Table of Contents

Keynotes ................................................................. 3
Pre-Congress Workshops ......................................... 9
In-Congress Workshops .......................................... 15
Symposium ............................................................. 25
Papers ................................................................. 161
Posters ................................................................. 221
Author Index ....................................................... 311
Keynotes
**K-01**

**Developing and disseminating effective psychological treatments: Science, practice and economics**

Clark, David M.

*Institution of Psychiatry at Kings College, United Kingdom*

It is often argued that the cognitive-behaviour therapy (CBT) movement has been particularly successful in developing new and effective treatments because it has fostered a close interplay between theory, experimental psychopathology and treatment development. This talk will provide some fruitful illustrations of the interplay before moving on to discuss one of the world’s largest attempts to disseminate CBT to the general public. The English Improving Access to Psychological Therapies (IAPT) initiative aims to vastly increase the availability of evidence-based psychological treatments for anxiety disorders and depression by training an extra 6,000 psychological therapists and deploying them in new, stepped care services. Outcomes are assessed with a session-by-session monitoring system that achieves unusually high levels of data completeness. Over 300,000 patients per year are currently being seen in IAPT services. The background to the initiative, the scientific and economic arguments on which it is based, the training and clinical service models, a summary of progress to date and likely future challenges & developments will be described. Possible implications for CBT dissemination elsewhere in Europe will be considered.

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**K-02**

**Recent Development in Compassion Focused Therapy**

Gilbert, Paul

*University of Derby, United Kingdom*

This talk will give a brief overview of the origins and nature of compassion focused therapy. One of its key aims is to increase affiliative positive emotion to self and others, since these emotions are powerful regulators and impact on well-being. However, research shows that many people can have a fear and resistance to this type of positive affect and as a result can lack the ability to regulate emotions with this system. This talk will explore current research on this difficulty and how to address it in therapy.

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**K-03**

**Do fathers know best? The role of the father in the Aetiology, Prevention and Treatment of Child Anxiety Disorder**

Bögels, Susan

*University of Amsterdam, Netherlands*

The role of parenting in the aetiology, maintenance, prevention and treatment of (child) anxiety disorders has been investigated extensively in the last decades. It is therefore surprising that fathers have been largely forgotten in this research. Also, in parent-focused treatment of children with anxiety disorders, father participation has been low, and parent training has not addressed the different and perhaps complementary roles that fathers and mothers can play in helping their child overcome fears. In this keynote it will be argued why it is important to not only include fathers in research and treatment of children with anxiety disorders, but also to think about differences between fathers’ and mothers’ roles in the aetiology and treatment of excessive child anxiety. A new, evolutionary-based model will be presented concerning a particular role of the father, focusing on fathers’ encouragement of risk taking and exploration of the external world. New tasks that have been developed in our lab to assess fathers’ unique role in interaction with his child from the age of 4 months will be demonstrated with video recordings. First findings from our longitudinal study on the role of mother and father in the aetiology of child anxiety in infancy will be presented. Implications for prevention and treatment of child anxiety disorders will be discussed.

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**K-04**

**Schema Therapy for Personality Disorders**

Arntz, Arnoud

*Maastricht University, Netherlands*

Schema Therapy developed from CBT as it is applied to axis-I disorders. In trying to apply ordinary CBT techniques to axis-II disorders, clinicians experienced limited effects. The developers of Schema Therapy therefore started to develop new methods and to integrate techniques derived from other models. Thus, Schema Therapy integrates insights and techniques derived from CBT, experiential methods (notably from Gestalt Therapy), psychodynamic therapy, and developmental theories, esp. attachment theory. Instead of being an eclectic approach, Schema Therapy aims to offer an integrated method based on the cognitive (schema) model of psychopathology. Like the early learning theories, Schema Therapy assumes that people have basic needs, which drive their behavior, and that when these needs are not adequately met, psychological problems develop. When basic needs are not adequately met in children, dysfunctional schemas and coping strategies develop that may lead to personality disorders. For severe psychopathology like personality disorders, Schema Therapy uses the concept of schema mode, which refers to the moment-to-moment state of the individual, characterized by typical combinations of emotions, cognitions (schema content), and behaviour. Schema Mode models have now been developed.
and tested for almost every personality disorder, and help patient and therapist to understand the strong moment-to-moment changes personality disorder patients often experience, and to choose the appropriate technique to address the mode that is activated during the session. Schema Therapy has now been tested as a treatment for cluster-C, cluster-B, and paranoid personality disorder, and effects are often very favourable compared to other approaches. New applications include personality disordered patients in high security forensic hospitals, and group-ST which seems to be especially effective in Borderline PD. Evidence from recently completed and preliminary evidence from running trials will be presented. The results indicate that Schema Therapy is an effective and cost-effective treatment. Neuroscience studies suggest that Schema Therapy not only leads to symptomatic change, but also to changes at deep brain levels, where emotional responsivity is regulated.

K-05

Psychological Treatment of Psychosis: From Demonstrating Effectiveness to Implementation

Haddock, Gillian
The University of Manchester, United Kingdom

This keynote address will review current progress in the development of cognitive behavioural treatments of psychosis and will summarise key research evidence. Unresolved research and clinical questions will be highlighted, particularly in relation to how implementation of available treatments is poor. Results from recent trials of psychological therapies will be presented which will highlight how traditional CBT approaches to working with psychosis need to be developed and adapted for complex needs (such as co-morbid substance misuse or problems or aggression and violence) and to ensure that preferences of service users in relation to their individual views on their psychosis, their recovery and the type of treatment which they receive are addressed. Data from recent work on the development of new service user outcomes measures for psychosis, and novel ways of delivering recovery oriented psychological treatments for psychosis will be discussed.

K-06

Can we Change the Demographics of Anxiety Disorders? The Theory and Reality of Prevention and Early Intervention in Anxiety Disorders

Salkovskis, Paul
University of Bath, United Kingdom

We are in the exciting position of having a range of highly effective treatments for anxiety disorders which should be effective for most people. Anxiety should therefore be an unnecessary problem as a result of developments in CBT. Why then do so many people still suffer from these problems? We have yet to see a decrease in the prevalence of anxiety disorders either in the clinic or in the community. It will be suggested that our main failures in the treatment of anxiety not only lie in offering “too little, too late”, but also in being overly tolerant of inappropriate therapy approaches. In this keynote address, consideration will be given to the prospects for primary, secondary and tertiary prevention across the different anxiety disorders and the implications for earlier and more effective interventions. There is a risk that such approaches will spread things too thinly to be helpful; it is suggested that we should only be prepared to tolerate dilution of treatment where there is an evidence base to justify this. We should be providing interventions which are at the lowest intensity compatible with effectiveness, but no lower, on the basis of offering the least invasive and most effective treatments as early as possible. Finally, it will be suggested that we need to carefully

K-07

Mindfulness-Based Cognitive Therapy: Culture clash or creative fusion?

Fennell, Melanie¹; Segal, Z.V.²
¹Oxford University Dept of Psychiatry, United Kingdom; ²University of Toronto, Canada

Mindfulness-based cognitive therapy (MBCT) creates an unlikely partnership, between the ancient tradition of mindfulness meditation rooted in Buddhist thought, and the much more recent and essentially western tradition of cognitive and clinical science. This keynote investigates the logic of the integration: does it work? It identifies points of congruence and difference between the two traditions and concludes that, despite first appearances, this is a fruitful partnership which may well endure.

Fennell, M.J.V. & Segal, Z.V. (2011) Mindfulness-based cognitive therapy: Culture clash or creative fusion? In Williams, JMG & Kabat-Zinn J (Eds) Mindfulness: Diverse Perspectives on Its Meaning, Origins, and Multiple Applications at the Intersection of Science and Dharma Contemporary Buddhism (Special Issue), Volume 11, Issue 1, May 2011

K-08

CBT for anxiety disorders in children: A systematic review and meta-analysis

Öst, Lars-Göran
Dept. of Psychology, Stockholm University, Sweden

Much less research has been done on anxiety disorders in children and adolescents compared to the large number of studies in adults. However, during the last decade there has been a very large increase of research in this area. A search in the common data bases yielded a total of 85 randomized clinical trials (totaling almost 5600 patients) with the following distribution: Specific phobia 12, Social phobia 12, Panic disorder with agoraphobia 1, OCD 11, PTSD 14, Separation anxiety 1, and the mixed diagnoses Generalized anxiety disorder, Separation anxiety and Social phobia 34. The meta-analysis generally found good treatment effects that were maintained at follow-up. Applying the APA Task Force criteria for empirically supported treatments showed that there is at least one well-established treatment for each anxiety disorder; Specific
Dialectical Behavior Therapy Emotion Regulation Skills: What’s New

Linehan, Marsha
University of Washington, United States

Dialectical behavior therapy (DBT) was developed originally to treat suicidal behaviors, expanded to treat borderline personality disorder and is not widely used to treat a number of other disorders. At its core, DBT focuses on increasing emotion regulation, broadly defined to include regulation of not only the experience and physiology of emotions but also regulation of expressive and action components of emotions. Recent data suggests that enhancement of DBT skills are likely critical factors in the beneficial effects of DBT. Although emotion regulation skills, per se, are taught in DBT, the entire set of of skills (including mindfulness, distress tolerance, and interpersonal effectiveness) affect the individual’s emotional response patterns and equilibrium. Revised skills include set of new skills for regulating emotions when cognitive functioning has broken down and also a major expansion of opposite action. New data and these changes will be highlighted.

K-11

Computers and psychosocial treatments for anxiety disorders in youth: Widespread opportunity for prevention

Kendall, Philip C.; Khanna, M.
1Temple University, United States; 2University of Pennsylvania, United States

Following an overview of the epidemiology of anxiety disorders and the pervasive experience of negative emotions in youth, cognitive and behavioral skills that can effectively reduce anxious distress will be described and reviewed. Results from a meta-analysis of school-based anxiety prevention programs will be reported. Computer applications of CBT strategies that can be easily disseminated will be considered, including a computer-assisted program for treating anxiety, a therapist training DVD, and a parent web-page. The advantages and disadvantages of the use of technological advances for the widespread prevention of undue and disturbing anxiety will be considered.

K-12

A New Era for Psychological Therapies: Returning People with Common Mental Health Problems to Work

Berge, Torkil
Vinderen Community Mental Health Center, Diakonhjemmet hospital, Oslo, Norway

Employment is a crucial part of human life – providing financial security, meaning, identity and social participation. Even though most people with mental health problems want to work, and having a job has been shown to be highly beneficial for their physical and mental health, they have the lowest employment rate of all disabled groups. Sickness, absence from work, underperformance due to stress, depression and anxiety disorders are major public health and economic problems, resulting in an estimated annual four billion pound workplace loss in the United Kingdom. Existing research has tended to focus on interventions for people with severe mental health problems such as vocational rehabilitation, but depression and anxiety affect 20% of the working population, especially people in non-manual jobs; teachers, nurses, police officers and medical practitioners. The need for psychological services is enormous, and only a small proportion of individuals in need receive treatment. Efforts to make talk therapies available to these vast numbers of people has been described as the most radical re-think in mental health services since the large scale closure of psychiatric beds. In the Improving Access to Psychological Therapies (IAPT) Scheme, one million people in England will receive such help, delivered by more
than a hundred treatment-centers. A cognitive behavioural approach should include evidence based interventions for helping people cope with a wide range of work-related factors contributing to stress, depression and anxiety – job insecurity, role conflict and ambiguity, work-family conflict, emotional exhaustion, organizational injustice, harassment and bullying. Interventions should also be informed by research on the identification and deployment of strengths – work commitment and engagement, social support, coping strategies, self-efficacy, resilience and positive emotions. In Norway there are several projects inspired by the IAPT, designed to help people with depression or anxiety on sick leave or who are at risk of going on sick leave. The results are promising. It is exciting to have been given the opportunity of developing new ways of implementing a portfolio of psychological services; individual psychotherapy, coping with depression courses and guided self-help (bibliotherapy and computerized therapy in combination with therapeutic telephone interventions). Most people with common mental health problems are not being served. Current models of delivery need to be expanded to reduce the burden.

K-13

Mindfulness-based Cognitive Therapy: Does it Work? How Does it Work?

Kuyken, Willem
Mood Disorders Centre, University of Exeter, United Kingdom

While we know that mindfulness-based cognitive therapy (MBCT) works, do we know how it works? Careful clinical observation and theoretical modelling informed the development of MBCT (Segal, Williams, & Teasdale, 2002). At least four randomised controlled trials suggest MBCT can help people with a history of recurrent depression stay well (Kuyken et al., 2008; Ma & Teasdale, 2004; Segal et al., 2010; Teasdale et al., 2000). To help us understand how MBCT works, this presentation threads together theory, clinical observation, experiential understanding and research. The first half of the keynote overviews the key pathways by which we suppose MBCT works. This will include coming to see thoughts and feelings differently, turning towards the difficult with openness, equanimity and care and coming to see the body as a refuge. The second half of the presentation will ask, “how can we examine this question empirically?” and will overview qualitative research, process-outcome research, experimental studies and dismantling studies. These threads will be drawn together to draw some preliminary conclusions about how MBCT works. A clearer understanding of MBCT’s key mechanisms of change can enhance our effectiveness as therapists and could drive clinical innovations. Some of these implications will be drawn out, with reference to case illustrations. Segal ZV, Williams JMG, Teasdale JD. Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse. New York: Guilford Press; 2002.

K-14

Preventing the Onset of Depressive Disorders: Possibilities and Challenges

Cuijpers, Pim
VU University Amsterdam, Netherlands

The public health significance of mental disorders is high. Depressive disorders are highly prevalent, and are associated with considerable loss of quality of life and huge economic costs. Treatments can only reduce the burden of disease of depressive disorders with about one third. A small but growing number of studies has examined the possibilities to prevent the onset of depressive disorders. In this presentation, the results of this research field will be described, its weaknesses and strengths, and the challenges for the future. First, we will describe what prevention is, and why it is important. We will also describe new techniques to identify the optimal target populations for prevention. Then we will give an overview of the research examining the possibilities to prevent the onset of depressive disorders (Muñoz et al., 2010). Results of meta-analyses in this field suggest that it may be possible to prevent or delay the onset in some cases (Cuijpers et al., 2008). Finally, we will describe the possibilities to apply preventive interventions in routine care, and we will describe stepped-care models for prevention, as well as the possibilities of Internet-interventions and psychoeducational prevention in primary care. We will also discuss the limitations of the research that has been conducted, as well as the challenges for future research.


K-15

Psychopharmacological and Psychosocial Interventions for Youth: First, Do No Harm

Ollendick, Thomas H.
Child Study Center, Virginia Tech, United States

In his controversial book, “Anatomy of an Epidemic,” Robert Whitaker documents the rise in psychiatric disorders in the past 50 years for both adults and youth and asserts the use of psychiatric drugs is fueling this epidemic. Moreover, he challenges the notion that individuals with these disorders may have to take psychiatric drugs the rest of their lives, just like a “diabetic must take insulin.” Finally, he suggests that some of these drugs may cause “more harm than good.” Building on the thesis of this far-reaching treatise, this address will review some of these developments and then highlight recent developments and trends in the use of CBT in both prevention and treatment programs for youth that produce significantly better outcomes, largely in the absence of psychiatric drugs. The address concludes with the notion that we have effective psychosocial treatments and prevention programs and they result in “more good than harm.”
Pre-Congress Workshops
PW-01

Schema Therapy for Borderline Personality Disorder

Arnoud Arntz
Maastricht University, Netherlands

Borderline Personality Disorder (BPD) is one of the most prevalent (1.5-2% in the general population) and severe forms of psychopathology. BPD-patients are generally not very popular among clinicians, and they often raise strong countertransference feelings. One of the problems with BPD is that these patients tend to suddenly change in emotional state, confusing therapists and making them easily feeling helpless and lost. Traditional CBT-approaches were not very successful, missing a good understanding of the disorder. Schema Therapy (ST) offers a model to understand BPD and to apply specific methods and techniques depending on the stage of therapy and the specific emotional state of the patient. Briefly, BPD is understood as resulting from problematic childhood experiences, characterized by lack of safety and high threat levels. This includes unsafe attachment and emotional (and often sexual) abuse. ST can be seen as a way to repair these early experiences. ST has 3 foci: (1) the therapeutic relationship (the therapists offers a safe relationship and “reparents” in a limited way); (2) the past (traumatic experiences are processed, often using experiential techniques like imagery rescripting); and (3) the present (present problems are addressed). Emotional states are understood by a schema-mode model, helping patients to get grip on their emotions and therapists to choose the right technique. Studies demonstrated that ST is a very effective and cost-effective treatment, despite its length of 1.5-3 years. Key Learning Objectives 1. to understand and apply the schema mode model of BPD, so that BPD-symptoms and behaviours can be understood 2. to be able to detect the mode the patient is in, and to choose an appropriate technique 3. to understand and apply the basic ST-techniques 4. to use the therapeutic relationship to ‘reparent’ 5. to be able to choose focus and type of technique according to the phase of therapy Please note that for a full training a 4-days workshop is recommended. Training modalities (i.e. experiential, didactic, role play etc) 1. Didactic power point presentation 2. Modeling techniques (DVD, life role play) 3. Experiential: practice in pairs 4. Questions and discussion 2-3 key references 1. Arntz, A. & van Genderen, H. (2009). Schema Therapy of Borderline Personality Disorder. Wiley-Blackwell 2. Giesen-Bloo, J., van Dyck, R., Spinhoven, P., van Tilburg, W., Dirksen, C., van Asselt, T., Kremers, I., Nadort, M., & Arntz, A. (2006). Outpatient Psychotherapy for Borderline Personality Disorder. Archives of General Psychiatry, 63, 649 – 658 3. Young, J.E., Klosko, J., & Weishaar, M.E. (2003). Schema Therapy: A Practitioner’s Guide. New York: Guilford. Brief description of the workshop leaders Arnoud Arntz was appointed as full professor in 2000 and as scientific director of the research institute of Experimental Psychopathology in 2001. Together with Marcel van den Hout he is chief editor of the Journal of Behavior Therapy and Experimental Psychiatry. His fields of interest are the experimental study of pain, anxiety disorders and personality disorders, with a special interest in investigating information processing in these areas. Potential implications for the everyday clinical practice of CBT ST is the first treatment for which it was demonstrated that it was able to lead to full recovery of BPD. Moreover, ST helps patients to achieve a normal level of quality of life, as ST is not only focused on symptom reduction.

PW-02

Effective and efficient cognitive therapy for social phobia

David M. Clark
Institute of Psychiatry at Kings College, United Kingdom

Social Phobia is common and disabling. Longitudinal studies show it has a particularly low natural recovery rate, emphasizing the need for effective treatment. Clark & Wells proposed a cognitive model of the maintenance of the disorder and, with colleagues, developed a specialized cognitive therapy programme that aims to treat the disorder by reversing the maintenance processes specified in the model. The maintenance factors are: self-focused attention, use of internal information (images & feelings) to make erroneous inferences about one’s social performance, covert and overt safety behaviors, distorted self-image related to early socially traumatic experiences, and problematic pre-event and post-event processing. Six randomized controlled trials have shown that the cognitive therapy programme is associated with a high recovery rate and is more effective than exposure therapy, group CBT, interpersonal psychotherapy, SSRIs and placebo medication. Mediational studies strongly support the hypothesis that cognitive therapy works by targeting key process in the cognitive model. The workshop starts with an overview of the cognitive model, particularly focusing on novel treatment implications. Each of the steps in treatment is then described in detail and illustrated with case material and videos of treatment sessions. As well as covering key techniques, the workshop will also discuss ways in which the usual therapeutic relationship in cognitive therapy needs to be modified in order to take into account key features of social phobia. Goals: By the end of the workshop, participants should be able to: § Identify key processes in maintaining social phobia § Develop an individual version of the cognitive model with their patients § Be able to identify and start to implement appropriate therapeutic techniques.
Mindfulness-based Cognitive Therapy: An Introductory Day Integrating Experiential Learning, Clinical Skills, Theory & Research

Kuyken, Willem
College of Life and Environmental Sciences, United Kingdom

Mindfulness practices for cultivating well-being and transforming suffering have a long lineage dating back at least 2600 years. Making use of this rich lineage Jon Kabat-Zinn began teaching mindfulness systematically to people with chronic health problems in medical and psychiatric settings in the 1970’s 1. Depression is a leading cause of disability in the world, creates untold human suffering and tends to be recurring. People who suffer depression often express a wish for psychological help to facilitate their recovery from depression in the long-term. Responding to this need MBCT has been developed as an innovative approach that combines mindfulness and cognitive-behavioral approaches 2. It is a brief group program in which people learn skills to support their sustained recovery from depression. At least four randomized controlled trials now suggest that among people with recurrent depression MBCT halves the rates of relapse compared with usual care and it is equivalent to staying on anti-depressants long-term. This has led many health care systems to begin introducing MBCT into their services. Training Modalities and Workshop Aims This workshop will introduce delegates to MBCT, encouraging experiential learning through some of key mindfulness practices that are core to MBCT. Background theory and rationale will be supported through a listing of key resources. There will be some opportunities to sample the clinical skills involved in teaching MBCT, as well as resources for further training in MBCT. Previous delegates at this workshop have said of the workshop: “really insightful and enlightening;” “a very comprehensive introduction” and “I enjoyed the relaxed, experiential and responsive tone to the day.” Professor Willem Kuyken is a research clinical psychologist specializing in recurrent depression. His clinical work, research and training with people with mood disorders span more than a fifteen years. He has been teaching MBCT since 2001 and training MBCT therapists since 2005. He recently completed a UK Medical Research Council funded randomized controlled trial of MBCT in real world health care settings 3 and is Chief Investigator of PREVENT, a definitive trial comparing MBCT with anti-depressant medication http://www.prevent-southwest.org.uk/. He has a personal mindfulness practice dating to the early 1990’s. He is a Co-Founder of the Mood Disorders Centre, a research, clinical and training center in Exeter, England (www.exeter.ac.uk/mooddisorders).


Prevention of Depression: Organising Prevention Projects in Practice

Cuijpers, Pim
VU University Amsterdam, Netherlands

In this workshop introductory lectures will be given on prevention of depression, target groups for preventive interventions, theoretical models, the interventions methods that can be used, and practical issues on how to develop a prevention project. An overview of prevention projects for preventing depression and the results of outcome research will be given, and a model for developing prevention projects will be presented. After the introduction we will work through the five steps that were laid out in a handbook on Prevention of Depression in 1993 (Munoz & Ying, 1993): 1. Identifying the Target: What do you intend to prevent? 2. Choosing a theory to guide the intervention: What mechanisms are involved? 3. Identifying high risk groups: For whom is the intervention appropriate? 4. Designing the intervention: How do you propose to prevent the target condition? 5. Designing the study: How will you measure the effects of the intervention? We will discuss theoretical as well as practical issues in prevention projects, and help participants with the development of projects.


Cognitive Behavior Therapy for Adolescent Depression: A Modular Approach

Curry, John
Duke University, United States

This workshop will focus on the basic principles and methods of modular CBT for adolescents with depression, and on key modules within that approach. Modular CBT was used in the Treatment for Adolescents with Depression Study, in which combined fluoxetine and CBT proved to be the most efficacious intervention for moderately to severely depressed teens. In the modular approach, there is a consistent session structure, into which various skills training modules are included over the course of treatment. Core CBT modules are those which address cognitive or behavioral deficits common to most depressed adolescents, as well as psychoeducation for teens and parents, and relapse prevention. Core modules were ‘required’ in TADS as they are hypothesized to be essential elements of CBT for depression. Optional modules are those that appear to be pertinent to individual cases, but not necessarily common to most depressed adolescents. Optional modules are used when the case formulation points to the importance of the skills that they contain for the treatment of the individual adolescent’s depression. The overall treatment is guided by a case formulation that is based first on the initial assessment, and then updated systematically in approximately six-week intervals. The core modules in TADS CBT are Mood Monitoring, Increasing Pleasant
Activities, Cognitive Restructuring, and Problem-Solving. Optional modules included social interaction, assertion, communication, relaxation, and affect regulation. All parents received psychoeducation, but there were also optional modules for parent-adolescent interaction problems. Participants in this workshop will learn the basic principles of modular CBT for adolescent depression, how to select and organize a treatment plan with core and optional modules, how to involve parents, and how to maintain a consistent session structure to anchor the treatment. Lecture, videotapes of session segments, and role-plays will be used to demonstrate how to conduct sessions using the modular approach. Both the short-term and longer term efficacy and safety outcomes of CBT, fluoxetine, and combined treatment in TADS will be reviewed.


**PW-06**

The Conceptualisation, Assessment and Treatment of Posttraumatic Stress Disorder (PTSD) in Children and Adolescents

**Dalglish, Tim, Meiser-Stedman, Richard**

*MRC Cognition and Brain Sciences, United Kingdom*

Focus of the workshop: The core focus of this workshop is on the treatment of posttraumatic stress disorder (PTSD) in children and adolescents who have been exposed to discrete traumatic events such as violent/sexual assaults, medical emergencies, disasters, or road accidents. The workshop also covers the presentation and assessment of PTSD in these younger age groups. What participants will gain: Participants in the workshop will gain: 1) a solid understanding of the nature of PTSD in young people; 2) familiarity with a cognitive model for PTSD in youth and how to use it as a tool for formulation; 3) comprehensive knowledge of the assessment of PTSD in children and adolescents including use of standardised self-report and interview measures, evaluation of challenging symptoms, and working with the differing symptom profiles and algorithms in younger people; and 4) detailed understanding of a cognitive-behavioural intervention for children and teenagers developed by our group, and of how to apply it. Media: The workshop includes slide presentations, videos, audio materials and interactive clinical exercises. An extensive hand-out pack will be provided. The presenters: Tim Dalglish and Anna McKinnon both have extensive experience in the analysis, assessment and treatment of PTSD in younger populations, both as researchers and clinicians, and currently actively involved in a clinical trial of acute PTSD in 8-17 year olds in Cambridge, U.K.


**PW-07**

Choosing to Change: Cognitive-Behavioural Treatment of OCD

**Paul Salkovskis**

*University of Bath, United Kingdom*

**PW-08**

Intensive and effective treatment of specific phobias

**Öst, Lars-Göran**

*Stockholm University, Sweden*

Specific phobia is the most prevalent of all psychiatric disorders in the general population with a lifetime prevalence of 12.5%. However, few people suffering from specific phobia apply for treatment, mainly because they are nor aware of the treatment possibilities, or they are afraid that the treatment itself will be worse than having the phobia. I have developed a rapid treatment that is carried out in one single session, which is maximised to 3 hours. The treatment is based on a cognitive behavior analysis of the catastrophic beliefs the patient has in relation to a possible confrontation with the phobic object or situation. Prolonged exposure is done as a series of behavioral experiments to help the patient test the catastrophic beliefs they have. In animal phobics modeling is used as an adjunct. During the last two decades I have done 12 randomized clinical studies on phobias of spiders, snakes, blood-injury, injections, dental care, flying and enclosed places in adults and 2 studies on various specific phobias in children and adolescents. The mean treatment time varies between 2 and 3 hours and the proportion of clinically significant improvement between 80-93%. The effects are maintained, or furthered, at the 1-year follow-up. These results have been replicated in at least 17 RCTs carried out in Holland, Belgium, England, Germany, Austria, Norway, USA, Canada, and Australia. During the workshop the participants will learn to assess specific phobias and get video demonstrations of how these can be treated in a one-session format using prolonged exposure and modelling.

Cognitive therapy for low self-esteem: A transdiagnostic framework for treatment

Fennell, Melanie
Oxford University Dept of Psychiatry, United Kingdom

WORKSHOP OVERVIEW Low self-esteem is probably one of the problems most commonly encountered in clinical practice. It crosses diagnostic boundaries, and so is not readily encapsulated by current diagnosis-specific cognitive-behavioural models. It is associated with a range of painful emotions (including both anxiety and depression), and can undermine clients’ ability to lead a satisfying life, and to form and maintain fruitful relationships. This practical, highly interactive workshop presents a cognitive model of low self-esteem, an elaboration of Beck’s original model of emotional disorder. This forms the basis for a coherent programme of cognitive-behavioural interventions designed to undermine old, negative beliefs about the self and to establish and strengthen new, more kindly perspectives. The programme integrates concepts from evidence-based practice in the treatment of anxiety and depression with newer ideas on working cognitively with central beliefs about the self. PARTICIPANTS Basic knowledge of Beck’s cognitive model of emotional disorder, and of cognitive behavioural treatment methods, will be assumed. There will be opportunities for discussion and practical exercises, and an emphasis on applying the material in clinical practice. Objectives By the end of the workshop, participants will be able to: • Describe the place of low self-esteem in Beck’s cognitive theory of emotional disorder • Conceptualise a case, using a cognitive model of low self-esteem as a framework • Draw on a range of possible methods for enhancing metacognitive awareness • Explore the “evidence” on which clients base their negative opinions of themselves • Help clients to establish and strengthen new, more positive perspectives on the self WORKSHOP LEADER Melanie Fennell was a pioneer of cognitive therapy in the UK, and is a founder member of the Oxford Cognitive Therapy Centre, where she developed and directed the Oxford Diploma in Cognitive Therapy and the Oxford Diploma/MSc in Advanced Cognitive Therapy Studies. In July 2002, at their 30th Anniversary Conference, was voted “Most Influential Female UK Cognitive Therapist” by the membership of the British Association of Behavioural and Cognitive Psychotherapies. As a clinician, Dr Fennell’s particular interests are depression and low self-esteem. She is the author of “Overcoming Low Self-Esteem” (1999), “The Overcoming Low Self-Esteem Self-Help Course” (2006), and “Boost Your Confidence” (2011). As well as these popular works for the general public, she has written practical texts for clinicians on depression and low self-esteem. Since 2003, she has worked with Professor Mark Williams in the Oxford University Department of Psychiatry, developing Mindfulness-Based Cognitive Therapy (MBCT) for people suffering recurrent depression and suicidality, and training MBCT teachers. With Professor Williams, she is Co-Director of the Oxford MSt in MBCT.

Introduction to Compassion Focused Therapy for Shame and Self-Critical Difficulties

Gilbert, Paul
University of Derby, United Kingdom

This workshop will introduce participants to the basic ideas and interventions used in Compassion Focused Therapy (CFT). CFT was originally developed with people with high shame and self-criticism. These individuals often come from difficult backgrounds where there are low levels of affiliation and affection. This is problematic because from infancy onwards attachment and affiliative experiences play a major role in brain development and regulation of threat-based emotion. Indeed, individuals from these backgrounds can find experiencing positive, affiliative emotions (accepting compassion and being self-compassionate) difficult. This workshop will explore the role of the evolution of mammalian attachment and affiliation in threat regulation with a focus on the complexity of threat processing systems and its regulation through affiliative processing. What will we learn? Participants will learn to focus on the forms and functions of shame and self-criticism and how to treat them by developing self and other directed compassion. CFT aims to develop care and affiliative-focused motivation, attention, emotion behaviour and thinking. Key skills include the use of compassion focused imagery, building the compassionate self and using the sense of a compassionate self to engage with areas of personal difficulty. The workshop will use a range of PowerPoint presentations, DVD presentations and some limited personal practice. Who Is It For? The workshop is suitable for all those who are engaged in therapeutic interactions with clients and who have basic CBT skills. Some resources Gilbert, P. (ed.). (2005). Compassion: Conceptualisation, Research and Use in Psychotherapy. London: Routledge. Gilbert, P. (2009). The Compassionate Mind. A New Approach to the Challenges of Life: London: Constable & Robinson. Gilbert, P. (2009). An introduction to compassion focused therapy. Advances in Psychiatric Treatment, 15, 199-208. Gilbert, P. (2010). Compassion Focused Therapy. Distinctive Features. London: Routledge. Gilbert, P. (ed.). (2010). Compassion Focused Therapy. Special Issue. International Journal of Cognitive Therapy. 3, 97-201

Treating anxiety in youth: Clinical procedures informed by developmental, cognitive, behavioral, and family literatures

Kendall, Philip C.
Temple University, United States

The workshop will provide an initial description of the theory that guides intervention for treating anxiety in youth and an overview of the nature, symptoms, and experience of anxiety in youth. We will consider when anxiety is developmentally reasonable and when it is disordered, and we will consider features of anxiety as they relate to and are expressed by children as well as adolescents. Cognitive, behavioral, family (parenting) and emotional factors will be addressed. The bulk of the workshop will be on intervention strategies that comprise CBT for anxiety in
PrE-CONgrESS
WOrKShOPS

youth. Each of the strategies (e.g., coping modeling, changing self-talk, affect education, exposure tasks) will be described in detail and illustrated with (a) case examples (b) samples from the child-participant’s workbook and (c) descriptions in the therapist’s treatment manuals. A flexible implementation of the manual-based approach will be described and encouraged. Sample videos of actual sessions and re-enacted sessions will be available to be played and discussed, and small groups of workshop participants will have an opportunity to engage in role-play activities. Research outcomes that inform decisions regarding the provision of clinical services for anxious youth will be considered and these findings highlight both (a) what we know and (b) what we do not yet know about the treatment of anxiety disorders in youth.

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PW-12

Dialectical Behaviour Therapy for Adolescents: Treating Emotion Dysregulation and Non-Suicidal Self-Injury

Ritschel, Lorie A.
Emory University, United States

This four-part workshop is designed for clinicians who provide services for adolescents who (1) struggle with pervasive emotion regulation difficulties, and/or (2) engage in non-suicidal self-injury (NSSI). In Part I, I will provide an overview of emotion regulation difficulties as they occur in adolescents. I will review diagnostic criteria for Axis I and II pathology in teens and will discuss common clinical presentations, including comorbid conditions such as substance abuse, bipolar disorder, and anxiety disorders. I will discuss the differences between suicide and NSSI and how to conceptualize these behaviors within DSM-IV nosology. Part I will conclude with a discussion of the rationale for developing early interventions targeting emotion regulation difficulties in this vulnerable population. In Part II, I will provide an overview of DBT as a comprehensive treatment package, including individual and group therapy, coaching calls, and consultation team meetings. Participants will learn about the five skills training modules that are taught in DBT for adolescents (DBT-A; Mindfulness, Distress Tolerance, Emotion Regulation, Walking the Middle Path, Interpersonal Effectiveness). I will discuss how to construct case conceptualizations within a DBT framework and will illustrate the use of diary cards and chain analyses through videos and role-play demonstrations. I will also review tips for skills training, including choosing and reviewing homework assignments. In Part III, I will discuss setting up a complete DBT program for adolescents, including decisions about inclusion/exclusion criteria, training team members, collecting data to track client progress, and including parents in treatment. In Part IV, I will review the newest empirical evidence about DBT-A. I will present data from the most recent published literature as well as data from our clinic at the Child and Adolescent Mood Program (CAMP) at the Emory University School of Medicine.
In-Congress Workshops
IW-01

Cognitive Behaviour Therapy for Psychosis: Implementation into Practice within Routine Services and with Complex Clients

Haddock, Gillian
The University of Manchester, United Kingdom

This workshop will describe the development of cognitive-behavioural treatments for people with psychosis and will summarise key research evidence. Unresolved research and clinical questions will be highlighted. For example, issues in relation to working with clients with dual disorders and those who are difficult to engage in CBT. In addition, the difficulties in implementation of CBT approaches in some areas will be discussed. Treatment protocols from some recent trials of psychological therapies will be presented and these will highlight how traditional CBT approaches to working with psychosis need to be developed and adapted for complex needs (such as co-morbid substance misuse or problems or aggression and violence) and to ensure that preferences of service users in relation to their individual views on their psychosis, their recovery and the type of treatment which they receive are addressed. Details of recent work on the development of new service user outcomes measures for psychosis, and novel ways of delivering recovery-oriented psychological treatments for psychosis will be discussed.

IW-02

Collaborative Case Conceptualisation in CBT

Kuyken, Willem
University of Exeter, United Kingdom

Case conceptualization is at the heart of cognitive-behavioural therapy (CBT) because it is the art and science of how most therapists individualise therapy for their clients. This becomes particularly critical when clients have complex or co-morbid presentations. When done well conceptualisation empowers clients, is rewarding for therapists and increases CBT’s effectiveness. Yet, most CBT therapists feel that there is a gap between their knowledge and practice. Further, case conceptualization is often taught as an activity that happens in the therapist’s head during or between sessions. In this workshop you will learn a new case conceptualization approach that is called Collaborative Case Conceptualization. The model has three guiding principles: collaborative empiricism, incorporation of client strengths, and levels of conceptualization. Therapist and client work collaboratively to describe and then explain the issues a client presents in therapy. Rather than simply look at client problems, the model incorporates client strengths to maximize the opportunities not only to relieve client distress but also to build client resilience. The workshop will have a particular focus on breaking up problematic maintenance cycles and incorporating client strengths into conceptualization. Training Modalities This workshop is based on ideas Willem Kuyken developed with his collaborators Christine Padesky and Rob Dudley, described in their book Collaborative Case Conceptualization. In this workshop you will see demonstrations of this new model through DVD illustrations and have the opportunity to practice new skills in role plays. Workshop Aims You will learn: Methods to help clients understand presenting issues using descriptive and explanatory models of conceptualization. How to incorporate client strengths into each phase of conceptualization to build client resilience. The importance of working collaboratively and empirically to develop, test and refine conceptualizations.


IW-03

Group CBT for Obsessive Compulsive Disorder

Sochting, Ingrid
Department of Psychiatry, Canada

A group format for OCD is just as effective as individual treatment for adults and adolescents with OCD. The publicly funded Richmond Mental Health program has run over 30 OCD groups, mostly adults but an adolescent OCD Group program has also been successfully evaluated. The workshop will summarize relevant and up to date research and outline a treatment protocol. This 12 week session by session protocol includes psychoeducation, exposure and response prevention (ERP), refocusing strategies following exposure aimed at facilitate habituation, as well as strategies for enhancing motivation and cohesion. Treatment components specific to adolescents will also be discussed. Outcome measures will be presented.

Learning objectives: (1) To become familiar with a Group CBT protocol for adults and adolescents with OCD; (2) To develop an ERP treatment plan based on individual subtypes within a group setting; (3) To be able to develop your Group CBT programs based on participants receiving a comprehensive set of hand-outs.

Training modality: The workshop will primarily be didactic but also offer opportunities for participants to develop their own ERP treatment plans based on case presentations.

Description of leader: Dr. Sochting is chief psychologist at Richmond Hospital and clinical assistant professor at University of B.C. She has developed a number of group therapy programs for mood and anxiety disorders, trained psychiatry residents and other mental health professionals in group therapy, given many Canadian and international workshops on OCD, and has an active group therapy research program.


16 EABCT 2011
Tips from the trenches: The clinical side of CBT for anxious youth

Kendall, Philip C.
Temple University, United States

With an emphasis on the games, activities, and materials that can be used when implementing CBT for child anxiety, the strategies for identifying anxious self-talk and engaging in behavioral experiments and exposure tasks will be described and discussed. Accumulated suggestions and recommendations from practicing therapists will be shared within the framework of a manual-based intervention.

Positive CBT. from reducing distress to building success

Bannink, Fredrike
Owner, training, coaching and mediation practice, Netherlands

Traditional CBT has been strongly influenced by the medical model of diagnosis and treatment. The structure of problem solving - first determining the nature of the problem and then intervening - influences the content of the interaction between therapists and clients: they focus on what is wrong with the client. The mission of the helping professions is to empower clients to live more productive and satisfying lives. Empowering clients indicates the intent to, and the process of, assisting individuals, groups, families, and communities to discover and expend the resources and tools within and around them. In the past 20 years there has been a development of competency-based, more collaborative approaches to working with clients. Positive Psychology and Solution Focused Brief Therapy are amongst these approaches, who are predominantly directed toward clients' preferred futures and strengths instead of their past problems and deficits. In this workshop I will explore with you how traditional CBT can become Positive CBT. The focus of Positive CBT is no longer on what is wrong with the client and on repairing what is worst, but on what is right with him/her and on creating what is best. In this quest Positive CBT does not have to be constructed from the ground up, but in Positive CBT the focus on problems is replaced with a focus on client strengths.

Objectives: at the end of the workshop the attendants will: - be informed about Positive CBT - know the similarities and differences between traditional CBT and Positive CBT - have some knowledge on how to use Positive CBT in their work with clients

The workshop format will be a dialogue-lecture (with room for questions and experience-based learning). The workshop format will be a dialogue-lecture (with room for questions and experience-based learning). The workshop format will be a dialogue-lecture (with room for questions and experience-based learning).

Applied relaxation: A versatile coping technique in CBT

Öst, Lars-Göran
Stockholm University, Sweden

Applied relaxation (AR) takes progressive relaxation as its starting point, but since this takes far too long in a natural anxiety situation it has to be reduced. This is done through a series of six steps reducing the time it takes to become relaxed from 15 min to 20-30 seconds. The steps are 1) Progressive relaxation tension-release, 2) Progressive relaxation tension-release, 3) Cue-controlled relaxation, 4) Differential relaxation, 5) Rapid relaxation, and 6) Application training. During the last step patients practice how to apply rapid relaxation in natural anxiety-arousing situations in order to prevent the initial anxiety reactions to escalate into full-blown panic attacks. Usually the treatment takes 10-12 sessions. Division 12 of APA found AR to be well-established (empirically supported treatment) for generalized anxiety disorder and probably efficacious for panic disorder (with or without agoraphobia). However, there are randomized clinical trials of AR in the treatment of other disorders as well: social phobia, claustrophobia, blood phobia, dental phobia, tension headache, tinnitus, pain, non-ulcus dyspepsia, stress, anxiety in schizophrenic patients, and vasomotor symptoms in postmenopausal women. The workshop will illustrate with video how AR is carried out for panic disorder and discuss other applications.

Trauma, Eating Disorders and Comorbidity: Research, Assessment, and Treatment

Brewerton, Timothy
Department of Psychiatry & Behavioral Sciences/Medical University of South Carolina, United States

Objectives: This half-day workshop will be valuable for scientists and practitioners who seek to integrate current, evidence-based knowledge of trauma, PTSD, eating disorders (EDs), and comorbid psychopathology into clinical practice or research. Violence is common, and traumatization is associated with the emergence or worsening of multiple psychiatric symptoms and diagnoses. Thus, traumatized individuals often present with complicated clinical presentations for which there is currently no single treatment of choice.

Methods: The presenter will integrate available research from both female and male adults, adolescents and children, with a focus on the etiological role of trauma in light of a biopsychosocial model. The presenter will also review self-report and interview-based assessment practices for use in treatment and research settings. Treatment approaches for the traumatized patient with both ED and comorbid psychopathology will be described using an integration of published practice guidelines, phasic treatment with sustained attention to nutritional rehabilitation as a necessary first step, and evidence-based treatments for both EDs and PTSD (e.g., DBT, CBT, exposure/ response prevention, and pharmacological agents). The presenter
will discuss Person’s case formulation approach for use in designing individualized empirically-based treatment plans for patients with complex psychiatric presentations that include trauma, EDs, and related psychopathology. Workshop participants will have the opportunity to participate in active discussions of key issues to the treatment of these complicated patients.

Results: Traumatic experiences, especially those that produce PTSD and its symptoms, are significant yet nonspecific risk factors in the development of EDs (especially those with bulimic symptomatology) and other related psychiatric conditions. Although evidence-based treatment is becoming increasingly flexible, patients with comorbid EDs and PTSD often present with a highly complicated clinical picture, and current treatment manuals include limited advice regarding strategies for blending core components of treatments designed for different classes of disorders (i.e., EDs & anxiety disorders, EDs & substance use disorders) in comorbid cases.

Conclusions: This workshop will help scientists and practitioners who want to understand how trauma and PTSD influence and complicate the course and treatment of EDs.

IW-08

Emotion Regulation Skills: Clinical Update

Linehan, M.

Dialectical behavior therapy (DBT) is an evidence-based treatment for suicidal behaviors, borderline personality disorder and other disorders of high emotion dysregulation. At its core, DBT focuses on increasing emotion regulation and includes four sets of basic behavioral skills: mindfulness, distress tolerance, interpersonal effectiveness and emotion regulation. Data based on teaching the current set of published skills as well as research on as yet unpublished updating of these skills indicates that DBT skills mediate much of the clinical gains from DBT treatment. This workshop will focus on new and updated skills in both the emotion regulation set of skills as well as new crisis survival skills for use when skills break down due to cognitive overload.

IW-09

Treating Body Dysmorphic Disorder

Bjornsson, Andri

Brown University, United States

Learning objectives: This workshop will provide an overview of body dysmorphic disorder (BDD); clinical features and associated morbidity, with an emphasis on the most promising psychological treatments to treat this severe and relatively common disorder. The presenter will describe the interventions (cognitive behavioral therapy for BDD, interpersonal psychotherapy and mindfulness based therapies) while focusing primarily on CBT for BDD, and ways in which CBT can be integrated with mindfulness.

Training modalities: A mixture of “interactive didactics” and experiential learning (via exercises)


Brief description of workshop leader: Dr. Andri Bjornsson is a post-doctoral fellow in clinical psychology at Brown University, working with Dr. Katharine A. Phillips in the Body Dysmorphic Disorder Program at Rhode Island Hospital, RI, USA, who is a world-renowned authority on BDD. Dr. Bjornsson does both extensive clinical work and research with this population, and will report on those experiences in the workshop.


IW-10

Competitive Memory Training (COMET) for low self-esteem

Korrelboom, Kees

PsyQ, Netherlands

Introduction: Low self-esteem is a major issue in many different psychopathological conditions. However, only few interventions exist that specifically target the enhancement of low self-esteem. Since low self-esteem not always automatically improves with the amelioration of the main disorder the patient is treated for, such a specific intervention might be worthwhile. Recently such a specific intervention has been developed and put to the test in several studies in different patient populations. Inspired by Chris Brewin’s publication (2006), this intervention is called Competitive Memory Training or COMET. After negative self-opinions have been identified, COMET targets positive instances of self-worth. COMET for low self-esteem is a short (6-9 sessions) cognitive-behavioral technique that can be applied individually as well as in groups. Personalized experiences where such positive characteristics were manifest are made more emotional salient and competitive with the aid of imaging, body posture, facial expression and music. Finally the enhanced positive self-opinions are associated with triggers that have always been connected with low self-esteem by using counter-conditioning techniques. Committed to experimentally founded principles and findings, COMET for low self-esteem is regarded as a translational and trans-diagnostic approach, that has already been shown successful in eating disorders, personality disorders and depression. Learning objectives Participants in the workshop will be familiarized with the criteria for indication for and the techniques of COMET for low self-esteem. Possible pitfalls in applying COMET will be discussed, as well as questions the participants might have. Training modalities Part of this half-day workshop will be didactic and another part experiential. The prac-


IW-11

Mindfulness for children and adolescents with ADHD and their parents

Bögels, Susan

University of Amsterdam, Netherlands

Children with ADHD [Attention Deficit Hyperactivity Disorder] have problems maintaining attention over prolonged periods of time, have difficulty holding goals and plans in mind, and have difficulty inhibiting a pre-potent response. Mindfulness training is an intervention based on eastern attention/meditation techniques that helps increase a wide, open awareness as well as focused attention, and reduces automatic responding. In this workshop, the rationale, program details, and effects of an 8-session mindfulness group training for children and for adolescents with ADHD, and a parallel mindful parenting group training for their parents, will be discussed. Mindfulness exercises that we have found to be helpful for children and for adolescents with ADHD can be experienced in the workshop (with the participants being children or adolescents for that purpose) and will be demonstrated with video-fragments of real training sessions. Also, exercises from the mindful parenting program will be demonstrated. Results of scientific research on the immediate and follow-up effects of the training on children as well as parents' ADHD symptoms, as well as on other measures, such as parental stress and parental reactivity, will be also presented. Key learning objectives: -Insight in the type of attention problems of children with ADHD, and how mindfulness may influence these problems -Knowledge of the scientific results of mindfulness training for children with ADHD and their parents, also in comparison to other treatment options -Knowledge about the similarities and differences of this program compared to MBCT/MBSR programs for adults with depression, pain, etc. -Experiencing mindfulness practice from the perspective of a child or adolescent with ADHD and their parents -Orientation on the skills needed for mindfulness teachers working with this population: group management skills, mindfulness skills for working with children, mindful parenting skills About the workshop leader: Susan Bögels is professor of developmental Psychopathology at the University of Amsterdam (UvA), and director of the UvA Treatment Center for Parents and Children. She has been studying mindfulness in different contexts, such as for patients with social anxiety disorder, for adolescents with externalizing disorders, for parents in mental health care settings, for children with ADHD, and for children in school settings, together with her research and clinical team. She has published theoretical as well as research papers about mindfulness, and is currently writing a book for professionals on Mindful Parenting.


IW-12

Motivation and change: cognitive behaviour therapy applied to addiction

Ryan, F.N.

Imperial College, United Kingdom

Objectives: Participants should learn how to apply core cognitive and behaviour therapy skills to deal with substance misuse and associated common mental health problems. The workshop should therefore be relevant to both specialist substance misuse practitioners as well as those who encounter drug, alcohol or compulsive gambling problems in generic mental health or primary care settings.

Methods: The framework, termed CHANGE (Change Habits and Negative Generation of Emotion), is a blend of tried and tested motivational and cognitive behavioural approaches. It also embraces recent findings indicating that addiction endures in part because addicted individuals acquire implicit processing biases that impair cognitive control mechanisms such as attention and working memory. These subtle but pervasive deficits in executive control act as a vulnerability factor that contributes to the enduring nature of addiction.

Results: The programme is organised into four sequential stages known as the “Four Ms” : methods results conclusions; Motivation and engagement; Manage impulses and craving; Mood management; Maintenance and relapse prevention Each of these stages requires tailored intervention strategies reliant on the therapist deploying specific competencies. Throughout, particular emphasis is placed on the importance of a robust therapeutic alliance based on a clear conceptualisation of the psychology of addictive behaviour. The content will involve didactic presentation and an opportunity to observe and practice relevant skills.

Conclusions: Participants should learn: How to conceptualise complex cases involving substance misuse and co-occurring disor-
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IW-13

Problem solving therapy: a transdiagnostic approach
Huibers, Marcus 1; Bouman, Theo2
1Maastricht University, Netherlands; 2University of Groningen, Netherlands

In this workshop participants will learn to appreciate the potentials of a generic problem solving approach. Problem solving therapy has been proven to be effective in a wide range of psychopathology, such as relatively mild psychosocial problems, depression in primary care, as well as patients suffering from cancer, and employees at risk for absenteeism. Basically, problem solving lies at the heart of cognitive behavioural therapy, and may be regarded as a necessary mindset for both patient and therapist. The main aim is to help patients recognize their problems (of whatever nature), to formulate goals and solutions, and to implement these in their daily life. In that sense, the pivotal issue is patient empowerment, departing from what is essentially a transdiagnostic point of view. In a stepped care model of mental health service delivery, problem solving therapy can be an important first step, intended to prevent the development of serious psychopathology. The learning objectives of this workshop are: - to familiarize participants with the problem solving approach, - to become acquainted with a manualized 7-step problem solving model, - to obtain skills in carrying out a problem solving treatment by providing hands-on experience with each of the seven steps. The workshop consists of a plenary introduction to the general topic and treatment rationale. Next, each of the seven steps is briefly explained, immediately followed by practical exercises which participants will carry out in subgroups. Workshop leaders Theo K. Bouman is professor of clinical psychology at the University of Groningen (The Netherlands) and head of the post master clinical training programme. He has specialized in CBT for anxiety disorders and somatiform disorders. Marcus J.H. Huibers is professor of empirically directed psychotherapy at Maastricht University (The Netherlands). His particular area of expertise is psychotherapy for depression.


IW-14

Relapse prevention using brief CBT
Bockting, Claudi
Groningen University, Clinical Psychology, Iceland

3 hours in-conference workshop Depression is a recurring disorder. CBT is effective in reducing relapse and recurrence (for a meta analysis see Vittengl et al., 2007). A specific eight session Preventive Cognitive Therapy (PCT) after divers types of acute treatment, appears also to be an effective strategy to prevent relapse in recurrently depressed patients, even over 5.5 years (Bockting et al., 2009). This preventive effect of group CT focuses on presumed psychological vulnerability factors of relapse, e.g. rigid dysfunctional attitudes (Beck, 1987). In this workshop this new preventive cognitive group therapy will be demonstrated using DVD and practiced in role-plays. In addition, multi-media PCT using internet en mobile cognitive therapy (on a cell phone) will be demonstrated.


IW-15

Cognitive-behavioural treatment of health anxiety (“hypochondriasis”)
Salkovskis, Paul
Department of Psychology, University of Bath, United Kingdom

This workshop aims to provide a basic grounding in cognitive-behavioural treatment as applied to health anxiety, (hypochondriasis). Cognitive Behavioural Therapy has now been shown to be an effective treatment for hypochondriasis in several randomised controlled trials. The cognitive behavioural theory, which forms the basis of such treatment, suggests that for hypochondriasis (and probably for some types of somatisation disorder) patients’ problems lie not in the physical symptoms and other bodily variations they experience but rather in the way they interpret and react to these symptoms, and the way they respond to other medical information. The theory also specifies that a particular pattern of misinterpretation and reactions are involved in the maintenance of health worries, and therefore need to be modified in the course of treatment. The cognitive theory of health anxiety resembles cognitive theories of other disorders such as panic in several respects. However, a crucial difference lies in the time course of the interpretations which are characteristic of health anxiety and hypochondriasis. This and other differences mean that the emphasis in Cognitive Behavioural treatment has to be somewhat distinct from cognitive-behavioural treatments for anxiety disorders such as panic, with more in common with treatment for OCD. In particular, the importance of helping the patient to develop alternative, non-catastrophic interpretations of the topics they are experiencing is emphasised. However, such an approach also needs to avoid the pitfalls involved in the
provision of “reassurance”. In the workshop, participants will be introduced to ways of applying the cognitive behavioural theory. The main aims are to help patients identify and deal with factors which provoke and maintain health concerns and to allow the person to re-engage in normal activities. Once participants have been familiarised with cognitive-behavioural theory for health anxiety, the workshop will highlight clinical strategies for:

- assessment of anxiety and health related triggers, the way these are interpreted and the factors involved in the maintenance of the problem
- use of assessment instruments
- engagement in psychological treatment
- formulation and reaching a shared understanding
- techniques for helping re-attribute

The use of behavioural experiments
- helping the patient stop seeking reassurance and unnecessary medical investigations
- dealing with anxiety in the therapist and the patient’s physicians
- relapse prevention

IW-16

Imagery Rescripting
Arnoud Arntz
Maastricht University, Netherlands

IW-17

Empowering children and adolescents in social situations: self-awareness, self-regulation and self-acceptance while valuing social capital
Gaspar de Matos, Margarida 1; Salvador, M.C. 2; Gouveia, J.P. 3
1 FMH/UTL, Portugal; 2 UC - Coimbra, Portugal; 3 UC - Coimbra, Portugal

Learning objectives: During this workshop we will be proposing and discussed some innovative protocols for children and adolescents with social behaviour problems, taking into consideration idiosyncrasies in this age groups, and also incorporating a positive and acceptant attitude towards themselves and a curiosity attitude in the changing process. The aim of the workshop is to help professionals to be aware of youths idiosyncrasies in the expression of their problems and within their reality and to be able to help them allowing for individual differences and for social realities differences, letting them keep autonomy and individual choices. The role of these professionals will be discussed as well as their capability to mediate parental influence of their children positive growth. Theoretical rational Theoretical rational for these protocols come from an extensive previous work by the authors themselves, and was based in others’ work such as Clark & Wells (1995); Hayes et al. (1999); Greco & Hayes (2008); Gilbert (2000); Weissman, Markowitz & Klerman (2000); Baumeister & Vohs (2007); Merrell (2008) and Frydenberg, (2008). When talking about empowering children and adolescents in social situations, the aim is not only that children and adolescents overcome their social behaviour problems but also to enable them with a positive view of themselves and of their strengths in order to empower them to overcome other difficulties and to promote their self-determination while valuing their social capital and ultimately to pursue their life-long projects and values.

Method: Four parts will be proposed with a 10 minutes coffee break in between: 1-Part one- didactic - (30 minutes, run by MGM & MCS) - Theoretical framework for the interventions 2-Part two - experiential - (60 minutes, run by MGM) – Building self awareness, self regulation and social capital in order to face anger, anxiety and low mood: tips for youths’ self-fulfillness and for professionals’ use 3-Part three- experiential - (60 minutes, run by MCM) – Building self awareness, a positive view of oneself, and keeping ones’ life under control: more tips for youths’ self-fulfillness and for professionals’ use 4- Part four – discussion and questions- (20 minutes- run by MGM & MCS)


IW-18

Novel cognitive behavioral approaches in bipolar disorder

Deckersbach, Thilo 1; Sylvia, L. 2; Eisner, L. 2; Holzel, B. 3
1 Bipolar Clinic and Research Program, United States; 2 Bipolar Clinic and Research Program/Massachusetts General Hospital, United States; 3 Massachusetts General Hospital, United States

Bipolar disorder, characterized by recurrent depressive and/or manic mood episodes, has traditionally been viewed as an episodic illness with periods of recovery in between mood episodes (APA, 1994; Trede et al., 2005). This view is increasingly challenged by clinical and epidemiological studies documenting that, despite pharmacotherapy, patients with bipolar disorder continue to experience substantial mood symptoms even when not in mood episodes and are often unable to fill household or occupational requirements (Judd et al., 2008). Cognitive Behavior Therapy (CBT) approaches, when used as an adjunct to mood-stabilizing medication, have demonstrated efficacy in increasing medication adherence, reducing relapse rates and shortening the length of mood episodes, in particular depression (Frank et al., 2005; Lam et al., 2003, 2005; Miklowitz et al., 2007; Rea et al., 2004; Scott et al., 2004). A primary aim of this workshop is to teach participants how to use CBT to treat bipolar disorder. Despite advances in adjunctive psychosocial treatment, many patients with bipolar disorder continue to have chronic mood disturbance that impairs their ability to function (Murray & Lopez, 1997). Thus, a second goal of this workshop is to introduce two novel psychosocial interventions developed by the presenters. First, we will discuss specific CBT strategies that have been developed and tested for bipolar disorder. These techniques include using mood diaries to monitor daily mood, identifying early warning signs for increasing mood symptoms, and teaching the patient strategies to increase medication adherence. We will also focus on established techniques to reduce the length of depressive episodes and the risk for manic episodes including activity scheduling, cognitive restructuring and problem solving.

EABCT 2011 21
We will then focus on two recently developed treatments adapted for bipolar disorder: cognitive remediation and mindfulness-based cognitive therapy (MBCT) (Deckersbach et al., 2010; Deckersbach, Höfzel, & Eisner, 2011). Cognitive remediation is designed to increase functioning in patients with bipolar disorder (Deckersbach et al., 2010). This treatment addresses three cognitive domains that impact daily functioning: attention, declarative long-term memory, and executive functioning. MBCT integrates mindfulness-based meditative practices with elements of cognitive therapy. The goal of MBCT is to help patients be aware of distressing thoughts, feelings, and sensations without trying to change them or replace them with other thoughts (Deckersbach, Höfzel, & Eisner, 2011; Segal, Williams, & Teasdale, 2002; Williams, Teasdale, Segal, & Kabat-Zinn, 2007). Treatment elements include gentle movement exercises and meditation based elements, such as body scans and sitting meditations and mindfulness towards soothing experiences. For all treatments, participants will be instructed in what the specific strategies are and how to implement them with patients. Taken together, attendees to this full-day workshop will enhance their training and practical knowledge of CBT-based psychosocial interventions to treat individuals with bipolar disorder. Workshop Leaders: Thilo Deckersbach, Ph.D. is an Assistant Professor of Psychology at Harvard Medical School (HMS) and the Director of Psychology at the Bipolar Clinic and Research Program (BCRP) at the Massachusetts General Hospital (MGH). He specializes in the developments of new psychosocial treatments for bipolar disorder as well as functional neuroimaging research. Louisa G. Sylvia, PhD., is an Instructor of Psychiatry at HMS and Associate Director of Psychology in the BCRP. She specializes in CBT for bipolar disorder. She is currently developing a new psychosocial intervention to reduce the disproportionate medical burden associated with bipolar disorder. Lori Eisner, Ph.D., is a postdoctoral fellow in the BCRP at MGH. She specializes in CBT for bipolar disorder and is currently piloting a new psychosocial treatment for bipolar disorder that focuses on emotion regulation strategies. Her research is funded through two Harvard Medical School fellowship awards. Britta Höfzel, Ph.D., is a Research Fellow in the Psychiatric Neuroscience Program at MGH and HMS. She conducts MRI research investigating the neural mechanisms of mindfulness practice. Dr. Höfzel is a Mindfulness-Based Stress Reduction instructor and a certified yoga teacher. Dr. Hoelzel is supported by a Marie Curie International Outgoing Fellowship within the 7th European Community Framework Program.

Background: Computerised CBT (CCBT) has become an increasingly significant part of the range of effective interventions available for the management of emotional disorders such as depression and anxiety (Bennett-Levy et al. 2010). Significant progress has also been made in the recent development of effective CBT interventions for children (Stallard, 2009; Verduyn, Rogers, & Wood, 2009). This workshop introduces a new computerised CBT intervention for children with depression and anxiety aged 9-13 years – called David gNATenborough’s Island (by Gary O’Reilly, Nicola McClade, and David Coyle). It is uniquely designed as a computer game that children play in session with their therapist over the course of 6 sessions. As the child and therapist progress together through the different levels of the game the young person learns about the relationship between thinking, feeling, and behaviour; the effects of negative automatic thinking; thought monitoring; cognitive restructuring; and how to identify and challenge core beliefs. During the intervention the child plays a computer game with their therapist where they control a character who represents them on a visit to an island where they help a world famous explorer called David gNATenborough and his team of investigators. A child friendly concrete metaphor unfolds within the intervention that makes CBT concepts accessible to younger children. In the game Negative Automatic Thoughts (NATs) are described as being like gNATs or little flies that sting you into certain thoughts usually without you noticing. Thought Monitoring becomes gNAT trapping. Cognitive Restructuring becomes gNAT swatting. And understanding Core Beliefs becomes hunting gNATs back to their hives. As the narrative of the game unfolds children learn about themselves, gNAT trapping, gNAT swatting, and hunting gNATs back to their hive by helping with experiments devised by David gNATenbourough and his team in the world’s first gNAT lab. Throughout the 6 sessions of the game the young person, their therapist, and game characters continuously interact with each other and have to work together as characters ask questions and set tasks for the young person.

Learning Objectives: Participants will - be introduced to the child friendly translation of CBT concepts that unfolds within the computer game intervention. - receive a full demonstration of the CCBT programme - receive a CD with the intervention that they may then use in their clinical practice. Training Modalities: This half-day workshop combines didactic teaching with full CCBT intervention demonstration. Workshop Leader: Dr Gary O’Reilly is a Senior Lecturer/Deputy Director of the Doctoral Programme in Clinical Psychology at University College Dublin and Principal Clinical Psychologist at Lucena Clinic (CAMHS) Dublin.


Group Schema Therapy for Borderline Personality Disorder

Reiss, Neelle1; Fretwell, H.2

1University Medical Center Mainz Department of Psychiatry and Psychotherapy, Germany; 2Center for BPD Treatment & Research, Midtown CMHC & Indiana University School of Medicine, United States

Background: Borderline Personality Disorder (BPD) is a highly prevalent disorder internationally, which has long been viewed as severe and difficult to treat. Most psychotherapeutic approaches have focused on the life threatening symptoms of BPD. Other symptoms such as dysphoria or emptiness result in a decrease of general functioning and a low quality of life. Schema Therapy (ST; Young, Klosko & Weishaar, 2003) has been developed as a comprehensive treatment to address the whole array of BPD symptoms with the goal of improved functioning and quality of life. Several studies have shown the effectiveness of ST in the individual setting (Giesen-Bloo et al., 2006; Nadort, et al. 2009). A recent development in ST is group ST (GST) for patients with BPD, which has demonstrated its effectiveness in a randomized controlled trial of the outpatient model (Farrell, Shaw & Webber, 2009) and a series of open-trials of the inpatient model (Reiss, Lieb, Amtz, Shaw & Farrell, submitted). GST targets key criteria of BPD including: impairments in stability of self and relationships and the negative impact of stormy relationships and fear of abandonment on social, family, and occupational functioning. The GST experience provides a closer analogue to the family of origin, with a large array of schema change and relationship experiences to learn from. A peer group provides opportunities to identify and remediate unmet adolescent needs for mastery, autonomy, healthy validation of sexuality and exploration of life’s meaning. Group acceptance can undo emotional damage from critical or rejecting family groups and/or childhood peer groups. The experience of a supportive, validating group can directly impact and help heal key BPD schemas of abandonment, defensiveness, emotional deprivation, social isolation and mistrust/abuse. Delivering ST in a group requires some adaptations to the interventions originally designed for individual treatment. Like ST, GST uses the limited reparenting therapist style and integrates experiential, cognitive and behavioral pattern-breaking mode change work. All ST interventions have been adapted to the group modality.

Implementing limited reparenting in a group with BPD patients who have attachment difficulties and early emotional learning deficits presents added challenges and a two therapist model has been developed to address both the needs of the group as a whole, and the need of an individual patient in the group. Training Modalities: In this workshop the BPD mode model of ST will be explained. The key components of GST will be presented and GST specific strategies to work with dysfunctional modes will be demonstrated and subsequently practiced by the workshop participants by role play. The adaption of key components of ST such as limited reparenting to the group setting will be integrated in demonstrations. Learning objectives 1. Participants will learn the key components of the GST model for BPD by didactic presentations and demonstrations. These components include imagery rescripting in a group. 2. Participants will have the
opportunity to try the demonstrated techniques themselves in role plays thus enabling them to be able to apply the techniques in their clinical work. Brief description of workshop leaders: Neele Reiß, M.Sc., is a clinical psychologist at the University Medical Center Mainz, Germany. She developed and tested an inpatient BPD program combining individual and group ST. She is an experienced workshop presenter. Heather Fretwell, MD, psychiatrist is Director of the Center for BPD Treatment & Research, Midtown CMHC & Indiana University School of Medicine. She is an experienced leader of outpatient GST for BPD. Both collaborate with Amtz & Farrell on GST outcome research.

Symposium
Symposium 1 – Imagining CBT: The role of mental imagery in CBT treatment

S01-1

Does schema therapy for personality disorder using imagery rescripting results in inconsistent trauma reporting

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Objectives: Objective of the study was to assess the prevalence of decreasing, consistent and increasing reports of sexual and physical abuse after 12 months of long-term psychological treatment of personality disorders, to investigate demographic and clinical characteristics predictive of inconsistency of reporting abuse and to explore whether autobiographical memory may account for this inconsistency.

Methods: The SCID II was used to assess the presence of personality disorder in 229 patients participating in a RCT comparing schema-focused therapy, clarification-oriented psychotherapy and treatment-as-usual. Severity of Axis I (SCL-90) and Axis II pathology (ADAP-IV), self-reported history of sexual and physical abuse (SPAQ) and autobiographical memory specificity (AMT) were assessed at baseline and after one year of treatment.

Results: 180 (78.6%) patients reported the same instances of invasive sexual and/or physical abuse on the SPAQ at baseline and follow-up, 25 (10.9%) decreased and 24 (10.4%) increased their abuse reports. Consistency of reporting abuse did not differ between schema-focused therapy, clarification-oriented psychotherapy and treatment-as-usual. A current depressive episode (SCID I) and a decreased capacity to produce specific negative memories on the AMT were characteristic of decreasing abuse reporters, while increasing abuse reporters showed higher levels Cluster A personality pathology (in particular schizotypal traits) on the ADP-IV.

Conclusions: These results suggest that even in treatment procedures directed at exploring someone’s personal past with abuse-related imagery (such as schema-focused therapy) consistency of reporting abuse is quite high. However, certain clinical characteristics may make some persons more likely to change their trauma reports. Moreover, a reduced negative memory specificity may represent an avoidant strategy as present in retrausters of abuse. The likelihood of reporting more instances of sexual and/or physical abuse probably depends on the goal of imagery-based strategies (i.e. changing maladaptive appraisals of previous traumatic situations using imagery instead of uncovering repressed/dissociated traumatic situations using imagery) than on the use of imagination-based methods per se.

S01-2

Targeting maladaptive appraisals of intrusive autobiographical memories in depression (part of symposium: „Imagining CBT: the role of mental imagery in CBT treatment“)

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Intrusive memories are the core diagnostic feature of PTSD, but these memories are also common in depression. There is increasing evidence of parallels in the nature and management of intrusive memories across these two disorders. For example, in both depression and PTSD, negative appraisals (e.g., having this memory means I’m going crazy) are correlated with cognitive avoidance and predict symptom levels over and above intrusion frequency (Ehlers & Steil, 1995; Starr & Moulds, 2006). Cognitive models of PTSD conceptualise safety-seeking behaviours as central to intrusion persistence because they prevent disconfirmation of maladaptive appraisals. In Studies 1 and 2 we examined whether safety behaviours in response to such appraisals of intrusive memories are linked to their maintenance, in high dysphoric and clinical (i.e., depressed and formerly depressed) samples. As predicted, dysphoric and depressed participants endorsed beliefs that reflected themes of wanting to control their memories, and self-deprecation about experiencing intrusions. These beliefs prompted a range of safety behaviours. Given the key role of appraisals in intrusion maintenance, in Studies 3 and 4 we experimentally manipulated appraisals and tested the impact on intrusion frequency. In Study 3, participants received either positive or negative appraisal cognitive bias modification (CBM) training, watched a depressing film, and monitored intrusions for a week. As predicted, compared to the negative condition, participants who underwent positive CBM reported fewer intrusions. In Study 4, we examined the relative efficacy of CBM, one session of cognitive behavioural education that sought to reduce maladaptive appraisals of autobiographical intrusions (CBT), and a wait-list comparison (WL). Participants in the CBT condition reported the greatest reduction in intrusion-related distress at one week follow-up. Participants in all three conditions reported significant reductions on measures of mood, memory intrusiveness, negative appraisals and rumination. The findings highlight the role of dysfunctional appraisals in the maintenance of intrusive memories in depression, and the need for treatment developments in this area.

Developing Preventative Strategies to Reduce Intrusive Imagery Following Trauma

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Objectives: Intrusive, negative imagery (e.g. flashbacks) is the hallmark symptom of posttraumatic stress disorder (PTSD). We use the stressful film paradigm, a laboratory-based approach, to investigate the cognitive mechanisms underlying intrusive imagery development and explore the application of novel treatment interventions. Research has shown that completing particular cognitive tasks during a stressful film (an analogue trauma event) can influence subsequent intrusive imagery development (Holmes & Bourne, 2008). In accordance with clinical models of PTSD and models of working memory, visuospatial tasks decrease intrusive imagery whereas other tasks do not (Holmes, Brewin, & Hennessy, 2004). However, to be applicable to real-world treatment innovation, we need to investigate whether completing cognitive tasks after a stressful event may also serve to modulate intrusive imagery.

Methods: We present a series of studies which use the stressful film paradigm to induce intrusive imagery in healthy volunteers. We look at the effect of novel competing cognitive tasks (e.g. the visuospatial based computer game, Tetris) in the memory consolidation phase i.e. at various time points after the stressful film (Holmes et al 2009; 2010).

Results: Participants who played the visuospatial-based computer game Tetris either at 30 minutes or 4 hour after viewing a stressful film had significantly fewer intrusive memories for the film over the following week relative to the control no-task condition. This finding was not due to mere distraction as participants who completed a verbal-based computer game, Pub Quiz, reported significantly more intrusive memories for the film.

Conclusions: We suggest that simple visuospatial tasks (e.g. Tetris) may provide a cost-effective and accessible intervention in reducing the development of intrusive imagery in PTSD.


Post-trauma imaginal rescripting protects against intrusion development and negative appraisal: An analogue experimental study

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Several contemporary theories posit that early information processing and the formation of an “inadequate trauma memory” play a key role in the development of later PTSD symptoms. Factors affecting adequate processing of trauma-related information could thus affect the subsequent development of trauma memories and lead to involuntary, sensory-rich intrusions of the trauma. Imagery rescripting -a new treatment strategy for PTSD comprising imaginal exposure and imaginal “rewriting” the trauma script- proved successful in reducing PTSD symptoms. It is thought to affect imagery-based processing directly. As a consequence, it may also affect post-trauma information processing and memory (re)consolidation. The present study therefore examines the impact of imagery rescripting on the formation of intrusive memories using the trauma film paradigm. An aversive film was presented to 73 healthy participants, who were randomised over 3 conditions: 1) imaginal rescripting of the film, 2) imaginal re-experiencing of the film, and 3) imaginal re-experiencing of a positive, non-related event. The 9-minute interventions took place 30 minutes post-film. The imaginal rescripting group experienced fewer intrusive images of the film in the subsequent week than the other groups; the imaginal re-experiencing group had the most intrusive images. The imagery rescripting group also showed less negative cognitions about the world. Furthermore, a second experiment in participants with and without anxiety problems showed that imagery rescripting and imagery reexperiencing had an effect on intrusion development in participants with anxiety but not in those without anxiety. To conclude, imaginal rescripting changes the meaning of the traumatic event by associating it with images, actions and feelings of control. Especially persons with anxiety problems may be sensitive to interventions in the (re)consolidation phase. (Part of the symposium „Imagining CBT: The role of mental imagery in CBT“)
The Role of Noradrenergic Activation in the Etiology of Intrusive Memories

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**Introduction:** Intrusive images are a common feature of many psychological disorders, including posttraumatic stress disorder (PTSD). Recent evidence has potentially extended cognitive models of intrusions by identifying the role of biological markers of arousal at the time of encoding in subsequent memory for emotional events. This study investigated the roles of arousal and emotionality of the encoded stimulus in the aetiology of intrusive images.

**Method:** Eighty 80 university students (39 men and 41 women) viewed 20 emotive and 20 neutral IAPS images. Half the participants underwent a cold pressor test (CPT), immersing their hand in ice water, while the remaining participants immersed their hand in warm water. Samples of salivary alpha-amylase (sAA), a biomarker for noradrenergic activity, were collected from participants at various intervals. Participants completed intrusion questionnaires two days later.

**Results:** Participants in the High Arousal condition who underwent the CPT reported more intrusive images of emotive images than participants in the control condition. Greater noradrenergic activation, measured by sAA levels, resulted in more intrusions of emotive relative to neutral stimuli.

**Discussion:** These findings suggest that intrusive imagery is, in part, a function of negative memories interacting with elevated arousal, and that noradrenergic mechanisms may be a key factor in this process. Conclusion: Understanding the key biological process underpinning intrusive memories may point to early interventions to limit the development of PTSD reactions.
Based intervention resulted in favorable changes in pathological gambling, anxiety, depression, and quality of life. Composite between-group effect size (Cohen’s d) at posttreatment was 0.83. Follow-ups carried out in the treatment group at 6, 18, and 36 months indicated that treatment effects were sustained (ds=2.58, 1.96, and 1.98). Hence, the evidence was in support of Internet-delivered treatment for pathological gamblers. However, it was not clear how effective the treatment was for more severely depressed individuals. In the present study no control group was used, instead no one was excluded because of low mood. A total of 194 participants were included and treatment results, including a 3-year follow-up will be presented as well as variables that predict treatment success as well as drop-outs and relapse.


S02-3

Motivational Interviewing Coding Laboratory, a service that facilitates the acquisition and retention of MI?

Forsberg, Lars
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Lars Forsberg will present a web-based coding service which has been developed at the Motivational Interviewing Coding Laboratory (MIC Lab) at Karolinska Institute. MIC lab provides assessments of audio recorded treatment sessions. The Motivational Interviewing Treatment Integrity Code (MITI) is used for treatment integrity assessment of MI in clinical trials, as well as in MI training and supervision. Feedback based on MITI ratings has been found to facilitate the acquisition and retention of MI skill. MITI coding is also used to assess therapeutic sessions with respect to “unspecific” therapeutic variables, often not assessed in clinical trials or therapy trainings. Many of the MI variables seem to be congruent with these therapeutic variables like collaboration support, autonomy support and empathic listening. Inter-rater reliability at the MIC Lab has ranged from good to excellent. Users are able directly to upload their audio-recorded sessions to the service website. A range of options for tailored feedback are offered. It will be discussed if a web-based service offering treatment integrity assessment may form an important part of training and supervision, quality assurance of clinical practice, and perhaps certification procedures.

S02-4

Motivational Interviewing in “Self directed experience / Therapeutic Skills (Personal Psychotherapy)” a course in the Psychotherapy Training Programme at the Karolinska Institute

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Karolinska Institute, Centre for psychotherapy research, Sweden

The aim of the course is that the students will learn the importance of therapist’s variables in the therapy situation and to be able to apply this knowledge with patients and behave in a manner adherent with MI, but also learn some other experiential techniques. Experiences from this first course will be presented, where the students have applied their MI skills with their patients, transcribed some of their exchanges and trained to score the sessions according to the MITI. The students have a mentor with whom they set up individual learning goals and discuss how to attain these. It will be discussed how this fit with the rest of the curriculum in the training, what has been good, what needs to be improved.
Symposium 3 – Emotional Vulnerability and hypervigilance in borderline personality disorder

S03-1

Emotional vulnerability and cognitive bias is cue specific in patients with borderline personality disorder: implications for treatment

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Objective: It has been demonstrated that heightened emotional vulnerability, i.e. intense, easily triggered affective reactions and cognitive bias, i.e. biased evaluation of environmental and interpersonal stimuli are common in borderline personality disorder (BPD). However, little is known about the specificity of these deficits, i.e. whether they are triggered by emotional stimuli in general or whether they are cue specific.

Methods: Two studies examined cue specificity of emotional vulnerability and cognitive bias in BPD patients compared to depressive and healthy controls. Emotional vulnerability was measured by physiological responses to acoustic startle probes using a script driven imagery paradigm with disorder-specific vs. non-specific stimuli. Cognitive bias was examined with the thin-slice judgments paradigm, where participants were asked to evaluate persons shown in 10-second film clips.

Results: BPD participants showed clear potentiation of startle responses to disorder-specific cues, but not to emotional cues in general. Further, in comparison to both healthy and depressive controls, BPD was specifically associated with an aggressivistic evaluation bias.

Conclusions: Emotional vulnerability and cognitive bias in BPD appear to be no general handicaps in emotional functioning but are rather related to disorder-specific schemas. Therapeutic implications are discussed.

S03-2

HPA axis and memory in borderline personality disorder

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Objective: Studies on the function of the hypothalamic-pituitary-adrenal (HPA) axis in borderline personality disorder (BPD) suggest an enhanced basal cortisol release in concert with a reduced feedback sensitivity of the HPA axis. Cortisol has been shown to have serious impact on memory function in humans. In healthy subjects administration of cortisol impairs memory retrieval. In patients with depression an association between HPA axis dysregulation and memory performance have been reported, while studies in BPD are missing.

Methods: In a placebo-controlled crossover study patients with BPD and healthy control subjects received a placebo or 10 mg of hydrocortisone orally before memory testing.

Results: After hydrocortisone intake, healthy subjects showed impaired memory retrieval compared to placebo treatment. In contrast, memory performance of patients with BPD was not affected by hydrocortisone treatment.

Conclusions: The present findings replicate previous findings of impaired memory retrieval after hydrocortisone treatment in healthy subjects. We speculate that the missing acute impairing effect of hydrocortisone memory retrieval in patients with BPD might reflect reduced central glucocorticoid sensitivity.

S03-3

A Model of the Relationship between Negative Emotions, Experiential Avoidance, and Positive Emotions in Borderline Personality Disorder

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Objective: Experiential avoidance (EA) is an important factor in maintaining different forms of psychopathology including borderline personality pathology (BPD). So far little is known about the functions of EA, BPD and general psychopathology for positive emotions. In this study we investigated three different anticipated pathways of their influence on positive emotions.

Methods: About 334 subjects varying in general psychopathology &/or BPD completed an online survey including self-ratings of BPD, psychopathology, negative and positive emotions, and EA. Measures of positive emotions included both a general self-rating (PANAS) and emotional changes induced by two positive movie clips. Data were analysed by means of path analysis.

Results: In comparing the three path models, one model was found clearly superior: In this model, EA acts as a mediator of the influence of psychopathology, BPD, and negative emotions in the prediction of both measures of positive emotions.

Conclusions: EA plays a central role in maintaining lack of positive emotions. Therapeutic implications are discussed.
Exploring the interaction between emotional vulnerability and perceived maternal parenting style in the prediction of borderline personality disorder: A prospective 5-year longitudinal study

Arens, Elisabeth; Stopsack, M.; Barnow, S.
Heidelberg University, Germany

Objective: The biosocial theory of borderline personality disorder (BPD) (Linehan, 1993) assumes that BPD is a disorder of the emotion regulation system resulting from complex transactions between biological vulnerabilities (e.g., heightened emotional vulnerability) and certain dysfunctional environments (e.g., trauma, maladaptive parenting style). However, since its initial formulation the model still lacks robust empirical evidence, given there are no prospective longitudinal studies testing the main assumptions of the model.

Methods: The current study examined longitudinally whether temperamental traits harm avoidance (HA) and novelty seeking (NS), internalizing and externalizing disorders, trauma and perceived invalidating parenting style, as measured during adolescence, contributed to the risk of BPD, diagnosed on the basis of standardized clinical interviews 5 years later. Individuals with BPD from a community sample of 416 young adults were compared to individuals with depressive disorders and psychiatrically healthy subjects.

Results: Results indicated that adolescent internalizing disorders as well as the interaction of HA and perceived maternal overprotection predicted the risk of BPD 5 years later. NS was not shown to be a predisposing vulnerability.

Conclusions: Results are interpreted as confirmation of the biosocial model. Gender-specific etiological differences are discussed.


Symposium 4 – Psychological consequences of natural disasters: predictors of recovery and longterm problems

Early predictors of PTSD 12 months following the 2008 earthquake in Iceland

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1Landspítali - The National University Hospital of Iceland, Iceland; 2Center of Public Health Sciences, University of Iceland, Iceland

Introduction: Historically, earthquakes have been a destructive natural force in Iceland, the most earthquake prone area in Northern Europe. Despite strong earthquakes in Iceland in the last decade, very little scientific attention has been given to their psychological effects. Thus, the purpose of the current report was to examine the psychological impact of the May 29th 2008 earthquake in South Iceland, which caused widespread and significant damage. The goal of this study was to examine early predictors (age, gender, perception of the earthquake, receiving formal psychosocial support, symptoms of PTSD and depression 2 months post earthquake) of PTSD symptoms and depression 12 months following the earthquake.

Method: Participants were 533 individuals (aged 18 to 80 years, 56.3% women) who were randomly selected from the National Registry of Iceland, lived in the affected area during the earthquake and completed both the 2 and 12 month post earthquake assessment.

Results: Multiple regression analysis revealed that PTSD and depression symptoms 2 months after the earthquake were the best predictors of PTSD symptoms a year after the earthquake, when controlled for gender, age, prior trauma history, experiencing the earthquake as trauma and receiving psychological support.

Discussion: The current study offers a unique opportunity to examine the psychological effects of natural disaster in a modern and affluent society, with a strong infrastructure, well controlled health care system and a nationwide social security network. Conclusion: The current study offers important information for health care needs of individuals following earthquakes and highlights the importance of early detection of post trauma problems and the importance of available empirically supported psychological interventions in the area affected by a strong earthquake.
The psychological consequences of experiencing a volcanic eruption - a population-based study

Hauksdóttir, Arna 1; Pétursdóttir, Guðrún 2; Kolbeinsson, Pórir Björn 1; Valdimarsdóttir, Unnur 1

1 Center of Public Health Sciences, Iceland; 2 Institute of Sustainable Studies, Iceland; 3 Health Care Institute of South Iceland, Iceland

Background: Volcanic eruptions have often occurred in countries with a weak infrastructure and limited means to carry out comprehensive and controlled studies. The Eyjafjallajökull eruption poses unusual opportunities to study the health effects of a volcanic eruption. Iceland presents a modern and affluent society, with a strong infrastructure, not least a well equipped and well controlled health care system and a nationwide social security network. Particularly important in the present context are the extensive medical records available on an individual basis (by utilizing the national registration number which is unique for every inhabitant in Iceland).

Methods: In fall 2010, all inhabitants 18-80 years old, living in an area close to the eruption, were contacted (N=1500). They were sent a questionnaire, including questions on demographics, physical health (respiratory, diseases and other somatic symptoms), psychological health (stress and other psychological morbidity), levels of experience of exposure to the eruption (ash, sounds, smell etc) and utilization of services provided. In addition, a control group of 700 people, living in northern part of Iceland, matched for age, was included for comparison.

Discussion: Results are currently being analysed and will be focusing on psychological health consequences for this particular study. They will hopefully give knowledge on psychological health of this group and provide base for future guidelines on how to reduce potential morbidity following such a natural disaster.

The effects of residential relocation on victims health 16 years after catastrophic avalanches in Iceland

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1 University of Iceland, Iceland; 2 University of Iceland and Landspitali - The National University Hospital of Iceland, Iceland; 3 University of Iceland and Karolinska Institutet, Iceland

Objective: Few studies have assessed the effects of residential relocation after natural disasters on longterm physical and mental health. Previous research suggests that relocation is associated with higher rates of psychological morbidity in victims. In 1995 two villages in the western part of Iceland were struck by avalanches, taking the lives of many inhabitants and causing considerable damage. The goal of this study is to assess the effects of residential relocation from the disaster area on victims health, 16 years after the disasters.

Method: Participants are 453 residents of the villages where the avalanches hit, who are today 18 years old or older. Questionnaires are used to assess relocation, mental and physical health. Posttraumatic stress symptoms are assessed with the Posttraumatic Diagnostic Scale (PDS) and depression and anxiety symptoms with the Depression Anxiety Stress Scales 21-item (DASS-21). Physical health is assessed with questions about previous and current disease history and physical symptoms. Relocation is tracked with questions about the total number of residential relocations prior to and after the disaster. In addition, victims are asked why they relocated, whether relocation after the disaster was voluntary or involuntary and whether victims regret relocating from the disaster area. The effects of residential relocation on perceived social support and health will be analyzed.

Results: Currently, data collection is underway. Data processing and analyses will be finished in May. Conclusion: This study aims to enhance our understanding of the impact of victims moving away from a disaster area on longterm psychological recovery, providing an opportunity to improve future prevention methods in the aftermath of disasters.

Impact of early disaster evacuation on long-term post-traumatic stress

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1 Center of Public Health Sciences, Iceland; 2 Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden; 3 Center of Public Health Sciences, University of Iceland, Iceland

Introduction: Large scale natural disasters leave survivors at risk for long-term psychiatric morbidity; it is not known whether timing of evacuation from trauma site modifies this risk. The aim of this study is to investigate whether duration at disaster site following the 2004 tsunami in South-East Asia affects the risk of long-term psychological morbidity in Swedish tsunami survivors.

Method: This is a population-based follow-up study of 10 116 Swedish tsunami survivors who came home to ten health districts in Sweden in the first three weeks after the tsunami disaster; 4932 answered a questionnaire 14 months later (49% response rate). 4446 participants responded to day of evacuation and contentment with its timing. They were also asked about sick leave last month, common mental disorders (GHQ), symptoms of post-traumatic stress (IES-R), suicidal thoughts during the last year, and psychotropic medication use last month.

Results: 54% (2597) of the participants were content with evacuation time, 33% (1613) felt they were evacuated too early, and 13% (635) felt they were evacuated too late. Compared with those who were evacuated 14-21 days after the disaster, individuals evacuated in the first four days were at increased risk of post-traumatic stress symptoms (adjusted odds ratio (OR) 2.0, 95% confidence interval (95%CI) 1.3-3.1), common mental disorders (OR 1.4, 95%CI 1.0-2.0) as well as showing trend towards increased risk of suicidal thoughts (OR 1.5, 95%CI 0.9-2.5), sick leave (OR 1.7, 95%CI 0.9-3.1), and psychotropic medication use (OR 1.3, 95%CI 0.9-2.0).
Discussion and conclusion: With implications for future rescue work following natural disasters, our findings indicate that a third of Swedish tsunami survivors wanted to stay longer at disaster site and that early evacuation was associated with increased risk of post-traumatic stress symptoms.

Symposium 5 – Phenomenology and Treatment of Compulsive Buying

S04-5

Experience of volcanic eruption and psychological consequences – a population-based study

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Background: Volcanic eruptions have often occurred in countries with a weak infrastructure and limited means to carry out comprehensive and controlled studies. The Eyjafjallajökull eruption poses unusual opportunities to study the health effects of a volcanic eruption. Iceland presents a modern and affluent society, with a strong infrastructure, not least a well equipped and well controlled health care system and a nationwide social security network. Particularly important in the present context are the extensive medical records available on an individual basis (by utilizing the national registration number which is unique for every inhabitant in Iceland).

Methods: In fall 2010, all inhabitants 18-80 years old, living in an area close to the eruption, were contacted (N=1500). They were sent a questionnaire, including questions on demograpics, physical health (respiratory, diseases and other somatic symptoms), psychological health (stress and other psychological morbidity), levels of experience of exposure to the eruption (ash, sounds, smell etc) and utilization of services provided. In addition, a control group of 700 people, living in northern part of Iceland, matched for age, was included for comparison.

Discussion: Results are currently being analysed and will be focusing on psychological health consequences for this particular study. They will hopefully give knowledge on psychological health of this group and provide base for future guidelines on how to reduce potential morbidity following such a natural disaster.

S05-1

Influence of mood on buying behavior in compulsive vs. non-compulsive buyers: An experimental study


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Objectives: Compulsive buying (CB) is characterized by excessive buying behavior, which leads to significant distress and impairment. Previous studies explored the phenomenology of CB and possible antecedents of CB behavior, especially mood states. Most of these studies used retrospective measures and often focused on compulsive buyers only. Therefore, the aims of this study were 1) to compare compulsive and non-compulsive buyers concerning key aspects of buying behavior and 2) to investigate the effect of experimentally induced negative mood states on such behavior in compulsive vs. non-compulsive buyers.

Methods: Forty compulsive buyers and 40 controls were randomly assigned to a negative or neutral mood induction procedure (2x2 design), which was followed by assessments of buying behavior (likelihood to expose oneself to a shopping situation, urge and probability to buy, willingness to pay).

Results: Irrespective of mood state, compulsive buyers were significantly more likely to expose themselves to a shopping situation than non-compulsive buyers. In addition, the compulsive buyers self-reported an increased urge to buy (in general and in the specific test situation) and an increased probability to buy in the specific test situation. In contrast, compulsive buyers were not willing to pay more than non-compulsive buyers for the shopping items presented in this study.

Conclusions: Our study is one of the first to directly compare compulsive buyers with controls in respect to key aspects of buying behavior. Our results indicate that compulsive buyers may differ from non-compulsive buyers in the likelihood to expose oneself to a shopping situation. Furthermore, clinically relevant buying behavior seems to be characterized by an exaggerated urge and probability to buy, but not by willingness to overpay. In contrast to previous findings, we did not find mood effects on buying behavior. Possible explanations and conclusions will be discussed.
Daily mood patterns and compulsive buying in the natural environment

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Objective: This study attempted to examine the extent to which patterns of mood and daily stress experienced by individuals with compulsive buying (CB) are associated with CB episodes by using Ecological Momentary Assessment (EMA).

Method: Twenty-five individuals (2 males, 23 females) aged between 22 and 62 years (M = 39.68, SD = 12.31) who met the diagnostic criteria for CB were asked to carry a handhold computer for two weeks and to rate their mood and impact of daily stress. The EMA protocol implemented three types of self-report methods: signal-contingent, event-contingent, and end-of-day ratings. The assessment included the Positive and Negative Affect Scale (PANAS), the four-item anger/hostility scale of the Profile of Mood States (POMS), and 35 items of the Daily Stress Inventory (DSI). Between-days as well as within-day analyses were conducted by using mixed model analysis.

Results: The comparison of mood and impact of daily stress on days where CB occurred with those without CB episodes (between-days analysis) did not reveal any significant differences. Within-day analysis indicated that negative affect was significantly increasing and positive affect was significantly decreasing as participants approached a CB episode. There was also evidence of significant decrease of negative affect following a CB episode. Positive affect did not significantly increase after CB episode. No significant changes in anger/hostility or the individualized impact of minor stressful events prior or following CB episodes were found.

Conclusion: The findings indicate that CB episodes hold negative reinforcing properties for individuals with CB.

Compulsive buying, eating disorder symptoms and temperament in female students and eating disorder patients

CLAES, Laurence; Bijttebier, P.; Mitchell, J.; de Zwaan, M.; Mueller, A.
1K.U.Leuven, Department of Psychology, Belgium; 2Neuropsychiatric Research Institute, United States; 3University of Erlangen, Germany

Objectives: The aim of the present study was to investigate the relationship between compulsive buying (CB), eating disorder (ED) symptoms, and temperament (controlling for depression) in a sample of female students and ED patients.

Method: We assessed female undergraduate students and ED patients using the Compulsive Buying Scale, the Eating Disorder Inventory, the Behavioral Inhibition System and Behavioral Activation System scales, the Adult Temperament Questionnaire, and the Physical Health Questionnaire-Depression.

Results: The results show a positive association between CB and the Eating Disorder Inventory-II drive for thinness and bulimia subscales. Both CB and eating disorder symptoms were related to low levels of effortful control. Finally, CB was also related to high levels of Behavioral Activation Scale reactivity (impulsivity), whereas eating disorder symptoms (especially drive for thinness) were more strongly related to high levels of Behavioral Inhibition Scale reactivity (anxiety).

Conclusions: The implications of these findings for the treatment of CB and eating disorder symptoms will be discussed.


The Treatment of Compulsive Buying

Mitchell, J.; Mueller, A.; de Zwaan, M.; Claes, L.
1NRI, United States; 2Univ of Erlangen, Germany; 3Catholic Univ, Belgium

The controlled treatment literature for this condition has only recently begun to develop. Three trials now have evaluated the efficacy of a cognitive behavioral manual-based group treatment, studies conducted by two of the authors on this paper. The results have been quite promising and speak to both the acute and longer term efficacy of this approach. Pharmacotherapy approaches are also being explored, and the role for drug treatment thus far appears quite limited.(to be part of a compulsive buying symposium)
Symposium 6 – Danish Contributions to Research in OCD and Anxiety Disorders – Cognitive Characteristics and CBT Treatment Outcome

S06-1

Fifty years of anxiety treatment in Denmark
Rosenberg, Nicole
Aarhus University Hospital, Risskov, Denmark

As 2011 is the 50th anniversary of neurosis-treatment in Danish psychiatry, the symposium will start with a short summary of the development from the beginning till today. The first clinic for neurosis was established in Aarhus University Hospital in 1961. The treatment was psychoanalytic and an impressive study on characteristics of neurotic patients was carried out. In the 80’s and 90’s revolutions within diagnosis, research, and treatment took place, and today the OCD- and Anxiety Disorder clinics have modern profiles, offering evidence based methods, mainly CBT, for treatment and prevention.

Rosenberg Psyke og Logos 2011 8:167

S06-2

The effectiveness of Cognitive Behavioural Therapy for Obsessive Compulsive Disorder in a Danish Psychiatric Hospital outpatient clinic
Jonsson, Hjalti1; Bennedsen, B.E.2; Thomsen, L.2; Kastorp, K.2; Hougaard, E.1
1Aarhus University, Denmark; 2Clinic for Obsessive Compulsive Disorder, Aarhus University Hospital, Denmark

This paper presents treatment outcome data from a randomized comparative trial (n = 97) of cognitive behavioural therapy (CBT) for obsessive compulsive disorder (OCD), and compares with naturalistic outcome data of 90 OCD patients from the same clinic. The paper looks in particular at patients who failed to make or maintain gains following standard treatment and examines whether extra sessions offered (more of the same) enhances treatment response. The potential advantages and disadvantages of extended treatment courses as other refinements of CBT for OCD to enhance effectiveness and prevent relapses will be discussed.


S06-3

Associations between treatment outcome and cognitive functions in Obsessive Compulsive Disorder. Preliminary results
Kjaer Vandborg, S.; Hartmann, T.
Clinic for OCD, Denmark

First choice treatment of OCD is Cognitive Behavioural Therapy and/or Selective Serotonin Reuptake Inhibitors. Up to 50% of OCD-patients do not respond significantly to this treatment. Preliminary results on whether treatment outcome is associated with cognitive functions in OCD will be presented. If cognitive functions are associated with treatment outcome, it may be possible to differentiate future treatment approaches and thereby ensure good treatment outcome for more OCD-patients and prevent chronification of the disorder.


S06-4

Emotion knowledge and social anxiety
Skytte O’Toole, Mia
Aarhus university Hospital, Denmark

Emotion knowledge influences how emotional episodes unfold and is thought of as an important factor implicated in adaptive emotion regulation. It has been proposed that individuals with social anxiety disorder (SAD) have poor clarity of emotions when compared with healthy controls, that is, they have difficulties identifying and differentiating their own emotions. On the contrary, it has also been hypothesized that individuals with SAD are better able to detect negative emotions in others due to a heightened awareness of threatening information in their environment. Thus, there exists contrasting views regarding these individuals’ degree of emotion knowledge. Results from a large survey and a meta-analysis concerning emotion knowledge in SAD will be presented.
Can computer-aided CBT be the key to a broader distribution of CBT and to earlier interventions?

Mathiasen, Kim
Clinic for Anxiety Disorders, Aarhus University Hospital, Risskov, Denmark

Anxiety disorders are common, debilitating and often chronic. Access to treatment can be delayed by long waiting lists and a shortage of suitably qualified therapists. Computer-aided CBT (cCBT) offers an accessible alternative to meet the demands placed on services and clinicians. Studies have demonstrated that cCBT can achieve treatment effects that are comparable to standardized face-to-face treatment with CBT. The Clinic for Anxiety Disorders at Aarhus University Hospital has translated FearFighter, an evidenced based treatment for panic and phobia in the UK and localized it to Danish culture. An RCT will examine its efficacy and effectiveness. The process of adaptation as well as the clinical and cost effectiveness studies will be discussed. Segments of the English and Danish versions will be demonstrated.

Marks, Isaac M. et al. Saving clinicians’ time by delegating routine aspects of therapy to a computer: a randomized controlled trial in phobia/panic disorder. Cambridge University Press 2004; 34, (pp 9-18)

A school-based program to prevent depression and to build up life skills

Hautzinger, Martin; Wahl, M.W.; Patak, M.P.
University of Tuebingen, Germany

The major goal of our project was to prevent the development and increase of depressive symptoms in adolescents by empowering adolescents to improve their life skills, to foster their realistic thinking, and to influence school behaviour. Vocational track students in grade 8 from the southwest of Germany participated either in a school-based universal prevention programme or a non-intervention control group (standard curriculum). The cognitive-behavioural programme LARS&LISA includes 10 sessions held in a regular school setting in same-gender groups. The programme is based on the social information-processing model of social competence (Dodge, Annual Review of Psychology 44:559-584, 1993) and consists of five basic elements: (1) formulation and setting of personal goals; (2) relationship between cognitions, emotions and behaviour; (3) exploration and change of dysfunctional cognitions; (4) training of social competence; (5) assertiveness training. We have demonstrated that the programme can be successfully delivered to students in a higher vocational track of school (Realschule) by psychologists. Currently it is being evaluated in a lower vocational track of school (Hauptschule) by teachers and psychologists. With LARS&LISA we provide a prevention strategy that can be successfully delivered to a school-based population and integrated into classroom curriculum.

Follow Up and Prediction of Prevention of Depression and Dysthymia Among Icelandic Adolescents

Arnarson, Eirikur1; Craighead, W.E.C.2
1University of Iceland, Iceland; 2Emory University, United States

Objectives: Major depression and dysthymia are frequent, debilitating, and chronic disorders, whose highest rate of initial onset occurs during the late adolescent years. The effectiveness of a program designed to prevent an initial episode of major depression or dysthymia among adolescents was investigated.

Methods: Participants were 171 fourteen-year-old “at risk” but never previously depressed Icelandic adolescents who were randomly assigned to a prevention program or a treatment-as-usual (TAU) assessment only control group. They were identified as “at risk” by reporting the presence of depressive symptoms or a negative attributional style. The program was based on a
developmental psychosocial model of enhancement of resilience to factors associated with the occurrence of mood disorders. It was administered in a school setting by trained school psychologists. There was a manual for the group leaders and a workbook for the students. The program comprised 14 sessions with groups of 6-8 adolescents. Diagnostic clinical interview and self-report data were collected at baseline, posttest, 6-month follow up and 12-month follow up sessions. There were no significant differences between the prevention and TAU groups for dropout rates or for “dropouts” compared to the “completers” on any of the screening measures.

Results: At posttest, diagnoses of new (initial) episodes of depression and/or dysthymia were assigned to 2.5% of the TAU Control Group but 0% of the prevention group. By the 6-month follow-up, the diagnosis for initial episodes of depression and/or dysthymia had been assigned to 13.3% of the TAU group but only 1.6% in the prevention group; data for 12-month follow-up were similar (21% for the TAU group and 4% for prevention group). Twice as many girls as boys experience an initial episode of depression/dysthymia. Survival curves for initial episode rates were separately estimated at 6- and 12-month follow-ups using the Cox proportional hazards model. Students not available for follow-up were treated as censored observations. At 6-month follow up, the prevention program relative to TAU significantly reduced the risk of development of a first episode of depression and/or dysthymia ($\hat{\beta} = 4.03, p = .0448; OR = .122$). Survival analysis for the 12-month follow-up data indicated continued group differences ($\hat{\beta} = 5.02, p = .025; OR = .182$). At the end of 1-year follow up a student who participated in the prevention program was only 18.2% as likely to have developed an initial episode of the depression/dysthymia as a student who was in the TAU group. Stated differently, the prevention program relative to TAU decreased the likelihood of having a first episode by 81.8%. A logistic regression model was estimated for the TAU condition subjects in order to determine if the screening CDI, CASQ-NEG, and the CASQ-POS predicted either the diagnosis of MDE/Dysthymia; only the CDI significantly predicted the diagnosis of MDE/Dysthymia (estimate $= .0997, SE = .0467, Wald \hat{\beta} = 4.55, p = .0330$). Conclusions: The results show that it is possible to can prevent the development of depression in adolescents “at risk,” who have not previously been depressed.


Prevention of depression in adolescence - a Portuguese study

Matos, Ana Paula; Cherpe, S.; Craighead, W.E.; Arnarson, E.Ö.

1University of Coimbra, Portugal; 2Emory University, United States; 3University of Iceland, Iceland

Objectives: At the present research stage, the main aim is to study some risk/protective factors for depression.

Methods: The sample is of 905 adolescents, 357 males (39.4%) and 548 females (60.6%), ranging in age from 12 to 16 years. The age average of adolescents is 13.87 years ($SD = 1417$), with no statistically significant differences between sexes regarding age [$F = 13.94, SD = 1.435$ vs. $M = 13.76, SD = 1383$, $t = -1.911 p = .056$]. The subjects completed the Children’s Attributional Style Questionnaire (CASQ - Seligman et al., 1984), the Children’s Depression Inventory (CDI - Kovacs, 1985), the Multidimensional Anxiety Scale for Children (MASC - March et al., 1997), Mental Health Continuum-Short Form for youth (MHC-SF - Keyes, 2008), Child Behavior Checklist (CBCL; Achenbach, 1991).

Results: The data show that girls present higher values than boys on depressive and anxiety symptoms. In girls total CDI correlates significantly with ten MASC dimensions (ranging from $r=-.120, p=.006$ to $r=.557, p=.000$). Otherwise, boys have higher values in CASQ scores: NEG and POS composites. Parents’ reports on psychopathological symptoms of adolescents (CBCL) reveal that girls have higher values of somatic complaints, and boys present higher scores of attention problems and anti-social behavior. Boys show higher values in all domains of subjective well-being (MHC-SF). Based on mental health levels (MHC-SF), the majority of adolescents are in “flourishing” (44.7%), 16.4% are in “languishing” and 38.9% are in “moderate mental health”. This trend occurs in both sexes. However, there are more girls in “languishing”, while the number of boys in “flourishing” is higher ($\chi^2 = 8.112$, $p = .017$). Crossing levels of mental health with levels of depressive symptoms it was found that 3.4% of adolescents in “flourishing”, 5% of adolescents in “moderate mental health” and 28% in “languishing”, show depressive symptoms. This means that compared with adolescents in “flourishing”, adolescents in “moderate mental health” are 1.5 times more likely to show depressive symptoms, while those in “languishing” are 8.4 times more likely to develop depressive problems.

Conclusions: Keyes (2010) points that increasing the level of mental health lessens the risk of mental illness. This is also emphasized by the results of this study. Additionally, results show that strategies to promote subjective well-being and to intervene on attributional style and emotional distress should be sensitive to gender differences.

Universal Prevention of Adolescent Depression: A 12-Month Follow-up Comparison of two Active Prevention Programs

Pössel, Patrick; Martin, N.C.M.; Garber, J.G.
University of Louisville, United States

Objectives: Adolescent depression is an important public health problem often accompanied by serious functional impairment. The current study examined two potential important moderators of the effects of universal prevention programs on depression at follow-up: the level of such symptoms at baseline and adolescents’ sex. Adolescents with low versus high baseline depressive symptoms may respond differently to the interventions. For example, Pössel et al. (2004) reported that participants with initially high depression scores (high-risk) in the prevention group showed decreased symptoms at follow-up, whereas depressive symptoms in the control group did not change. Increases in depressive symptoms in low-risk participants in the prevention group were prevented, whereas the low-risk controls increased in depression scores. Concerning the moderating effect of sex, recent meta-analyses revealed contradictory results. Stice et al. (2009) reported that studies including a greater percentage of girls yielded greater effects, and Merry et al. (2006) showed that prevention studies reduced depression scores for boys but not girls.

Methods: This study compared a universal cognitive-behavioral (CB) prevention program (102 females, 64 males) with a structurally equivalent, non-specific psycho-educational program as the active comparison group (Active; 108 females, 66 males) and a no intervention, assessment-only control group (115 females, 63 males). The two programs were facilitated by trained group leaders in 90-minute sessions that met weekly across 10 weeks; students in the no intervention control group participated in their regular Wellness class during this time.

Results: Nested within group, at the 12-month follow-up adolescents in the CB program reported a nonsignificant trend toward lower depression scores compared to the Active group, F(1/34) = 3.21, p = .082. Furthermore, boys in the CB program reported significantly lower depression scores than boys in the no intervention condition, F(1/80) = 5.81, p = .018, at 12-month follow-up. Unexpectedly, baseline depression did not influence the effects of the CB or Active group.

Conclusions: Results will be discussed in reference to baseline depression and sex as moderators when comparing CB programs to active and no intervention control groups.


Is Cognitive Behavior Therapy the Optimal First-line Treatment for Depression?

Hollon, S.; Bockting, C.
1VanderBilt University, United States; 2Groeningen University, Netherlands

Prof. S. Hollon, VanderBilt University, USA Is Cognitive Behavior Therapy the Optimal First-line Treatment for Depression? The cognitive and behavioral therapies (CBTs) have emerged as a major alternative to antidepressant medications (ADM) in the treatment of depression and might be preferred as the first-line intervention for most if not all patients. Although ADMs are generally safe and efficacious they do not separate from pill-placebo among patients with less severe depressions and there is no indication that they do anything to reduce subsequent risk once their use is terminated. When adequately implemented CBT can be as efficacious as ADM in the reduction of acute distress without producing side effects and CBT appears to have an enduring effect that lasts beyond the end of treatment; patients who respond to CBT are about half as likely as patients who respond to ADM following treatment termination and no more likely than patients continued on medications. Given this enduring effect, CBT is likely to prove more cost-efficient than ADM. CBT appears to be superior to ADM for depressed patients free from personality disorders and for patients with more prior negative life events. CBT also appears to be superior for patients who are unemployed and does a better job than ADM in leading to improvement in employment. CBT appears to work through specific mechanisms with respect to both treatment process and the mechanisms of change within the patient. Adding cognitive therapy to medications appears to enhance response for patients with more severe or less chronic depressions and a more purely behavioral intervention may be as efficacious as medications and as enduring as cognitive therapy. The incidence of severe adverse events and risk for suicide both appear to be reduced for patients treated with cognitive and behavioral interventions relative to medication alone. There are even indications that a cognitive behavioral intervention can prevent episode onset in at-risk adolescents. Taken in aggregate, these findings suggest that CBT might well be preferred to ADM as the first-line treatment for most depressed patients.
Preventing relapse of recurrent depression: Outcome of a randomized controlled trial comparing cognitive-behavioral maintenance therapy with manualized psychoeducation

**Aim:** Major Depression is a highly recurrent disorder with high personal and societal costs. Besides pharmacological continuation and maintenance therapy, several cognitive approaches have been developed for the prevention of recurrences. The primary goal of our multicenter study was to compare the relapse preventing effects of an integrative cognitive-behavioral maintenance therapy (CBMT) with a manualized active Psychoeducation (MAPE).

**Methods:** 186 Patients were included in our study, meeting the following inclusion criteria: recurrent depressive disorder, currently in remission, 3 or more depressive episodes in the history. Exclusion criteria were organic psychiatric disorders, substance-abuse-related disorders, schizophrenia, schizoaffective disorders, depressive disorder with psychotic symptoms, bipolar disorder, mental disabilities, posttraumatic stress disorder, borderline personality disorder, severe physical illness, and acute suicidality. Patients were randomly assigned to either CBMT or MAPE. All patients received treatment as usual (TAU) given by a psychiatrist. Patients were treated in 12 psychiatric hospitals or outpatient clinics.

**Results:** As a primary outcome, relapse rates were measured in both treatment conditions over one year follow-up. There were no significant differences between both treatments. However, when comparing patients with 5 or more depressive episodes and patients with less than 5 episodes in the history, there was a significant interaction effect. Univariate analyses revealed that CBMT was significantly superior to MAPE in the subsample with 5 or more depressive episodes.

**Discussion:** Discussion will focus on the particular importance of the history of depression for the efficacy of CBMT, and draw the consequences of these results for relapse prevention in depression.

### Internet based cognitive behaviour therapy in the prevention of relapse in persons with partially remitted major depression: a randomized controlled trial

**Objectives:** To investigate whether Internet based cognitive behaviour therapy (CBT) can prevent relapse in persons with partially remitted major depression after previous treatment.

**Method:** Seventy-one women and 13 men (N = 84) with partially remitted major depression after previous treatment.

**Results:** Significantly fewer participants in the CBT group experienced relapse (4/38 or 10.5%) compared to those in the control group (14/37 or 37.8%). The difference in relapse rates between the groups occurred early in the study period and was still apparent after 6 months. A trend towards a larger reduction of depressive symptoms was observed at post treatment in the participants who received CBT compared to controls. Improvement in depressive symptoms reduced the risk of relapse. A trend towards a higher rate of remission was found in the CBT group at the 6 month follow-up. Conclusion: Internet based CBT seems promising in preventing relapse in persons with partially remitted major depression.

### Internet-based Relapse Prevention after Inpatient Therapy of Major Depression Disorders – Secondary Analyses of a Randomized Controlled Trial

**Objectives:** To investigate whether Internet based cognitive-behaviour therapy (CBT) can prevent relapse in persons with partially remitted major depression after previous treatment.

**Method:** Seventy-one women and 13 men (N = 84) with partially remitted major depression after previous treatment.

**Results:** Significantly fewer participants in the CBT group experienced relapse (4/38 or 10.5%) compared to those in the control group (14/37 or 37.8%). The difference in relapse rates between the groups occurred early in the study period and was still apparent after 6 months. A trend towards a larger reduction of depressive symptoms was observed at post treatment in the participants who received CBT compared to controls. Improvement in depressive symptoms reduced the risk of relapse. A trend towards a higher rate of remission was found in the CBT group at the 6 month follow-up. Conclusion: Internet based CBT seems promising in preventing relapse in persons with partially remitted major depression.
**Objectives:** Therefore, the goal of the present study is to evaluate the use of a Transdiagnostic-Internet-based-maintenance-treatment (TIMT) to enhance long-term-effects of inpatient therapy of MDD.

**Methods:** Using data from a randomized controlled trial designed to test the effectiveness of TIMT for various mental health disorders (N = 400), we performed secondary analyses of 208 participants with MDD to identify the specific effectiveness for patients with MDD. Patients were assigned to 12-week-TIMT after inpatient treatment or to a treatment-as-usual-group (TAU). TIMT involved a self-management-module, a patient-support-group, asynchronous patient-therapist communication and an online-based progress-monitoring. TAU involved outpatient individual or group-psychotherapy and/or special standardized outpatient face-to-face- maintenance-treatment and/or psychotropic management. Groups were compared using multi level analyses of change 3 and 12 month after inpatient treatment discontinuation with regard to change in depressive symptoms and general psychopathological symptom load.

**Results:** Three and 12 months after inpatient treatment participants of TIMT showed less depressive symptoms and less psychopathological symptoms than TAU-participants.

**Conclusions:** Results from this study provide evidence that TIMT is a) well accepted and b) effective to enhance the impact of inpatient CBT for people with MDD. Future studies should investigate the potential of a disorder-specific internet-based relapse-prevention program for MDD. Therefore we plan to develop and evaluate such a program (IMT-D) that aims to enhance self-management, empowerment and relapse-prevention skills in patients who have completed inpatient treatment for depression. Concept and design shall be discussed.

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**Preventing relapse and recurrence using face to face CT or mobile CT? Three randomized controlled trials**

Bockting, C.L.H.; Elgersma, H.; Kok, G.D.; van Rijsbergen, G.

Groningen University; Netherlands

Major Depressive Disorder has a highly recurrent nature. Results of a RCT comparing preventive cognitive therapy added to treatment as usual (TAU) versus TAU alone will be presented. CT has an protective effect in reducing time to relapse over 10 years (p<.03). In addition, two on going RCT’s will be presented. The first trial evaluates an eight session face to face CBT compared to a combination of both, in recurrently depressed patients (Bockting, et al., 2011). The second evaluates a mobile CT with SMS based monitoring as compared to TAU (Bockting, et al., 2011). In addition, specific ingredients of Mobile CT will be demonstrated.

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**Assessing Mindfulness with Self-Report Measures: The Comprehensive Inventory of Mindfulness Experiences (CHIME)**

Bergomi, C.; Kupper, Z.; Tschacher, W.

University Hospital of Psychiatry Bern, Department of Psychotherapy, Switzerland

Mindfulness has been defined as self-regulation of attention with a particular orientation characterized by curiosity, acceptance and openness (Bishop et al., 2004). In recent years, the interest in the study of the mechanisms underlying the positive effects of mindfulness-based clinical interventions has been steadily growing. Appropriate measurement of mindfulness is thus essential. During the last decade, many efforts towards this goal have been made, leading to the development of at least seven mindfulness self-report scales and to some advances in the experimental assessment of mindfulness. These scales differ in two important ways from each other: 1) they focus on different aspects of mindfulness; 2) they measure mindfulness as a holistic construct, with tightly interrelated facets, or as a multi-dimensional construct, with separable facets. Such differences hamper the comparability of results obtained with different scales and stand for two relevant open issues in the assessment of mindfulness regarding 1) the conceptual covering of the mindfulness construct and 2) the kind of relationship between its facets. A new mindfulness self-report measure, the Comprehensive Inventory of Mindfulness Experiences (CHIME), will be presented based on results from two studies that were conducted to develop and validate the CHIME. The goal of the first study was to test a preliminary version of the CHIME with a particular focus on clarifying the two open issues just highlighted. The facets included in the CHIME stem from a review of all mindfulness facets proposed in validated mindfulness scales. Results in a meditation naïve (n = 313) and a more meditation experienced (n = 144) sample suggested that the relationship between mindfulness facets is influenced by the degree of meditation experience: Facets were found to be more interconnected with growing experience.

In the second study, the final version of the CHIME was validated. Important ways from each other: 1) they focus on different aspects of mindfulness; 2) they measure mindfulness as a holistic construct, with tightly interrelated facets, or as a multi-dimensional construct, with separable facets. Such differences hamper the comparability of results obtained with different scales and stand for two relevant open issues in the assessment of mindfulness regarding 1) the conceptual covering of the mindfulness construct and 2) the kind of relationship between its facets. A new mindfulness self-report measure, the Comprehensive Inventory of Mindfulness Experiences (CHIME), will be presented based on results from two studies that were conducted to develop and validate the CHIME. The goal of the first study was to test a preliminary version of the CHIME with a particular focus on clarifying the two open issues just highlighted. The facets included in the CHIME stem from a review of all mindfulness facets proposed in validated mindfulness scales. Results in a meditation naïve (n = 313) and a more meditation experienced (n = 144) sample suggested that the relationship between mindfulness facets is influenced by the degree of meditation experience: Facets were found to be more interconnected with growing experience.

**Keywords:** mindfulness, assessment, self-report, questionnaire

Germany
tive emotion regulation strategies (e.g. rumination, self-blame) MBCT group. Moreover, participants use less poor adaptive cogni-
iety and depressive symptoms after the participation to a MBSR or
a MBSR or MBCT well as the frequency of use of cognitive emotion regulation strat-
questionnaires that assessed anxiety and depression symptoms as
help determine the characteristics of participants who benefit
MBA. The present study explores whether self-assessments can
denced symptom reduction. However, clinical experience suggests
Cognitive Therapy (MBCT) have shown positive outcomes for vari-
geworthy in personality psychology, as well as in clinical psychology. At the same time, various
ings have been published. However, despite the focus on the body of many central mindfulness-based
s, no specific instrument for the assessment of such a
body-related mindfulness has been established. To address this
issue, the Body Mindfulness Questionnaire (BMQ) was developed.
Methods: Exploratory and confirmatory factor analyses
determined the factor structure of the BMQ. Correlations were
analysed between the BMQ factors and relevant constructs to
that the BMQ is a valid and
reliable instrument that allows assessment of the important facet
of the mindful awareness of the body.

Characteristics of participants who benefit most from Mindfulness Based Approaches: can self-assessments provide an indication? 
Jermann, Francoise; Weber, B.; Myers-Arrázola, L.; Bizzini, L.; Bondolfi, G. 
Geneva University Hospital, Switzerland

Over the years, Mindfulness-Based Approaches (MBA) such as
Mindfulness-Based Stress Reduction (MBSR) or Mindfulness-Based
Cognitive Therapy (MBCT) have shown positive outcomes for vari-
ous psychiatric disorders. Most of the studies that have explored
the impact of these approaches on psychological symptoms evi-
denced symptom reduction. However, clinical experience suggests
that perhaps only a particular profile of patients can benefit from
MBA. The present study explores whether self-assessments can
help determine the characteristics of participants who benefit
most from MBA. Forty-five participants completed self-report
questionnaires that assessed anxiety and depression symptoms as
well as the frequency of use of cognitive emotion regulation strat-
egies and mindfulness skills before and after a MBSR or a MBCT
group. The results show that there is an overall diminution of an-
xiety and depressive symptoms after the participation to a MBSR or
MBCT group. Moreover, participants use less poor adaptive cogni-
tive emotion regulation strategies (e.g. rumination, self-blame)
and display more mindfulness skills after the participation to the
group. These latter changes are particularly marked in participants
with higher baseline depressive symptoms compared to partici-
pants with lower baseline levels. Given that literature has some-
times called for caution in proposing MBA to depressed partici-
pants, the present results warrant some discussion.
The German version of the five facet mindfulness questionnaire (FFMQ): Psychometric properties and relationship with the Schema Mode Inventory

Heidenreich, Thomas¹; Zarbock, G.²; Ströhle, G.; Michalak, J.³

¹Hochschule Esslingen, Germany; ²Institut für Verhaltenstherapieausbildung Hamburg, Germany; ³Dresden, Germany; ⁴Universität Bochum, Germany

This paper briefly presents the psychometric properties of the German version of the “five factor mindfulness questionnaire” developed by Ruth Baer. Further, correlations between mindfulness facets and the Schema Mode Inventory are reported. Possible connections between mindfulness and schema theory and therapy are discussed.

Symposium 10 – New developments in Schema Therapy for BPD – adaptation to therapy groups

Group Schema Therapy: What remains the same and what changes when Schema Therapy is implemented in a Group?

Fretwell, H.M.¹; Farrell, J.M.²; Young, J.E.³

¹Center BPD Treatment Midtown CMHC, IUSM, United States; ²Indiana Univ School Med, ST Institute Midwest, United States; ³Schema Therapy Institute NY, United States

This paper by Fretwell, Farrell & Young describes the model for group schema therapy (GST) developed by Farrell and Shaw and the changes needed in ST interventions and limited reparenting therapist style to adapt it to a group modality. The theoretical models of GST and individual ST developed by Young are consistent.

Method: GST has been tested in a manualized, randomized-controlled outpatient trial and 2 inpatient open trials. The outpatient RCT tested the effectiveness of adding an 8 month, 30 session schema-focused therapy (SFT) group to treatment-as-usual (TAU) individual psychotherapy for patients with BPD. Patients (N = 32) were randomly assigned to ST + TAU and TAU alone.

Results: Significant reductions in BPD symptoms, global severity of psychiatric symptoms, and improved global functioning with large treatment effect sizes were found in the SFT+TAU group. At the end of treatment, 94% of ST plus TAU, compared to 16% of TAU, no longer met BPD diagnosis criteria (p < .001). These results were maintained and increased at 6 month follow-up. Dropout was 0% in the ST condition and 25% in TAU. The inpatient pilots (N=72) demonstrated similar positive effects. These studies lend support to GST as an effective treatment for BPD that leads to recovery and improved function.

Discussion: Speculations about possible catalyzing or augmenting interactions between ST and the curative factors specific to group treatment are discussed. A unique feature of the model of Group Schema therapy developed by Farrell and Shaw and tested in a RCT (2009) compared to existing cognitive and behavioral group treatment is that aspects of the interpersonal process group are strategically employed. Like individual ST, the group model is seen as having great promise for the treatment of personality disorders in addition to BPD and for more complicated Axis I presentations that do not respond to traditional CBT. The GST model harnesses the therapeutic factors of the group to identify and remediate central schema issues involved in the interpersonal disturbance of these disorders like abandonment, defectiveness, social isolation and alienation, etc. The naturally occurring opportunities in a group for in-vivo and vicarious learning as well as behavioral pattern breaking are employed effectively in the model. Work underway to test the GST model for outpatients with BPD, the forensic population and eating disorders, and the potential of the model for other treatment are discussed.
**S10-2**

**The Development of a Schema Therapy Day Treatment Program with groups: content and preliminary data**

**Arntz, Arnoud; Houben, M.**  
*Maastricht University, Netherlands*

More intensive treatment programs are a necessary level of care for patients with borderline personality disorder (BPD) who have serious self-injury and suicidality. This presentation describes the development of a Schema therapy Day treatment program in the Netherlands that utilizes Group ST. The program uses a multi-disciplinary team that includes psychologists, art therapists, drama therapists and movement therapists. Pilot data (BPDSI, BPD Checklist and Quality of life measures) evaluating the effectiveness of the project in reducing BPD symptoms and improving quality of life, will be presented, which demonstrate promising results. Results from qualitative interviews with patients will also be presented. This program can be an important addition to the continuum of care needed to successfully treat the large continuum of severity and general heterogeneity of the BPD population.


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**S10-3**

**Results of 3 pilot studies of Group Schema Therapy in inpatient settings – Germany and USA**

**Reiss, Neеле1; Lieb, K.1; Farrell, J.2**  
1University Medical Center Mainz Department of Psychiatry and Psychotherapy, Germany; 2Indiana Univ Sch Med, ST Institute, Midwest, USA, United States

**Introduction:** During the last years, several promising treatments for Borderline Personality Disorder (BPD) have been developed and tested in the outpatient setting, among them Schema Therapy. Two randomized controlled trials have shown its effectiveness in an outpatient setting, one of them in the individual, the other one in the group therapy setting. Inpatient treatment is another necessary level of care for patient with severe BPD who cannot be managed safely in their home communities. In this intensive treatment setting individual and group Schema Therapy (GST) are combined. This presentation will describe the intensive ST program combining individual and GST that has been tested in Indianapolis, USA and Mainz, Germany.

**Method:** In pilot study 1 two trained therapists conducted GST for N=41 consecutively admitted patients with BPD. The average length of treatment in this program was 4.5 months. In pilot study 2 one trained Schema therapist conducted GST for N=36 BPD patients. In this study, the length of treatment was limited to 12 weeks. In pilot study 3 two therapists trained in individual, but not in GST conducted groups for N=15 BPD patients for 12 weeks. Personal satisfaction with the treatment program was assessed, too.

**Results:** Significant reductions of symptoms were found in both borderline specific symptoms and general psychopathology in all three studies with varying effect sizes. Qualitative data on the treatment satisfaction highlighted possible difficulties and strengths of the intensive schema therapy treatment program.

**Discussion:** All 3 pilot studies focused on the implementation and evaluation of a combination of individual and GST in the inpatient setting. Effectiveness of intensive Schema Therapy could be shown for all three studies, but important questions regarding the length of treatment and number and training of group psychotherapists were raised.

**Conclusions:** Intensive Schema Therapy treatment programs with a combination of individual and GST for patients with BPD can be successfully implemented inpatient settings.

Effect Study of Cognitive Behaviour Therapy and Workcoping for Patients With Anxiety and Depression

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Background: Mild to moderate depression and anxiety disorders may result in work absenteeism and disability, and an increase in sick leave and disability benefits for such common mental disorders is observed in several western countries. Employment provides income, social identity and social support, and has been suggested to benefit people with mental disorders. The Norwegian Welfare and Labour Administration (NAV) administers the vocational rehabilitation services in Norway and aim to increase work attendance, reduce sick leave and release of disability benefits. There has been no evaluation within NAV of these services’ effect on competitive employment for people with common mental disorders.

Methods: The current study is a multi-centred randomised controlled trial. The primary outcome measure is work participation, with changes in mental health as secondary outcome. Participants are recruited by referral from General Practitioners, case-managers within NAV and by self-referral. The intervention is Centre for work-coping (CWC), a vocational rehabilitation service within NAV that offers 15 sessions of individual Cognitive Behaviour Therapy (CBT), and a job consultant service based on Individual Placement and Support (IPS). The service is established in six centres nationwide and is inspired by the IAPT-Centres in UK, though here implemented as part of vocational rehabilitation services. The control is treatment as usual within NAV or the health care system. Participants receive questionnaires at baseline, then 6 and 12 months after inclusion. Primary outcome will be measured by data on benefits and taxes gathered from NAV registries.

Results: Preliminary results on patient-flow and descriptive data of participants based on status reports from the research project will be presented.

Discussion: The results will yield new information concerning the effect of cognitive behaviour therapy and vocational rehabilitation within NAV on competitive employment for people with common mental illnesses, and could add knowledge on means of preventing disability benefits resulting from such illness.
A Strategy for the Development of Psychological Therapy Services in Northern Ireland

Duffy, Michael

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In 2009 the Northern Ireland Dept of Health and Social Services published a new strategy for the development of psychological therapies. The introduction to the strategy stated that services would now “be delivered to agreed principles and standards and by competent and skilled staff, who are appropriately supervised and accredited by relevant professional bodies.” The strategy recommended a stepped care model of service delivery to promote early intervention, self help and support in the community, but also recognised the need for specialist services for people with more complex conditions, particularly those arising from mental health and learning disabilities. This presentation will report on the work of the regional Psychological Therapies Group that was established to implement this strategy and present data from one guided self-help project provided by AWARE in the voluntary sector. Also, in 2009 in one region of the Republic of Ireland a new training initiative based on Cognitive Behavioural Therapy principles was offered to mental health professionals aimed at enhancing clinical practice. An evaluation of this training programme will be provided based on participants and service manager responses.

A new initiative: to reduce the psychological barriers that prevents unemployed citizens from seeking and holding on to employment.

Wattar, Ulla

Watter Gruppen, Kognitivt Psykolog Center, Denmark

In 2009, the City of Copenhagen, the Occupation and Integration effort, gave its citizens with psychological problems the same status as had previously been granted to citizens with physical handicaps. Citizens with psychological problems could here after be referred to selected psychological services with the main purpose of removing the psychological barriers that prevent employment. The Wattar Group, a private psychology center was granted to right to implement this effort and has developed an effective program. The main psychological treatment being offered is CBT evidence based treatment for anxiety, depression, ADHD and others, in groups or individually. An interdisciplinary team supports this effort. The primary goal is to help the citizens come closer to employment. We have completed around 570 citizens with an average of 13 weeks participation in the program and can now document that between 25 and 30% of the citizens progress towards occupation or education as a direct effect of the program. In addition about 25 % are referred out for more specialized treatment often substance abuse. The program can also show significant reduction of measures on depression and anxiety. This presentation will present the results of the progression to employment, the group and individual strategies that have been selected.

Symposium 12 – Preventing and Improving Mood Episodes in Bipolar Disorder: Novel Psychosocial Treatment Strategies

Mindfulness-Based Cognitive Therapy for the Treatment of Symptomatic Individuals with Bipolar Disorder


1Massachusetts General Hospital, United States; 2Massachusetts General Hospital, United Kingdom; 3Temple University, United States

Dr. Thilo Deckersbach will present his work developing Mindfulness-based Cognitive Therapy (MBCT) for bipolar disorder (BD). In this treatment patients practice meditation techniques as well skills to recognize negative thoughts. It consists of 12 2hr group sessions in which BD patients (N=10) learn and practice yoga exercises, body scans, and meditation techniques. This was coupled with mood monitoring and relapse prevention (e.g., recognizing triggers and modifying stress responses that intensify mood symptoms and increase the risk of relapse). Clinical scales and questionnaires were completed at baseline, post-treatment and at a 3-month follow-up. We found significant decreases in mood symptoms (HAM-D, p < .05), and increases in self-reported psychosocial functioning (LIFE-RIFT: p < .05), well-being (Positive Affect Scale, p < 05) and cognitive functioning (p < .05). In addition, data will be presented from the recently completed randomized controlled trial that compared MBCT with a psychoeducational-supportive group treatment. Overall, results suggest that MBCT for BD shows promise as a treatment that aims at decreasing residual mood symptoms, as well as increasing functioning and well-being in patients with high levels of residual symptoms.
S12-2

Integrated treatment for anxiety in bipolar disorder

Jones, S.J.; Kay Hampshire, K.H.; Byrne, P.B.
Lancaster University, United Kingdom

Dr. Steven Jones will discuss two studies conducted on treating comorbid anxiety with BD. In study 1, he and his colleagues conducted a qualitative investigation of the experience and consequences of anxiety in individuals with BD. This indicated the importance of anxiety as an integral experience within BD as well as experiences of anxiety separable from BD. This work then informed a series of focus groups conducted with service users with BD to facilitate the development of an anxiety in BD therapy manual. Results of the thematic analysis of this focus group work will also be reported. The resulting randomized controlled trial is now in progress so the nature of the intervention and preliminary information on feasibility will be provided.

S12-3

Life Goals Collaborative Care (LGCC): Integrated Psychotherapy and Health Behavior Change for Persons with Bipolar Disorder

Killbourne, A.K.
University of Michigan Medical School, United States

Dr. Amy Kilbourne will present her work developing the Life Goals Collaborative Care (LGCC) program. This intervention is designed to improve medical and psychiatric outcomes for persons with BD. The treatment focuses on personal goal-setting that is aligned with wellness and symptom coping strategies and supported through collaborative care. Patients with BD and at least one risk factor for cardiovascular disease were recruited from four mental health and primary care clinics, and randomized to LGCC or attention control. Outcomes included symptoms, health behaviors, and risk factors for cardiovascular disease. Of the 178 enrolled (mean age=50, 32% female, 30% manic episode), 6-month outcomes suggest greater levels of physical activity, higher mental health functioning scores, and fewer hospitalizations among LGCC compared to attention control patients. Twelve-month outcomes will focus on effects of LGCC on risk factors for cardiovascular disease. LGCC potentially addresses the physical-mental health treatment gap in routine care.

S12-4

Nutrition/weight loss, Exercise, and Wellness Treatment (NEW Tx) for Bipolar Disorder

Sylvia, Louisa1; Nierenberg, A.N.1; Stange, J.S.2; Peckham, A.P.1; Deckersbach, T.D.1
1Massachusetts General Hospital, United States; 2Temple University, United States

Dr. Louisa Sylvia will discuss the development of an integrated psychosocial treatment for BD to decrease the associated disproportionate medical burden. The intervention consists of three treatment modules: Nutrition/weight loss, Exercise, and Wellness Treatment (NEW Tx) which were administered in 12, 60-min group sessions over 14 weeks to two pilot groups. We completed the first group (n = 4), revised the treatment and then conducted a second group (n = 6). Participants completed all of the pre-and post-treatment study assessments and attended 82% of the sessions. Both groups increased their weekly exercise levels by over 100 minutes. Participants in the second group showed an improvement in their quality of life (LIFE-RIFT), as well as a decrease in both depressive symptoms (MADRS) and weight (all p’s < .05). NEW Tx was well tolerated and feasible, and demonstrates promising data on its efficacy for reducing the medical burden in BD.
Symposium 13
Therapeutic writing: New developments in expressive and positive writing

S13-1

Extending the Written Disclosure Paradigm to Treating Relationship Trauma

Snyder, Douglas
Texas A&M University, United States

Objectives: Considerable evidence now supports the psychological and health benefits of written emotional disclosure when pursued in an individual context. However, the literature has largely neglected interpersonal applications of the written disclosure paradigm. In this presentation, we describe an extension of the written disclosure paradigm to the treatment of couples struggling to recover from an extramarital affair.

Methods: Using a replicated case-study design, six couples were evaluated prior to, during, and following an integrative 3-stage treatment for recovery from infidelity. Treatment components emphasized (1) containing initial emotional and behavioral dysregulation following initial disclosure or discovery of the affair; (2) examining potential contributing relationship, situational, and intrapersonal factors to the affair; and (3) exploring forgiveness and reaching informed decisions about how to move forward. At the end of each of these 3 stages, each partner engaged in a writing task involving a letter to their partner disclosing significant feelings and thoughts, and these letters were exchanged and discussed both outside and in therapy.

Results: Following treatment, injured spouses whose partner had participated in an extramarital relationship showed significant decreases in depression and PTSD related symptomatology, reductions in state anger and global marital distress, and decreases in negative assumptions and increases in forgiveness toward their partner. Similarly, participating partners showed significant decreases in PTSD-related symptoms, depression, and initial anger toward their spouse. Effect sizes reflecting reductions in marital distress for injured spouses were moderate to large and generally exceeded average effect sizes for efficacious marital therapies not targeting affair couples.

Conclusions: For some injured partners, emotion regulation requires disinhibition and cathartic expression of profoundly hurt feelings that, if chronically suppressed, may contribute to sustained autonomic arousal and emotional or behavioral avoidance. For other injured partners, emotion regulation requires the organization and modulation of intense feelings that otherwise find expression in chaotic and sometimes aggressive verbal and physical behaviors. Apart from its regulatory role, written disclosure frequently also serves an exploratory or expressive and positive writing function. Perhaps most important from an interpersonal perspective, when applied to couples the written disclosure paradigm has the potential to promote communication, empathic understanding, and secure attachment. Overall, use of the written disclosure paradigm in the treatment of infidelity shows considerable promise in helping couples to examine shattered assumptions and to consolidate modified schema into a new, coherent “story” of their relationship.


S13-2

Resource diary: Enhancement of emotion regulation in a clinical sample

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University of Jena, Germany

Introduction: Since Pennebaker's (1989) “expressive writing” intervention, numerous studies have focused on the evaluation of mental and physical health benefits of expressive writing. Although individuals experienced a strong decline of positive mood during writing, most studies have found considerable evidence of positive long-term effects on mood, life-satisfaction, or physical health. Closer analyses of word use in the written essays have led to the idea that ongoing writing about positive aspects of life could also enhance mood-state, well-being, and happiness as well as reduce depressive symptomatology. Although writing about positive aspects of life shows promising effects in healthy or sub-clinical people, studies with clinical patients are rare. Therefore, the aim of our study was to evaluate the effects of a resource diary on mood, emotion regulation, and the use of resources in a sample of psychotherapy patients.

Method: At the end of psychotherapeutic treatment N=41 former inpatients with depression (58%), adjustment disorder (35%) or somatization disorder (7%), were randomly assigned to either writing a resource diary (intervention group; N=21) or to the control group (no writing, assessment only; N=20). The intervention group wrote over four weeks, three days a week for about 20 minutes about specified resource activating questions (e.g. moments of happiness in the last week). Pre- and post measures were administered to both groups with an interval of four weeks between.

Results: Results in the intervention group showed significant enhancement of mood after every writing session. Moreover, four weeks of resource writing improved significantly adaptive emotion regulation (reappraisal) as well as handling of daily strains in the intervention group compared to the control group.

Discussion: Resource writing following a psychotherapeutic treatment seems to be a promising intervention for the enhancement of mood, emotion regulation, and handling of daily strains. Most patients in our sample were diagnosed with depression. However, it might be that especially depressive patients benefit from resource writing. Therefore, and because of its good practicability and the low costs, resource writing is needed to be evaluated further. Especially studies with longer follow-up intervals and with depressive samples are required.

Conclusion: Positive writing could be a promising and useful way to facilitate end of therapy to the patients and help to enhance important therapeutic achievements, such as emotion regulation abilities and handling of stressful experiences.
Word use of outpatients with a personality disorder and concurrent or previous major depressive disorder

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1Leiden University, Netherlands; 2Maastricht University, Netherlands; 3University of Amsterdam, Netherlands

Objectives: In a recent study, Rude, Gortner, and Pennebaker (Cognition and Emotion, 2004) found word use to be related to depression and vulnerability to depression in the essays written by college students.

Methods: We sought to replicate the findings by Rude, Gortner, and Pennebaker (2004) and extend their findings to a clinical sample. Hereeto, we examined the written essays of 304 psychiatric outpatients with a personality disorder and a mixed psychiatric profile on DSM-IV axis-I and 108 healthy controls using word count software (the Linguistic Inquiry and Word Count, LIWC). Data on the tendency to be discrepant about the current self as compared to a more ideal self were also gathered.

Results: We found that psychiatric outpatients in general used more words referring to the self and negative emotion words and fewer positive emotion words, compared to healthy controls. However, word-use proved unrelated to depression specifically. Actual-ideal self-discrepancies were related to patient status and to current depression. Contrary to our hypothesis, however, these discrepancies did not correlate with the use of words referring to the self.

Conclusions: We conclude that the negative content and self-focus of written essays and high levels of discrepancy reflect a negative thinking style that is common to a range of psychiatric disorders rather than being specific to depression.


Developing well-being: Applying a resource- and well-being diary to foster positive emotional states

Laireiter, Anton-Rupert; Spitzbart, K.

Department of Psychology, University of Salzburg, Austria

Objectives: Positive Psychology states that it is time to concentrate more on positive emotions and personal resources. To prove this statement a lot of studies have been conducted, amongst others using diaries on well-being and happiness. Most of these were applied to depressives with impressive outcomes: Depression was reduced and well-being enhanced. In the present study a similar approach was adopted. However the diary was not applied to depressives but to healthy people. It was the aim of the study to test, if this method also leads to improvements in well-being and positive emotions in psychologically healthy people.

Methods: The diary was treated by 80 students from different faculties of the University of Salzburg for a period of 14 days. Each respondent had to fill in once a day - in the evening - what kinds of good and lucky events he/she had experienced, what positive meetings with other people he/she had, and who, if ever, had supported him/her during the day. A control group also consisting of 80 students did not get this intervention but just completed questionnaires on wellbeing and psychological resources at the beginning and the end of treatment of the experimental group.

Results: In pre-post-comparisons the intervention resulted into a significant improvement of well-being and positive emotions and a decline of negative states such as anxiety, depression and irritability with medium effect-sizes (d=.30-.50). In addition, perception of personal and social resources improved as well with a medium effect-size (d=.30). Participants who felt less well at the beginning of the intervention and perceived less personal and social resources benefited more from the application than those with higher well-being and more resources. These results were supported by comparing the experimental with the control group. At the end of treatment both groups differed significantly in well-being, positive emotions and perception of resources (d=.20-.50)

Conclusions: The study shows that laying one’s focus on his/her own resources and well-being in everyday life can help to foster these states, especially if one feels a little bit bad or has some blues. In the next step a comparable study with depressives will be conducted.
S14-1

The Influence of Impaired Cognitive Control on Rumination and Depressive Symptoms: A Prospective Study in Remitted Depressed Adults

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Ghent University, Belgium

Introduction: Previous research has demonstrated that impaired cognitive control may be an important vulnerability factor for depression. Moreover, impairments in the cognitive control functions of working memory have been proposed as a crucial process underlying the tendency of ruminational thinking. Decreased cognitive control mechanisms lead to difficulties in inhibiting internal attention to irrelevant negative information, contributing to depressive rumination. The aim of the present study was to investigate the influence of impaired internal cognitive control on rumination and depressive symptoms in a prospective design with a 1 year follow up in a clinical sample.

Method: Thirty remitted depressed adults were invited to participate in this study after screening and exclusion of current depression. At baseline, self report questionnaires measuring rumination (RRS) and depressive symptoms (BDI) were administered. Participants also completed the Internal Shift Task (IST), which investigates cognitive control by examining the ability to switch internal attention between emotional and non-emotional mental representations in the working memory. One year later participants were contacted again and asked to complete the BDI and RRS.

Results: The results indicated that internal shift costs for emotional information can predict severity of depressive symptoms 1 year later, even when controlling for baseline BDI. Moreover, mediation analyses showed that the influence of this impaired cognitive control on depressive symptoms is mediated by ruminative response.

Discussion: These findings support the assumption that impaired internal cognitive control is a process underlying rumination and depressive symptoms. This underscores the importance of cognitive control ability as a vulnerability factor for depression, which can lead to clinical implications. Conclusion. Impaired cognitive control can predict depressive symptoms 1 year later, and this relationship is mediated by rumination. These findings enhance our understanding of underlying mechanisms of depression and depressive thinking and may aid in developing therapeutic interventions aimed at reducing relapse rate in depression.

Symposium 14 – Reduced internal cognitive control and the persistence of negative thoughts: A crucial cognitive mechanism in depression?

The relationship between impaired internal cognitive control, depressive symptoms, and rumination

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Introduction: We aimed at developing a reliable paradigm to investigate switching capacity between internal mental representations (emotional as well as non-emotional) in working memory. A first test-retest reliability study lead to the conclusion that the Internal Shift Task (IST) is a reliable measure of internal cognitive control. Consequently, we have investigated the relationship between impaired cognitive control, depressive symptoms, and rumination in two cross-sectional studies with the IST in dysphoric samples. This offers the possibility to disentangle to some extent the relationship between impaired cognitive control and depressive symptoms in general, and rumination more specifically. Because it has been proposed that rumination is one of the most important cognitive vulnerability factors for depression, and that rumination is related to impaired cognitive control, we hypothesized that impaired internal cognitive control would be more closely linked to rumination as compared to depressive symptoms in general.

Method: In a first experiment, the IST was administered to a pre-selected sample of dysphoric (N=20) and non-dysphoric (N=20) undergraduates. In a second experiment, the IST was administered to a pre-selected undergraduate sample of high ruminators (N=20) and low ruminators (N=20).

Results: The main findings were that depressive symptoms in general were not related to impairments in switching between internal mental representations. Interestingly, rumination was related to internal switching impairments in the context of emotional information. The switching impairments were most pronounced when negative information was held in working memory. The variable that was most predictive of the switching impairments was depressive brooding, the maladaptive component of rumination.

Discussion: A crucial and quite consistent finding across the studies reported here is that impaired cognitive control is more strongly related to rumination than to depressive symptoms in general. Conclusion. These findings of a relationship between internal cognitive control and rumination can stimulate future basic research to improve our theoretical understanding of the cognitive vulnerability factors for depression and rumination, and can also stimulate translational efforts to increase the effectiveness of treatment and prevention programs for depression.
Impaired Cognitive Control in Clinical Depression: General but No Valence-Specific Impairments

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Introduction: Cognitive control impairments are hypothesized to underlie cognitive and affective features of depression, such as mood-congruent processing biases, rumination, and sustained negative affect. Prior research yielded only mixed evidence for the presence of general cognitive control impairments in depression and the idea of valence-specific reductions in cognitive control has been advocated. To date, the precise role of emotional information in determining the magnitude of cognitive control impairments in task-performing is not fully understood. This study examined reduced internal cognitive control in relation to emotional information and task settings in clinical depression.

Methods: Individuals diagnosed with major depressive disorder and matched non/never-depressed control participants (N = 40) performed the Internal Shift Task (IST). This task measures internal cognitive control for both emotional and non-emotional information, here defined as switching between internally held mental representations requiring continuous updating in working memory.

Results: Clinically depressed individuals demonstrated general switching impairments. These switching impairments were neither influenced by the task-settings for emotional information (task-relevant, task-irrelevant) nor by the valence of the stimuli (angry, neutral) in the emotion condition. Moreover, this general switch cost correlated positively with rumination.

Discussion: Our findings support the hypothesis that impaired cognitive control is a feature of depression at more severe symptom levels. Interestingly, in the context of prior studies with the IST, the current results suggest that the nature of the cognitive control impairments depend on the depression severity. Whereas clinical symptom levels are associated with an overall reduction, specific relations between cognitive control for emotional information and rumination were observed in subclinical depression.

Conclusion: The results of this study provide a better insight in the relation between depression, impaired internal cognitive control and rumination. Future research should examine cognitive control as a vulnerability factor underlying the etiology and maintenance of depression and treatment possibilities (e.g. cognitive control training) could be explored.

Impaired Internal Cognitive Control Moderates the Relationship between Stressful Events and Rumination: A Prospective Design

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Ghent University, Belgium

Objectives: Rumination is considered to be an important cognitive vulnerability factor for depression. Moreover, several studies showed that rumination prospectively predicts the onset, duration and severity of depressive symptoms. Recently, it has been proposed that reduced cognitive control would contribute to ruminative tendencies (Koster, De Lissnyder, DeRaakshan, & De Raedt, 2011). Impaired internal cognitive control has been defined as a difficulty keeping previously relevant, but now irrelevant information out of working memory, enhancing ruminative thinking. We used a prospective design to examine whether inter-individual differences in internal cognitive control ability, both for non-emotional and emotional material, moderates the relationship between stressful events and the tendency to ruminate.

Methods: At baseline, the Internal Shift Task, measuring the ability to switch attention between items in working memory, was administered in an undergraduate sample (N=37). Six weeks later, during their first examination period at the university, self-report questionnaires were administered during four consecutive weeks, at four fixed moments, measuring stressors, rumination and depressive symptoms.

Results: Results showed that impaired cognitive control, as reflected in larger switch costs, moderated the association between stress and rumination. A larger switch cost when processing emotional material was specifically associated with increased depressive brooding - the maladaptive form of rumination- in response to stress, whereas no effects were observed with reflective pondering - the more adaptive form of rumination.

Conclusions: In most models, it has been proposed that rumination depletes cognitive resources. However, the current results based on a prospective design indicate that there might also be a reverse relation, showing that impaired internal cognitive control contributes to rumination, and particularly depressive brooding. The current study supports the idea that inter-individual differences in internal cognitive control moderates the tendency to ruminate in response to stressful events. These results increase our understanding of the working mechanisms underlying rumination, which can stimulate translational research to improve the effectiveness of interventions by tailoring them to account for individual differences in information processing styles.

Understanding depressive rumination: The impaired disengagement hypothesis

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Persisting negative thoughts are considered a hallmark feature of depression. Recent information-processing approaches have started to uncover the underlying mechanisms of depressive rumination. Despite marked advances in this area, there is a lack of integration between psychopathology and affective neuroscience research. We propose the impaired disengagement hypothesis as a unifying framework between both approaches. The core tenet of our model is that prolonged processing of self-referent material is due to impaired attentional disengagement. This impairment has detrimental effects for subsequent emotion regulation attempts. The empirical evidence for this framework is discussed and we outline future research that allows testing the causal predictions of this model. Moreover, this framework can account for the effectiveness of various treatments for depression and may aid in devising new interventions to target depressive cognition.


The Effectiveness of Cognitive Behavioral Analysis System of Psychotherapy for Chronic Depression: A Multisite Randomized Controlled Trial

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Background: Existing research into the treatment of chronic depression has mostly been conducted in academic settings. These situations do not represent regular care in mental health organizations. Pragmatic-applied research conducted in regular mental health care is therefore required to evaluate the feasibility and effectiveness of these treatment strategies in the real-world, outpatient setting. Objective: To examine the feasibility and effectiveness of Cognitive Behavioral Analysis System of Psychotherapy (CBASP), a psychotherapy model developed specifically to treat chronic depression.

Method: A randomized controlled trial was conducted comparing CBASP (n=69) with Care As Usual (CAU; n=73) in three mental health care organizations in the Netherlands. Patients (aged 18-65) had a main diagnosis of chronic depression according to DSM-IV. CBASP consisted of a mean of 24 sessions conducted over one year. CAU consisted of a mean of 23 sessions of evidence-based treatments (e.g. Cognitive Behavioral Therapy, Interpersonal Psychotherapy, and Short term Psychoanalytic Supportive Psychotherapy) conducted over one year. Pharmacotherapy was provided in both arms. The Inventory for Depressive Symptomatology-Self-report (IDS-SR) was used as the primary outcome measure. The IDS was administered at pre-treatment, after 8, 16, 32, and 52 weeks. Patients with a 50% symptom reduction on the IDS, were considered responders. Remission was defined as an IDS score of 13 or less.

Results: Mean IDS scores dropped from 40.9 to 23.1 in the CBASP group and from 43.7 to 33.2 in the CAU group at week 52. There was no significant main effect between the two groups on the IDS (t = −1.10, P = .27), however, there was a significant treatment X time interaction (t = −2.51, P = .01); patients assigned to CBASP had a greater reduction of depressive symptoms towards the end of the trial compared to patients assigned to CAU. Moreover, CBASP completers were more likely to respond (CBASP: 45.8% versus CAU: 15.4%, P =.001) and to remit (CBASP: 27.1% versus CAU: 7.7%, P =.01) and less likely to fulfill DSM-IV criteria for major depression compared to CAU completers (CBASP: 25.5% versus CAU: 65.3%, P =.001) at week 52.

Conclusion: This trial shows that CBASP is more effective than standard evidence based treatments for chronic depression. The
results are important as this is the first time that CBASP was tested rigorously in severe chronically depressed patients who had been referred to mental health care organizations, and against a high standard control condition. The results suggest that the added effectiveness of CBASP becomes especially evident after the acute treatment phase.

**S15-2**

**Exposure-based cognitive therapy for depressed outpatients – preliminary findings**

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Exposure-based cognitive therapy for depression (EBCT) has been developed to accomplish more sustainable symptom relief by integrating principles of anxiety therapy (i.e., exposure), as well as emotion-focused therapy (i.e., emotional processing) (A. Hayes, et al., 2005). Assumed mechanisms of change are exposure and emotional processing. We will present the results of a preliminary investigation of a 22-session-treatment with 35 outpatients with an adapted version of EBCT in Switzerland (EBCT-R). We expected a reduction of depressive symptoms in the range of the original EBCT and the EBCT-R pilot trials, a cubic pattern of symptom change, as well as higher cognitive-emotional processing in the exposure phase of treatment that predicts improvement in depression. Depression symptoms were assessed by patient self-report before and after treatment, as well as before each session. Problem activation and cognitive-emotional processing were assessed by patient and therapist reports after each session. Results indicate that EBCT-R yields a significant symptom reduction comparable to those in the earlier EBCT(R) trials, and shows expected process characteristics. Results will be discussed with respect to theoretical assumptions, practical implications, and future research.


**S15-3**

**The role of axis II disorders in prognosis and response to CBT in recurrent depression**

Bockting, Claudi

Groningen University, Netherlands

The role of axis II disorders in prognosis and response to CBT in recurrent depression Prof. Claudi L.H. Bockting, PhD (1) Affiliation: (1) University of Groningen, Department of Clinical Psychology, The Netherlands Depression is a recurring disease, especially in patients with a co-morbid personality disorder. Preventive Cognitive Therapy (CT) applied after remission, appears to be an effective strategy to prevent relapse in recurrently depressed patients (for a meta-analysis see Vittengl et al., 2007). This presentation focuses on the prevalence of personality disorders and predictive value of having an axis II disorder in terms of response on preventive CT (as assessed using the PDQ-4R, after adjustment for SCID-II criteria). Personality pathology was assessed in 172 euthymic patients with recurrent depression within a randomized trial comparing Preventive Cognitive therapy versus treatment as usual. Prospectively relapse and recurrence was assessed over 5,5 years follow-up (using the SCID-I, Bockting et al., 2009). In this study 46.7% of the remitted recurrently depressed patients had at least one of the axis II disorders. Having a co-morbid personality disorder did not predict poor response on preventive CT (time to relapse and recurrence, p=0.019). Patients with borderline personality disorder profit more from an eight session preventive CT than patients that did not have a co-morbid axis II disorder.


**S15-4**

**Long-term psychotherapy for chronic depression. Comparing Psychoanalysis (PAT) and Cognitive Behavioural Therapy (CBT) under regular clinical out-patient conditions. A controlled effectiveness study**

Hautzinger, M.

Eberhard Karls University, Germany

**Objective:** Studying the effectiveness and the efficiency of psychoanalytic psychotherapy and of cognitive behaviour therapy of chronic depressed patients.

**Methods:** Both treatments are studied under regular clinical out-patient conditions. Treatments are provided by experienced private practitioner. Sessions are taped and controlled by blind evaluators. All assessments over three years (intake, every 6 month, yearly) are conducted by blind clinical evaluators. The design has two arms, a preference and a randomization arm. In both design arms we offer either psychoanalysis (sessions 3-4 times weekly) or cognitive behaviour therapy (1-2 weekly, up to 60 sessions)

**Results:** We have already included more than 340 depressed patients. First comparison at baseline and at one year after intake will be presented. The study is still ongoing, but preference arms are closed. Final patients will be included by Fall of 2011.

**Conclusions:** Psychoanalysis can be studied under controlled and randomized conditions. Experience with both psychotherapies will be discussed.
Symposium 16 – Positive Behavior Therapy: recovery and strengthening of Personal Successful Functioning

S16-1

Positive Behavior Therapy: theory

Bruins, Bart
Rivierduinen, organization for mental health care, Netherlands

A positive behavior therapeutic approach distinguishes itself by a focus on behavior that affords well-being and that provides personal strength. In our approach we stress the central role of the environment as a supplier of stimuli that influence the personal state. So, to influence his well-being the individual has to act on his environment by operant behaviors. By operant behavior the individual can approach, escape and avoid those stimuli. So, only by operant behavior the individual can influence his well-being by his own. Everyone must have a stable repertoire of such operant behaviors: Personal Successful Functioning. Systematic analysis of adaptive behavior of persons with a variety of mental disorders has revealed that the state of safety is the central point in their Personal Successful Behavior. This safety does not primarily concerns the absence of physical harm, but the existence of social inclusion. Most individuals gain in personal strength when they feel themselves socially significant and worthwhile. So, social safety signals are of great importance for a stable sense of well-being. This empirically finding is summarized by the theory of Dominant Active Avoidance (Bakker-de Pree, 1984, 1987) and constitutes the theoretical framework of the Positive Behavior Therapy. In this introductory presentation we will explain the theory and elucidate its implications for the understanding of both well-being and personal strength and the onset of mental disorders.


S16-2

Positive Behavior Therapy: the clinical practice

Vlamings, Hendrik
GGZ Midden-Holland Gouda, Netherlands

In this presentation will be elucidated how in a Positive Behavior Therapy symptoms are reduced, not by attacking the symptoms directly, but by restoring and strengthening someone’s Personal Successful Functioning. This will be illustrated by clinical cases. In a Positive Behavior Therapy, whether or not having symptoms, is seen in relation to the person’s situation. If the situation provides opportunities for his Personal Successful Functioning, a person feels all right. Especially, if it has given him a feeling of social safety. If that is not the case, symptoms will arise because of the absence of safety. Which conditions a person needs for Personal Successful Functioning is dependent upon his learning history. So, to reduce symptoms it is essential that the client is getting back in contact with the conditions for his successful functioning. We will explain how the therapist can restore dysfunctioning by different techniques. In short, these techniques comprise questions for the client about his daily activities; especially about those he had felt worthwhile in doing it. By describing these activities that he felt worthwhile himself about, he recalls the opportunities for those activities. By on the one hand bringing the client in contact with conditions which are essential for him to function to his own satisfaction and to feel all right, and, on the other hand, by not imposing him any specific behavior, the therapist brings about that the client recovers in his unique way and gains strength. In this way symptom reduction is realized. Moreover, as a result of the constant focus on the conditions for Personal Successful Functioning, the client learns to guard his own well-being which also may prevent relapse.


S16-3

Reducing the Impact of ‘Hearing Voices’ on Daily Life by Positive Behavior Therapy in a Group

Baas, Liesbeth
GGZ Friesland, Netherlands

During Cognitive Behavioral Group Therapy for people with severe complaints about ‘Hearing Voices’ we observed an increase of hearing voices when the focus during and between the sessions was on their complaints. For example by keeping up a record for the period between the sessions about the frequency the client suffered from hearing voices or when challenging the not-helping content of the heard voices during the session. Although at the end of the program none of the participants was free of hearing voices, most of them reported an improvement of their emotional state and most of them were more involved with activities. During the evaluation they let us know that the group sessions offered an opportunity to exchange experiences of how each participant tried to manage his daily life in spite of the heard voices. Normally they hardly speak with others about their complaints. This feedback brought us to some fundamental changes in the therapy procedures. We shift our focus from the disordered behavior to personal successful functioning. That also implicated a shift from the cognitive paradigm as foundation for the interventions to the frame of reference of behavior analysis of adaptive behavior. Aim of the therapy is to enhance stimuli for personal successful behavior so that they can be responded in favor of the private stimuli that increase the likelihood of maladaptive actions or mal adaptively refraining from action. Heard voices often play that role. In this presentation we will inform you extensively about the adjustments we have made.
Asperger’s Disorder and Personal Successful Functioning: a Positive Behavior Therapeutic Approach

Andreoli, Paul
Stichting Constructionele Gedragsanalyse, Netherlands

Personal successful functioning is mainly under control of adaptive active avoidance. It generates safety signals of being socially ‘included’. People suffering from Asperger’s Disorder (AD) are severely and sustained impaired in social interaction and empathy. This influences the development of a stable repertoire of successful behavior and makes them vulnerable for developing maladaptive behavior patterns. Enabling people with AD to develop personal successful functioning requires special arrangements in the environment. To some extent this means a structured and orderly organized environment, but also tailor-made adjustments and support. In this way opportunities can be offered for the person involved to explore and experience which activities contribute to personal well being and social safety. We shall present some cases on how carers try to find ways for support without being overprotective and neither overestimating the person’s abilities.

Teaching MBCT in 2011: The Swiss example

Lucio, Bizzini
Geneva University Hospital, Switzerland

Dr. Bizzini will present the stepwise program for training as an MBCT instructor in Geneva. This proposal is based on both empirical data and grounding in the experience of teaching meditation. Mindfulness meditation has emerged as a novel approach to emotion regulation and stress reduction that has demonstrable health benefits. Mindfulness-Based Approaches have been used effectively treating recurrent depression, chronic fatigue, anxiety, high blood pressure, insomnia and chronic pain. Many of these interventions have been empirically validated and disseminated in different clinical settings. Particular attention has to be paid to the learning process of MBA instructors because teaching MBA programs requires a grounding of personal mindfulness practice, teaching skills, the ability to work with group therapy process and interpersonal skills, ethical integrity and organizational skills. Instructors also need to convey warmth, acceptance and compassion.

Segal, Z.V., Williams, J.M.G. & Teasdale, J.D. Mindfulness-based cognitive therapy for depression. New York: Guilford Press 2002

Teaching mindfulness: Experiences from Germany

Heidenreich, Thomas1; Meibert, P.2
1Hochschule Esslingen, Germany; 2Bochum University, Germany

This paper is part of the symposium “How to teach mindfulness-based approaches in clinical settings: Perspectives from different countries” organized by Dr. Lucio Bizzini. The paper briefly presents the history of teaching MBSR and MBCT in Germany as well as the current opportunities for training in Germany. The German MBSR-MBCT association founded in 2005 will be introduced and special emphasis will be put on MBSR/MBCT teacher training. Prerequisites of training programs, requirements of training programs and postgraduate trainings will be discussed. Finally, training standards and ethical guidelines will be outlined.
Teaching mindfulness: Experiences from the United Kingdom
Willem Kuyken
University of Exeter, United Kingdom

Instructing Mindfulness-based Intervention: Science, Practice, or Both?
Philippot, Pierre
UCLouvain, Belgium

I will discuss which core skills are required for the effective practice of mindfulness-based intervention. He will review the recommendations formulated by different authors and the existing empirical evidences. A synthesis will be proposed in terms of which skills need to be acquired for which type of intervention, of how these skills can be taught, and of the empirical evidences existing or needed to support these propositions.

Symposium 18 – Overgeneral Autobiographical Memory as a Vulnerability Factor for Depression: Underlying Mechanisms and Promising Intervention

Autobiographical Memory Specificity and the Persistence of Depression in HIV-Positive Patients: Rumination and Social Problem Solving Skills as Mediators
Roberts, J.E.; Yanes, P.K.; Morse, E.D.; Hsiao, C.B.; Simms, L.
University at Buffalo, United States

Introduction: Past theory and research suggests that autobiographical memory specificity increases acute negative emotional reactions to stressors, but protects against the development of longer term depression by facilitating effective problem solving. The present study tested the role of memory specificity and its interaction with life stress in the persistence of depressive symptoms among Human Immunodeficiency Virus (HIV)-positive individuals. Additionally, we examined whether rumination and social problem solving mediated these effects.

Method: Participants were 46 HIV-positive male patients at a community immunodeficiency clinic who reported at least mild depressive symptoms at baseline. Patients completed measures of depressive symptoms, perceived stress and the Autobiographical Memory Test at baseline, and measures of depressive symptoms, rumination and social problem solving three months later.

Results: Regression analyses indicated a statistically significant Memory Specificity x Perceived Stress interaction in predicting change in depressive symptoms, B=.09, t=2.10, p<.05, such that stress was a stronger predictor of future depression among patients with greater memory specificity. Compared to patients with poor specificity, those with better memory specificity experienced fewer depressive symptoms at low to moderate levels of stress, but greater depression at the highest levels of stress. Finally, rumination, but not social problem solving, mediated this moderated effect.

Conclusions: Our results suggest that memory specificity acts as a diathesis that increases the depressive impact of life stress among HIV-positive patients, and increases in rumination account for this effect. In contrast to past studies reporting that memory specificity predicts lower levels of depression in the long term, our sample was facing potentially severe unresolvable life adversities. Highly stressed HIV-positive patients would likely experience the downside of memory specificity (repeated amplification of acute emotional distress) with little benefit from its upside (enhanced problem solving skills). It may be that memory specificity leads to long term positive versus negative emotional outcomes depending on whether or not stressors are potentially resolvable through effective problem solving.
Mechanisms underlying overgeneral autobiographical memory in depression: capture and rumination, functional avoidance and executive capacity deficits

Barnhofer, Thorsten; Duggan, D.; Crane, C.; Williams, J.M.G.
University of Oxford, United Kingdom

Objectives: Autobiographical memory overgenerality is a well-established cognitive characteristic of depressed patients that has a number of detrimental effects on patients' adaptive functioning. Research into the mechanisms underlying this deficit has identified three main factors involved in its occurrence: capture and rumination, functional avoidance and executive capacity deficits (CaRFAX-Model, Williams, 2006). However, while there is evidence for the role of each of these factors, little is known about the joint effects and interactions of these factors in bringing about these deficits.

Methods: The current study investigated the effects of all three factors on memory specificity in a sample of 276 remitted depressed patients with a history of at least three previous episodes. Autobiographical memory specificity was assessed using cue words relating to prevalent dysfunctional beliefs in depression in order to allow assessment of capture by individually relevant content. Rumination was assessed using the Ruminative Response Style Scale by Nolen-Hoeksema (Teynrr et al., 2003); avoidant tendencies were measured using the Action and Avoidance Questionnaire by Hayes et al. (2004); and executive capacity was measured using the Baddeley Dual Task.

Results: Results of the study will be presented at the conference.

Overgeneral Autobiographical Memory as a Learned Cognitive Avoidance Strategy

Debeer, Elise; Raes, F.; Williams, J.M.G.; Craeynest, M.; Hermans, D.
1University of Leuven, Belgium; 2University of Oxford, United Kingdom; 3Lessius University College, Belgium

Objectives: According to the functional avoidance or affect-regulation hypothesis, a possible mechanism underlying overgeneral autobiographical memory (OGM) is that people retrieve less specific autobiographical memories to avoid the re-experience of intense negative emotions that are associated with adversities from the past (Williams et al., 2007). In two experiments we tested the basic assumption of the affect-regulation hypothesis, i.e. that OGM is a learned cognitive avoidance strategy, based on principles of operant conditioning (OC).

Methods: Participants were undergraduate students (N = 39 in Experiment 1, N = 41 in Experiment 2). The OC procedure that was used in both experiments consisted of six blocks of 10 emotional cue words. Participants were asked to generate a memory in response to each cue word. No instructions were given with regard to the specificity of their memories. An aversive sound was presented contingent upon every specific (Condition 1) or non-specific memory (Condition 2). After the OC procedure, a contingency awareness interview was assessed. The most important procedural difference between both experiments was the degree to which contingency awareness was prevented. In Experiment 1 a strong coverstory was used to avert contingency awareness, while in Experiment 2 contingency awareness was slightly activated by informing participants that the occurrence of the sound was related to the type of memories they retrieved. We hypothesized that, after the OC procedure, participants who had been punished for the retrieval of specific memories would retrieve significantly less specific memories than participants who had been punished for non-specific memories.

Results: In Experiment 1, our hypothesis was only confirmed in contingency aware participants. In Experiment 2 on the other hand, we found a significant effect of our OC procedure, independently from the contingency awareness status of the participants.

Conclusions: The results indicate that operant learning processes can play a role in the retrieval of autobiographical memories and shape their specificity. As such, they provide further support for the functional avoidance hypothesis.

Reducing Overgeneral Memory using MEmory Specificity Training (MEST)

Schoofs, Hanne; Hermans, D.; Raes, F.
University of Leuven, Belgium

Objectives: Given that research has shown that reduced specificity of autobiographical memory retrieval represents an enduring vulnerability factor for depression, Raes and colleagues (Raes, Williams, Hermans, 2009) developed the MEmory specificity Training (MEST). The main component of this intervention is the training participants in retrieving specific (rather than overgeneral) memories. Attention is paid to more concrete memories, by the repeated questioning of sensory-perceptual details of memories. Based of the results of a preliminary study, the authors suggested that the MEST might offer a capable intervention to tackle this core cognitive process of reduced memory specificity involved in depressive vulnerability and could be used for primary and secondary prevention. In this presentation, two new applied studies, investigating the effects of the MEST will be discussed. In a first study, we intended to replicate these findings, and examine whether the specificity of memories can indeed be sustainably increased. In a second training study, we investigated whether MEST prior to a psycho-education program for stress and anxiety, increases the benefit from the psycho-education program. A previous RCT study (Van Daele, Van den Bergh, & Hermans, 2009) found that the Autobiographical Memory Test (AMT) at baseline predicts increased problem-solving skills after the psycho-educational program. Perhaps the lack of memory specificity reduces the extent to which one can benefit from therapy. This might be particularly true when the core of treatment is 'transfer of information' (e.g., psycho-education) and learning participants...
‘skills’ to become one’s own therapist. Therefore a memory specificity pretraining would be of particular importance to increase the benefit from therapy.

**Methods:** In study 1, participants were 30 inpatients, all experiencing significant depressive symptomatology. They took part in the four week training and administered questionnaires at four time point (pre-training/post-training/follow-up 6 months/follow-up 12 months). In study 2, healthy participants who subscribed for a stress education program were randomly allocated to a training or control group. The training group received three MEST sessions. They administered questionnaires at four time points (pre-training/post-training/post-education/follow-up 6 months).

**Results and Discussion:** For both studies, participants’ retrieval style was measured using written versions of the AMT and the SCEPT. Moreover, we investigated whether increasing specificity leads to a reduction in depressive symptoms, ruminative thoughts and an increase in problem-solving skills. In the presentation, the results will be unveiled and discussed.

Raes et al, J Behav Ther Exp Psy 2009; 40: 24

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**Symposium 19 – Training and Supervision:**

**A symposium in honour of Auður R. Gunnarsdóttir**

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**S19-1**

**Audur Gunnarsdottir’s contributions to Cognitive Behavioral Treatment in Iceland.**

Amarson, E.Ö.; Hansdóttir, I.

University of Iceland, Iceland

With the death of Auður R. Gunnarsdóttir in 2010, CBT in Iceland lost one of its most outstanding representatives. Her impact on the profession of psychology in Iceland is substantial and reflected in her contribution to promoting CBT in Iceland as well as in her zealous work in developing CBT training opportunities for Icelanders. Her ambition was to hold the EABCT in Iceland and tragically she can not be here to see her dream come to fruition. This presentation will pay tribute to Audur and her work.

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**S19-2**

**Motivational Interviewing**

Helgason, Á.

Karolinska Institutet, Sweden

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**S19-3**

**EABCT Training and Supervision standards**

Macdonald, H.

University of Sheffield, United Kingdom

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**S19-4**

**OCTC Training in Iceland**

Fennell, M.

Warneford Hospital, United Kingdom
A controlled evaluation of attentional training technique (ATT) on intrusive thoughts and emotions following a stressful life event

**Callinan, Sheila**¹; Wells, A.²

¹Division of Clinical Psychology, University of Manchester, Italy; ²Centre for Cognitive Psychotherapy School Studi Cognitivi, Italy

**Objectives:** This study examined the effects of ATT (Wells, 1990) on intrusions, emotions and attentional flexibility following exposure to a stressful life event. Distressing intrusive thoughts are a common symptom following exposure to traumatic stimuli (Horowitz, 1979), and are a common symptom of post-traumatic stress disorder (PTSD; APA, 1994). ATT is a specific technique used in metacognitive therapy, which aims to stop self-focused attention and improve metacognitive flexibility and control so that the person may discontinue perseverative cognitive styles and threat monitoring behaviours. Only one previous study by Nassif & Wells (in preparation) has explored the effect of ATT on symptoms following trauma exposure.

**Method:** The current study aimed to replicate and extend this study by including a number of modifications. University students (N = 60) who had experienced a stressful life event and experienced intrusive thoughts about it that they found distressing were randomly assigned to either an ATT group or a control group.

**Results:** The results showed that ATT can be beneficial in reducing symptoms and the results add to studies suggesting positive effects of the technique across a range of disorders.


Horowitz, M. (1979). Trauma and Stress Disorder: Psychological Responses to Natural and Human-Caused Disasters. New York: Brunner/Mazel. 28:487-95


Metacognition in Desire Thinking: a preliminary investigation

**Caselli, Gabriele**¹; Spada, M.M.²

¹Cognitive Psychotherapy School Studi Cognitivi, Italy; ²London South Bank University, United Kingdom

**Objectives:** Desire thinking is defined as a voluntary thinking process orienting to prefigure images, information and memories about positive target-related experience. Recent research has highlighted the role of desire thinking in the maintenance of addictive, eating and impulse control disorders. Currently little is known about metacognitions in desire thinking. The principle aim was to investigate: (1) the presence and content of desire thinking during a desire experience; (2) the presence of metacognitive beliefs in desire thinking; (3) the goal of desire thinking; (4) attentional focus during desire thinking; and (5) the impact of desire thinking on craving.

**Method:** Twenty four individuals with a diagnosis of either alcohol abuse, bulimia nervosa, pathological gambling or smoking dependence were assessed using a semi-structured interview.

**Results:** Findings indicated that participants engaged in desire thinking and endorsed both positive and negative metacognitive beliefs about this process. The goal of desire thinking was to regulate internal states. Participants also reported that during a desire experience their attentional focus was continuously shifting between internal state and external context and that engaging in desire thinking increased craving.

**Conclusions:** These findings provide preliminary evidence that metacognitions play a role in desire thinking.


Beliefs over control interact with intolerance of uncertainty and metacognition on worry

**Ruggiero, Giovanni**¹; Stapinski, L.²; Sassaroli, S.²; Rapee, R.²

¹Cognitive Psychotherapy School Studi Cognitivi, Italy; ²Centre for Emotional Health, Macquarie University, Sydney, Australia, Australia

**Objectives:** Cognitive theory conceptualizes worry as influenced by meta-cognitive beliefs on worry, intolerance of uncertainty, and perceptions of control over events and reactions (Rapee, Craske, Brown, & Barlow, 1996). This study tests the hypothesis that the effect of intolerance of uncertainty would interact with meta-cognitive beliefs on worry and perceived control.
The Impact of meta-cognitive beliefs on state anxiety in high socially anxious individuals: interactions with anticipatory processing and distraction

Gkika, Styliani1; Wells, A.2

1University of Bolton, Italy; 2Division of Clinical Psychology, University of Manchester, United Kingdom

A contemporary cognitive model of social phobia (Clark & Wells, 1995) proposed that socially anxious individuals engage in a worry-like process termed anticipatory processing. This process has been associated with increased state anxiety (Hinrichsen & Clark, 2003; Vassilopoulos, 2005) and has been found to involve negative thoughts and recollections, and escape and avoidance planning (Hinrichsen & Clark, 2003; Vassilopoulos, 2008). However, according to a meta-cognitive model of emotional disorders (Wells & Matthews, 1994, Wells, 2009), meta-cognitive beliefs should play a role in the maintenance of such process. The present study aimed to investigate whether meta-cognitive beliefs interact with anticipatory processing and/or distraction to influence state anxiety before and after a speech. Eighty high socially anxious individuals completed a battery of questionnaires followed by a threat induction (recorded speech). Following this, half engaged in a 10-minute anticipatory processing period and half completed a distraction task. Subsequently, participants engaged in a 3-minute preparation of a speech topic, followed by a 3-minute speech. State anxiety was assessed before the manipulation, and before and after the speech. Results showed that strong beliefs about the uncontrollability of anticipatory processing were associated with greater decrease in anxiety from pre to post-speech. In the anticipatory processing condition, these beliefs were associated with increased anxiety before the speech. In the distraction condition, positive meta-cognitive beliefs about anticipatory processing and about focusing on a self-image were associated with maintained anxiety after the speech. These results are discussed in terms of the meta-cognitive model and its clinical implications.

S21-2
Mechanisms of change in the prevention of adolescent social anxiety

de Hullu, Eva; Sportel, B.E.; de Jong, P.J.; Nauta, M.H.
University of Groningen, Netherlands

In the context of a large study assessing the efficacy of two preventive interventions for adolescents at risk for developing social anxiety (Project Pasta; www.projectpasta.nl), this presentation will focus on mechanisms of change. According to current models of social anxiety, biased cognitive processing of social information plays a major role in the maintenance of social anxiety. Early biases in information processing, such as attentional bias to threat, interpretive bias, or automatic negative associations to social situations, guide anxious children towards avoidance behavior and could thus enhance anxiety. Both Cognitive Behavioral Therapy (CBT) and Cognitive Bias Modification (CBM) could change biases in information processing, and this might be one of the mechanisms of change in which treatment affects anxiety symptoms. In this presentation, we will focus on the course of information processing biases before the intervention period, after the intervention period, and at 6, 12, and 24 months follow-up. Do attentional bias to threat, interpretive bias, and automatic associations to threat change after treatment (CBT or CBM), and is this change connected to change in anxiety? Can we identify subgroups in which this mechanism of change is particularly important, such as individuals with low attentional control? An insight into these questions will be presented and clinical implications of the results will be discussed.

S21-3
Prevention of Anxiety in Youth: A Meta-Analysis of School-Based Interventions

Read, Kendra; Mychailyszyn, M.P.; Kendall, P.C.
Temple University, United States

Objectives: Research suggests that anxiety is one of the most prevalent psychological problems among youth (e.g., Albano, Chorpita, & Barlow, 2003; Costello, Mustillo, Erkanli, Keeler, & Angold, 2003), with prevalence rates in children and adolescents ranging from approximately 5%-25% (Costello, Egger, & Angold, 2004; Lewinsohn & Clarke, 1999). Anxiety disorders are associated with numerous negative sequelae and can persist into adulthood if left untreated, increasing risk for the development of comorbid conditions and substance abuse problems (Albano et al., 2003; Kendall, Safford, Flannery-Schroeder, & Webb, 2004; Woodward & Fergusson, 2001). Cognitive-behavioral therapy (CBT) meets the standards of an efficacious treatment and is a recommended first-line treatment (APA Task Force on the Promotion and Dissemination of Psychological Procedures, 1995; Chambless & HOLLON, 1998). Government mandates have promoted schools as a preferred setting for the delivery of mental health interventions (New Freedom Commission on Mental Health, 2003; U.S. Public Health Service, 2000). To guide informed decisions, there is the need for a comprehensive synthesis of school-based interventions for the prevention of youth anxiety. Previous meta-analyses have not focused exclusively on school-based studies, though have issued a call to pay greater attention to this topic (Silverman, Pina, & Viswesvaran, 2008)

Methods: Studies were included in the present meta-analysis if they examined the outcome of an intervention implemented (1) to prevent anxiety within a school setting, (2) employed CBT components, (3) with school-age youth enrolled in grades K through 12, (4) with sample sizes large enough for the types of statistical analyses required in meta-analysis, (5) provided quantitative analyses with statistical information needed for the calculation of effect sizes, and (6) within the 20-year time frame (01-01-1991 to 12-31-2010).

Results: This meta-analysis explored outcomes for 8722 youth studied across 27 evaluations of interventions designed to prevent anxiety. The project examined relationships between characteristics of (1) participant youth, (2) the various interventions, and (3) study methodology associated with differential outcomes. Results indicate which features of intervention are most critical to producing clinically meaningful change.

Conclusions: Recommendations will be made about how future programs can be tailored in terms of intervention level (e.g. universal prevention versus indicated prevention), population of interest (e.g. age, gender, etc.), and program implementer (e.g. teachers versus research psychologists), to produce optimal outcomes for anxious youth.

S21-4
School-based prevention of anxiety disorders in youth: What has been done, what works, and how does it work?“

Aune, Tore; Stiles, T.C.
Psychology Department at NTNU, Norwegian Directorate for Children, Youth and Family Affairs, Norway

Introduction: Social anxiety disorder (SAD) is one of the most prevalent, chronic, impairing, and persistent of all the psychiatric disorders. Although relatively effective treatments exist, for various reasons, the majority of children and adolescents do not receive treatment. Further, retrospective reports have indicated that, in most cases, SAD precedes the development of mood disorders.

Method: A population-based sample (N=1748) of pupil (11-14 years of age) from 2 counties were cluster randomized to either an intervention or a control condition. The NUPP-SA, which educates pupils, parents, teachers and health workers, was administered.

Results: The results indicate that NUPP-SA had a significant specific intervention effect for reducing social anxiety in the total sample as well as among the syndromal subjects. Further, significantly fewer subjects from the intervention county developed syndromal social anxiety (SSA) during the 1-one period, thus showing the prevention effect. However, 1-year follow-up data have not yet been fully analyzed, -and thus, some data from the follow-up trial will be presented and discussed at the congress.

Discussion: A universal preventive program does not have to be highly successful to be a good social investment. In addition, an
effective universal preventive program has advantages compared with selective treatment packages. Preventing the development of social anxiety disorder at an early stage may prevent the development of secondary disorders at a later stage.

**Conclusions:** The results demonstrate the value of an intervention aimed specifically at reducing social anxiety and preventing the development of SAS among young people. Thus, greater attention should be placed on public health interventions during childhood and adolescence.


### Symposium 22 – Recent developments in the field of sexual dysfunctions: from the lab to the clinic

#### S22-1

**Are changes in threat related automatic associations related to improvement in women with lifelong vaginismus following exposure treatment?**

Melles, Reinhilde1; Ter Kuile, M.M.2; Brauer, M.3; Van Lankveld, J.4; De Jong, P.5

1Academic Hospital Maastricht, Netherlands; 2Academic Hospital Leiden, Netherlands; 3Leiden University Medical Center, Netherlands; 4Open University Heerlen, Netherlands; 5Groningen University Medical Center, Netherlands

**Objectives:** The cognitive model of vaginismus highlights the importance of threat related involuntary automatic information processing in the development and maintenance of vaginismus. In this study we examined treatment-related changes in threat related automatic associations as an indicator of this cognitive model of vaginismus. In addition we also examined whether treatment success (i.e.) intercourse was associated with changes in threat related automatic associations. The aim: of study was to investigate (1) whether automatic threat related associations were affected by treatment and (2) whether treatment success was mediated by changes in automatic threat related associations.

**Method:** Threat related associations were assessed using a single target Implicit Association Test (St-IAT) with pictures displaying sexual penetration being the (single) target stIAT and threat/safe words being the attributes. Participants were women with lifelong vaginismus who applied for a treatment intervention study (N = 70). They completed the St-IAT before randomization (to treatment or a waiting-list control period) and at 3-month follow-up. Treatment consisted of a maximum of three, 2-hr exposure sessions during one week at a university hospital. The main outcome measure was intercourse ability at 3 months.

**Outcome:** The preliminary results and the conclusions of this study will be presented.

#### S22-2

**Implicit Attitudes toward Penetration in Vaginismus and Dyspareunia**

de Jong, Peter1; Borg, C.2

1University of Groningen, Netherlands; 2University of Groningen, Malta

**Objectives:** Current cognitive conceptualisations of psychopathology distinguish between two modes of information processing: effortful or deliberative (explicit) processes and automatic (implicit) processes. Automatically activated associations would be most important for eliciting reflexive defensive behaviours. Following this, automatic associations might
also be the crucial factor in eliciting the characteristic defensive reactions in women suffering from vaginistic complaints (e.g., reflexive contraction of pelvic musculature).

**Methods:** The present study was designed to test the hypothesis that penetration-pictures might automatically elicit more negative affective associations in women with vaginismus life-long vaginismus (n = 26) and/or women diagnosed with dyspareunia (n = 26) compared to sexual complaint-free women (n = 26). In this study both global automatic affective evaluations and more specific disgust-related automatic associations were assessed by means of an Affective Simon Task and a single Implicit Association Test, respectively.

**Results:** Global affective associations with sexual penetration stimuli tended to be positive and independent of sexual complaints. Interestingly, the implicit measure focusing on more specific affective associations showed that for both clinical groups sex stimuli automatically elicited associations with disgust.

**Conclusions:** These findings are consistent with the notion that uncontrollable activated (disgust) associations are involved in eliciting defensive reactions at the prospect of penetration seen in both conditions.

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**Does disgust mediates or moderates treatment effect in women with lifelong vaginismus?**

**Method:** Seventy women with lifelong vaginismus were allocated at random to exposure or a waiting-list control period of 3 months. Exposure consisted of a maximum of three, 2-hr sessions allowing vaginal entry of a penis or other objects. The precise etiological processes underlying vaginismus are still unclear. One of the factors that have been proposed to be involved in the generation of vaginistic symptoms is penetration-related fears and most of the treatment modalities in lifelong vaginismus focus on exposure to penetration related (pain) fear. Recent research, however, suggests that disgust may also play a role in vaginismus. The role of disgust in the treatment of lifelong vaginismus has not yet been investigated. Aim: The present study investigated (1) whether the effect of an exposure therapy in women with lifelong vaginismus is mediated or moderated by sexual and moral disgust respectively, and (2) whether disgust and (pain related) fear are independent mediators/moderators of treatment outcome.

**Outcome:** The preliminary results of this study will be presented.

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**Trait Disgust in Vaginismus, Dyspareunia, and Erectile Dysfunction: Are Disgust Appraisals Involving Intercourse Associated with Sexual Dysfunctions?**

van Overveld, Mark; Peters, M.L.; ter Kuile, M.

1. Erasmus University Rotterdam, Netherlands; 2. University of Groningen, Netherlands; 3. Maastricht University, Netherlands; 4. Academic Hospital Maastricht, Netherlands; 5. Leiden University Medical Center, Netherlands

**Introduction:** Disgust propensity has become increasingly associated with psychopathological conditions, such as anxiety disorders and eating disorders. The role of disgust in sexual dysfunctions, however, has hardly been explored. Yet, disgust could be involved in sexual dysfunctions as experiencing disgust likely disrupts sexual arousal. Moreover, disgust is a defensive emotion, which may well activate defensive responses (e.g., pelvic contractions). Preliminary work demonstrated that vaginistic women indeed displayed generally enhanced trait disgust.

**Objectives:** To examine whether such enhanced disgust responsivity is associated specifically with sexual stimuli, the Sexual Disgust Questionnaire (SDQ) was recently devised. The current studies examined: a) the psychometric qualities of the SDQ, and b) whether enhanced levels of dispositional disgust for sexual stimuli are associated with sexual complaints in a group of patients with sexual dysfunctions.

**Methods:** In the first study, a large sample of students completed the SDQ (N = 762) to test its psychometric features. In the second study, patients with vaginismus (N = 39), dyspareunia (N = 45), or erectile disorder (N = 28) and matched controls (N = 112) completed the SDQ to examine the role of trait disgust in these dysfunctions.

**Conclusion and results:** The SDQ is a valid and reliable instrument. Further, vaginistic participants showed elevated levels of disgust towards sexually contaminated stimuli. Yet, all patient groups showed generally enhanced dispositional disgust compared to matched controls. Part of symposium: Recent developments in the field of sexual dysfunctions: from the lab to the clinic
Vaginismus: Restricted General & Sex-Related Moral Standards

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Introduction: Relatively strong adherence to conservative values and/or relatively strict sex-related moral standards logically restricts the sexual repertoire and will lower the threshold for experiencing negative emotions in a sexual context. In turn, this may generate withdrawal and avoidance behaviour, which is at the nucleus of vaginismus.

Objectives: The aim of this study was to examine whether indeed strong adherence to conservative morals and/or strict sexual standards may be involved in vaginismus.

Methods: The Schwartz Value Survey (SVS) and Sexual Disgust Questionnaire (SDQ) were completed by three groups: women diagnosed with vaginismus (N=24), a group of women diagnosed with dyspareunia (N=24), and a healthy control group of women free of sexual complaints (N=32). We used the SVS to investigate the individual’s value pattern and the SDQ to index the willingness to perform certain sexual activities as an indirect measure of sex-related moral standards.

Results: Specifically, the vaginismus group showed relatively low scores on liberal values together with comparatively high scores on conservative values. Additionally, the vaginismus group was more restricted in their readiness to perform particular sex-related behaviors than the control group. The dyspareunia group, on both the SVS and the SDQ, placed between the vaginismus and the control group, but not significantly different than either of the groups.

Conclusion: The findings are consistent with the view that low liberal and high conservative values, along with restricted sexual standards, are involved in the development/maintenance of vaginismus.

Note: It would be highly beneficial if this abstract can make part of the symposium entitled: Recent developments in the field of sexual dysfunctions: from the lab to the clinic (1677811)

ADDITIONAL MATERIAL Moreover, preliminary data from a study conducted in Malta with healthy controls using single target Implicit Association Task (st-IAT) to index the initial high conservative (and/or low liberal) automatic sex association (together with SVS and SDQ) will be presented and integrated in the above discussion.

Symposium 23 – Goal processes, depression and rumination

Rumination, dysphoria and personal goal strivings

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Motivational theories of self-regulation suggest that rumination is instigated by poor progress towards important goals and/or problematic disengagement from such goals. Maladaptive features of the structure, appraisal and content of personal goals may contribute to engagement in ruminative thinking. In this study, an unselected sample of undergraduates (N = 210) completed a personal strivings assessment in which they listed ten goals before rating each on dimensions including incentive value, outcome expectancy, self-concordant motivation and inter-striving conflict. Participants also completed measures of trait ruminative thinking and depressive symptoms. One month later, participants rated their progress on each striving and the extent to which they had ruminated about each striving, before completing a second measure of depressive symptoms. Multilevel modelling was used to explore relationships between striving characteristics and rumination at both the between-person and within-person levels. At each level of analysis, ruminative thinking was expected to be associated with lower success expectancies, more avoidance striving and greater perceived conflict among strivings. Results are discussed in terms of self-regulation theories and their potential relevance for understanding clinical depression.

Rumination’s impact on goal disengagement

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The disengagement from goals that are too difficult to attain is a crucial self-regulatory competence. The current contribution presents two studies that investigate the impact of self-focused rumination—a cognitive style common among depressed people—on goal disengagement. In these studies, participants were instructed to solve anagrams, some of which were unsolvable. In Study 1, it could be shown that an individual’s predisposition to engage in self-focused rumination was associated with getting stuck in the attempt to solve unsolvable anagrams. In the subsequent experiment (Study 2), ruminative thoughts were manipulated by asking participants to focus on their self, personality, and goals in life, a task frequently employed to induce rumination. Compared to participants undergoing a distraction induction, ruminating participants were more likely to get stuck trying to solve unsolvable anagrams. This research thus suggests
that self-focused rumination hinders disengagement from unattainable goals. The results shed light on specific self-regulatory problems that might be common in depressed individuals: Behavioral passivity and concurrent cognitive activity (i.e., rumination) might be a frequent trap in depressed individuals’ attempts of goal pursuit.

Depressed people are not less motivated but are more pessimistic about attaining their personal goals

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1University of Liverpool, United Kingdom; 2University of Exeter, United Kingdom

Objectives: Personal goal motivation has rarely been examined in clinical depression, despite its theoretical importance. Here we investigated whether clinically depressed persons (n = 23) differ from never-depressed persons (n = 26) on number of freely generated approach and avoidance goals, appraisals of these goals, and reasons why these goals would and would not be achieved.

Method: Participants listed approach and avoidance goals separately and generated explanations for why they would and would not achieve their most important approach and avoidance goals, before rating the importance, likelihood and perceived control of goal outcomes.

Results: Compared to never-depressed controls, depressed persons did not differ on number of approach and avoidance goals or on rated goal importance. As expected, depressed individuals, relative to controls, judged approach goal outcomes as less likely to occur and avoidance goal outcomes as more likely to occur and generated a combination of fewer reasons why they would achieve their goals and more reasons why they would not achieve their goals.

Conclusions: Our results suggest that depressed persons do not lack valued goals but are more pessimistic in their goal explanations and appraisals. An implication of these findings is that therapeutic efforts should focus on challenging negative thinking relating to goal pursuit, rather than merely encouraging depressed people to identify possible goals.

Increasing positive goal-setting and planning skills and its relevance to depression

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Deficits in goal setting and planning have long been seen as important in depression. Although it is not uncommon to address goals, those goals are often related to the experience of depression rather than being positive life goals that may be quite independent of depression. An approach to teach positive goal-setting and planning (GAP) skills has been developed that focuses on helping individuals identify their valued positive goals and improve their planning skills for attaining those goals. The GAP intervention has been shown to be effective in increasing well-being in the general population. A recent study has also shown that a self-help version of GAP is also effective in reducing depression in those who have a history of chronic depression. The value of goal setting approaches as part of the treatment of depression will be discussed.
Avoidance Learning and Flight Learning in Fear of Spiders

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A well-known symptom of phobias is avoidance: Phobics try to stay away from the stimuli that they find threatening. As a result, they tend to avoid locations that are likely to contain the threatening stimuli. However, in order to be able to avoid threat, phobics first have to learn which locations are likely to contain threat stimuli. To study the time course of this avoidance learning, we used virtual reality. In Experiment 1, highly spider-fearful individuals (SF) and non-anxious controls (NAC) were sitting at a virtual table. They had their hands under the table, holding a button box with 3 buttons. On the other end of the table, there were 3 closed virtual boxes. On each of 60 trials, participants had to open one of the boxes by pushing the corresponding button of the box. Each trial had the following structure: The 3 boxes appeared and a „ready beep“ sounded, the participant pressed one of the 3 buttons, the corresponding box rose, either a virtual spider or a virtual toy car of similar size appeared under the box, the spider/car moved approx. 30 cm towards the participant and stopped (independent of any button presses), the participant pressed the same button once more to finish the trial, and the object and all boxes dissolved and re-appeared for the next trial. The participants were told that it was always determined randomly which of the two objects would come out of which box.

Unbeknown to the participants, in the first 30 experimental trials, the probability of a spider differed across boxes: One box housed 40% spiders and 60% cars (the almost-neutral box), one box housed 90% cars (the safe box), and the third box contained 90% spiders (the threat box). Unbeknown to the participant, these odds were reversed during the second 30 trials: The safe box became the threat box and vice versa. When analyzing how frequently participants opened each box, we found that SFs quickly learned to favor the safe box over the threat box. After the probability reversal, they quickly changed their preferences, abandoning the previously-safe box for the now-safe box. In Experiment 2, participants could use flight in addition to avoidance: By pressing another button, they could make the spider or car disappear immediately after it appeared. We studied whether under these circumstances, SFs would still develop a preference for the safe box, and learn to change their preference after the probability reversal.

Objectives: Anorexia nervosa (AN) is the psychiatric disorder with the highest mortality rate among young people. More insight into factors contributing to AN patients’ success in restricting their food intake is therefore of major importance. One mechanism that might be involved here could be the loss of motivational orientation towards food. Current dual-system models indicate that it is important to differentiate between automatic and controlled processes in this respect. Automatic processes are thought to influence more spontaneous behavioural responses towards food-relevant stimuli. These automatic response tendencies can be controlled by more deliberate processes that require sufficient cognitive resources. The successful restriction of food intake in AN patients, even under conditions that typically impair self-control (e.g., stress), may thus be explained by assuming that (also) automatic responses towards food are less favorable among AN patients than among normal eaters. Otherwise one would expect that self-control would break down under some conditions, as it is the case with BN. This study tested whether (i) indeed AN is characterized by reduced automatic approach tendencies to food, and (ii) the automatic motivational orientation towards food would recover following successful treatment.

Methods: To test this hypothesis, we used an Affective Simon Task-manikin version (AST-manikin) to measure automatic approach tendencies towards high-caloric and low-caloric food in...
young AN patients (n = 75) immediately before treatment and at one year follow up. Body mass index (BMI) was used to index treatment efficacy.

Results: AN patients indeed showed reduced automatic motivational orientation towards food compared to non-symptomatic controls. Although, the automatic motivational orientation towards high-caloric and/or low-caloric food was not generally increased at one year follow up, there was a positive correlation between the increase in automatic approach tendencies towards high-caloric food and treatment success.

Conclusions: The findings support the view that reduced automatic approach tendencies are involved in AN, and may contribute to the maintenance of AN-symptoms. Based on the finding that treatment success was associated with an increase of AN patients’ approach tendencies it would be interesting to test whether treatment efficacy could be improved by adding interventions designed to increase automatic approach tendencies towards food.

Positivity Approach Training: A Generalized Cognitive Bias Modification
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Many emotional disorders are accompanied by a strong negative information processing bias: Negative stimuli draw and hold attention, they are remembered better, and ambiguous situations are interpreted in a negative way. The resulting cognitive distortions are targeted by cognitive therapy, but since many of the underlying cognitive processes are highly automatic and not open to conscious control, the power of the interventions is limited. A new technique called „Cognitive Bias Modification” (CBM) might be a chance to fill this gap. In CBM, biases are changed with the help of computer tasks. It has been shown to be quite effective, but so far, CBM trainings have been highly specific and targeted to single disorders. Therefore, we have started to explore a transdiagnostic approach by developing a generalized training of approach-avoidance tendencies. The training involves an Approach-Avoidance-Task (Rinck & Becker, 2007) in which participants use a joystick to pull pictures on a computer screen closer to themselves or to push them away. In Study 1, half of the participants always pulled a variety of positive pictures closer and always pushed many different negative pictures away (approach-positive group), while the other participant group consistently did the opposite (approach-negative group). We found that the training effect generalized to new, untrained pictures and that it created an attentional bias for pictures that had been approached during the training. The effects on mood and stress vulnerability were small, however, possibly because of ceiling effects since the participants’ mood was rather positive. Therefore, in Study 2, we first induced a negative mood in the participants before giving them either an approach-positive training or a sham training. We will report the results of this recently finished study, and discuss implications for applications of this general CBM in a variety of emotional disorders.


Approach, avoid, or neither? Investigating human freezing using trauma analogue passive viewing paradigms
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Fast emotional reactions and action tendencies in response to threat, like fight and flight responses, serve survival purposes. The approach-avoidance paradigm has indeed shown that action tendencies are associated with stimulus valance. Animals may show a third motor response in reaction to threat: freezing. Several recent studies showed that humans also experience freezing behaviour. The present studies were set up to investigate human freezing using a passive viewing paradigm. We specifically wanted to examine the role of prior traumatisation and also study the time course of freezing. In the first experiment, healthy female participants were shown unpleasant (mutilated bodies), pleasant (sports), and neutral pictures (objects), selected from the IAPS. Participants had to watch the stimuli while standing on a stabilometric platform and attached to a heart rate assessment device. Results showed that body sway and heart rate were significantly reduced in response to the aversive pictures, indicating freezing. Moreover, participants with prior experience of aversive events showed enhanced freezing. Interestingly, participants that experienced multiple aversive events (versus those with no and those with one event) reduced body sway was not restricted to unpleasant pictures but occurred in response to all picture categories. These findings suggest that trauma may change later automatic physical responses to emotional events with cumulative effects of multiple traumatisation. Next, unpleasant (aftermath of a car accident), pleasant (Herbie) and neutral (cross road) film clips were used to test the paradigm in ecologically more valid stimuli and examine the time course of freezing. The unpleasant film indeed evoked reduced body sway and heart rate, the neutral and pleasant films did not.

Furthermore, the results suggest a fast reduction of body sway, as well as more sustained reductions of body sway and heart rate. These may be reflections of a fast attentional response and a sustained defensive freezing response. Part of the symposium: Approach and avoidance in clinical disorders.
Symposium 25 – Mechanisms of perseveration in psychopathology

S25-1

Systematic processing in perseverative worry: Issues of measurement and manipulation in assessing this mechanism

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Dysfunctional perseveration is one of the key defining features of pathological worrying and one explanation for this is that worryers engage in a more analytic, detail oriented, elaborative processing style known as systematic processing. However, our understanding of the role of systematic processing in pathological worry depends upon our ability to measure what is essentially an inferred style of processing. Our laboratory has explored a range of methodologies, including indirect and direct self-report measures, and thought-listing tasks. In one reported experimental study, the role of systematic processing as a mediator of the facilitative effect of negative mood on worry was assessed using self-report measures of factors known to promote systematic processing. Participants were exposed to a negative (n = 30), neutral (n = 30), or semantic priming (n = 26) mood induction. Participants completed 100-point visual analogue scales measuring cognitive appraisals known to increase an individual's processing sufficiency threshold (accountability, responsibility, desire for control, and need for cognition) and increase the tendency to deploy systematic processing. Experimentally-induced negative mood facilitated the endorsement of cognitive appraisals known to increase systematic information processing. The composite measure of the systematic processing facilitators was found to partially mediate the relationship between negative mood and a measure of worry frequency (Penn State Worry Questionnaire). Experiments using more direct measures of systematic processing will also be discussed. Conclusions will be made about the utility of these methods for measuring and manipulating systematic processing, and future directions for exploring this mechanism of perseveration will be presented.

S25-3

How compulsions breed doubt: Obsessive compulsive-like (motor) perseveration blocks spreading of semantic activation

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Objectives: Patients with Obsessive Compulsive Disorder (OCD) engage in perseverative behavior to reduce uncertainty. However, perseverative behavior has ironical effects; checking paradoxically enhances memory uncertainty (van den Hout en Kindt, 2003) and OC-like staring induces uncertainty about perception (van den Hout et al., 2009). How does perseveration breed uncertainty? When a word is repeatedly said out loud, the availability of semantic information related to this word is diminished as evidenced from Reaction Time (RT) tasks (Smith, 1984). Semantic satiation not only occurs for repeated words, but also for repeated pictures. We hypothesized that perseverative motor behavior as exhibited by OC patients (like checking) has the same effects and interferes with the perception of meaning. The dissociative uncertainty reported by OC-patients (‘I remember doing it in a way, but it’s all fuzzy’, Reed, 1985) may be the experiential end point of perseveration induced semantic satiation.

Methods: Thirty-eight undergraduate psychology students copied 20 types of OCD checking for either 2 or 20 times. Then they had to decide whether a given picture was either semantically related or unrelated to the checked object. If a loss of meaning occurs, this decision would be delayed from 2 to 20 checks.

Results: Perseverative checking induced semantic satiation; it took more time to decide whether the checked object and the picture were related after 20 checks than after 2 checks.

Conclusions: This study provides an explanation how OC-like perseveration induces feelings of unreality and uncertainty.

S25-2

How is attention to threat influenced by trait and state anxiety? A study of attentional deployment to threat across trait anxiety, mood state, and time

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Research suggests that high trait-anxious individuals are more likely to be vigilant for and to visually attend to threatening, relative to neutral, information. It is argued that this attentional bias to threat is a central factor in the development and persistence of anxiety disorders (e.g., Mathews & Mackintosh, 1998). However, attentional biases to threat have not only been demonstrated as a function of trait anxiety, but also as a function of state anxiety. It is possible, then, that attentional biases towards threat are simply an epiphenomenon of state anxiety and not necessarily a feature of trait or pathological anxiety. A more probable explanation is that trait and state anxiety interact such that high levels of both constructs result in greater attention to threat. Furthermore, attention to threat can change over time as bottom-up processes that control attention yield to top-down processes, and thus attention at various stages in time may be differentially influenced by trait and state anxiety. In the present study, participants high and low in trait anxiety underwent calm and anxious mood state inductions (counterbalanced) prior to an eye tracking task in which they freely viewed threat-neutral image pairs over 5 seconds. Probability and duration of eye fixation at first fixation and across time will be analyzed. It is hypothesized that trait and state anxiety will interact such that participants with high trait anxiety will deploy their attention to threat whilst in an anxious state to a greater degree than those low in trait anxiety, and the pattern will be characterized by persistent deployment to threat as opposed to vigilance/avoidance or focus on neutral stimuli. Results will be discussed in terms of implications for understanding and treating anxiety disorders.
Perseveration reduces accessibility of how the checked object is related to other stimuli. The doubt and uncertainty reported by OC patients may be the experiential result of this process.

**S25-4**

**It’s not what you think it’s the way that you think it: the role of rumination in psychosis**

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There is growing evidence of an association between repetitive thinking processes (such as worry and rumination) and various types of psychopathology (such as anxiety and depression). This research extends this work by exploring the role of rumination in psychosis, and particularly explores how repetitive thinking processes may contribute to the development and maintenance of delusional beliefs (including paranoia). Using both questionnaire methods and lab-based studies manipulation of thinking processes in non-clinical samples, our pilot work has begun to indicate that rumination may be associated with delusional ideas independently of trait anxiety or depression, and may play a role in the maintenance of delusional ideas and associated distress in comparison to alternative thinking processes. Implications for understanding the maintenance of delusional beliefs, future research and clinical practice will be briefly explored.

**S25-5**

**Mood-as-input theory: A transdiagnostic mechanism**

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There is an emerging view within psychopathology that many cognitive and behavioural processes are transdiagnostic. Excessive perseveration is a symptom that crosses diagnostic categories and the mood-as-input hypothesis describes a mechanism that is potentially common to these differing psychopathologies and perseverative activities. The basic assumption from a mood-as-input approach is that the variables required to generate perseveration need not be activity specific, and if an individual suffers endemic negative mood, has a perfectionist approach to goal-directed activities, and is unable to objectively determine goal achievement, then perseveration across a range of goal-directed activities is possible. One implication of this is that – if a mood-as-input mechanism contributes to perseveration of clinical symptoms – then those individuals will be highly vulnerable to the development of other, related perseverative symptoms. Experimental evidence will be reviewed and discussion will focus on whether perseveration in a number of psychopathologies can be understood through underlying mood-as-input mechanisms.

**Symposium 26 – Integrating attachment theory and CBT: on clarifying the attachment conceptualization and understanding the impact of attachment on CBT outcome**

**S26-1**

**The specificity of autobiographical attachment memories in children: The role of attachment relationships and links with depression**

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**Introduction:** Although research has convincingly demonstrated that depression is associated with difficulties to retrieve specific autobiographical memories, less is known about the factors that contribute to this association. Although some researchers have investigated potential mechanisms underlying a reduced specificity of autobiographical memories, surprisingly little attention had been paid to the association with another important risk factor of depression: the quality of the relationship with the attachment figures. Therefore the current study aimed at investigating whether depression is related to a reduced specificity of attachment memories and whether this association can be explained by attachment processes. This was investigated in a middle childhood sample as literature suggests that in this age group the developmental foundations predicting later depression can be found.

**Method:** For this reason, 80 general population children (ages ranging from 10-13) completed an adapted version of the Autobiographical Memory Task, the People In My Life Questionnaire (Trust and Communication Subscales), and the Child Depression Inventory.

**Results:** Results indicated that the initial effect of depression on specificity of the autobiographical memories disappeared when taking into account the children’s communication with mother about their emotions and feelings. Furthermore, although no direct link was found, trust in the availability of mother was indirectly linked with specificity of the autobiographical memories via communication.

**Conclusions:** Although our findings are limited due to the cross-sectional design, this suggests a pathway through which attachment influences vulnerability to depression. This way, the present study can add to our understanding of the role of attachment experiences in the development of depression, which might impact existing therapeutic interventions.
**S26-2**

**Trust in the Availability of Mother and Distressed Children’s Proximity Seeking Behavior in Middle Childhood**

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1K.U.Leuven, Belgium; 2Ghent University, Belgium

The secure base conceptualization of internal working models implies that expectations regarding the availability of the attachment figure as a secure base should be functionally equivalent to a cognitive schema. In conformity with cognitive schema theory, trust in the availability of mother influences the attentional processing of mother. Children who trust less in her availability orient their attention more quickly towards her, and have a more narrow attentional field around her. The current study aimed at investigating whether trust-related attentional biases are associated with attachment behavior. Following the secure base hypothesis, we predicted that distressed children who trust more in their mother’s availability would more quickly seek her proximity and support. Attachment questionnaires were administered and the attentional narrowing effect was measured in 33 children (9-11 years old). An Attachment Observation Task (AOT) measured how long distressed children waited to seek the proximity of their mother. The AOT consisted of a problem solving (during which children had to solve a difficult puzzle) and a waiting phase. Children were given a doorbell to call for mother after finishing or giving up on the puzzle. Mother waited before returning until the child rang the bell a second time. After the reunion, children were asked to rate on a 5-point Likert scale how distressed they felt when mother did not show up immediately after the first bell. Results showed that both self-reported trust in the availability of mother and the breadth of the attentional field around her were significantly related to how long distressed children waited to call for mother.

**S26-3**

**Attachment and an interpretation of ambiguous mother-child interactions**

Vandevivere, Eva; 1 Bosmans, G.; 2 Braet, C.

1Ghent University, Belgium; 2K.U. Leuven, Belgium

The internal working model about the attachment figure is a crucial concept within attachment theory as it is assumed to influences the cognitive processing of attachment related information. Research has revealed that a secure base script is characterized by a biased processing of information that is congruent with the content of that schema. The first study investigates (1) whether trust in availability of mother as a secure base is related to a biased interpretation of the interaction with mother and (2) whether this relation lasts after taking into account the effect of negative affect and anxiety. Moreover, study two (3) investigates whether parenting behaviors are related to this interpretation bias and (4) whether this association is mediated by trust in availability. The interpretation bias was measured with a new Interpretation Bias Task (IBT) and attachment and parenting with questionnaires. All the analysis were controlled for negative affect and anxiety. In study one with 97 children, a multiple regression with interpretation bias as dependent and trust, depressive symptoms and anxiety as independent factors, showed that trust significantly predicted the objective IB score (β=-.26, p<.05). Thus, results show that children who trust less in the availability of mother are more prone to interpret her behaviour in a threatening manner. Furthermore, the relationship is still significant after taking into account depressive symptoms and anxiety. These results are in line with the hypotheses that IB is due to the effect of a secure base script reflecting specific maladaptive experiences with parents. In the second study, the original significant effect of psychological control and autonomy support by mother on the subjective IB score was reduced to non-significance adding trust. The original significant effect of psychological control on the objective IB score was also reduced to non-significance adding trust. Consequently, psychologically controlling and autonomy supportive parenting styles were indeed related to this interpretation bias as well. But in line with previous research on information biases, these associations were completely mediated by trust in availability.

**S26-4**

**An attachment perspective on computerised CBT in primary care**

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1Ultras VUK, United Kingdom; 2University of Sussex, United Kingdom; 3University of Southampton, United Kingdom; 4University of Bristol, United Kingdom

Attachment orientation comprises schema regarding the availability and trustworthiness of caregivers, and is known to be related to engagement with therapy. In traditional face-to-face therapy, attachment style has been identified as a predictor of initial help seeking (Riggs, Jacobvitz, & Hazen, 2002) and a moderator of the effectiveness of different types of therapy (Tasca et al. 2006; McBride et al., 2006). E-health technologies such as Computerised CBT (CCBT) aimed at broadening the reach and access to psychological therapies are increasingly used in primary care worldwide. However the relationship between attachment and engagement with computerised therapy is yet to be explored. This presentation outlines a programme of work exploring the links between attachment and the application of computerised cognitive behavioural self-help therapy in primary care. This talk will present: i) data on the relationship between attachment style and therapeutic orientation (help-seeking behaviour, expectations for therapy, engagement); and ii) an attachment-based analysis of data collected as part of computerised CBT programme, focusing on cognitive responses to a threat scenario and challenging inner beliefs. Findings will be discussed with reference to implications for improving engagement with self-help CBT and developing attachment-focussed CBT techniques. McBride et al., Journal of Consulting and Clinical Psychology 2006; 74; 1041–1054 Riggs et al., Psychotherapy: Theory/Research/Practice/Training 2002; 39; 4 344–353 Tasca, et al., Psychotherapy Research 2006; 16; 1 106-121
Symposium 27 – It’s the thought that counts: appraisals in psychosis

S27-1

The route to psychosis: what differentiates individuals with psychotic experiences with and without a 'need-for-care'?

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Objectives: A number of studies examining some of the predictions made by cognitive models of psychosis will be presented, specifically the potential contribution of appraisals and response styles to the development of 'need for care'.

Methods: Groups reporting psychotic-like experiences with and without a 'need for care' were compared on types of experiences, appraisals of these experiences, distress, and ways of responding.

Results: Both groups were found to have similar overall levels of psychotic-like experiences and prior trauma, but were characterised by distinct types of experiences, appraisals, and responses to their experiences, leading to higher distress in the clinical groups.

Conclusions: Overall this body of work provides support for the cognitive model of psychosis in suggesting that cognitive and behavioural factors are key in differentiating non-clinical anomalous experiences from clinical psychotic status.

S27-2

A qualitative comparison of psychotic-like phenomena in clinical and non-clinical populations

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Objectives: To explore the nature and context of psychotic-like phenomena in clinical (C) and non-clinical (NC) participants, and to investigate whether the factors involved with triggering a psychotic-like ‘out-of-the-ordinary’ experience (OOE) can be distinguished from those determining its clinical consequences.

Design and methods: Qualitative data were collected by semi-structured interviews, and analysed using Interpretative Phenomenological Analysis (IPA). 12 participants, who reported OOE starting in the last five years, were split into C and NC groups depending on whether they were involved with mental health services as a result of their experiences. Inter-group comparisons of emergent themes were made.

Results: Inter-group similarities were found in the triggers and subjective nature of experiences, with clearer group differences in the inter-personal and background personal contexts, and how the experiences were incorporated into their lives. In particular, the inter-personal theme of validation was identified as important in distinguishing the clinical consequences of OOE.

Conclusions: It is not the OOE itself that determines the development of a clinical condition, but rather the wider personal and interpersonal contexts which influence how this experience is subsequently integrated. Theoretical implications for the refinement of psychosis models are outlined, and clinical implications for the validation and normalisation of psychotic-like phenomena are proposed.


S27-3

Metacognitive training in schizophrenia: Detecting and defusing cognitive traps

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Numerous studies have found that patients with (paranoid) schizophrenia jump to conclusions, are biased in their attributions, share a bias against disconfirmatory evidence, are overconfident in errors, and display problems with theory of mind. These biases seem to precede the psychotic episode and may represent factors involved in the formation and maintenance of the disorder.

Building upon this literature, we developed a metacognitive training program (MCT) that aims to convey scientific knowledge on cognitive biases to patients and provides corrective experiences via many exercises in an engaging and supportive manner. The group training is now available at no cost in 23 languages via www.uke.de/mkt. Last year, an individualized metacognitive program called MCT+ has been developed which is a hybrid of metacognitive training, psychoeducation and cognitive-behavioral therapy (www.uke.de/mkt_plus). Studies from our unit as well as independent evidence tentatively speak for the feasibility and efficacy of this approach.

Early Adverse Experiences, Social Defeat and Paranoid Ideations A Virtual reality Study

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Background: It has been proposed that the cumulative effect of prolonged exposure to social stressors may lead to 'social defeat' and that adverse life events can lead to psychopathology (Selten&Cantor-Graae, 2005). Cognitive models of psychosis suggest that early stressful events may result in a cognitive vulnerability which influences the appraisal of daily stressors and increases the likelihood of developing a psychotic disorder (Garety et al. 2007). Virtual Reality (VR) is the ideal methodology to investigate cognitive models in an experimental setting as it allows to measure the in vivo and in situ reaction to social situations as they occur (SanchezVives&Slater, 2005)

Method: In this study we tested the hypothesis that adverse life events and social defeat influence the appraisal of the virtual environment. The virtual environment is a 3D tube ride modelled on the interior of a London Underground train carriage. It is designed to be perceived as neutral, but can be perceived as stressful by those who appraise social situations as threatening. Participants wear a headset and can move through the virtual environment by walking and whole-body turning.

Results: A total of 60 participants meeting ARMS criteria and 45 controls were recruited. ARMS reported significantly higher levels of paranoid ideation in the VR environment. Adverse life events and social defeat were strongly associated with paranoid ideation during the VR experiment.

Conclusion: Adverse life events and social defeat are linked to the paranoid appraisal of social situations.


Change Processes in Individual Cognitive Therapy for Social Phobia

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Background and Objectives: Individual Cognitive Therapy (ICT) is effective for treating social phobia but little is known about the mechanisms by which the treatment achieves its effects. This study investigated the potential role of self-focused attention, social phobia related negative automatic thoughts, and working alliance as mediators of clinical improvement.

Methods: Twenty-nine patients with social phobia received ICT within a randomized controlled trial. Weekly process and outcome measures were analyzed using multilevel mediation models.

Results: Changes in self-focused attention mediated improvements in social anxiety one week later. In contrast, changes in frequency of or belief in negative social phobia related negative automatic thoughts did not predict social anxiety one week later. Working alliance was positive throughout treatment but did not predict outcome.

Conclusions: Changes in self-focused attention may mediate therapeutic change in ICT. Treatment interventions should hence target self-focused attention.

Psychotherapy for social phobia: How do alliance and cognitive process interact to produce outcome?

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The purpose of this study was to whether and how alliance and specific cognitive process may interact to influence outcome. Eighty social phobic patients were randomized to 10-week residential cognitive or residential interpersonal therapy. They completed process and outcome measures weekly. The ratings were analysed with mixed models. It was found that initial patient-rated alliance predicted the course of social anxiety throughout therapy and that this effect was indirect through the cognitive process. However, this indirect effect did not interact with treatment. There was a trend toward an indirect effect of
weekly variations in therapist-rated alliance through weekly variations in subsequent cognitive process on weekly variations in subsequent social anxiety. Thus, the results support a facilitative rather than an active ingredient perspective on the role of alliance.

S28-3

The mediating role of non-fear emotions in the treatment of PTSD - A randomized controlled trial study

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The concepts of posttraumatic shame, guilt, and anger have received little empirical investigation in the field of traumatology. In particular, current definitions emphasize fear, but current theorizing and increasing evidence (Holmes, Grey & Young, 2005; Grey & Holmes, 2008; Grunert, Weis, Smucker, & Christianson, 2007) suggest that non-fear emotions such as guilt, shame and anger may serve important functions in the development, maintenance and treatment of PTSD. Thus, providing hypothesis of causal links between trauma-related shame, guilt and anger with the process and outcome of treatment. The present study explored the processes of change in a randomized controlled trial evaluating the effectiveness of two exposure-based form of cognitive therapy for trauma, in which Imagery Exposure (IE) specifically targets fear, while Imagery Rescripting and Reprocessing Therapy (IRRT) focus on non-fear emotions as well as fear. The main aim of the study was to assess whether changes in PTSD symptoms will be mediated by changes in fear, anger, self-blame, guilt, shame, and self-compassion experienced during imagery, and whether the mediating relationships are different in the two sorts of treatments. Empirical investigation of these relationships will be analyzed with mixed random and fixed effect models.


S28-4

Mediation of Treatment Change in Cognitive Therapy for Social Phobia – Two Functional Magnetic Resonance Imaging Studies

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Background: Social phobia is thought to be maintained by a concern about how one is seen by others, related negative mental imagery and a resulting tendency to monitor one’s performance (Clark & Wells, 1995; Rapee & Heimberg, 1997).

Method: Fifteen patients with social phobia (SPs), 13 recovered patients (rSPs), and 15 healthy controls (HCs) were tested. Study 1 investigated neural correlates of public (“Others see me as pathetic”) and private self-referent (“I see myself as worthless”) judgements as compared to judgements of another person. Study 2 investigated neural correlates of task vs. self-focused attention during a simple discrepancy detection task. The task was superimposed on a video of an empty room (absent) or a researcher who appeared to monitor participants’ performances (present).

Results: Study 1: SPs differed from HCs in activation patterns associated with mental imagery and self-focused attention for “public vs. other” referent judgements. CT was associated with both normalized and compensatory patterns in these areas. Study 2: SPs differed from HCs in activation patterns associated with task-focused attention and public state self-consciousness while the researcher was absent. This effect was obliterated when the researcher was present. CT was associated with (a) normalized activation patterns in areas associated with task-focused attention and public state self-consciousness while the researcher was absent, and (b) compensatory effects in areas associated with self-focused attention for “present vs. absent” irrespective of target detection.

Discussion: SPs differ from HCs in activation patterns associated with public focused attention, mental imagery, and performance monitoring. CT is associated with (a) normalized activations in areas associated with mental imagery and performance monitoring and (b) compensatory effects that may mirror a decrease in self-focused attention. CT should continue to modify patients’ mental imagery about how they think they are being seen by others, normalize patients’ excessive motivation to perform well and target self-focused attention.

The association between cognitive errors, coping strategies and depression: a study of depressed patients undergoing therapy

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Research has shown a relationship between cognitive errors and various indicators of psychopathology, as well as between coping and mental health. However, past studies were based on questionnaires, and thus fail to document coping and cognitive processing as they naturally unfold. Objective: This study examined how cognitive errors and coping strategies are related to psychopathology, namely depression, and to treatment response, using two observer rated methods designed to assess cognitive errors (Drapeau et al., 2007) and coping behaviours (Perry et al., 2005) in-vivo, i.e. as they are used or reported by patients in session.

**Method:** Data were collected as part of the landmark component study of cognitive behavioral treatment for depression conducted by Jacobson and colleagues (1996, 2008) and through a university based clinic. Thirty (n = 30) depressed individuals were assessed before therapy using the Beck Depression Inventory, the Hamilton Depression Scale, and the Global Assessment of Functioning Scale. Cognitive errors and coping were rated. In addition, one late therapy session was rated using those same measures. Thirty (n = 30) non depressed individuals seeking situational help were also assessed.

**Results:** Significant differences were found between the depressed and non depressed participants; associations were found between specific errors and symptoms and general functioning. Results also indicated some, although fewer, relationships between coping strategies and symptoms. A number of these findings are contrary to cognitive behavioural theory.

**Conclusion:** Implications for treatment and research will be discussed. The value and importance of not relying only on questionnaires but of also using observer rated methods will also be discussed.

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Observer-rated assessment of cognitive errors and coping action patterns

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¹McGill University, Canada; ²University of Lausanne, Switzerland

A difficulty in conducting research in cognitive behavioral therapy lies in finding or developing measures that tap cognitive errors and coping patterns, and in applying those measures to document response to treatment and understand psychotherapy process. The CE and CAP rating systems (Drapeau et al., 2005; Perry et al., 2005) are the first known observer-rated measures of cognitive errors (CEs) and coping action patterns (CAPs). Unlike questionnaires, the CE and CAP methods document CEs and CAPs as they occur or are reported by a patient in any type of interview. The two rating methods are detailed in manuals and operationalize the cognitive errors developed by A.T. Beck, J.S. Beck and colleagues, and other clinicians, as well as 12 different coping strategies in three manifestations (i.e., cognitive, behavioral, and affective) based on the work of Skinner and colleagues (2003). The manuals contain detailed descriptions of each construct, including a definition and possible function, ways to differentiate between similar or related constructs, and examples from actual therapy sessions. This presentation will outline the central tenets of the methods, and will enable observers to better understand and recognize cognitive errors and coping behaviors as they occur in therapy. It will also provide attendees with additional ways of conceptualizing patient problems and functioning.

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What do clinicians think of cognitive errors? Clinicians’ assessment of the cognitive error rating scale

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McGill University, Canada

**Objectives:** Cognitive errors and their interpretation are considered a central component of Cognitive Behavioural Therapy (CBT; Sacco and Beck, 1995). Nevertheless, there is lack of consensus regarding the definition of the cognitive error (CE) construct as well as the definitions of specific types of CEs. Correspondingly, there is no method for identifying the full gamut of CE types proposed in the literature and no observer-rated method of identifying CEs as they appear in a therapy session (e.g., Kwon and Oei, 1984; Leahy, 2003; Lefebvre, 1981). This latter fact is problematic because self-report questionnaires are prone to various participant-distortions (e.g., self-censoring, reporting salience rather than frequency, etc.; see Glass & Arnkoff, 1997) and other limitations (e.g., the inaccuracy of making punctuated measurements of a continuous process, etc.; see Blankstein & Segal, 2001). Given the theoretical and clinical significance of CEs, the Cognitive Errors Rating Scale (CERS) has been developed to clarify the ambiguity surrounding the definition of CEs and CE types and to provide an observer-rated means of...
assessing CEs. The present study examined whether the CERS’s presentation of CEs, CE types, and other CBT constructs (e.g., schemas) accurately reflects the way in which they are construed among CBT researchers and practitioners.

**Method:** An online survey (n=128) regarding the CERS was distributed to professional psychological organizations.

**Results:** It was found that CERS accurately portrays how CEs, CE types and other CBT constructs are defined by CBT researchers and practitioners. The findings also suggest that demographic variables, including practitioner manual use and years in practice, affect whether participants perceive there to be a need for and a benefit from the provision of consensual definitions for CBT constructs. Finally, the results indicate a lack of consensus among researchers and practitioners regarding the benefit of differentiating the between CE types.

**Conclusions:** This study shows a) that the CERS has strong face validity and b) that practitioners are likely to differ in their perception of how relevant the CERS is to their practice based on their attitude toward manual use and the amount of time they have been in practice. Finally, the study suggests a direction for further research pertaining to the CERS and to CBT theory – an investigation of the role that differentiating between CE types plays in effective CBT practice.

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**Cognitive Errors and Coping Patterns assessed by External Observers in Borderline Personality Disorder**

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Most studies on cognitive errors and coping are based on self-report measures which present a number of limitations. So far, no studies were conducted using valid observer-rated methodology addressing the question of cognitive distortions and coping in BPD (Borderline Personality Disorder) as they unfold spontaneously in session.

**Methods:** A total of N = 25 clinical interviews with patients presenting with BPD were transcribed and rated using the Cognitive Errors Rating Scale (Drapeau, Perry, & Dunkley, 2008) and Coping Patters Rating Scale (Perry et al., 2005); their cognitive profiles were compared to those of N = 25 healthy controls who underwent the same procedure.

**Results:** Overall, results indicated that no between-group difference in the frequency of cognitive errors was found. However, heightened levels of negative cognitive errors, in particular over-generalizing and fortune-telling, were associated with BPD. Furthermore, autonomy coping was associated with BPD functioning.

**Conclusions:** These results have high levels of ecological validity and are promising for the refinement of cognitive theory of Borderline Personality Disorder. Clinical implications for assessment and intervention are discussed.

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**Symposium 30 – Clinical Assessment and fMRI in Pediatric Populations**

**S30-1**

**Effects of Prenatal Maternal Depression on the Neurodevelopment of Social Cognition in Children Aged 4-6 using fMRI**


1 Emory University, United States; 2 Georgia State Univ., United States; 3 University of Arkansas, Medical Sciences, United States

**Objectives:** Children exposed to prenatal maternal depression have increased risk for psychological illnesses, especially anxiety and depression(1). This elevated risk reflects both genetic and environmental factors that disrupt brain maturation processes related to affective, cognitive, and social behavior(2). This research tests the hypothesis that exposure to prenatal maternal depression disrupts the development of neural circuitry implicated in social cognition and thus confers risk for later psychological problems. We believe that using fMRI to observe the neural fingerprint of social cognition in an at-risk population will help scientists and clinicians understand the intergenerational transmission of depression and thus create early intervention strategies that lessen or halt the progression of psychological illness.

**Methods:** Twenty-one children participated in this study, fifteen of whom had complete fMRI data and were included in the imaging analysis. The mothers of these children were monitored during pregnancy by the Emory Clinic. Depression levels during pregnancy and in the post-partum period were based on 7-11 separate clinical assessments. Offspring were categorized according to the amount, severity, and gestational timing of prenatal maternal depression. The study characterizes the neural response and functional connectivity associated with performance of a joint attention task during fMRI scan(3) and links these results to the emergence of psychological disorders based on the outcomes of a battery of behavioral assessments.

**Results:** We have collected and analyzed complete fMRI and behavioral data for 15 children (8 male/7 female, 8 Low/7 High maternal depression). High levels of maternal depression correlated with attenuated neural activation in the frontal areas and amplified activations in the posterior areas during the joint attention task, as compared to children with exposure to low levels of prenatal maternal depression. Correlations of these fMRI results to a battery of behavioral measures, will serve to link the clinical outcomes to the children’s neurodevelopment over time.

**Conclusion:** These results suggest that prenatal maternal depression dramatically compromises the childhood maturation of self-regulatory functions of the prefrontal cortex. Maternal depression during pregnancy thus appears to represent a plausible neurodevelopmental risk factor for childhood psychological problems. This presentation is designed to be part of the symposium called Clinical Assessment and fMRI in Pediatric Populations.

Diagnostic Assessment of At-Risk Children of Depressed Mothers, Aged 4-6

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Objectives: This paper will describe the development and administration of a detailed diagnostic assessment for children aged 4-6. The assessment was developed for use in a study using fMRI to examine the neuro-developmental effects of depression during pregnancy on a sample of preschool-age children of depressed mothers. The detailed behavioral information gathered using this assessment complemented the fMRI data in informing a model of intergenerational transmission of risk for depression.

Methods: Because there is no gold standard for diagnostic assessment for this age group, to obtain behavioral and diagnostic information about the study subjects, a parent interview which we will call the K-SADS/PAPA was administered. The K-SADS/PAPA was created by carefully merging sections of the Preschool Age Psychiatric Assessment (PAPA) (Egger & Angold, 2004) and the Kiddie-Schedule for Affective Disorders and Schizophrenia-Present and Lifetime Version (K-SADS-PL) (Kaufman, Birmaher, Brent, & Rao, 1997). Each section of the K-SADS/PAPA contributes information to a possible diagnosis. To maintain age-appropriate diagnostic criteria, the most up-to-date literature on preschool diagnosis was consulted for a number of disorders: depression (Luby, 2004), social phobia and separation anxiety disorder (Warren, 2004), and bipolar disorder (Leibenluft, Charney, Towbin, Bhangoo, & Pine, 2003).

Results: The K-SADS/PAPA was administered to mothers of the study subjects. Administration of the K-SADS/PAPA took 1-2 hours. Questions from the PAPA informed the diagnostic criteria on the K-SADS without difficulty. Although only two children met diagnostic criteria for a DSM-IV disorder (both behavioral disorders), the KSADS/PAPA generated descriptive information regarding subthreshold symptoms that clustered into three main categories: specific phobias/separation anxiety, oppositional behaviors, and mood lability.

Conclusion: By capturing descriptive information about subthreshold symptoms, the K-SADS/PAPA may provide a powerful tool in predicting outcomes in at-risk children.

Luby, Handbook of Infant, Toddler, and Preschool Mental Health Assessment 2004; New York, NY: Oxford University Press
Leibenluft et al, Am J Psychiatry 2003; 160

Behavioral Activation for Depressed Teens: Using fMRI to Characterize Adolescent Depression and Improve Personalized Medicine

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Objectives: Major depression (MDD) is a leading cause of medical disability worldwide, and adolescents are particularly vulnerable, with high rates of depression often seen in MDD. In this ongoing effectiveness study, we are using fMRI to better characterize neural activation in depressed adolescents and to use findings from pretreatment imaging to better predict who will respond to BA, thereby improving personalized medicine by working to clarify what works, why, and for whom.

Methods: Teens (ages 14-17) with MDD are assessed at baseline and then undergo fMRI scanning using the Monetary Incentive Delay task (MID). The MID recruits neural circuits involved in reward and loss and was chosen because it maps onto the mechanisms of change purported to underlie BA. Participants complete 18 weeks of individual therapy and are reassessed at post-treatment.

Results: 18 adolescents (61% female, M age = 15.2 years) have entered treatment; 10 depressed teens and 7 healthy controls (HC) have completed scanning. Preliminary results indicate that BA is effective in treating depression based on the Children’s Depression Rating Scale (p<.001). Neuroimaging analyses reveal small pretreatment differences between depressed teens and HC in reward response (p<.01, uncorrected) and significant differences in loss response (p<.005). Repeated measures ANOVAs will be conducted to evaluate pre- to post-treatment changes in neural activation in depressed teens; mixed-model ANOVAs will be conducted to compare post-treatment activation in depressed teens to HC.

Conclusion: These results suggest that BA is effective and that depressed teens show a distinctly different pattern of neural activation at baseline compared to HC. Findings will be used to develop an algorithm to predict treatment response to a larger randomized trial.

Symposium 31 – “Human” support in computerised CBT self-help for common mental health problems: what, how much and by whom?

S31-1

Internet- and computer-assisted therapies for depression and anxiety: three meta-analyses

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This paper presents the results of three meta-analyses of internet- and computer-assisted therapies for depression and anxiety. The first examines the effects of computer-assisted therapies for anxiety disorders and shows that computerised and face-to-face CBT do not differ significantly from each other, although the effect size of cCBT decreased when more therapist time was replaced by the computer. In the second meta-analysis we examined the effects of computer-assisted therapies for depression, and found that these had moderate to large effect sizes. In the third meta-analysis we examined the effects of self-guided therapies for depression (without professional support), and found that these therapies had a small but significant effect on depression.

S31-2

Therapist impact on treatment outcome with cCBT for anxiety disorders

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The role of the therapist has been a neglected factor in research on cCBT. In this paper we will present data on therapist behaviour and its association with treatment outcome in cCBT for anxiety disorders. First we will present data from three controlled trials with a total N of 119 in which we analyzed differences between eight therapists. In the study we found no significant mean level differences between therapists. However, one significant intraclass correlation between participants nested within therapists was found, suggesting that the outcome on the Beck Anxiety Inventory might have been influenced by the impact of the individual therapists. In a large scale trial on social anxiety disorder we randomly allocated 102 patients to either experienced or novice therapists. There were 13 Internet-therapists in the study, 7 of which were licensed clinical psychologists with an average or 3 years of clinical experience (range 2-6 years), and 6 clinical psychology students in their last semester of the five years master’s degree program. While we found large within group effects on measures of social anxiety, there were no differences between the two groups of therapists. While there is substantial support for some kind of guidance in cCBT for anxiety disorders (at least in the pretreatment assessment) it is yet unclear how much training is required by the therapist. Our findings are in line with results from the Titov group in Australia.


S31-3

Internet based preventive interventions for depression and anxiety: role of support?

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Introduction: There is no doubt that self-help through the Internet is an effective preventive intervention. It is not clear, however, whether it is necessary to offer these interventions with professional support or without. The differences between these two types of web based self-help have not been examined well, although this is very important from the point-of-view of implementation. A system without coaching is much more easy to implement than a system with coaching, which needs an infrastructure of coaches, professional training, and an institute which functions as employer for the coaches. In the current project, we compare web based self-help with different levels of support.

Methods: We will recruit a total of 500 subjects from the general population with mild to moderate depression and/or anxiety. They will be assigned randomly to one of five conditions: (1) Web based problem-solving through the Internet (self-examination therapy) without coach; (2) The same as 1, but with the possibility to ask help from a coach on the initiative of the respondent; (3) The same as 1, but with weekly contacts with a coach; (4) Weekly contacts with a coach, but no web based intervention; (5) Information only (through the Internet). As intervention we use the existing website Allesondercontrole, based on the principles of brief problem-solving. An earlier trial showed that it is effective in reducing depression and anxiety. We examine the effects after the intervention, after 3 months, and after 12 months.

Results: This is an ongoing trial. Currently about 300 people are included. The very first results seem to show that (1) all interventions are more effective than ‘information only’ (2) the self-help intervention without coaching and the self-help intervention with coaching on the initiative of the patients are less effective than the self-help intervention with weekly coaching (3) weekly coaching without self-help is as effective as the self-help intervention with weekly coaching.

Conclusions: It is not possible to draw conclusions yet. But on the EABCT conference we will be able to draw at least tentative ones.
Role of clinician and peer support in cCBT for problem-drinking

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Self-help interventions to curb adolescent and adult problem drinking are increasingly being delivered via the Internet. The effectiveness of these interventions has been evaluated in several randomized controlled trials. In this presentation we will present the results of two meta-analyses and a systematic review. First we present the results of a meta-analysis into the effectiveness of self-help interventions that consist of a single session web-based intervention without professional guidance. This type of interventions is known personalized normative feedback interventions. Participants receive automated feedback on their level and pattern of alcohol consumption and their level of consumption is also compared to their relevant peer group. We will also present the results of our meta-analysis into the effectiveness of unguided low intensity self-help interventions delivered via the Internet for alcohol moderation purposes. Subsequently, the differences between guided versus unguided self-help interventions for problem drinking are being discussed in terms of their clinical effectiveness and social-demographic characteristics of their participants. We will end this presentation by exploring differences ‘guidance’ may play in Internet interventions for the prevention of problematic alcohol use and those for depression.


The impact of tinnitus acceptance on tinnitus distress

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Objectives: The concept of acceptance has received growing attention in the last years. Across different chronic medical conditions, acceptance has been shown to be associated with less distress. Within tinnitus research, recent studies on acceptance-based treatments showed promising results. To assess acceptance in tinnitus patients, Westin et al. (2008) developed the Tinnitus Acceptance Questionnaire (TAQ), which, however, has not yet been cross-validated. Aims of the current study were therefore to verify the factor structure of the TAQ and to investigate the role of tinnitus acceptance for the experience of tinnitus distress.

Methods: 435 patients with chronic tinnitus completed the TAQ as well as inventories to assess tinnitus distress and associated symptoms. First, an exploratory factor analysis (EFA) was conducted to assure that the primary factor structure of the TAQ was evident in the sample. Second, a confirmatory factor analysis (CFA) was carried out. Eventually, the role of acceptance for tinnitus distress was investigated by means of mediation analyses.

Results: The EFA yielded a 2-factor solution accounting for 61.74% of the variance in the TAQ. All items loaded on the same factors as described by Westin et al. (2008) and the scale showed a comparable internal consistency (Cronbach’s α=.86). Accordingly, the CFA was conducted for the 2-factor solution including all items. Based on theoretical considerations, covariance was added between the error terms for several items. Computed fit indices provided support for a good fit of the data to the hypothesized model (χ²(45)=173.660, p<.001; CFI=.955; RMSEA=.081). The results of the mediation analysis revealed that tinnitus specific acceptance partially mediated the effect of the subjective tinnitus loudness on tinnitus distress (path ab=.769; CI95 0.576, 9.71; p<.001). Furthermore, tinnitus acceptance mediated the effects of depression and anxiety on tinnitus distress.

Conclusion: The TAQ has been shown to be a psychometrically sound inventory to measure tinnitus specific acceptance and can therefore be recommended for further use in tinnitus research. Moreover, results of the mediation analysis showed the importance of acceptance for the experience of tinnitus distress.
Therefore, it might be essential to further implement acceptance-based strategies in CBT-based tinnitus treatments to improve tinnitus acceptance and thus to reduce tinnitus distress.


S32-2

Exposure based cognitive behavior therapy for irritable bowel syndrome – theory and treatment

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Irritable bowel syndrome (IBS) is a functional gastrointestinal disorder, which is characterized by abdominal pain combined with altered bowel habits and bloating. IBS is associated with impaired quality of life and functioning. Since the disorder is common, with a point prevalence between 5% and 15%, it leads to large societal costs because of increased health care use and work loss. In the last 30 years, several psychological treatments for IBS have been developed and evaluated, including psychodynamic psychotherapy, hypnotherapy, stress management, biofeedback, relaxation therapy, cognitive therapy, and cognitive behavior therapy. Although several studies have shown large treatment effects some studies show very little effect. The theoretical models that these studies rely upon do not seem to produce consistent treatment effects. All these interventions are based on the notion that IBS symptoms are caused and exacerbated by different external stressors. External in the sense that they are not part of the illness, but stem from sources such as difficult interpersonal relationships, maladaptive coping strategies, negative self-schemas, negative appraisals of daily stressors, or general life difficulties. However, recent research suggests that the primary source of stress that causes symptoms is part of the illness itself. In analogue with current models of panic disorder, IBS-patients have developed hypervigilance towards their own body and react with fear in response to naturally occurring gastrointestinal symptoms. Through positive feedback loops, fear and attention increase the experience of IBS symptoms. In order to experience less symptoms and worry about symptoms, IBS patients develop patterns of avoidance, control, and safety behaviors. These behavioral patterns lead to decreased quality of life and increase the fear of and focus on symptoms. We will present a “third wave” cognitive behavioral treatment based on this model of IBS. The treatment includes brief mindfulness training and exposure to IBS-symptoms and other fear-related contexts. The treatment has been evaluated in four clinical trials with response rates between 59% and 65%.

S32-3

Acceptance and commitment group therapy for health anxiety: Results from a pilot study

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Background: Health anxiety (HA) or Hypochondriasis is a prevalent somatoform disorder, which has an early onset and is persistent. However, hypochondriasis is a rarely used diagnosis in clinical practice despite studies having reported a prevalence between 0.8-9.5% in primary care 1). As a consequence, the disorder is rarely treated. Acceptance and Commitment Therapy (ACT) is a recent development within cognitive-behavioural therapy, which uses acceptance and mindfulness strategies together with commitment to foster behavior change.

Objectives: To examine 1) the feasibility of conducting ACT in groups for patients with severe HA. 2) if patients experienced reductions in symptoms of HA and changes in illness perceptions in the course of the treatment, and in a 6-months follow-up period.

Methods: 34 patients in 4 groups were included in the pilot study. Symptoms of HA and illness perceptions were obtained from questionnaires immediately before treatment, at end of treatment, and 3 and 6 months after end of treatment. HA were measured with the Whiteley-7 and illness perceptions with a modified version of the Illness Perception Questionnaire (IPQ) used in previous Danish studies.

Results: Of 34 patients, 2 dropped out of the treatment. Patients reported high levels of satisfaction with the program. Data on health anxiety and illness perceptions is currently processed.

Conclusions: There was only low attrition from the treatment and patients reported high levels of satisfaction with the treatment. Thus ACT in groups seems to be an acceptable and feasible treatment from the patients’ perspective.


S32-4

Telephone Counseling for Patients with Chronic Heart Failure: an Evaluation Study

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The study evaluated the effectiveness of a newly developed program for patients suffering from Chronic Heart Failure (CHF) with the purpose of improving participants’ perceived health and actual physical symptoms. Participants were insurants of a big German health insurance company and recruited to participate in a telephone counseling program focusing on nutrition behavior, physical activity, fluid intake, and medication compliance.

Multilevel analyses (ML) were conducted to analyze changes in the health related outcome variables over time in N = 259 participants. The results show an improvement of perceived state of health, physical symptoms, and somatic impairment as well as...
differential effects between “completers” and “non-completers” of specific modules indicating specific module effects. No significant differences in program effectiveness were found across functional status, age, or gender, demonstrating the broad applicability of the intervention.

A brief cognitive-behavioural intervention addressing illness perceptions in non-cardiac chest pain – concept, feasibility and acceptability

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Objective: Chest pain persists in many cases despite lack of evidence of an underlying cardiovascular disease (non-cardiac chest pain NCCP). Affected subjects often continue to believe their symptoms being related to heart disease. To prevent the condition from becoming chronic, a stepped care approach has been suggested. While more intense cognitive behavioural therapy (CBT) seems to be efficacious, the effects of brief interventions have rarely been investigated and were inconsistent (Kisely et al. 2010). The aim of this study is to evaluate a one session CBT-based intervention that addresses the subject’s illness beliefs.

Method: Subjects consecutively presenting chest pain for diagnostic tests at the clinic for cardiology are asked for health related worries prior angiography and after standard feedback of test results. 90 subjects with NCCP are then randomised to intervention or standard medical care. Assessments of pain, disability, illness representations are at baseline, 1- and 6-months FU.

Results: FU assessments are not yet completed. The focus will be on describing the rationale of the intervention, and short term results. Preliminary analyses show 60 % of NCCP patients being female, mean age of 53 (± 12.7) years, and 42 % having chest pain episodes at least daily. Health related worries (M = 5.5, SD = 2.4; VAS 0 – 10) and heart related disease conviction (M = 5.1, SD = 2.3) decreased significantly with acknowledgement of medical test results, but both remained on a substantial level. Thus an intervention concerning illness representations seems appropriate. Post intervention evaluation indicate a high degree of satisfaction among patients (e. g. > 85% perceive it as helpful).

Discussion: Immediate session ratings indicate the approach to be credible and successful. Follow-up data will show whether the brief intervention is also more effective in reducing clinical symptoms than standard medical care.

Conclusion: Many NCCP subjects are not entirely reassured after standard provision of medical test results, and these may need enhanced care. The present psychological intervention seems to be acceptable to patients and feasible in specialist care.

Evidence-Based Treatment: Issues of Dissemination in Iceland
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Psychological services for children and adolescents in Iceland are widely available, yet at the same time limited by complicating factors of cost, waiting lists and involvement of the national health care system. When children and adolescents receive services, many do receive evidence-based treatment. A large proportion of practicing clinical psychologists, whether working in private clinics or at clinics run by the government, are educated and trained in using cognitive-behavioral methods and apply mainly evidence-based treatments. In this presentation, information is offered on what kind of group and individual therapy is available for children and adolescents in Iceland. Various downsides of the current health care system will be discussed, as well as problems relating to the fact that most evidence based treatment programs are simply translated into Icelandic and effectiveness studies are generally not conducted due to lack of funding. Finally, an overview of CBT based preventative programs currently being offered in Iceland will be presented.

Improving Access to Evidenced Based Psychological Treatments for Children & Adolescents in the UK
Perrin, Sean
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Beginning in 2002, the Department of Health (DoH) in partnership with the National Institute of Clinical Excellence (NICE) began publishing guidelines for the evidenced-based care and treatment of individuals with specific psychiatric disorders. With few exceptions the first-line psychological treatment recommended in all of the guidelines was some form of CBT. The publications of these guidelines led to a re-assessment of the CBT capacity needed to provide this recommended treatment. Out of this assessment was born the Improving Access to Psychological Therapies programme (IAPT) - which aimed to train 10,000 new CBT therapists to provide low and high intensity CBT to adults with anxiety and depression. Building on the success of this programme, the DoH has decided to extend the IAPT so that children with anxiety, depression and behaviour disorders might also gain improved access to CBT. This presentation details the training curriculum (core skills and disorder-based training, supervision and assessment requirements) and the service modernization changes (improving care pathways, weekly outcome measurement, building local CBT supervision capacity and stakeholder involvement) imposed on clinical services that send staff for IAPT training. Drawing on his experience of CBT dissemination in the UK and Europe, the presenter discusses the issues that this new iteration of IAPT will need to address (low CBT supervision capacity, problems of staff retention after training, competition between professional groups, and cultural resistance to assigning diagnoses to and repeated assessment of children) if it is to be as successful as its adult counterpart.

The role of pediatricians in the dissemination: knowledge of and the need for a better mental health service for children in Switzerland
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Objectives: Despite substantial disability associated with mental disorders in children and the availability of effective therapies for most mental disorders in childhood, only a minority of children with mental disorders receives treatment. In addition, in cases where psychological problems arise at an early age, the duration between onset of symptoms and start of initial treatment is particularly long. Thus, early recognition of mental disorders in children is vital. The importance of primary care settings in the identification and management of common pediatric mental disorders is well recognized. Within this setting pediatricians play a major role in the recognition of mental disorders in childhood and adolescence. Pediatricians are typically the first to see children or adolescents with psychological problems and their regular observation of the child’s development is a good basis for judging whether a child’s problem is in need of treatment or not. The aim of the present study is to assess pediatricians’ awareness of mental disorders in their patients. Furthermore, this study investigates pediatricians’ needs and requests for diagnosing and handling mental disorders in children and adolescents.

Methods: 250 pediatricians completed a questionnaire especially developed for this study, which asked for the estimated frequency and type of mental disorders in their patients, confidence in identifying mental disorders, diagnostic and treatment strategies used, as well as requests for additional training.

Results: Pediatricians estimated that 15 percent of children in their pediatric settings reported psychological difficulties. The most frequent mental disorders indicated were attention-deficit hyperactivity disorder (ADHD), anxiety disorders, depression and aggressive disorders. Confidence in assigning diagnoses for anxiety disorders and depression was lower than for externalizing disorders. Counselling was the treatment approach most often reported in treating mental disorders, followed by psychopharmacological medication. Psychotherapy, however, was reported very rarely. Pediatricians’ requests for continuing education included diagnostics and screening instruments to identify psychological problems in childhood.

Conclusion: Because pediatricians are often confronted with psychological problems, they have the important role in recognizing early signs of mental problems and referring to evidence-based treatments. Therefore, continuing training in mental health diagnostics and treatment in children is essential. Such knowledge both helps ease the suffering of children and contributes to the reduction and prevention of their suffering as adults.
Symposium 34 – The Parent Factor in Childhood Anxiety Disorders

S34-1

Do anxious mothers tell scary stories?
Dodd, Helen; Hudson, J.L.
Macquarie University, Australia

Objectives: The inter-generational transmission of anxiety is likely to be underpinned by a range of processes including verbal information transfer. The aim of the present study was to examine whether anxious and non-anxious mothers differ in the amount of threat they communicate when talking to their child a story about a novel animal.

Methods: Participants were 202 children (aged 3 years 2 months - 4 years 5 months) and their mothers, recruited as part of a longitudinal study examining the role of behavioural inhibition and family environment in the development of child anxiety. Maternal anxiety was assessed using the Anxiety Disorders Interview Schedule (ADIS-IV; Brown, DiNardo, & Barlow, 2004); 39% met criteria for at least one clinical anxiety diagnosis. Mothers were asked to tell their child a 4-minute story about an imaginary wild animal that their child had never seen before but were likely to encounter on their next holiday. The stories were recorded and coded for threat-related and safety-related comments. After hearing the story, children were asked a series of questions about their attitudes towards the animal.

Results: No significant differences were found in the number of threat and safety related comments included in the stories told by anxious and non-anxious mothers. However, the amount of negative and positive threat-related information included in the story affected the child’s anticipated reactions to the animal; children who heard more threat-related information said they were more likely to feel scared, run away and think that the animal would hurt them. This effect was not moderated by child anxiety or child temperament.

Conclusions: The results support the idea that children use the information their parents communicate to them to form expectations about unfamiliar stimuli. However, there was little evidence that anxious mothers are more likely to describe novel stimuli in a threat-related way.

S34-2

Treating parent anxiety to enhance the efficacy of family-based cognitive behavioural treatment for childhood anxiety disorders
Newall, Carol; Hudson, J.; Rapee, R.; Lyneham, H.; Schniering, C.; Wuthrich, V.; Seeley, E.
Macquarie University, Australia

The presence of untreated parental anxiety poses a significant risk to the successful short-term outcome of CBT for childhood anxiety disorders. The current randomised trial examined whether a treatment program that included parental anxiety management (PAM) as well as a family-based cognitive-behavioural therapy (CBT) was more efficacious than the family-based CBT program alone in treating childhood anxiety disorders. Two hundred and nine children (aged 6-13 years) with a principal anxiety disorder were recruited. Of these, 109 participants and their parents were randomly allocated to a PAM + family-based CBT treatment condition, while the remainder received family-based CBT only. Overall, outcome results at post-treatment and 6-month follow-up revealed that there were no significant differences between the PAM + family-based CBT group and the family-based CBT only group on outcome assessments of: (1) child diagnostic status and (2) parent diagnostic status. Results further suggest that children with non-anxious parents were more likely to be diagnosis-free for any anxiety disorder diagnoses compared to children with anxious parents at post-treatment and 6-mth follow-up. In summary, the addition of PAM in its current format to family-based CBT did not enhance the treatment of childhood anxiety disorders. Results will be discussed in terms of: (1) the lack of PAM effects on parental anxiety diagnostic status at post-treatment and follow-up and its impact child’s diagnostic status following treatment; and (2) the conceptual link between parental anxiety and its impact on child anxiety treatment outcomes, and specific parenting behaviours that need to be targeted in treatment. Paper to be presented at the Symposium: „The Parent Factor in Childhood Anxiety Disorders: An Opportunity for Prevention of the Disorder and Enhancement of Treatment Outcomes”

S34-3

Parents installing fear beliefs in their children via the verbal information pathway
Muris, Peter
Erasmus University Rotterdam, Netherlands

Objectives: Rachman's (1991) three pathways theory proposed that childhood fears not only arise as a consequence of direct learning experiences, but can also be elicited by means of threat information transmission. The present investigation provides a direct test of the role of negative information in the transfer of fear and anxiety from parents to their children. An experiment was carried out in which parents were presented with a novel animal (i.e., an Australian marsupial) about which they received negative, positive, or ambiguous information. Parents were incited to pass this information on to their offspring by asking them to describe a series of imaginary confrontations with the animal. The main hypothesis of the study was that children’s fear of the animal would change as a function of the information provided to the parents.

Methods: Parents of children aged 8 to 13 years (N = 88) were presented with negative, positive, or ambiguous information about an unknown animal and then given a number of open-ended vignettes describing confrontations with the animal with the instruction to tell their children what would happen in these situations. Fear of the animal was assessed by means of a self-report scale of fear beliefs and a confirmation bias task.

Results: Results indicated that children’s fears (as indexed by the
fear beliefs scale as well as the confirmation bias task) were influenced by the information that was provided to the parent. That is, parents who had received negative information provided more threatening narratives about the animal and hence installed higher levels of fears in their children than parents who had received positive information. In the case of ambiguous information, the transmission of fear was dependent on parents’ trait anxiety levels. More precisely, high trait anxious parents told more negative stories about the unknown animal, which produced higher fear levels in children.

Conclusions: The verbal information pathway appears to play a role in the transmission of fear from parents to their offspring. This knowledge could be employed in early intervention programs for fearful and anxious children.


S34-4

The effect of inflated responsibility on maternal and child behaviours

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Experimental studies are a useful way of highlighting the causal relationships which may underlie the development of psychological distress. There has been considerable debate about the role parents may play in the development of anxiety in children but there is uncertainty about the extent to which parental beliefs and behaviours are causally related to children’s anxiety. This paper will present 3 related studies in which the effect of inflated responsibility on children’s and mother’s behaviour is examined. According to Salkovskis (1985, 1999) inflated responsibility is a key causal factor in OCD and in adults there is a range of evidence that inflated responsibility is correlated with OCD. Reeves and Reynolds (2008) found some studies which demonstrated an association between inflated responsibility and OCD in children and young people but an absence of experimental evidence. In this presentation we will present evidence that in children, inflated responsibility increases OCD-like behaviours, i.e. checking, hesitating and the length of time taken to complete a task. This supports Salkovskis’ inflated responsibility of OCD. Further we present 2 studies which involve experiments with children and their mothers together. In study 2 we inflated responsibility beliefs only in children but not in their mothers. This led to an increase in OCD-like behaviours in children but not in their mothers. In study 3 we manipulated responsibility beliefs in children and in their mothers. This led to significant increases in maternal reassurance giving, and in child reassurance seeking and other OCD like behaviour. The effect of maternal responsibility beliefs appeared to amplify the effect of responsibility beliefs in their children. The data suggest that parental beliefs and behaviour may have a direct causal effect on the development of children’s anxiety.

Symposium 35 – Treating anxiety and OCD in children and adolescents: psychological and neurobiological mechanisms of change

S35-1

Cognitive mechanisms of change in CBT for anxiety-based school refusal in adolescence

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Background: Cognitive-behavioural treatment (CBT) is found to be effective with anxious school refusers. Still, about one-third to one-half of the school-refusing youths show little or no response to CBT, indicating that there is room for improvement. Efforts to improve CBT warrant investigations of working mechanisms of change.

Objectives: The proposed study examined whether changes in adolescent self-efficacy were associated with changes in school attendance and internalizing problems following CBT for school refusal in adolescence.

Methods: The sample consisted of 19 adolescents (13 boys and 6 girls; aged 12 to 17 years, M=15.0) who participated in the evaluation of the ‘@School project’, a developmentally-sensitive CBT for school refusal in adolescence. In addition to the presence of an anxiety disorder, 9 of the 19 adolescents (47%) met criteria for a mood disorder at pre-treatment. The majority of adolescents (n=14, 74%) had not attended school at all during the two-weeks of pre-treatment assessment, and one other adolescent attended only 10% of the time. The CBT treatment was designed as a developmentally appropriate, modularized manual-based treatment comprising cognitive and behavioral interventions. Treatment was implemented across an average of 16 weeks, comprising sessions with the adolescent, his/her parent(s), and the school staff. The measures related to treatment outcomes (i.e., anxiety, depression, school fear, parent-reported internalizing behaviour) and the mediator variable (i.e., self-efficacy) were assessed at pre-treatment, post-treatment, and follow-up treatment. Innovative statistical approaches were implemented to test for working mechanisms of change in uncontrolled small samples.

Results: Increases in self-efficacy were accompanied by increases in school attendance and decreases in internalizing behavior (i.e., school fear, anxiety, depression, and parent-reported internalizing behavior) at post-treatment and two-month follow-up. With regard to the analysis of mechanisms of change, increases in self-efficacy were associated with increases in school attendance and decreases in school fear at post-treatment. At two-month follow-up, increases in self-efficacy were not associated with increases in school attendance or decreases in internalizing problems.

Conclusion: There was evidence found for adolescent self-efficacy being a working mechanism behind CBT for school refusal in as much as increases in self-efficacy were related to decreases...
in school fear and increases in school attendance at post-treatment. The fact that reductions in fear of school and increases in school attendance depended, to some extent, upon enhanced belief in adolescents’ ability to engage in school-attending behaviors hints at the importance of targeting self-efficacy during treatment for school refusal. At the same time, there was no support found for self-efficacy being a working mechanism of CBT at follow-up, suggesting that some other mechanisms of change may be operating two-months following CBT.

Cognition, perceived control and coping in the treatment of anxiety disorders in children and adolescents

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Objective: To investigate whether changes in cognitive restructuring, coping and perceived control over anxious situations are active mechanisms of change in CBT for anxiety disordered children and adolescents.

Method: Participants were 148 children (8-18 years old, M = 12.5 years, 57% girls) with a primary anxiety disorder. Children were randomized to an active treatment condition (12-week CBT, n = 93) or an eight-week waitlist condition (n = 55). Assessments were completed pre-waitlist, post-waitlist/pre-treatment, mid-treatment, post-treatment and at three-month follow-up. Longitudinal mediation models were investigated in AMOS with Latent Difference Score Modeling (LDSM).

Results: CBT was effective in reducing anxiety level. After treatment and at follow-up respectively 57% and 63% of treatment completers were free from any diagnosis. Children in the waitlist condition showed a small, but non-clinical improvement from pre- to post waitlist. An increase of positive thoughts preceded subsequent decrease in child-reported anxiety symptoms. The level of child-reported anxiety symptoms influenced subsequent change in avoidant coping. An increase in three coping strategies (direct problem solving, positive cognitive restructuring and seeking distraction) preceded subsequent decrease in parent-reported anxiety symptoms.

Conclusion: Using a longitudinal design several mechanisms of change of CBT for anxious children were identified. A change and increase in positive thoughts and coping strategies preceded a change and decrease of anxiety symptoms. Surprisingly, a change in negative thoughts was not related to symptom reduction.


The moderating effect of parental rearing style and parental temperament on treatment outcome in children and adolescent treated for anxiety disorders

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Cognitive behavioral therapy (CBT) is an efficacious intervention for child and adolescent anxiety disorders. Treatment effects for individual CBT for anxious youth range from 43% to 88% (Silverman et al., 2008). However, this means that 12% to 57% of the children in CBT research trials for anxiety disorders do not benefit sufficiently of treatment. Therefore, there is a need to identify child and parent factors associated with treatment success and failure. Both temperament and parental child-rearing style are found to be associated with clinical anxiety disorders in youth. However, only few studies have examined these factors as potential predictors of treatment outcome for children with anxiety disorders. Partial support for the predictive value of both parental psychopathology and family functioning has been found (e.g. Berman, Weems, Silverman, & Kurtines, 2000; Liber et al., 2008). It can be hypothesized that such factors influence one another such that treatment outcome is influenced by parental rearing style, but particularly so if parents possess a unique combination of temperamental factors. For example, parents with high emotional reactivity (negative affectivity) and low emotion regulation capacities (effortful control) are likely to exert a different influence on the course of an exposure-based cognitive therapy than parents with low emotional reactivity and high emotion regulation capacities. Therefore, the goal of this study was to investigate the mutual and moderating effects of parental rearing style and parental temperament on treatment outcome in children and adolescent treated for anxiety disorders. Participants were 148 children and adolescents (ages 8-18; M=12.5, SD=2.8, 56.8% girls) referred to one of two outpatient child psychiatric units for anxiety problems in the Netherlands. All participants were clinically diagnosed with at least one anxiety disorder and treated with a 12-session individual CBT program. Treatment recovery was assessed using the Anxiety Disorders Interview Schedule for DSM–IV—Child and Parent Version, a semi-structured interview developed to assess major psychological disorders in children and adolescents, with a main focus on internalizing problems. The Revised Child Anxiety and Depression Scale - Parent and Child Version (RCADS-C and P) was used to assess the severity of symptoms of individual anxiety disorders and depression in accordance with DSM-IV nosology. Child’s and parents’ perceptions of parental rearing behaviors were assessed with the child and parent versions of the EMBU questionnaire (Egna Minnen Beträffande Uppfostran; Swedish acronym for My memories of Upbringing). Parental temperament was assessed with the Adult Temperament Questionnaire -1.3 (ATQ) Assessment took place at pretreatment, at posttreatment and at 24 weeks follow up. Both anxiety symptoms (RCADS child and parent report) and anxiety disorders (ADIS child and parent interview) decrease over time. At posttreatment and at 24 weeks follow-up, 56.9% and 63.2% of the children no longer meet the criteria of
any anxiety disorder. The data on the moderating role of parent and child temperament and parental rearing style are currently being analyzed and the results will be presented at the conference. The results of this study are expected to provide a better understanding of factors underlying positive and negative treatment outcome in children and adolescents treated for anxiety disorders. Findings may have important implications for clinical practice.


Mechanisms of change in CBT for children and adolescents with OCD

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The cognitive model is the most prominent model about the development and maintenance of OCD and forms a basic principle for treatment. However, it is not clear if cognitive restructuring is essential for treatment of OCD, especially for children. Not all children with OCD report dysfunctional cognitions. Some children perform their rituals because ‘they have to do it’, or ‘until it feels just right’. Do cognitive models not apply to these children, or do dysfunctional cognitions implicitly still play a role? An alternative explanation focuses on attentional processes. Are children with OCD more vigilant for potential threat than other children, or do they have difficulties to disengage attention from threat? The aim of the present study is to examine whether obsessive beliefs and attentional processes are mechanisms of change in CBT for children and adolescents with OCD. Knowledge about the effective ingredients of CBT is needed to improve treatment. Participants are 45 children (8–18 years) with OCD. Treatment consists of 16 weekly sessions CBT. Participants are randomized over 2 conditions: CBT, and 8 weeks waitlist followed by CBT. Assessments were executed pre-waitlist, post-waitlist/pre-treatment, mid-treatment, post-treatment, and at 16-weeks follow-up. Obsessive beliefs and meta-cognitions were measured with the child version of the Obsessive Beliefs Questionnaire (OBQ-CV) and the Meta-Cognitions Questionnaire – Adolescent version (MCQ-A). Selective attention is measured with a dot probe task. OCD severity is measured with the CY-BOCS. The final data are now collected. Results will be presented and discussed at the conference.


Neurobiological mechanism of change after cognitive behavioral therapy in paediatric patients with obsessive compulsive disorder

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Background: Neuroimaging studies of children and adolescents with obsessive compulsive disorder (OCD) reveal abnormalities in fronto-striatal circuits. However little is known how cognitive behavioral therapy (CBT) changes this neurobiological basis of obsessive compulsive behavior. Aim: The aim of this study is to find out which neurocircuits change after CBT in paediatric OCD.

Method: 29 medication free children and adolescents with OCD (age range 9-19, mean 13.8) were scanned in an MRI-scanner before and after 16 sessions of CBT. 29 age and gender matched healthy controls were scanned in the same manner. Structural and functional scans were made. During the functional scans a planning paradigm (Tower of London), an error monitoring task (Flanker task) and a task for selective attention (DOT probe task) were executed.

Results: Patients show on a structural level regional gray and white matter volume differences with healthy controls before treatment, especially an increase of gray matter volume in the frontal pole and insula. After treatment OCD patients show an increase of regional grey matter volume in the orbitofrontal cortex. White matter volume shows an increase in bilateral capsula externa. Functional imaging during planning revealed an hypoactivation of dorsolateral and parietal structures before treatment. After treatment this difference ceased to be significant. Error monitoring showed only in elderly patients more activation of the rostral anterior cingulate cortex which did not change after CBT. The selective attention task showed more hippocampal activation before treatment which normalized after treatment.

Conclusion: CBT in children and adolescents with OCD changes the volume and function of certain brain regions especially in dorsal and ventral fronto-striatal circuits.

Parent directed CBT for young anxious children, a pilot study

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Objectives: Evidence suggests that anxiety disorders are successfully treated with Cognitive Behaviour Therapy (CBT) in children aged eight years and above, but little is known about the efficacy of CBT for young children with severe anxiety.

Methods: We investigated a parent directed cognitive-behavioural intervention, including parents of 26 children aged 4 to 7 years. The intervention consisted of four two-hour group sessions (focusing on CBT principles and parenting practices). And thereafter with each parent(couple) four weekly individual telephone sessions were held about the implementation of the strategies they had learned using the idiosyncratic hierarchy they had developed with their child. Parents, children and teachers completed questionnaires at pre- and post treatment about children’s anxiety symptoms, behavioural inhibition en internalizing symptoms. Parents completed a questionnaire about their parenting related to hypothetical anxiety provoking situations for their children.

Results: Parents and children reported significant decreases in child anxiety. Parents and teachers noted significant decreases in behavioural inhibition. Last, parents also reported significant decreases in internalizing symptoms. Furthermore, mothers but not fathers, reported significant increases in their use of positive reinforcement and modeling and reassurance, and a significant decrease in their use of reinforcement of dependency directly after treatment.

Conclusions: Based on the results reported by parents, children and in a lesser extent teachers, parental CBT seems to succeed in empowering and educating parents to facilitate the necessary changes in their anxious child.
initially recruited aged between 3.5 and 4.5 years. Participants’ behaviour during an observation paradigm was assessed to produce a BI classification using methods initially developed by Kagan et al., (1984). At baseline, parent-child interactions were observed and maternal anxiety was assessed. The presence of child anxiety disorders was assessed at baseline, 2 year follow-up and 5 year follow-up using the Anxiety Disorders Interview Schedule for Children-Parent version (Silverman & Alano, 1996).

**Results:** The results suggest that behavioural inhibition, maternal anxiety and parenting behaviours all play a role in the development of anxiety. In particular, maternal anxiety and behavioural inhibition consistently confer additive risk for child anxiety. There is also some evidence that parenting behaviours play a direct role in the development of child anxiety and also an indirect role via child temperament.

**Conclusions:** Child temperament and family environmental factors confer additive risk for anxiety in middle-childhood. Early intervention programs therefore need to target child characteristics as well as maternal anxiety and parenting behaviours in order to be maximally effective in reducing anxiety risk.

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**Targeting risk factors for inhibited preschool children- preliminary findings**

Hudson, Jennifer; Dodd, H.F.

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A substantial body of work has identified that the temperamental construct of Behavioural inhibition (BI) is associated with elevated risk for anxiety disorders (e.g. Chronis-Tuscano et al., 2009). Recent research from our team has identified a number of additional risk factors that place a preschool child at risk for anxiety over a 5-year period. Our research shows that behavioural inhibition, maternal anxiety and parenting behaviours play a role in the development of anxiety. In particular, maternal anxiety and behavioural inhibition consistently confer additive risk for child anxiety. There is also evidence that parenting behaviours play a direct role in the development of child anxiety and also an indirect role via child temperament. Early intervention programs therefore need to target child characteristics as well as maternal anxiety and parenting behaviours to be maximally effective in reducing anxiety risk. The purpose of the current study was to alter the trajectory of at risk children through an intervention specifically designed to reduce risk factors. Children who scored at least one standard deviation above or below the mean on the approach scale of the Children’s Temperament Questionnaire-short version (Sanson, Smart, Prior, & Oberklaid, 1994) were recruited aged between 3.5 and 4.5 years. Participants’ behaviour during an observation paradigm was assessed to produce a BI classification using methods initially developed by Kagan et al., (1984). Parent-child interactions were observed and maternal anxiety was assessed. The presence of child and maternal anxiety disorders was assessed using structured diagnostic interviews. Children were randomly allocated to receive the 9 session intervention aimed at reducing inhibition, child and maternal anxiety and negative parenting behaviours. Assessment took place at baseline, 3 months and 6 months. At present, 40 children have been randomised to the study. Preliminary data will be presented.

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**Symposium 37 – Cognitive processes and depressive symptoms**

**The „Yes…But…” cognitive response to partial success and its relation to depressive mood**

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**Objectives:** Cognitive theories of depression state that people have characteristic ways of understanding negative life events and that those who exhibit a dispositional negative style and dysfunctional attitudes are at greater risk for depression (Ciesla & Roberts, 2007; Nolen-Hoeksema, 1991; Teasdale, 1999). Clinical experience highlights that depressed people tend to react negatively also in front of partial successes or alternative views emerging from cognitive restructuring. This study has explored the tendency of depressed people to use “yes…but” thinking style in front of partial success stimuli.

**Methods:** The study is a 2x2 experimental design that involved clinical and non-clinical samples, each one divided into two induction conditions. After recalling a memory of a past successful experience, participants spent eight minutes working through the “yes-but” or the “yes” thinking induction task. Before and after induction tasks participants completed four VAS measures used to assess mood, intrusive thoughts, judgement of self-worthlessness and self-unlovability.

**Results:** Separate 2 (Group) x 2 (Condition) x 2 (Time) Analyses of Variance (ANOVAs) were used to test the hypotheses relevant to each dependent variable. Preliminary results suggest a significant effect of „yes…but” condition on mood, intrusive thoughts, judgement of self-worthlessness and self-unlovability.

**Conclusions:** Findings support the role of „yes…but” thinking style in enhancing cognitive depressive reaction to successfull experiences.

Parental criticism, self-criticism and depression: an explorative research
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Objectives: Despite the fact that self-criticism is widely considered to be prominent in depressive disorders, the role of parental criticism has received little empirical attention. Many approaches have emphasized the role of early experiences with parents and the subjective perception of them in determining the development of negative self schemas but less is known about their relationship with the development of self-critical thinking style. The purpose of this study was to investigate the association between perceived parental criticism and self-critical thinking style and to determine whether the last represent a vulnerability factor for depression independent from ruminative brooding and concern about mistakes.

Method: A community sample of 194 participants completed a battery of questionnaires measuring levels of depressive symptoms, levels of self-criticism, perceived parental criticism, perfectionism (concern about mistakes) and ruminative brooding.

Results: A hierarchical regression analysis was run and showed that perfectionism (concern about mistakes) and ruminative brooding mediate the relationship between perceived criticism and self-criticism.

Conclusions: These findings highlight the role of concern about mistakes and brooding as mechanisms through which perceived parental criticism may be associated with self-criticism. In addition, the final equation showed that self-criticism was the only significant predictor of depression over and above the impact of perceived parental style, concern about mistakes and ruminative brooding.


The effect of positive mood on self-focused attention
Grol, M.; Koster, E.H.W.; De Raedt, R.
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Objectives: Heightened self-focused attention (SFA) has been consistently associated with negative affect and depression. However, the results on the relation between positive mood and self-focused attention are mixed. Within the field of positive psychology, the broaden-and-build theory proposes qualitatively distinct functions for negative and positive emotions. Positive emotions are believed to broaden people’s thought-action repertoires and build both physical, intellectual, and social resources. Based on research that supports this theory by linking positive emotions to increased attentional breadth, exploratory activity, and social openness, we expected positive mood to be associated with less SFA.

Method: Fifty healthy volunteers were randomized to receive a happy or neutral mood induction procedure which consisted of imagining either a happy- or neutral-inducing autobiographical memory. Positive or neutral music was played during imagery and throughout the experimental task. We used a new task to measure SFA as an early automatic narrowing of one's visual attentional field in the presence of self-referent information.

Results: We demonstrated that a bigger increase in positive mood was associated with less SFA.

Discussion: Emotions are believed to trigger self-perpetuating cycles. Whereas negative emotions trigger “downward spirals” leading to narrowed self-focus and narrowed thought-action tendencies which in turn trigger negative emotions, positive emotions trigger “upward spirals” by broadening cognition and increasing social openness which in turn may trigger positive emotions, fostering resilience over time. SFA may be involved in these self-perpetuating cycles as less narrowed self-focus may facilitate engagement in exploratory behavior, openness to new information, and social openness, and these effects in turn may trigger positive emotions.

Conclusion: The present study showed that positive mood is related to less SFA in a healthy sample. This is in line with the general effect of positive mood on broadened cognition as proposed by the broaden-and-build theory.

A qualitative analysis of barriers to implementing CCBT in English routine mental health services

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1Institute of Psychiatry, King’s College London, United Kingdom; 2Department of Psychology, University of Bologna, Italy

Introduction: Computer-aided Cognitive Behavioural Therapy (CCBT) is spreading rapidly across the English National Health Service (NHS). Many Primary Care Trusts (PCTs) have adopted FearFighter (FF), a CCBT system for panic and phobia recommended by the National Institute of Clinical Excellence (NICE, 2006). Despite being clinically and cost-effective in open and randomised trials (Marks et al, 2003; Schneider et al, 2005; McCrone et al, 2009), FF’s national implementation in uncontrolled settings requires further investigation. Objectives: This qualitative study investigates barriers to implementation in routine primary care and third-sector mental health services in England.

Methods: Thirty clinical leads/service managers who implemented FF in their own organisation were interviewed face to face or via phone. Each of the 6 Nurse Advisors (company staff supporting CCBT implementation in PCTs) was interviewed as well. The interviews explored perceived difficulties in implementing FF, as well as boosters and reasons for discontinuation in some PCTs. Audio files were transcribed and analysed in NVIVO. A thematic analysis was performed using an extended version of Greenhalgh et al’s (2005) model, in order to include CCBT-specific categories.

Results: Analysis is in progress and final results will be presented at the meeting. Preliminary findings revealed barriers to implementation fitting several categories of the model.

Conclusions: Limited awareness, competing services, and therapists’ attitudes toward CCBT are significant barriers to implementing this new treatment modality in routine care. Careful planning is necessary at the pre-implementation stage to identify strategies to overcome these barriers.

Symposium 39 – New research on personality disorders of the dramatic cluster

S39-1

Cognitive and emotional aspects of empathy in criminal offenders with antisocial personality disorder

Domes, G.1; Vohs, K.2; Habermeyer, E.2

1University of Freiburg, Germany; 2University of Zurich, Switzerland

Objectives: Deficits in empathy have been proposed to contribute to aggressive behavior in antisocial personality disorder (ASD). In the present study we investigated cognitive as well as emotional aspects of empathy in 60 criminal offenders with and without ASD compared to a healthy control group.

Methods: We used different facial emotion recognition tasks and the Multifaceted Empathy Task (MET).

Results: The group of criminal offenders with ASD showed subtle deficits in emotion recognition and reported lower emotional contagion when confronted with negative emotions of others.

Conclusions: The results of the present study support the hypothesis that criminal offenders with ASD mainly have problems in empathic concern rather than cognitive aspects such as emotion recognition. However, the two domains do not appear to be completely independent. The results are discussed with regard to the implications for cognitive-behavioral interventions in ASD.

S39-2

Lack of empathy in patients with narcissistic personality disorder

Röpke, Stefan1; Dziobek I.2; Ritter K.1; Schulze L.3; Preißler S.1; Renneberg B.2; Heekeren R.2

1Charité Berlin, Germany; 2FU Berlin, Germany; 3FU Berlin, Charité Berlin, Germany

The study’s objective was to empirically assess cognitive and emotional empathy in patients with narcissistic personality disorder (NPD). To date, „lack of empathy“ is a core feature of NPD solely based on clinical observation. In the behavioural study forty-seven patients with NPD, 53 healthy controls, and 27 clinical controls with borderline personality disorder (BPD) were included. Emotional and cognitive empathy were assessed with traditional questionnaire measures, the newly developed Multifaceted Empathy Test (MET), and the Movie for the Assessment of Social Cognition (MASC). Behavioural results indicate that individuals with NPD displayed significant impairments in emotional empathy on the MET. Furthermore, relative to BPD patients and healthy controls, NPD patients did not show deficits in cognitive empathy on the MET or MASC. The neuro-functional correlates of this impairment will be presented.

S38-4

How successful is low intensity CCBT for depression in the Netherlands?

Riper, Heleen; Warmerdam, E.H.

Vrije Universiteit Amsterdam, Netherlands

In this presentation we will present data on the clinical effectiveness of two low intensity CCBT interventions for coping with depression in the Netherlands in routine practice. These data will then be compared with those from three randomized controlled CCBT trials. The RE-AIM framework (reach, effectiveness, adoption, implementation and dissemination) from Glasgow will be used to structure and present the data. Using this framework we will use the prevalence and incidence rate for (adult) depression in the Netherlands to assess the potential reach of these interventions, their effectiveness in research and routine practice and their current adoption in routine practice. Results show that the clinical effectiveness in trial settings is comparable to those in routine practice but also that the latter entail populations of a more heterogeneous nature. In addition process evaluation data will be presented including the pitfalls and success factors for effectively implementation of CCBT. One of the current pitfalls is the yet insufficient embeddedness of CCBT in routine practice including a lack of a clear referral system from within this practice and uncertain and unrewarding reimbursement triggers. We will use the REAIM model to identify some research challenges for the future of CCBT implementation in the Netherlands. These results will be contextualised in comparison with developments in other EU countries such as Germany and Belgium.

S39-3

Orientation towards emotional faces in patients with borderline personality disorder: evidence from two different dot probe paradigms
Jacob, Gitta; Chung, B.Y.; Tuschen-Caffier, B.; Caffier, D.; Domes, G.
University of Freiburg, Germany

In experimental studies, BPD patients tend to interpret neutral faces as angry, and to orient towards angry faces. However, results are mixed and may also depend on the methods used. In this eye-tracking study, bias towards emotional, particularly angry faces was tested with two different dot-probe paradigms requiring different answering formats in BPD patients as compared to healthy controls. In both experiments, two faces with different emotional expressions are presented on the screen, and participants are instructed to focus a fixation cross between the two stimuli. In experiment I, a dot appears on one side of the screen after the picture stimuli disappeared and the participant indicates the position of the dot via mouse-click. In experiment II, frames of different colors appear around both stimuli after a short or longer time interval, and participants are instructed to focus the picture framed with one of the colors, while the stimuli are still present. In this presentation, the first results of this study will be presented.

S39-4

Variability of maladaptive assumptions in Borderline Personality Disorder: an ambulatory assessment study
Renneberg, Babette1; Spretz, D.S.1; Stiglmayr, C.S.2
1 Freie Universitaet Berlin, Germany; 2 AWP Berlin, Germany

Objective: Cognitive models of Borderline Personality Disorder (BPD) emphasize the role of maladaptive assumptions for the development and maintenance of the disorder. Research on maladaptive assumptions in BPD in everyday life is lacking.

Method: In order to investigate maladaptive assumptions of BPD patients in everyday life, we assessed three core beliefs central to BPD derived from the cognitive model using electronic diaries. 35 BPD patients received a handheld-PC for a 48 hour period, to enter hourly data. Additionally, each time aversive tension and current emotional state were assessed.

Results: Results indicate a high variability of BPD maladaptive assumptions over 48 hours. We found high and significant correlations between BPD assumptions and aversive tension. Increased aversive tension is significantly related to heightened intensity of negative assumptions. Furthermore, mean maladaptive assumptions scores of BPD patients were significantly higher when feeling intensive negative emotions compared to positive emotions.

Conclusions: Our results emphasize advantages of ambulatory assessment to investigate relevant characteristics of BPD pathology in more detail and we will discuss implications for further research.

S39-5

Aggressive attention and interpretation bias in antisocial personality disorders
Lobbestael, Jill1; Cima, M.2
1 Maastricht University, Netherlands; 2 Tilburg University, Netherlands

Objective: Information processing views on psychopathology postulate that patients focus on pathology-relevant stimuli, referred to as attentional bias (AB). This is typically demonstrated by probe-detection tasks in which faster responding to probes replacing threatening stimuli reflects increased threat attention. Interpretation bias (IB) is another information-processing deficit that indicates the tendency to interpret ambiguous information negatively. IB is typically measured by showing ambiguous social scenarios or pictures and asking subjects for an interpretation. The current study assessed whether patients with antisocial personality disorder are characterized by anger-related AB and IB.

In addition, we examined how these biases are related to impulsive aggression (i.e. emotion-driven defensive responses to perceived threats) versus predatory aggression (i.e. controlled, goal-driven aggression).

Method: Male participants with antisocial personality disorder, anxiety disorders, or non-patients controls were presented with verbal and facial probe-detection tasks, a story-task and ambiguous emotional interpersonal pictures.

Results and conclusions: Preliminary analyses show that anger-related biases are not specific for antisocial patients. Instead, anger-related attentional bias appeared to be uniquely related to impulsive aggression. Results from the complete sample will be addressed in the talk, along with the clinical implications.
Mindful parenting in mental health care: a study on the efficacy of the application of mindfulness in parenting in a clinical population

Hellemans, J.; Bogels, S.M.
UvA Academic treatment center for parent and child, Netherlands

Objectives: Bringing mindfulness into parenting (“mindful parenting”) has created one of the applications of mindfulness. Mindful parenting interventions are increasingly being used to help prevent and treat mental disorders in children, parenting problems, and prevent intergenerational transmission of mental disorders from parents to children. However, to date few studies have examined the effects brought about by mindful parenting. The goal of the current study was to evaluate the effects of an 8 session weekly group Mindful Parenting program in a child and parent secondary mental health care context, for a broad range of child and parent problems.

Methods: In this treatment parents are following an 8 week Mindful Parenting course, based on the 8-week Mindfulness Based Stress Reduction of Jon Kabat-Zinn. Parents are trained to transform their negative automatic reactions towards their child and parent secondary mental health care context, for a broad range of child and parent problems.

Results: Results show significant changes on these items applied, in which those families that had to wait at least 6 weeks before the intervention started, completed a waitlist assessment, and all families were assessed at pretest, posttest, and at 8-weeks follow-up.

Conclusions: Mindfulness training is providing a tool for the mind by which the automatic thought and behavior patterns can be transformed by which the parents can respond with more awareness to the children. Parents who cannot profit from behavioral parental training, can now be reached by this method because their mind, the underlying source of parental behavior, is transformed by which the automatic thought and behavior patterns can be reached by this method.


Coatsworth, J. Douglas; Duncan, L.G.; Greenberg, M.T.; Nix, R.L.
1The Pennsylvania State University, United States; 2University of California - San Francisco, United States

Family–based preventive interventions are effective in changing parenting practices, altering family relationships and reducing, delaying onset or preventing youth problem behaviors. Yet, the effects of the best evidence-based programs are generally small to medium, suggesting potential for improving these interventions. One possible way of strengthening preventive interventions is by incorporating mindfulness activities into their delivery. This presentation reports on the effects of an innovative program of research integrating brief mindfulness activities into the parent training component of the Strengthening Families Program: For Parents and Youth 10-14 (SFP 10-14). The presentation will describe a guiding theoretical model of mindfulness in parenting, illustrate some of the new activities that were infused into the intervention, and present results from a pilot randomized clinical trial and an ongoing large-scale, multi-site trial.
Mindfulness-based cognitive therapy for parents with a history of depression

Mann, J.; kuyken, W.; O'Mahen, H.; Evans, A.; Ukoumunne, O.; Ford, T.
1Mood Disorders Centre and Peninsula College of Medicine and Dentistry, United Kingdom; 2Mood Disorders Centre, University of Exeter, United Kingdom; 3Peninsula College of Medicine and Dentistry, United Kingdom

Objectives: There is evidence that parental depression can affect not only parental mood but also children’s development. A number of potential mechanisms for this have been suggested including a parent’s interactions with their child. There is however a lack of interventions for parents who experience recurrent depression. Mindfulness-based cognitive therapy (MBCT) has been found to significantly reduce relapse rates of depression to a level comparable to anti-depressant medication. It is also possible that MBCT may impact on aspects of parenting (Bailie, Kuyken & Sonnenberg, 2011). The aim of these studies was to develop an MBCT course for parents (MBCT-P) who experience recurrent depression.

Methods: The feasibility and pilot work followed the Medical Research Council’s guidelines for the development of complex interventions (MRC, 2008). A qualitative study explored parents’ views of MBCT but particularly focused on their interactions with their child before and after taking part in a course and any aspects of the course which they felt should be adapted. Two MBCT-P pilot groups have taken place and have been evaluated with changes again made to the content of the therapy sessions. These groups have enabled piloting of process and outcome measures to determine if they are acceptable and feasible to use in a future trial. The pilot groups have also allowed for the therapy manual and handouts to be finalised.

Results: A framework analysis approach was used to analyse the qualitative results and the findings have informed the session format. The manual and handouts have been finalised following consultation with MBCT therapists and the pilot group results suggest that MBCT-P could be beneficial for parents.

Conclusions: This pilot work has enabled the development of the MBCT-P programme. An exploratory randomised controlled trial is now taking place to compare MBCT-P to usual care. This will allow for further evaluation of this therapy.

Bailie et al, Clin Child Adolesc Psychol 2011; 1-17
MRC, Developing and evaluating complex interventions, 2008

Acting out Revenge in Imagery Rescripting Exercises – Healing Empowerment or Dangerous Risk?

Seebauer Laura; Jacob, G.
1Uniklinikum Freiburg, Germany; 2Albert Ludwigs Universität Freiburg, Germany

Objectives: Imagery Rescripting (ImRS) is a therapeutic strategy for treating patients with severe emotional problems. Patients undergoing ImRS, in particular patients with cluster-B personality disorders, frequently suggest acting out revenge fantasies in the imagery exercises. However there are some controversies on which consequences this can have for the patient. On the one hand research shows that fantasized actions may increase the future probability of actually acting in the fantasized way. On the other hand, revenge fantasies often seem to be very useful in terms of calming down the patient and helping him to express emotions and needs more clearly and in a more healthy way. The aim of this study was to approach this question to be able to be able to give recommendations to clinicians working with ImRS in the future.

Method: Aim of this study was to observe differences in the impact of ImRS with and without revenge-instruction on self-reported emotions (e.g. helplessness, satisfaction, sadness) and the heart rate. Furthermore self-reported aggressive behaviour in the following week was assessed. The sample consists of healthy students (N=80). Participants took part in a biographic, anger interview for emotional activation. After that the participants were randomised into one of the four following imagery conditions to cope with the activated emotions: 1. ImRS + revenge, 2. ImRs without revenge and two control conditions: 3. unrelated positive imagery, 4. neutral imagery. The measurements took place before and after the anger interview as well as after the intervention and in a one week follow up measurement.

Results: Both ImRS conditions were evaluated as very helpful by the participants. They chose very diverse modalities for revenge in the first imagery condition (physically, verbally, socially). The measurements showed that there was no significant difference in the impact of ImRS with and without revenge-instruction on self-reported emotions. The heart rate was significantly lower in both ImRS conditions compared to the control conditions. ImRS conditions were rated as more helpful than the control conditions.

Symposium 41 – New research in mental images in imagery rescripting

S41-1

Acting out Revenge in Imagery Rescripting Exercises – Healing Empowerment or Dangerous Risk?

Seebauer Laura; Jacob, G.
1Uniklinikum Freiburg, Germany; 2Albert Ludwigs Universität Freiburg, Germany

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Results: Both ImRS conditions were evaluated as very helpful by the participants. They chose very diverse modalities for revenge in the first imagery condition (physically, verbally, socially). The psychometric and physiological data are currently analysed, first results will be presented.

S41-2

Imagery rescripting and the self

Stopa, Lusia; Cili, s.; Pettit, S.

University of Southampton, United Kingdom

This paper will present the findings of a study investigating the impact of one session of imagery rescripting on a non-clinical population. It will especially focus on the changes observed on the participants’ sense of self after the rescripting of a significant negative memory. The findings will be illustrated with specific case descriptions. Their implications for the current understanding of imagery rescripting and for clinical practice will be discussed.

S41-3

Title: Imagery Rescripting for Obsessive Compulsive Disorder

Page, N.J.; Veale, D.; Salkovskis, P.M.

1Institute of Psychiatry, United Kingdom; 2University of Bath, United Kingdom

Introduction: As part of a wider study into treatment adjuncts for Cognitive Behavioural Therapy for Obsessive Compulsive Disorder (OCD), Imagery Rescripting as an experimental treatment adjunct was investigated for its efficacy in addressing Obsessive Compulsive symptomatology. The presentation will include an overview of the study as a whole and a more detailed look at one particular case.

Objectives and Methodology: The study aimed to establish whether Imagery Rescripting could be an effective intervention for OCD. 10 participants were involved in a randomised case series. All participants were first involved in a semi-structured interview to establish imagery phenomenology and then randomized to 7, 14, 21 or 28 days where they received the imagery intervention session. All participants had a placebo session 7 days prior to the imagery intervention. Outcomes were measured by idiosyncratic daily measures, weekly self-report measures and a weekly Y-BOCS clinician administered questionnaire. The subject presented here in more detail received an Imagery Rescripting session similar to that outlined in Arntz’s Treatment of Childhood Memories (1999).

Results: The case detailed in the presentation showed significant improvements on many of the measures following the imagery intervention.

Discussion and Conclusion: Imagery interventions show promise as treatment adjuncts to Cognitive Behavioural Therapy as usual for OCD and could be particularly useful in treatment resistant OCD. They are entirely consistent and therefore compatible with the Salkovskis (1999) model for OCD. Keywords Obsessive Compulsive Disorder, Imagery


S41-4

Cognitions in Bipolar Affective Disorder versus Unipolar Depression: Imagining suicide

Hales, Susie; Deeprose, C.; Goodwin, G.M.; Holmes, E.A.

University of Oxford, United Kingdom

Objective: Bipolar disorder has the highest rate of suicide of all the psychiatric disorders. Suicidal ideation needs to be better characterised, and imagining suicide has been neglected. In unipolar depression, individuals report vivid, affect-laden images of suicide or the aftermath of death (‘flashforwards’ to suicide) during suicidal ideation but this phenomenon has not been explored in bipolar disorder. Therefore the authors compared imagery and verbal thoughts related to past suicidality in individuals with bipolar disorder (n = 20) and unipolar depression (n = 20).

Method: The study used a quasi-experimental comparative design. The Structured Clinical Interview for DSM-IV was used to confirm diagnoses. Quantitative and qualitative data were gathered through questionnaire measures (eg. mood and trait imagery use). Individual interviews assessed suicidal cognitions in the form of (a) mental images and (b) verbal thoughts.

Results: All participants reported imagining ‘flashforwards’ to suicide. Both groups reported greater preoccupation with these suicide-related images rather than verbal thoughts about suicide. However, compared to the unipolar group, the bipolar group were significantly more preoccupied with ‘flashforward’ imagery, rated this imagery as more compelling, and were more than twice as likely to report that the images made them want to take action to complete suicide. In addition, the bipolar group reported a greater trait propensity to use mental imagery in general.

Conclusions: Mental imagery of suicide may be a neglected feature of suicidal ideation, particularly in bipolar disorder. If so, it will warrant further investigation for clinical assessment procedures.


EABCT 2011 93
Imagery Rescripting as a Stand-alone Treatment for Depression in Clients with Intrusive Memories

Hackmann, Ann1; Brewin, C.R.2; Wheatley, J.2
1University of Oxford, United Kingdom; 2University College London, United Kingdom

Objectives: Studies by Chris Brewin and colleagues have shown that intrusive memories occur frequently in depressed clients, and that their presence predicts poorer outcome at follow-up. Such memories are as vivid and distressing as memories in PTSD, but the themes are different, reflecting themes of failure, loss and guilt. In this study imagery rescripting was used as a stand-alone treatment for depression, in patients reporting intrusive memories.

Method: In this modular treatment study 10 clients with depression and intrusive memories were offered a course of imagery rescripting of the intrusive memories, and no other interventions. Measurements were taken weekly during treatment, and patients were followed up for a year.

Results: This treatment produced clinically significant drops in depression, maintained at follow up, after a relatively small number of treatment sessions. Intrusive memories declined in frequency and distress, and rumination fell spontaneously as the memories subsided.

Conclusions: The clinical implications of this study will be discussed, in the context of a modular approach to depression.

Symposium 42 – Profiles of Anxiety: Demographics, Individual Difference Factors, Quality of Life Impact and Treatment Outcomes around the World

A Protocol for Evaluating Anxiety Treatment Outcomes in a Naturalistic Setting: Development, Challenges, and Preliminary Findings

Björkvinsson, T.; Rosmarin, D.; Kertz, S.; Bigda-Peyton, J.
McLean Hospital/Harvard Medical School, United States

Objectives: There is strong evidence for the efficacy of Cognitive Behavioral Therapy (CBT) in the treatment of anxiety disorders, however, most evaluations have been conducted in controlled laboratories, which may exclude patients based on comorbidity, severity, treatment compliance, etc. Consequently, the utility of CBT in the “real world” of comorbidities, varied degrees of symptom severity, and treatment resistance is often unknown. The evaluation of CBT in naturalistic contexts is fraught with a myriad of methodological and practical challenges, including developing uniform assessments for a diverse patient population, study design and analytic plans, and the consistent collection of data with minimal impact on existing clinical infrastructure.

Method: McLean Hospital’s Behavioral Health Partial Program (BHPP), offers short-term (1-2 week), intensive CBT to over 800 acute psychiatric patients per year, suffering from an array of anxiety, mood, personality and psychotic disorders. In July, 2010, the BHPP initiated systematic data collection and treatment outcome evaluation, to assess the effectiveness of our program and mechanisms of change. In this presentation, we describe this initiative and present findings from approximately 600 patients. In the sample (n = 357), 53% were female (n = 184) and 89% (n = 307) were Caucasian (ages between 18 and 71, M = 35.7, SD = 14.4).

Results: As assessed by the Miniature International Neuropsychiatric Interview (Sheehan et al., 1998), anxiety disorders were common, 25% of the population meeting DSM IV-TR criteria for Generalized Anxiety Disorder (n = 96), 22.3% for Social Anxiety Disorder (n = 85), 13.9% for current Panic Disorder (n = 53), 11.3% for Obsessive-Compulsive Disorder (n = 41), and 10.7% for Post-Traumatic Stress Disorder (n = 41). The sample was highly comorbid, with 82% of the population (n = 285) meeting criteria for more than 1 Axis I disorder. Outcome analyses examining pre- to post-treatment change scores (Cohen’s d) reveal moderate effect sizes on depression (d = .71), anxiety (d = .40), and psychological well-being (d = .58) across all diagnoses. Treatment effects were greater for patients meeting criteria for Generalized Anxiety Disorder; depression (d = .95), anxiety (d = .61), and psychological wellbeing (d = .80). Further, using a novel measure to assess CBT skill acquisition (Jacobs, Christopher, & Neuhaus, 2011), acquisition of CBT skills was found to lead to symptom amelioration across diagnoses for all outcome measures. Using hierarchical linear and logistical regression estimates, CBT...
acquisition predicted a decrease in anxiety across diagnoses, \( R^2 = .61, F(5, 186) = 104.33, p < .001 \), and a positive treatment response within patients with Generalized Anxiety Disorder, \( \beta = -.10, \text{Wald} = 6.46, p < .05 \).

**Conclusions:** Results will be discussed in terms of the dissemination of effective CBT within acute psychiatric settings.

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**S42-2**

**Correlates of anxiety in Cyprus: Differences between Anxiety Disorders in Coping, Experiential Avoidance, Anxiety Sensitivity and Quality of Life**

Panayiotou, Georgia; Karekla, M.; Mette, I.

University of Cyprus, Cyprus

**Objectives:** Anxiety symptoms are typically found to correlate with increased physical symptom reporting and compromised quality of life (Mendelowicz & Stein, 2000), as well as lower self-report ratings of physical and emotional health, social functioning, and economic self-sufficiency on various measures. Previous research has also highlighted the associations between Anxiety Disorders, Experiential Avoidance and Anxiety Sensitivity and avoidant or emotion focused coping. Few attempts have previously been made to compare and contrast specific anxiety disorders on the degree of association with these correlates. The present study provides results on the relation between specific anxiety disorders and the above correlates from an epidemiological sample studied in the Republic of Cyprus. The specific Anxiety Disorders compared include Panic Disorder, Generalized Anxiety Disorder, Social Phobia, and Specific Phobia.

**Method:** A stratified random sampling procedure was used to compile lists of individuals from all districts of the government-controlled area of the island of Cyprus. Over 7000 persons aged 18-65 were initially selected of whom over a thousand were contacted over the phone and sent questionnaire packages. Approximately 420 participants returned completed questionnaires. Distribution across districts and across rural and urban areas reflects the demographic composition of the island but respondents were primarily female. Measures included the Psychiatric Diagnostic Screening Questionnaire, the Fear Survey Schedule-III, the AAQ-II, the Brief COPE, the WHO_QL, and the ASI.

**Results:** All ADs demonstrated high levels of avoidant and emotion focused coping approaches. GAD was associated with the use of a greater number of coping approaches compared to other disorders, probably indicating higher psychopathology. Experiential avoidance was high in all disorders, and persons high in this characteristics were more likely to have anxiety problems. Anxiety sensitivity was high in all disorders, especially social phobia and panic. Panic disorder was the only AD where quality of life was substantially compromised. Marital status, financial status and social support moderated this effect.

**Conclusions:** Correlates of the anxiety disorders in this European country can provide information on potential etiological and perpetuating mechanisms. Differences and similarities between ADs in these correlates can become the focus of clinical interventions in order to increase clinical efficacy.

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**S42-3**

**Cross-Cultural Adaptation of Cognitive Behavioral Group Therapy (CBGT) in the Treatment of Social Phobia: An Open Clinical Trial in Iceland**

Davíðsdóttir, S.; Ludvigsdóttir, S.; Viðar, S.; Björgvinsson, T.

Icelandic Center for Treatment of Anxiety Disorders, Iceland

**Objectives:** Cognitive Behavioral Group Therapy (CBGT) has demonstrated marked efficacy as a non-pharmacological treatment for social phobia in several prominent trials (see Heimberg, 2002 for a review). However, most existing CBGT protocols have been developed for Americans and the majority of investigations have been conducted in the United States. In particular, we are aware of only one previous report on the use of CBGT in Iceland (Davíðsdóttir, Porsdóttir and Halldórsson, 2006). Given the heterogeneity of social cues and fears within specific societies, a culture-specific approach to the reduction of social phobia and related symptoms seems warranted. We therefore adapted and translated an existing 10-session CBGT protocol and administered it to a large sample of treatment seekers presenting to the Icelandic Center for Treatment of Anxiety Disorders.

**Method:** Between 2007 and 2010, 102 participants meeting DSM-IV criteria for social phobia completed our protocol. Primary treatment outcomes were measured by the Social Interaction Anxiety Scale (SIAS) and Social Phobia Scale (SPS) administered at beginning and end of treatment, and one month post discharge.

**Results:** Post-treatment gains were statistically and clinically significant with large effect sizes for both outcomes (effect sizes of 1.46 and 1.21). Treatment gains improved again from post-treatment to follow-up. Secondary outcomes were also significant. Beck’s Depression Inventory scores diminished over treatment with an effect size of 0.81, and scores on self-esteem (Robson Self Concept Questionnaire) and quality of life (Quality of Life Scale) improved with effect sizes 0.77 and 0.52.

**Conclusions:** These results, though uncontrolled, suggest that our culturally-adapted CBGT protocol shows promise for the treatment of social anxiety and related symptoms in Iceland. The findings are discussed in the context of Icelandic culture, as well as limitations of the study and future research.
Demographics and epidemiology of anxiety in Cyprus: Results from a screening study of a random community sample

Panayiotou, G.; Georgiou, D.; Karekla, M.; Kapsou, M.
University of Cyprus, Cyprus

Objectives: Rates of lifetime prevalence of Anxiety Disorders (ADs) reported in epidemiological studies range from 13.6%-38.8%, rendering them a primary mental and public health concern. Anxiety symptoms are also found to consistently correlate with increased physical symptom reporting and compromised quality of life. Epidemiological studies consistently find higher rates of most of these disorders among females. The present study provides the first systematic attempt to examine the prevalence of anxiety symptoms and their relation to the presence of physical symptoms, life circumstances and demographic characteristics in the Republic of Cyprus. This study was part of a large, funded project on the epidemiology, correlates, consequences and characteristics of Anxiety Disorders. Anxiety symptoms investigated are representative of four broader ADs, namely Panic Disorder, Generalized Anxiety Disorder, Social Phobia, and Agoraphobia.

Method: A stratified random sampling procedure was used to compile lists of individuals from all districts of the government-controlled area of the island of Cyprus. Over 7000 persons aged 18-65 were initially selected of whom over a thousand were contacted over the phone and sent questionnaire packages. Approximately 420 participants returned completed questionnaires. Distribution across districts and across rural and urban areas reflects the demographic composition of the island but respondents were primarily female. Measures included the Psychiatric Diagnostic Screening Questionnaire (Zimmerman, 2002) the Fear Survey Schedule-III (among many other measures) and the Acceptance and Action Questionnaire II (AAQII), the Anxiety Sensitivity Index (STAIS-T), the Beck Depression Inventory (BDI-II), the Acceptance and Commitment Therapy (ACT) Action Questionnaire (AAQII), the Anxiety Sensitivity Index (ASI) and other related measures at intake. A clinical interview followed where participants were diagnosed and subsequently entered treatment.

Results: The majority (77.3%) reported not receiving any psychiatric help or taking medication. Most clients were single (60.4%) and had a high school level education (56.4%). Regarding the presenting problems and diagnosis, 75.5% of clients had a primary diagnosis of an anxiety disorder. This population presented high levels of anxiety, both state (M=53.68; SD=11.98) and trait (M=51.80; SD=12.87), moderate levels of depression (M=21.07; SD=12.13), and moderate levels of experiential avoidance (M=30.26; SD=14.39). In general males and females did not differ in terms of experiential avoidance, anxiety sensitivity etc) and levels of anxiety and depression in outpatient populations as widely measured by a variety of specific questionnaires are known in many countries (e.g. USA), yet this is not the case for Cyprus. The present study aimed to examine the reported levels of individual difference factors (e.g. levels of experiential avoidance, anxiety sensitivity etc) and levels of anxiety and depression in a sample of individuals seeking treatment in an outpatient CBT oriented clinic in Cyprus.

Method: One hundred and forty five clients (98 females, Mage = 28.85) completed the State and Trait Anxiety Inventory (STAI-S-T), the Beck Depression Inventory (BDI-II), the Acceptance and Action Questionnaire (AAQII), the Anxiety Sensitivity Index (ASI) and other related measures at intake. A clinical interview followed where participants were diagnosed and subsequently entered treatment.

Results: The majority (77.3%) reported not receiving any psychiatric help or taking medication. Most clients were single (60.4%) and had a high school level education (56.4%). Regarding the presenting problems and diagnosis, 75.5% of clients had a primary diagnosis of an anxiety disorder. This population presented high levels of anxiety, both state (M=53.68; SD=11.98) and trait (M=51.80; SD=12.87), moderate levels of depression (M=21.07; SD=12.13), and moderate levels of experiential avoidance (M=30.26; SD=14.39). In general males and females did not differ in terms of experiential avoidance, anxiety and depression (p > .05 for all).

Conclusions: These results indicate that the majority of individuals who seek help from a psychologist in Cyprus present with problems of anxiety. This is also reflected in the high levels of anxiety reported on the measures. Experiential avoidance is also found to be quite common in outpatient clients in Cyprus.
SYMPOSIUM 43

Symposium 43 – Linking Psychological Science to Clinical Psychological Science: A symposium in honour of Jakob Smari

S43-1

Linking Psychological Science to Clinical Psychological Science: A symposium in honour of Jakob Smari

Sigurðsson, J.F., Chair
Landspítali-Univeristy Hospital, Reykjavik, Iceland

Tragically, Jakob Smari died in 2010. His professional contribution to Psychology in Iceland was immeasurable. His impact internationally was also substantial and his work continues to be influential. In this symposium, both the man and his work will be celebrated. Some of this will be focussed on his past influence, but the symposium will also reflect the way his work continues to drive aspects of clinical science within psychology.

S43-2

Setting the Scene: Fundamentals of Clinical Science

Salkovskis, P.
University of Bath, United Kingdom

S43-3

Inspirational Influence

Jonsson, H.
University of Iceland

S43-4

Contribution to Psychological Research

Daniel Thor Ólafsson
University of Iceland

S43-5

Health Psychology and Cancer

Heðdis Valdimarsdottir
University of Iceland

S43-6

Contribution to Clinical Psychological Research

Ragnar Ólafsson and Ivar Snorrason
University of Iceland

S43-8

Applied Science and OCD

Paul Salkovskis
Department of Psychology, University of Bath, United Kingdom
A randomized multicentered trial of trauma focused treatment of psychotic patients with PTSD in the Netherlands; design and research questions

van der Gaag, Mark¹; van der Vleugel, B.²; van den Berg, D.; de Bont, P.; de Jongh, A.; van Minnen, A.

¹VU University / Parnassia Psychiatric Institute, Netherlands; ²GGz Noord-Holland-Noord, Netherlands; ³Parnassia Psychiatric Institute, Netherlands; ⁴GGz Oostbrabant, Netherlands; ⁵Acta VU University/ Amsterdam University, Netherlands; ⁶Radboud University, Netherlands

Objectives: The prevalence of posttraumatic stress disorder (PTSD) in severe mental illness varies from 10 to 60% is the published literature. Probably between 10 to 20% of lifetime psychotic patients, also meet the criteria for having a PTSD. There is not much evidence for the efficacy and safeness of treatment in patients with a lifetime psychotic disorder who also meet the criteria for PTSD. Some pilot studies show promising results.

Method: A study is designed to investigate whether treatment of PTSD is effective and safe in a group of people with a psychotic disorder? A multi-site randomised clinical trial with 80 patients Eye Movement Desensitisation and Reprocessing (EMDR) versus 80 patients Prolonged Exposure (PEx) versus 80 patients Treatment as Usual/Waiting list (TAU) is now being performed to answer these research questions. The outcome measures in this study are: Primary: Posttraumatic stress disorder (diagnose and severity) Secondary: psychosis, depression, adverse events. Moderators en mediators of treatment success. Cost-effectiveness will be assessed and expressed in Euro per gained Quality Adjusted Life Years. If no effectivity can be demonstrated, a cost-minimisation calculation will be made.

Results: Therapist have been trained in EMDR and in PEx during eight days. Therapies are closely supervised and monitored during the study. Fidelity measures are collected from a round sample of sessions.

Conclusions and Discussion: Pilots have been promising in showing effective treatment for PTSD without any adverse events or worsening of the condition in psychotic patients with a chronic course. If this study can demonstrate effectiveness and safety, this can change the treatment for many patients with severe mental illness and reduce suffering from symptoms of PTSD and probably also the burden of psychotic symptoms can be reduced in a subsample of the patients.
Efficacy and safety of Prolonged Exposure or EMDR-treatment for PTSD with patients with a vulnerability for psychosis. A multiple baserate N=10 single case design

de Bont, Paul
GGZ Oost Brabant, Netherlands

Objectives: Until now, only a small number of studies have investigated the safety and effects of psychological treatment for PTSD in psychotic patients. The main aim of this study was to explore the effects of two psychological, highly manualized, guideline PTSD treatments: EMDR and prolonged exposure. Another important aim was to determine if negative side effects would occur as a result of therapy. Among clinicians fear exists of harming vulnerable patients with confronting therapeutic procedures, thus risking psychotic exacerbation, suicidal behaviour or other adverse events.

Methods: In a N=10 single case study design the effects of psychological PTSD treatment were studied in psychiatric patients who suffer from psychoses. Participants were randomly assigned to either EMDR or Prolonged Exposure. Weekly measurements of PTSD and psychotic symptoms prior to, during and after treatment, gave a strong impression of how symptoms respond to treatment. The treatment in both conditions consisted of 12 sessions of 90 minutes. Adverse events were monitored weekly. Before, directly after and 3 months after treatment all subjects were tested more extensively for the variables PTSD and psychosis, and for three secondary outcome measures cognitive style, social functioning and quality of life.

Results: The results show that PTSD-treatment can be quite effective for both PTSD and even some of the psychotic symptoms. PTSD symptoms dropped considerably, in a number of cases below the point of still having a PTSD. In some cases treatment helped diminish the occurrence of harmful voices. Not one patient became psychotic as a result of therapy, not even patients that went through the guided reliving of traumatic psychotic events during Prolonged Exposure. No suicide attempts occurred. Occasional minor adverse events with medication occurred, but results taken as a whole the treatments were obviously safe.

Conclusion: This study shows that PTSD-treatment in psychotic patients is a serious option, next to medical treatment. It can be done safely, effectively and in a manualized fashion. No information can be derived from this study as to which of the two, Prolonged Exposure or EMDR, can be best applied in specific situations. Both seem to be equal in the limited number of cases.

Larkin, W & Morrison AP (ed), Trauma and Psychosis, New Directions for Theory and Therapy, Routledge, London/New York 2006 Frueh et al, J of Anx Disorders, 2009; 23; 665 Mueser et al J of Consult Clinic Psych; 2008; 76(2), 259

Practical guidelines for PTSD treatment in psychotic patients

van der Vleugel, Berber
GGZ Noord-Holland Noord, Netherlands

Objectives: Professionals are very cautious, if not reluctant, to treat trauma-related symptoms in psychotic patients. As is argued by the other speakers there is growing evidence psychotic patients can safely be exposed to PTSD treatment. There are several possible links between trauma and psychosis and an integrative approach to conceptualizing these relationships is needed (Morrison et al., 2003)

Methods: In this presentation practical guidelines are given with respect to gathering information in the assessment phase and presenting this information in an individual case conceptualisation. Choices regarding which experiences to work with and in what way, will be discussed. Treatment processes are illustrated by vignettes and video material. Some difficulties one may encounter when using interventions like EMDR and prolonged exposure with psychotic patients, will be addressed.

Results: Attendants will be mindful of an integrative model of trauma and psychosis and will be able to use this to identify the target(s) for intervening. They will be prepared for some difficulties they may encounter while conducting PTSD treatment.

Conclusions: Case formulations aim to explain the development and maintenance of client’s experienced problems in terms of causal relationships. It is vital that both client and therapist have a shared understanding of the problems that are going to be addressed in therapy and that interventions are guided by this formulation.

The relationship between trauma, psychosis and PTSD; consequences for trauma-focused treatment

van Minnen, A.
Radboud University, Netherlands

**Introduction:** The presentations of the whole symposium about treatment of PTSD in psychotic patients are introduced with an overview of several theoretical models about the relationship between trauma, psychosis and PTSD, and more specific, an overview will be given of effects of trauma-focused treatments in severe co-morbid patient groups.

**Method:** Furthermore, clinical implications for the diagnosis and treatment of psychotic patients with PTSD will be derived from these theoretical perspectives. Also, to illustrate, data are presented of an one open study with 47 PTSD-patients (without psychotic disorder) treated with Prolonged Exposure, in which the relationship between schizotypical personality traits and treatment outcome was studied. Further, to illustrate that co-morbid conditions (e.g.) may decrease due to PTSD treatment, a review will be presented for the effects of PTSD treatment on co-morbidity in general.

**Results:** Schizotypical traits were not significantly related to treatment outcome. From a theoretical perspective, no indications were found for not treating PTSD in psychotic patients. Also, the review shows that comorbidity is likely to decrease as a result of PTSD treatment.

**Discussion and conclusion:** Based on the theoretical perspectives and literature review, it will be concluded that there are no reasons to not treat PTSD in psychotic patients, and it will be argued that given the side-effects of PTSD, such as high risk of suicide and revictimisation, trauma-focused treatment is recommended.

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Modifying threat-related interpretations in adolescents

Salemink, E.; Wiers, R.W.
University of Amsterdam, Netherlands

**Objectives:** Socially anxious feelings sharply increase during adolescence and such feelings have been associated with interpretive biases. Studies in adults have shown that interpretive biases can be modified using Cognitive Bias Modification procedures (CBM-I) and subsequent effects on anxiety have been observed. The current study was designed to examine whether the CBM-I procedure has similar effects in adolescents and what factors moderate the effectiveness of training (level of pre-training anxiety, interpretive bias and executive control).

**Methods:** Unselected adolescents were randomly allocated to either a positive interpretation training (n=88) or a placebo-control condition (n=82). Participants in the positive interpretation training condition received short scenarios (in total 50 scenarios) describing ambiguous social situations that contained a word fragment. Participants solved the fragments which resulted in a positive interpretation. Anxiety was assessed with the STAI questionnaire and executive control with the classical Stroop task.

**Results:** Results revealed that the training was successful in modifying interpretations. Adolescents who received the positive training interpreted new ambiguous social information more positively and less negatively than adolescents in the control condition. The interpretive bias effects were most pronounced in individuals with a threat-related interpretive bias at pre-test and in individuals with low executive control. No effects on state anxiety were observed.

**Conclusions:** The current findings are promising with regard to applying bias modification procedures to adolescents, while further research is warranted regarding emotional effects.
Anxiety-related interpretation bias in young non-clinical children

Muris, Peter
Erasmus University Rotterdam, Netherlands

Objectives: It is well-known from the literature that anxious children from the age of 7 display a tendency to interpret ambiguous situations in a threatening way. This so-called interpretation bias is thought to play a role in the maintenance of anxiety problems in youths (Muris & Field, 2008). The present study examined whether such an anxiety-related interpretation bias also occurs in younger children.

Methods: Non-clinical school children aged between 4 and 10 years (N = 150) completed the short version of the Fear Survey Schedule for Children, and were then tested by means of ambiguous vignette tasks: during one task children were invited to tell the experimenter what would happen next in the scenarios described in the vignettes (free interpretation), during the other task children had to chose from a set of pre-described threatening and non-threatening interpretations (fixed choice interpretation).

Results: In general, support was found for the presence of an interpretation bias. That is, children with higher fear levels more often interpreted the ambiguous vignettes in a threatening way, and this appeared true for the free interpretation and the fixed choice interpretation tasks. Evidence was also obtained indicating that children as young as 4 years display an anxiety-related interpretation bias, but this was particularly the case on the fixed choice interpretation bias task.

Conclusion: Children as young as 4 years already exhibit an anxiety-related interpretation bias, although researchers need to employ a specific assessment procedure to demonstrate this phenomenon. These results may also have implications for the treatment of anxiety problems in young children, as they suggest that simple cognitive interventions may be applicable to this age group.


Can interpretation bias modification affect the intergenerational transmission of anxiety:

Preliminary results from a feasibility study

Benoit, Kristy; Ollendick, T.H.
Virginia Tech, United States

Objectives: Anxious adults and children tend to interpret ambiguous situations in a threatening manner, a phenomenon known as interpretation bias. Experimental paradigms that train individuals to interpret ambiguous scenarios in a benign manner can decrease anxiety in these populations. Paradigms have thus far relied upon intrapersonal stimuli, scenarios that are relevant to the anxious individual. However, because research suggests that anxious mothers may transmit their interpretation biases to their children via anxious behavior, it may be essential to train anxious mothers to more benign interpretations of ambiguity in their child’s environment. The objective of this study is to determine whether a uniquely interpersonal experimental paradigm, using child-referent scenarios, can alter the transmission of interpretation biases from clinically anxious mothers to their children.

Methods: Seventy clinically anxious mothers with a child between the ages of 7 and 12 are currently being recruited. Clinical interviews are used to determine the presence of anxiety disorders in mothers. Half of the mothers are being assigned to a positive interpretation modification program in which they are asked imagine that their child is in a series of socially ambiguous situations. These scenarios are consistently disambiguated in a positive way. The other half of the mothers are being assigned to a control condition in which their situations are resolved in a neutral way. The other half of the mothers are being assigned to a control condition in which their situations are resolved in a neutral manner. Following the training, mothers help their children prepare for an anxiety-provoking speech task. These interactions are coded for anxious maternal behavior, mother and child anxious cognitions about the task are assessed, child physiological data are collected as an objective indicator of anxiety, and child speeches are coded for overall performance and behavioral indicators of anxiety. It is hypothesized that mothers who receive the active training will have fewer anxious cognitions and engage in fewer anxious behaviors when interacting with their children. In turn, their children will have fewer anxious cognitions, less anxious behavior and physiological arousal, and better performance during the speech task.

Results and Conclusions: Pilot data is being collected at this time and preliminary data will be presented in this talk. Implications for the prevention and treatment of childhood anxiety disorders will be discussed.

Experimental modification of interpretation bias regarding social and animal fear in children

Lester, Kathryn1; Field, A.P.2; Muris, P.3
1Institute of Psychiatry, King’s College London, United Kingdom; 2University of Sussex, United Kingdom; 3Erasmus University Rotterdam, Netherlands

Objectives: Recent experimental research has shown that adults, adolescents and children can learn to interpret ambiguous material in a threatening or non-threatening way, using simple feedback-learning paradigms referred to as Cognitive Bias Modification for Interpretation (CBM-I). Data from a series of studies are presented examining the effects of child-appropriate CBM-I methods on children’s anxiety-related cognitions, emotional response and behaviour. We also examine whether the modification of interpretation biases about particular threats may follow age-related patterns in a similar way to normative fears.

Methods: In Study 1, 103 children aged 7–15 years received threat or non-threat bias modification about animal-related or social-related situations. Children were presented with a series of novel ambiguous vignettes pre and post-modification phase for which they rated perceived levels of threat as an index of interpretation bias. In Study 2, 67 children aged 7–11 years received threat or non-threat animal-related bias modification. In addition to interpretation bias, self-report anxiety was assessed pre and post-modification. Children also completed an approach task during which their behaviour, mean heart-rate and self-report anxiety were measured.

Results: Threat interpretation biases increased following threat modification and decreased after non-threat modification. In Study 1 and in line with developmental patterns of fear, some indications were found that the effects of animal modification were stronger than the effects of social modification in younger children, while it was possible to induce biases towards and away from threat for both animal and social content in older children. In Study 2, bias modification also directly invoked congruent changes in self-report anxiety, with anxiety increasing across threat and decreasing across non-threat modification. Threat modification also increased behavioural avoidance relative to non-threat modification.

Conclusions: The present results extend earlier research, which has shown that interpretation biases can be experimentally modified in children. Study 1 suggests children may be particularly vulnerable to acquiring interpretive biases about stimuli that are congruent with the normative fears associated with their age group. Study 2 suggests that the modification of interpretation biases may have important consequences for children’s cognition, emotional vulnerability and behaviour.

Symposium 46 – Mindfulness-Based Cognitive Therapy for depression relapse prevention: Mechanisms of action and new applications

How does MBCT work?

Kuyken, Willem; Bromley, A.; Williams, M.J.
Mood Disorders Centre, University of Exeter, United Kingdom

While mindfulness-based cognitive therapy (MBCT) was developed to target several lynchpin processes in recurrent depression (e.g., cognitive reactivity, rumination), the evidence to date is sparse. This paper reports on a series of qualitative and quantitative studies that suggest that MBCT is a complex intervention that works through a range of mechanisms. Implications for future research and MBCT therapists are discussed.

Methods: The trial compares Mindfulness-Based Cognitive Therapy (MBCT) for the prevention of relapse in recurrent depression with both an equally plausible cognitive treatment that does not include the meditation component, Cognitive Psychotherapy: “It changed me in just about every way possible.” Behavioural and Cognitive Psychotherapy, 37, 413-430.

The “Staying Well after Depression”-Trial: Design, Protocol and Hypotheses

Barnhofer, T.; Williams, J.M.G.; Russell, I.; Crane, C.; on behalf of Staying-Well team, x.x.x.

1University of Oxford, United Kingdom; 2Bangor University, United Kingdom; 3University of Oxford, Bangor University, United Kingdom

Objectives: This talk will present the design, hypotheses, and protocol of the “Staying well after depression-trial” which is currently being conducted at the Universities of Oxford and Bangor.

Methods: The trial compares Mindfulness-Based Cognitive Therapy (MBCT) for the prevention of relapse in recurrent depression with both an equally plausible cognitive treatment that does not include the meditation component, Cognitive Psycho- Education, and treatment as usual allocating participants in a ratio of 2:2:1. It will test whether MBCT reduces risk of relapse in recurrently depressed patients and incidence of suicidal symptoms in those with a history of suicidality who do relapse over the course of a one year follow-up. The use of a dismantling-design will allow isolating the specific contributions of the mindfulness meditation component of the treatment and investigating its mechanisms of action.

Results: Data will not be available at the time of the conference.

Conclusions: The design and hypotheses of this study will be discussed in the broader context of the current state of research on MBCT and its future challenges and options.
The effectiveness of a school-based mindfulness training as a program to prevent stress in elementary school children

van de Weijer-Bergsma, E.1; Langenberg, G.2; Brandsma, R.2; Bogels, S.M.1

1Research Institute Child Development and Education, University of Amsterdam, Netherlands; 2MindfulKids, Netherlands

Mindfulness interventions are increasingly being used to help prevent and treat mental disorders in children. The results of a study investigating the effects of a school-based mindfulness training (MindfulKids) on stress and emotional well-being in children will be presented. A quasi-experimental design was used. Children (N=209) from three elementary schools (aged 8 to 12 years) were randomly assigned to an immediate-intervention group or a waitlist-control group. At different time points before and after the training, a range of questionnaires were completed by children, their parents and teachers on stress, anxiety and behavioral problems, to assess immediate effects as well as effects 6 weeks after the training ended. In addition, both primary prevention as well as selective prevention effects were investigated. Part of symposium: Raes, F. Mindfulness-Based Cognitive Therapy for depression relapse prevention: Mechanisms of action and new applications.

A randomized-controlled trial into the effectiveness of a school-based mindfulness training to prevent depression in secondary school students

Raes, Filip1; Van Der Gucht, K.2; Dewulf, D.2; Bastin, M.1

1University of Leuven, Belgium; 2Institute for Attention and Mindfulness, Belgium

Objectives & Methods: This talk will present the results of a large-scale randomized controlled trial evaluating the effectiveness of a school-based mindfulness training (MBCT/ MBSR) in secondary school students (with the financial support of ‘Stichting Ga voor Geluk’). Classes of 14-18 year old students from several secondary schools (about 300 students in total) were randomly assigned to an 8-week mindfulness intervention group or a no intervention control group. Before and after the training, as well as at 6 months follow-up, a range of questionnaires were administered.

Results & Conclusions: Results for the effects on psychological complaints (depression, stress and anxiety), depression diagnosis, cognitive vulnerability and protective factors (e.g., rumination, cognitive reactivity, self-compassion, self-esteem) and mindfulness skills will be presented and discussed.

Overcoming treatment challenges in an inpatient setting: A focus on OCD

Blair-West, Scott

OCD Program at The Melbourne Clinic, Australia

Objective: Given the large number of individuals with obsessive compulsive disorder (OCD) who either drop out of traditional ERP or are considered treatment refractory (Vogel, Hansen, Stiles, & Götestam, 2006), intensive, inpatient treatment protocols have been developed to meet the needs of these individuals and those with severe OCD. The current presentation contributes to the overall goal of the panel "Anticipating treatment pitfalls when treating obsessive compulsive disorder: A special focus on intensive treatments", by describing inpatient OCD treatment and the challenges that are unique to such a setting.

Methods/Results: Discussions will begin by describing the efficacy and structure of inpatient treatment protocols. Challenges specific to an inpatient setting will be discussed, along with how this treatment protocol overcomes these and other challenges found in the research literature for standard evidence based treatments (EBT’s). This presentation will complement other panel members discussions of treatment resistance in intensive treatment programs while comparing the pitfalls (and methods of overcoming them) with other types of intensive treatment programs (i.e. residential/non-hospital settings). Furthermore, a cross-cultural comparison of treatment resistance and methods for overcoming/researching resistance will be facilitated. The current presentation’s focus on the clinical practice and research conducted at The Melbourne Clinic OCD Program in Australia will be compared with clinical and research experiences in Iceland and the United State of America.

Discussion: Overall this presentation will further the goals of the panel on "Anticipating treatment pitfalls when treating obsessive compulsive disorder: A special focus on intensive treatments" through discussion on the intensive inpatient treatment of OCD and facilitation of cross-cultural discussions pertaining to treatment pitfalls in OCD. Therefore, this presentation fits into the streams of anxiety and strengthening the therapist by increasing their understanding of, and adaptation to treatment resistance in OCD.

The residential treatment of OCD: Unique challenges and adaptations

Björgvinsson, Thröstur
Houston OCD Program, United States

Objective: Intensive residential treatments have been found to be an efficacious treatment for severe cases of obsessive compulsive disorder (OCD) (Bjorgvinsson et al., 2008). However, the use of intensive residential treatment programs carries with it some unique challenges that must be understood in order to provide effective treatment to severe populations. The objective of this presentation is to address these unique challenges and help attendees develop an understanding of the current state of treatment resistance/pitfalls in residential settings. Furthermore, a secondary objective is to further the understanding of cultural differences in these constructs between Australia, Iceland, and the United States of America.

Method/Results: Discussion will draw from the clinical experiences and research conducted at the Houston OCD Program. Multiple challenges will be addressed, both clinically and empirically, including dealing with family issues in a residential treatment program, the role of extreme guilt, preventing over-reliance on staff, and lack of motivation. Discussions will also focus on how to identify the presence of these challenges, along with explanations of techniques used to overcome them in a residential setting. Subsequently, distinctions between the presentation of treatment resistance/pitfalls in residential and inpatient treatment programs (discussed by Dr. Blair-West) will be targeted. Cross-cultural comparisons will be also drawn between research and treatment experiences in Iceland/United States of America and Dr. Blair-West’s discussion of treatment pitfalls in an Australian population.

Discussion: This presentation, in combination with other discussions presented in the panel “Anticipating treatment pitfalls when treating obsessive compulsive disorder: A special focus on intensive treatments”, will further the goals of understanding and preparing clinicians/researchers to deal with pitfalls in multiple evidence based treatments. Overall, attendees will be provided with a sound understanding of the research and clinical practice surrounding intensive residential treatment protocols, along with tools to adapt clinical techniques to overcome these pitfalls. Thus, this presentation fits into the streams of anxiety and strengthening the therapist, by increasing their understanding of, and adaptation to treatment resistance in OCD.


Treatment pitfalls in OCD: The role of merged OCD

Kirby, Harold
Anxiety and OCD Treatment Center of Philadelphia, United States

Objectives: The following presentation contributes to the goal of understanding treatment resistance and anticipating/adapting to treatment pitfalls when treating obsessive compulsive disorder (OCD). It will facilitate an overall understanding of the common treatment pitfalls as part of the panel entitled “Anticipating treatment pitfalls when treating obsessive compulsive disorder: A special focus on intensive treatments”. To this end, special focus will be paid to the role of comorbidity in the treatment of OCD and understanding when comorbid disorders have “merged” with OCD.

Method/Results: Merged OCD is a phenomenon that occurs when the feared consequences of an individual’s OCD overlap with the feared consequences of another, comorbid disorder (Grayson, 2010). This presentation will increase understanding of merged OCD through discussion of its definition, how to identify when OCD has merged with another disorder, and the effects of merged OCD on treatment outcome. Discussions will be based in the current research being conducted with this sample at the Anxiety and OCD Treatment Center of Philadelphia. Furthermore, this presentation will show attendees how to adapt current treatment protocols to provide efficacious treatment to this hard to treat population.

Discussion: The study of merged OCD is relatively new to the OCD literature. This presentation will increase awareness and understanding of this phenomenon through description of frontline research, allowing for more appropriate clinical techniques and further research. Overall, the discussion of merged OCD works in conjunction with the other topics incorporated in the panel on “Anticipating treatment pitfalls when treating obsessive compulsive disorder: A special focus on intensive treatments” to further understanding of treatment resistance/ pitfalls in OCD. Therefore, this panel fits into the streams of anxiety and strengthening the therapist within the realm of treatment resistant OCD.

Treatment Resistance: The Role of Functional Consequences and Scrupulosity

Van Kirk, Nathaniel
Virginia Tech, United States

Objectives: It has been repeatedly demonstrated that OCD treatments are highly effective; however, many sufferers still resist entering or fully engaging in the treatment process (Sookman, & Steketee, 2007). Research has found many factors that relate to less than optimal treatment outcomes (Keeley et al., 2008). This presentation will help individual’s create a basis for understanding treatment resistance in both the research and clinical domains.

Method/Results: Discussions will pay special attention to the construct of functional consequences of OCD behavior and its role in treatment resistance (Van Kirk & Clum, in progress). Functional consequences are operationalized as the positive and negative consequences of OCD behavior in everyday life. Research has shown this construct to be related to readiness to change, willingness to engage in treatment, and perceived effectiveness of treatment outcome. Furthermore, it has been shown to predict treatment motivation (as measured by the stage of change model) above and beyond the variance accounted for by symptom severity. Functional consequences have been targeted in an intensive residential treatment program in Houston, Texas. Findings indicated positive responses to evaluations of functional consequences and favorable effects on treatment progress following modification of an individual’s functional consequences. Factors influencing treatment outcomes in attention retraining (AR) will also be discussed, with a special focus on factors associated with scrupulosity. AR has been found to be an efficacious treatment for OCD (Najmi & Amir, 2010). This is further supported by a case study of AR with scrupulosity which evidenced a 26.1% reduction in symptom severity for a patient with severe scrupulosity, as measured by the Y-BOCS. Qualitative findings indicated satisfaction with the treatment and its outcomes; however, concerns regarding the effects of the treatment on religious standing were espoused. This presentation will discuss these findings and how to overcome these challenges when using AR.

Conclusion: Overall, this presentation will help those who attend to develop a basis for understanding treatment resistance. The combination of research and clinical based information will work in conjunction with the other presentation included in the symposium to allow participants to focus their research and adapt their clinical work to understand and overcome treatment resistance in the treatment of OCD. Thus, this presentation and the panel it is part of fit into the streams of anxiety and resistance in the treatment of OCD. Strengthening the therapist by increasing their understanding of, the panel it is part of fit into the streams of anxiety and resistance in the treatment of OCD. Thus, this presentation and the panel it is part of fit into the streams of anxiety and resistance in the treatment of OCD.

References:

Clinical Challenges When Treating Pediatric OCD in a 5-Day Intensive Treatment

Canavera, Kristin¹; Ollendick, T.H.²

¹Virginia Tech Child Study Center, United States; ²Virginia Tech, United States

Objectives: The need for effective treatments and treatment accessibility for pediatric obsessive-compulsive disorder (OCD) is important given that 50% of those with OCD in adulthood report symptom onset in childhood. Despite the growing evidence supporting the efficacy of exposure and response prevention (ERP) for pediatric OCD, children seeking services for their OCD symptoms often do not receive ERP. Intensive treatment programs may be a feasible treatment option for children and their families who do not have access to ERP treatment or are in an area where therapists trained in ERP are limited (e.g., rural families). Intensive treatments for pediatric OCD are typically about one month in duration, which is a large time commitment and potentially high cost for travel expenses that may prevent families from seeking this intensive treatment option. A viable alternative is to collapse these intensive programs into an even shorter duration.

Methods: The primary purpose of the proposed study is to evaluate the efficacy, feasibility, and acceptability of a brief, 5-day intensive ERP program for pediatric OCD using a controlled, multiple baseline experimental design. Nine children, ages 7-14 years, will be randomized to a one week, two, or three week baseline phase prior to receiving the one-week intervention. The current treatment will include a family involvement component in which family accommodation is directly addressed, and parents are guided in how to do ERP with their child in the home environment.

Results: During this presentation, preliminary outcome findings will be discussed. It is expected that children will show significant improvement in their OCD symptoms and functional impairment. Parental accommodation commonly associated with the maintenance of OCD are also expected to improve.

Conclusions: Additionally, the effects of comorbidity in treating pediatric OCD in an intensive format will be discussed, including comorbidity with other anxiety disorders, attentional problems, and non-compliance. Case examples will also be presented to discuss clinical challenges that may arise regarding issues of parental accommodation, parental psychopathology and/or OCD, and lack of motivation or insight.
Symposium 48 – Hot cognitions, metacognitions and biased cognitions: transdiagnostic developments in CBT

S48-1

Cbt for cognitive biases in patients with an ultrahigh risk for developing psychosis

Van der Gaag, Mark1; Linszen, D.2
1VU University/ Parnassia Psychiatric Institute, Netherlands; 2Universityof Amsterdam, Netherlands

Introduction: Indicated prevention in people with low levels of symptoms is directed to risk management of external risk factors and cbt for cognitive processes which promote psychopathology. In psychosis there are cognitive biases at work during psychosis, but also in the prodromal stage.

Methods: General CBT was enriched with psycho-education on „risky thinking styles“ and behavioural experiments to train awareness of cognitive biased processes. 201 help-seeking patients in secondary mental health services, who also fulfilled the At Risk Mental State criteria were randomised in a clinical trial. Treatment was given during 6 months. Follow-up was until 18 months. The main outcome was transition into psychosis.

Results: At end of treatment less patients made a transition into psychosis in the experimental condition than in the control treatment condition.

Discussion: These are preliminary results. Follow-up data are still being collected. The results are in line with other studies showing prevention or at least postponed transition into psychosis.

Conclusion: Awareness of stait-like cognitive biases in processing social information can help ultrahigh risk patients to prevent psychosis.

S48-2

Effectiveness of metacognitive therapy for generalized anxiety disorder: An overview

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PsyQ, Netherlands

Introduction: Metacognitive therapy (MCT) for GAD has been developed in an attempt to augment the efficacy of CBT for GAD, as reviews of the clinical significance has indicated that only about 50% of patients with GAD return to a ‘well’ status following treatment. Preliminary evidence indicates that MCT is an efficacious treatment for GAD (Wells & King, 2006; Wells et al., 2010).

Method: Randomized clinical trial into the effectiveness of individual MCT (Van der Heiden et al., submitted for publication) and an open trial into the effectiveness of group MCT (Van der Heiden et al., in preparation). Results of these studies will be presented, along with the results of an ongoing study into the long-term outcome (30-months follow-up) of MCT for GAD (Van der Heiden & Melchior, in preparation).

Results: MCT produces significant pre to posttreatment decreases in GAD symptoms, with large effect sizes and high proportions of clinically significant change. At follow-up, the improvements were maintained.

Discussion: MCT seems to have the potential to be more effective than the current ‘gold standard’ treatments for GAD, i.e., CBT and pharmacotherapy. However, the lack of an evidence-based approach for GAD as a control condition in our studies, limits the understanding of the unique or incremental benefits of MCT. Future studies should explore the effectiveness of MCT relative to CBT or pharmacotherapy.

Conclusion: MCT is an effective treatment for GAD, but more research is needed to identify whether MCT augments the efficacy of CBT for GAD.


S48-3

Working memory deficits underlying depression and anxiety

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Introduction: Selective processing of negative information plays a crucial role in the development and maintenance of depression and anxiety disorders. Especially biases in attention, interpretation and memory are thought to be responsible for many aspects of depression and anxiety disorders. Deficits in executive functioning in depressed or anxious patients may lie at the heart of these biases.

Method: The current research includes a randomized controlled trial tackling executive deficits in depressed and anxious patients. A working memory training was administered to patients with major depressive disorder or anxiety disorders. Over the course of four weeks patients performed computerized tasks to enhance their working memory abilities. Depressive and anxious symptoms were diagnosed before and after the intervention, as well as working memory performance.

Results: Patients with depressive or anxiety disorders benefited from the working memory training, relative to controls who received a bogus working memory training. That is, their working memory performance increased at follow-up. Moreover, depressive and anxious symptoms declined in the patients who received the working memory training.

Conclusion: These findings show that a therapeutic intervention targeting working memory deficits in depressed and anxious patients may have beneficial effects. Short and long term effects on depression and anxiety symptoms will be discussed. Focus will be on how this research may bridge the gap between basic cognitive science and clinical psychological treatments.
Competitive Memory Training: making cold cognitions hot

Korrelboom, Kees
PsyQ, Netherlands


Introduction: Despite adequate Socratic challenging, many patients in CBT are still bothered by dysfunctional interpretations. They now know indeed how things really are, but yet they quite often do not feel accordingly. In many such instances behavioral experiments are successfully applied. However, in specific problem areas it might be difficult to develop practical and adequate behavioral experiments. Behavioral experiments seem very appropriate to challenge dysfunctional expectations they are probably less suitable for changing more inherent opinions. Competitive Memory Training (COMET) has been developed to address specifically these sort of problems: strongly held dysfunctional inherent opinions that are difficult to challenge at an emotional level.

Method: In the presentation a short introduction will be given of the theoretical background of, the indications for and some practical aspects of the application of COMET. Then a review will be presented of a series of efficacy studies into this intervention.

Results: COMET for low self-esteem was more effective than TAU (therapy as usual) in three studies in different patient populations. COMET for depressive rumination was more effective than TAU in a sample of elderly depressed patients, while COMET for auditory hallucinations was more effective than TAU in reducing the burden of this condition for psychotic patients with auditory hallucinations. Finally, COMET for panic was equally effective as AR in a group of panic disordered patients. Until now, only 1 study produced negative results for COMET. In an e-health adaptation of the COMET for obsessions protocol, COMET appeared to be not effective.

Conclusions: COMET seems to be a promising intervention for a range of psychopathological conditions. It is easy to implement and fits comfortably into regular CBT interventions.


Symposium 49 – Acceptance as an emotion regulation process

The Importance of Acceptance in Chronic Pain

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CINEICC, University of Coimbra, Portugal

Little is known about how patient with a chronic pain condition functioning over the course of disease and what factors are associated with such changes when they occur. A longitudinal study was performed in a Portuguese clinical sample with early rheumatoïd arthritis (N=55) and showed the influence of acceptance/ experiential avoidance in the progression of pain, disability and depression, using latent growth curve models. Results support the acceptance based approach in the context of chronic pain conditions and show that what is needed to free the individual to pursue life directions is not the removal of pain but the abandonment of the struggle to avoid/ to reduce pain and the construction of patterns of effective action linked to chosen values.


Shame memories and psychopathology: The mediation effect of acceptance

Matos, Marcela; Pinto-Gouveia, J.
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Objectives: Shame experiences can occur very early in life and comprise a primary threat to the (social) self (Gilbert, 1998, 2003). Recently, Matos and Pinto-Gouveia (2009) found that early shame experiences reveal traumatic memory characteristics (e.g. intrusion, avoidance, hyper-arousal) that not only have an impact on feelings of shame in adulthood but also moderate the impact of shame on depression. However, the role of emotional regulation processes, such as acceptance/experiential avoidance, on this relationship has never been examined. This paper explores the mediation effect of acceptance between shame traumatic memories and depressive symptomatology and between shame traumatic memories and current shame feelings (external and internal shame).

Method: The Shame Experiences Interview was administered to assess shame traumatic memories from childhood and adolescence and a battery of self-report questionnaires was used to measure shame traumatic memory (IES-R), acceptance/experiential avoidance (AAQ-II), depression (DASS-42), external shame (OAS) and internal shame (ISS) in 100 participants from the general community population.
**Body image acceptance moderates the impact of body image dissatisfaction on disordered eating**

Ferreira, C.; Pinto-Gouveia, J.; Duarte, C.

CINEICC - Cognitive-Behavioural Research Centre, Psychology Department, University of Coimbra, Portugal

**Introduction:** This study explores if body image flexibility, the ability to accept perceptions, sensations, feelings and thoughts about one’s body, while pursuing effective actions in other life domains, moderates the empirically known effect of body image dissatisfaction on the engagement on dieting, a major risk factor for eating disorders.

**Method:** A battery of self-report questionnaires was used to assess body image dissatisfaction (FRS; measured as the discrepancy between the actual and the ideal body image), body image acceptance (BI-AAQ), and eating disorders symptomatology (EDI), in 679 participants from general population and in 46 eating disordered participants. Statistical procedures such as t-Tests for two independent samples, correlation analyses and multiple hierarchical regression analyses were conducted.

**Results:** Results show that there is a significant negative association between body image acceptance and body image dissatisfaction, and eating disorders symptoms. The male participants, in comparison to the female participants, present higher levels of body image acceptance. Significant differences were also found between patients with an eating disorder diagnosis and women from general population, with the patients presenting lower levels of body image acceptance. Results from the hierarchical multiple regression analyses show that body image acceptance significantly predicts drive for thinness. The moderator analysis suggests an effect of body image acceptance on the relationship between body image dissatisfaction and drive for thinness.

**Conclusions:** These findings suggest that body image acceptance can lessen the impact of the dissatisfaction with one’s current bodily appearance on the engagement on pathological restrictive eating behaviours and thinness seeking. Thus, our study emphasizes the importance of addressing flexibility and acceptance relatively to body image in new therapeutic approaches.

**Shame and Borderline Personality Traits: the mediating effect of experiential avoidance and rumination**

Denis, A.M.B.; Pinto Gouveia, J.A.V.

CINEICC, Portugal

Several empirical studies have systematically shown that shame plays a crucial role in a wide range of clinical disorders (e.g. Gilbert, 2000) including Borderline Personality Disorder (Rusch et al., 2007). However, the process by which external shame (‘how one exists in the minds of others’; Gilbert, 1997, 1998) and internal shame (‘how the self judges the self’; Gilbert, 1997, 1998) influences borderline personality symptoms remains unclear. Ruminative and experiential avoidance, both maladaptive forms of emotion regulation (e.g. Hayes & Feldman, 2004), have also been associated to Borderline Personality Disorder (e.g. Abela, Payne, & Moussaly, 2003; Chapman, Specht, & Cellucci, 2005). This study explores the mediation effect of rumination and experiential avoidance between shame (internal and external shame) and symptoms of the borderline personality disorder. A battery of self-report questionnaires was used to assess external shame (Others As Shamer; Goss, Gilbert, & Allan, 1994), internal shame (Internalized Shame Scale; Cook, 1996), rumination (Ruminative Responses Scale; Treynor, Gonzalez, & Nolen-Hoeksema, 2003), experiential avoidance (The Acceptance and Action Questionnaire; Bond et al., submitted) and borderline personality symptoms (BPQ - Borderline Personality Questionnaire; Poreh, Rawlings, Clardige, Freeman, & Faulkner, 2006) in a clinical sample of 90 patients with a Borderline Personality Disorder diagnose. Diagnosis of all patients where confirmed through the Structured Clinical Interviews for DSM-IV Axis I and Axis II Disorders and the Borderline Personality Disorder Severity Index (Weaver & Clum, 1993). Results from regression analysis show that experiential avoidance partially mediates the effect of external shame on abandonment and emptiness symptoms, as also, partially or fully mediates the effect of internal shame on suicide/self-mutilation, abandonment, emptiness and quasi-psychotic states symptoms. On the other hand, rumination fully mediates the effect of internal and external shame on affective instability symptoms. Since the results suggest that experiential avoidance and rumination helps to explain the relationship between external/internal shame and borderline personality symptoms, the clinical implications of these results will be discussed.

Symposium 50 – Biased, improved, self-focused? – Information Processing in Social Anxiety

S50-1

Emotional Facial Expressions and the Attentional Blink

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1University of Groningen, Netherlands; 2University of Ghent, Netherlands; 3Neuroimaging Center Groningen, Netherlands

Objective: There is considerable evidence indicating that social anxious people are primed to monitor social signals of disapproval. Thus far studies on selective attention have concentrated predominantly on the spatial domain, whereas the temporal consequences of identifying socially threatening information no subsequent task performance have received only scant attention. Therefore, this study focused on temporal attention costs and examined how the presentation of emotional expressions affects subsequent identification of task-relevant information.

Methods: A large group of participants with varying levels of social anxiety (N = 100) were presented with a single target rapid serial visual presentation paradigm (RSVP). Targets were gray scaled cars that were rotated to the left or to the right. Critical distractors were gray scaled angry, happy, and neutral facial expressions that were presented 240 ms or 840 ms before the target. It was the task of the participants to indicate the direction of the target’s rotation.

Results: Task-irrelevant facial distractors enhanced rather than impaired target detection. This effect was independent of emotional expression (angry, happy, neutral). Interestingly, this attentional enhancement effect was particularly pronounced in relatively high socially anxious individuals.

Conclusions: The enhanced target detection is probably due to the signal value of facial displays leading to a temporary increase of attentional resources allowing for rapid and adaptive responding. Given their social-evaluative concerns, this signal function is likely to be especially pronounced in high socially anxious individuals. The present findings are at odds with the idea of attentional costs and examined how the presentation of emotional expressions affects subsequent identification of task-relevant information.

S50-2

Blushing Fearfuls’ Judgmental Biases for the Costs and Probability of Displaying a Blush

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To explain their phobic fear of blushing it has been proposed that blushing fearful individuals overestimate both the probability and the interpersonal costs of blushing. To test whether these judgmental biases are indeed at work in blushing phobia, we presented a treatment-seeking sample of blushing fearful individuals a series of vignettes referring to situations in which people would likely anticipate a negative social judgement when blushing, and tested whether this clinical sample overestimates the social costs and probability of blushing, compared to non-fearful controls. Furthermore, to test if the biased judgement of social costs reflects an overestimation of the high fearfuls and/or an underestimation of the low fearfuls, a second experiment examined the actual effects of blushing on an observer’s judgement of the blushing actor. Experiment 1 showed that, indeed, blushing-fearful individuals generally reported enhanced costs and probability estimates. Experiment 2 showed that the observer’s judgments were very similar to the judgments anticipated by the low fear group in Exp 1. Thus the judgmental bias that was evident in the high fearful sample can be best interpreted as an overestimation of the actual social costs of displaying a blush. This is not only helpful in improving our understanding of the mechanisms involved in blushing phobia but also points to the clinical implication that it might be helpful to challenge blushing fearfuls’ cost expectancies as a way to correct their judgmental bias.

S50-3

Does self-focussed attention reduce mimicry in social anxiety?

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1Behavioural Science Institute, Radboud University Nijmegen, Netherlands; 2UMC St. Radboud, Nijmegen, Netherlands

In social interaction, being imitated usually leads to a more positive evaluation of the imitator. As social anxiety is characterized by exaggerated fear of negative evaluation, but also by actual devaluation, both, perception of being mimicked by an interaction partner as well as showing mimicking behavior have been assumed to play a crucial role herein. Interestingly, despite their fear of negative evaluation, SA do not appreciate being mimicked and they show less mimicry when interacting with others. Cognitive models of social anxiety suggest that self-focused attention may impair the perception of (positive) social cues such as mimicry by others or ‘mimicable behavior’. In order to test this hypothesis, SA and non-anxious controls (NACs) were asked to discover the grammar of a bogus language together with avatars in a Virtual Reality environment. In the self-focus condition they were asked to take terms with the avatar to complete blanks in the bogus sentences either with “I, me, my”, while in the other-
focus conditions they had to complete blanks with “he, him, his”. Meanwhile the avatars showed head and hand movements on predefined moments during the task and it was recorded in how far the participants mimicked the avatars’ movements. Preliminary results revealed that, against our expectations, SAs mimicked less than NACs when focusing on the avatar but mimicked as much as NACs when focusing on themselves. These results will be discussed in the light of current models of SA. Implications for treatment will be explored.

**Symposium 51 – When and how to expose… or not to expose? Recent insights into exposure techniques with applications for treatment of eating disorders**

**The way you look: how to use body exposure to increase body satisfaction**

Jansen, Anita; Voorwinde, V.; Hoebink, Y.; Mulkens, S.

Maastricht University, Netherlands

Body dissatisfaction is a risk factor for mood and eating disorders and it is a main characteristic of eating disorders and body dysmorphic disorder. Strategies to increase body satisfaction have hardly been studied in a systematic way. Although body exposure using a mirror is rather frequently done in clinical practice, it is unclear what exactly happens during the exposure and what the effects of the exposure are. In earlier studies we found that body dissatisfaction was related to selective visual attention for body parts perceived to be unattractive whereas body satisfaction was related to hyperattention for attractive body parts. In this study we controlled the attention of body-dissatisfied participants during mirror exposure. We tested whether exposure to attractive body parts would induce a significantly larger increase in body satisfaction than exposure to body parts that were perceived to be unattractive. The data are interesting and will be discussed.

The effect of advertisements and response inhibition on purchases in a supermarket

Nederkoorn, Chantal; Jansen, A.
Maastricht University, Netherlands

Our environment can easily lead to overconsumption: Palatable, high caloric food is omnipresent. In addition, commercials and advertisements are constantly convincing people to eat unhealthy snack foods. Obese people appeared more responsive to these environmental cues. In addition, obese people appeared less effective in inhibitory control and this might mediate the effect: Especially disinhibited people might be reactive to environmental cues. In the current study, the effects of inhibitory control and food advertisements on purchases are studied. Participants perform the stop signal task and purchase all the foods they would need for themselves for 3 whole days in an internet supermarket. In one condition, high caloric food items are advertised, in the other condition no advertisements are shown. It is hypothesized that participants with less inhibitory control will buy more calories than participants with more inhibitory control, but especially when food is advertised. Data will be presented and discussed.

Counterconditioning reduces cue-induced craving and actual cue-elicited consumption

University of Leuven, Belgium

Cue-induced craving is not easily reduced by an extinction or exposure procedure and may constitute an important route toward relapse in addictive behavior after treatment. In the present study (Van Gucht et al., 2010), we investigated the effectiveness of counterconditioning as an alternative procedure to reduce cue-induced craving, in a non-clinical population. We found that a cue, initially paired with chocolate consumption, did not cease to elicit craving for chocolate after extinction (repeated presentation of the cue without chocolate consumption), but did so after counterconditioning (repeated pairing of the cue with consumption of a highly disliked liquid, Polysorbate 20). This effect persisted after one week. Counterconditioning moreover was more effective than extinction in disrupting reported expectancy to get to eat chocolate, and also appeared to be more effective in reducing actual cue-elicited chocolate consumption. These results suggest that counterconditioning may be more promising than cue exposure for the prevention of relapse in addictive behavior. This presentation belongs to the symposium „When and how to expose… or not to expose? Recent insights into exposure techniques with applications for treatment of eating disorders“ Streams we consider this submission to be most suitable for: Eating disorders Experimental psychopathology Relapse prevention

Habituation or sensitization?: Effects of repeated exposure to food cues on intake & cravings

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1University of Savoie, France; 2University of Maastricht, Netherlands

Objectives: Weight-concerned individuals and chronic dieters are susceptible to triggers for overeating. One such trigger includes salient food cues, such as the sight and smell of palatable food, which have been shown to increase intake in restrained eaters. According to the cue reactivity model (Jansen, 1998), food-cue exposure elicits food cravings, and increases intake, as a result of conditioning processes. Therefore, repeated exposure to food-related cues in the absence of intake should diminish food cravings and intake (based on the exposure and response prevention model). The current study was designed to investigate the effectiveness in repeated exposure in reducing intake and cravings.

Methods: A total of 52 young women participated in this study, and were randomly assigned to a control condition (repeated exposure to neutral cues) or a food-cue condition (repeated exposure to chocolate).

Results: The results indicate that unrestrained eaters habituate to repeated exposure to chocolate, with fewer cravings and lower intake after repeated exposure to chocolate (relative to control exposure). In contrast, restrained eaters appear to sensitize to repeated chocolate exposure, with increased cravings and intake relative to controls.

Conclusions: These results suggest that it may be particularly difficult to decrease the susceptibility of restrained eaters to food-related cues. Possible clinical implications will be discussed.

Symposium 52 – Cognitive Behaviour Therapy for Irritable Bowel Syndrome and Inflammatory Bowel Disease: is it effective?

S52-1

Relaxation training for irritable bowel syndrome: a randomized controlled trial
van Rood, Yanda
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Psychotherapy is effective in treating irritable bowel syndrome, and relaxation therapy is often part of the treatment. The results will be presented of a study investigating the efficacy of relaxation training as a single brief group intervention (van der Veek et al. 2007). Ninety-eight irritable bowel syndrome patients were included in this randomized controlled trial. The control condition consisted of forty-six patients receiving standard medical care. The 52 patients in the intervention group received four 90-min sessions of relaxation training in small groups in addition to standard medical care. Irritable bowel syndrome symptom severity, medical consumption and quality of life were assessed at baseline in patients and in 38 healthy controls and evaluated in patients at 3, 6 and 12 months after intervention. Irritable bowel syndrome symptom severity was significantly reduced in the relaxation training group compared to the control group at 3, 6 and 12 months after treatment (time-by-treatment interaction, P = 0.002). Furthermore, quality of life had improved (general health, P = 0.017; health change, P = 0.05) and the frequency of doctor visits was reduced (P = 0.039). Relaxation training is a brief group intervention that significantly improves symptom severity, general health perception and medical consumption in irritable bowel syndrome patients immediately after, as well as 6 and 12 months after intervention. Two aspects of the intervention are discussed which might explain the observed effect; the role of both the intervention itself (relaxation) and the use of an acceptable and self-efficacy promoting treatment rationale.


S52-2

Cognitive behavior therapy for pediatric Functional Abdominal Pain: Preliminary results of a randomized controlled trial
van der Veek, Shelley1; Derkx, H.H.F.2; De Haan, E.1; Benninga, M.A.2; Boer, F.3

1Academic Medical Center / De Bascule, Netherlands; 2Emma Children’s Hospital AMC, Netherlands; 3Academic Medical Center, Netherlands

Introduction: Functional abdominal pain (FAP) is a common complaint in children and adolescents. Three previous randomized controlled trials (RCT) showed that cognitive behavior therapy (CBT) is an effective treatment for children with FAP. However, these studies suffered from methodological flaws like small sample sizes and high drop-out rates. The aims of the present study were to investigate 1) the effectiveness of CBT compared to medical care (MC) on pain symptoms in a large RCT, and 2) the effectiveness of CBT compared to MC in reducing symptoms of anxiety, depression, disability due to FAP, other somatic complaints and quality of life.

Methods: A total of 104 children were randomized to CBT or MC over a three year period. Both treatments consisted of 6 weekly sessions with a trained masters-level psychologist in the CBT arm and a pediatric gastroenterologist/pediatric resident in the MC arm. Data were collected pre- and post-treatment and at 6 and 12 months follow-up. Repeated measures ANOVAs were used to analyze differences in effectiveness between treatment conditions for all outcome measures.

Results: Children in both treatment conditions improved significantly in their level of abdominal pain from pre- to post-treatment. CBT was equally effective as MC in improving abdominal pain, according to both child and parent report (p for time x treatment interaction respectively p=.421 and p=.218). Concerning the other outcome measures, only for social anxiety a significant interaction effect was found, showing that CBT was superior to MC in reducing symptoms of social anxiety (child report: p=.037; parent report: p=.033). Follow-up data at 6 months are currently being collected and will be presented at the conference.

Discussion and conclusion: Six weekly sessions of either CBT or MC both cause a significant decrease in abdominal pain and co-morbid complaints. CBT does not seem to be superior to MC over this short time period, except for it’s effects on co-morbid symptoms of social anxiety. This shows that anxiety might be a moderator of treatment effectiveness, which highlights the value of investigating which treatment works best for which child.
We describe the development of a control group in a randomised controlled trial titled: Individual or group hypnotherapy in the treatment of Irritable Bowel Syndrome in primary and secondary care

Flik, Carla

University Medical Centre Utrecht, The Netherlands, Netherlands

To design a good control intervention is notorious in research on the effectiveness of psychological treatments. "Care as usual" is not a good control-option because the effect of the treatment one is studying can be ascribed to the effect of the attention of the therapist and not just on the intervention. Placebo comparison is very difficult because there is no existing intervention that has all components of the experimental intervention, except the active component. A sham intervention with the same amount of patient visits to the treatment centre, with the same amount of attention from the therapist but without the treatment condition, has no therapeutic meaning, is useless for the patient and therefore generates a negative effect. That is why in our randomised controlled trial we looked for an intervention, in which the therapist spends an equal amount of time and attention on the patient, that lacks the therapeutic component, but is of use to the patient. For the design of this intervention we choose for an educational programme. We studied relevant research about which knowledge IBS-patients have and like to have about their disorder (1). We deducted the themes that are important to them. On this base we developed an educational intervention with as much therapeutic contact-time as with the research-intervention. The object of the intervention is to pass on knowledge about relevant IBS-subjects. The content of our Educational Supportive Therapy: in a series of 6 bi-weekly 60 minute group-sessions a structured educational supportive therapy will be given. In the sessions topics are discussed, that are of importance to IBS patients. The topics are: information on IBS; food and life-regulations and dealing with stress. Homework assignments will also be given. To emphasize the supportive and educational character of this control-intervention, we deliberately choose for nurse practitioners, psychological assistants or welfare workers and not for psychotherapists to lead this intervention. They are specifically trained for the intervention.


Title study: CBT in patients with inflammatory bowel disease with a poor quality of life: a randomised controlled trial

Bennebroek Evertsz', Florentine

Academic Medical Centre (Amsterdam), Netherlands

Projectgroup: F Bennebroek Evertsz', Msc1, PCF Stokkers, PhD2, CLH Bockting PhD3, R Sanderman, Prof dr.4, MAG Spranglers Prof.dr.1

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Inflammatory bowel disease (IBD), mostly diagnosed at a young age, is of chronic nature and follows an unpredictable course of exacerbations and remissions [1, 2, 3]. Moreover, disease flares can be intense and the related physical symptoms, such as (bloody) diarrhoea, abdominal pain, fistula and fatigue can greatly challenge daily functioning. In most cases, life-long medical treatment is required and is often accompanied by severe side effects, such as weight gain, moon faces and acne. On top, most patients require surgery somewhere in the course of their disease to remove parts of their bowel or place a colostomy. The quality of life in patients diagnosed with inflammatory bowel disease (IBD) is often not too good. These patients suffer often from a depression and anxiety. CBT) seems the best therapeutic option [4, 5, 6]. However, evidence for the effectiveness of CBT in IBD adults is scarce since previous studies have major statistical shortcomings and lack cohesion [4, 7, 8, 9, 10, 11]. In this presentation preliminary results from a randomized controlled trial on the effectiveness of CBT in IBD patients with a poor quality of life will be presented. Patients have been randomly assigned to CBT (n = 40) versus a waiting-list control condition (n = 40). The last group received CBT after 3 months. The Inflammatory Bowel Disease Questionnaire (IBD-Q) was used to assess primary outcome of the intervention. It measures health-related quality of life and consists of 32 items assessing four dimensions; bowel symptoms, systemic symptoms, emotional functioning, and social functioning. Secondary outcome measures were symptoms of anxiety, depression and general quality of life. In addition, fragments of this targeted CBT for IBD patients will be demonstrated (DVD).

Symposium 53 – The significance of anger problems and their treatment

**S53-1**

**Behavioural view of anger**

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Anger is an emotion common to all humans. In a behavioural view anger is seen as behaviour. It has been described both topographically and functionally. Here we present a behavioural approach to the assessment and treatment of anger and what has been studied in research and what we do not know about anger behaviour.

**S53-2**

**Anger and hostility as risk factors for emotional behaviour and cardiovascular health**

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¹University of Tampere, Finland; ²Duke University, United States

The study of anger and hostility as risk factors for cardiovascular health has a history of half a century. For example, Type A behaviour had anger as a major component of the behaviour. Today anger has been identified as an independent risk factor for cardiovascular disorders. In the Tampere Ambulatory Hypertension Study (n = 120) anger has been studied intensively. Here we report some associations of anger with other emotional behaviour and cardiovascular health. As an example, when both hostility and social support were included in the same regression model, relationship between hostility and atrial natriuretic peptide (ANP), involved in the risk of heart disease, was partially attenuated (β = .15, P = .094) whereas the association between social support and ANP remained significant (β = -.20, P = .030), suggesting that social support partially mediates the relationship between hostility and ANP. A 20 to 25-year follow-up study is currently proceeding in the project.

**S53-3**

**Applying clinical case-formulation models for understanding violent acts in relationships**

Lappalainen, R.; Holma, J.

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Case formulation is a clinical assessment tool used in therapy, which helps the therapist and the client in treatment planning and in understanding the client’s complex situation. Functional Analytic Clinical Case Model (FACCM) is one type of cognitive behavioural approach to case-formulation. It produces individual models that differ among the clients with the same behavior problems.

**Objectives:** FACCM -Model is used in this study to examine the explanations men give to their own intimate partner violence in a programme for intimateely violent men. The change in explanations during programme was also compared to the change in violent behaviour reported by their partners.

**Methods:** The data consisted of videotaped recordings from batterer group sessions and women partners interviews in the beginning and in the end of the group treatment. Three men were chosen for the target of the analysis.

**Results:** FACCM -Model was able to address and describe the men’s complex situation as it is explained verbally by the men. Men’s own explanations for their violent behaviour and its causes during the treatment. Men started to report several problems that had complex causal, reciprocal relations with each other. Their also begun to report feelings of guilt and shame and other unpleasant feelings during the treatment. This increase in reports of negative unpleasant feelings was associated to successful treatment outcome.

**Conclusions:** Since the violent men seem to have several other problems, the challenge to the psychological treatments are to find a balance between treatment of violent behaviors and treatment of other problems associated with these behaviors.

**S53-4**

**Treatment of anger using student therapists and acceptance strategies**

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Assessment and treatment of anger require a comprehensive approach. This gives student therapists a suitable opportunity to get multi-faceted experience from assessment and treatment of psychological problems. In this project, novice student therapists treated clients (n > 35) with anger problems using a broad battery of questionnaires and self-observation and intensity assessment of anger situations. In treatment, they used acceptance and skill strategies, and problem-solving. The treatment included one introductory session and eight treatment sessions. The results were obtained in multiple baseline design of some clients on each baseline (e.g., anger situations and intensity). Some preliminary results are already available showing positive changes in anger intensity and hostility (e.g., in Cook-Medley Hostility Scale). The clients reported that they were either satisfied or very satisfied with their treatment. The results of this project will be reported.
Symposium 54 – Compassion as a treatment for self-criticism and psychopathology

**Physiological responses to compassion: evidence for aversive experiences in self-critics**

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1Mental Health Research Unit, United Kingdom; 2University of Coimbra, Portugal

**Introduction:** Self-criticism is a transdiagnostic variable which characterises a variety of mental health problems and is frequently associated with depression and anxiety. There is increasing evidence that self-criticism is associated with fears of receiving kindness and compassion. The aims of this research were to explore high self-critics and low self-critics physiological responses to compassionate imagery and compassionate thinking.

**Method:** In Study 1 participants (N=17) fMRI activation was measured during self-critical and self-compassionate thinking; In Study 2 participants (N=22) heart rate variability (HRV) and cortisol were measured in response to compassionate imagery; In Study 3 at two sessions participants (N=44) experience of compassionate imagery with oxytocin and placebo (administered intranasally) were measured.

**Results:** Study 1 revealed differences in activation according to whether participants engaged in self-compassionate or self-critical thinking. There were individual differences with high self-critics showing activation in areas consistent with experiencing compassion as difficult or aversive. Study 2 found that low self-critics showed changes in HRV and cortisol consistent with positive experiences of compassionate imagery. In contrast, high self-critics showed HRV and cortisol responses consistent with negative experiences of compassionate imagery. Study 3 revealed that high self-critics had less positive experiences of compassionate imagery particularly when given oxytocin.

**Conclusion:** These studies show that engaging in compassionate thinking and imagery can be experienced as positive by low self-critics. However, high self-critics appear to have more negative experiences associated with compassion and oxytocin; this has implications for therapeutic interventions which utilise compassion and oxytocin.


**Attention to compassionate cues: A Compassion-based attentional training game**

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1Mental Health Research Unit, United Kingdom; 2University of Coimbra, Portugal

**Introduction:** Vulnerability to, and maintenance of mood disorders such as anxiety and depression are (at least in part) due to attentional biases for threatening information. Individuals with mental health difficulties show enhanced attention toward threatening information (such as angry faces) and diminished attention toward positive information (such as smiling faces). Researchers have begun to explore the effectiveness of using attentional training tasks as therapeutic interventions for treating mood disorders. The aims of this research were to i) explore attentional processing of compassionate and critical facial expressions with reference to individual differences in mood, attachment, social rank and self-evaluative variables; ii) to develop a training task to re-train attentional biases to produce more enhanced processing of compassionate facial expressions and improve well-being.

**Method:** In Study 1 participants (N=70) completed an attentional bias task measuring their attentional orientation to compassionate and critical faces. In Study 2 participants (N=110) played a Compassion game (searching for a compassionate face amongst an array of critical faces) online for five minutes a day over 10 days. Cognitive (attentional bias task), physiological (cortisol—a stress hormone) and self-report (self-criticism and psychopathology) measures were taken pre and post to playing the Compassion game.

**Results:** The results of Study 1 revealed that high self-critics showed diminished attentional processing of compassionate faces. Study 2 revealed playing the compassion game was associated with improvements in well-being.

**Conclusion:** These studies revealed that self-criticism is a key variable which influences the attentional processing of compassionate cues. The Compassion game modified attentional biases and enhanced various indicators of well-being but there were important individual differences which had an impact on the effectiveness of the game. In particular, high self-critics appeared to benefit more from game playing than low self-critics.

Fears of compassion and happiness: Their relation to self-criticism and psychopathology

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Introduction: Compassion has recently become a focus of therapeutic interventions. However, there is increasing evidence from empirical research and clinical studies that some individuals find self-generating compassion and receiving compassion from others difficult and aversive. This research aimed to i) develop measures of fears of compassion and happiness; and ii) to explore these fears in relation to self-criticism, psychopathology and a range of social cognitive competencies.

Method: In Study 1 participants (N=275) completed self-report measures of fears of compassion, self-criticism and psychopathology. In Study 2 participants (N=185) completed self-report measures of fears of compassion, fears of happiness, emotion identification (alexithymia), empathy, mindfulness, self-criticism and psychopathology.

Results: The results of these studies revealed that fears of self-generating compassion, receiving compassion from others and fears of happiness were highly associated with self-criticism, psychopathology and difficulties with identifying emotions (alexithymia), empathy and mindfulness.

Conclusion: The findings of these studies reveal that individuals can have fears of compassion and happiness. This has implications for therapeutic interventions as these fears will need to be addressed in therapy to assist participants in self-generating and receiving compassion.

Gilbert et al, Psychology and Psychotherapy in press; Gilbert et al, Psychology and Psychotherapy in press;

Experiences of compassion in a highly self-critical patient group

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Introduction: Compassionate Mind Training (CMT) was specifically developed for people with high levels of shame and self-criticism, who have difficulties with self-reassurance and self-compassion. Previous research has found that people who have eating difficulties and disorders tend to be very self-critical and can be resistant or fearful of being self-compassionate. The aim of this study was to i) explore childhood and current compassion experiences of people with eating difficulties; ii) explore the value of training people with eating difficulties in self-compassion.

Method: In Study 1 patients with eating difficulties (including eating disorders and obesity) (N=19) took part a semi-structured interview, which asked about their experiences of compassion. In Study 2, participants (N=9) were recruited from an eating disorder self-help group in Derbyshire and invited to take part in eight sessions of CMT. Participants took part in a focus group to explore their experience of the sessions. They also completed questionnaires before and after taking part in the sessions, and at follow up six weeks later.

Results: Study 1 revealed that patients with eating difficulties had few experiences of compassion and there was some indication that eating behaviours were being used as a form of affect-regulation and soothing. In Study 2 the qualitative feedback highlighted the importance of introducing the compassion model to help participants understand how the mind works; the importance of practicing the exercises; the experience of emotional change; the positive experience of working as a group; and suggestions for the development of the programme. The questionnaire data indicated that most participants experienced reductions in self-criticism and shame and increases in self-compassion. Eating difficulties reduced and well-being increased.

Conclusion: This research provides promising evidence of the value of CMT for people with eating disorders.

Severe health anxiety (hypochondriasis) is a common and disabling problem with high costs for sufferers, their families and health care providers alike. While there is evidence that CBT approaches can be effective in treating health anxiety, there remains room for improvement with a significant proportion of patients failing to achieve good outcomes, particularly in the longer term. This presentation will report results from a randomized controlled trial of mindfulness-based cognitive therapy (MBCT) vs treatment-as-usual (TAU) for health anxiety. Previous attempts to treat health anxiety have met with limited success. Whilst it has been possible to demonstrate that CBT is an effective treatment for health anxiety (e.g., Clark et al., 1998), it has been difficult to establish the superiority of CBT over other psychological treatments in the treatment of health anxiety (e.g., Buswalda, Bouman & van Duijn, 2006; Visser & Bouman, 2001), particularly at longer-term follow-up (Clark et al., 1998). If there is, as the literature suggests, an equivalence of effect amongst psychological treatments for health anxiety then patient preference, comparative cost-effectiveness, and the ease of dissemination of the approach become important factors in determining the treatment of choice for health anxiety. Hence, treatments that are acceptable to patients, which can be carried out in cost-effective ways (e.g., group formats) and which can be effectively disseminated into routine clinical practice warrant further investigation. For these reasons we have investigated the applicability of mindfulness-based cognitive therapy (MBCT) to the treatment of severe health anxiety. Results from a randomized controlled trial (n=74) of mindfulness-based cognitive therapy (MBCT) vs treatment-as-usual (TAU) for health anxiety will be reported.

studies investigating imagery in health anxiety. First, results will be presented from a study investigating the prevalence, nature and content of intrusive imagery in 55 participants with severe health anxiety. Second, results of a study investigating the impact of Mindfulness Based Cognitive Therapy (MBCT) on the imagery experienced by 20 participants with health anxiety will be discussed. MBCT is an indirect intervention which shifts the focus away from challenging the content of images towards attempting to change the way individuals relate and respond to images and thoughts. This study therefore examines whether MBCT enables individuals with health anxiety to develop a new relationship with images, thus reducing the intrusive, frequent & distressing nature of the images. Finally, the impact of imagery rescripting techniques on two patients with severe health anxiety and distressing intrusive imagery will be presented. The ways in which challenges of working with imagery in health anxiety (e.g. the realistic nature and future focus of the images) were overcome will also be discussed.

Stei1, R., & Ehlers, A. Behaviour Research and Therapy 2000; 38, 537-558

**S55-4**

**Issues in the dissemination of MBCT as an approach to the treatment of Health Anxiety**

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**Objectives:** The project evaluating the efficacy and acceptability of MBCT as an approach to the treatment of health anxiety which was described in the last paper is a joint venture between the Department of Psychiatry in Oxford and OCTC (Oxford Cognitive Therapy Centre). The latter institution has, as its main aim, the training of health, and other professionals, in CBT and related approaches in order to facilitate the dissemination of appropriate and evidence based health care. Indeed, this is an important aim of the Lupina Foundation, who funded the project. To this end, the second part of the project was aimed at training a group of professionals working in health care settings in and around Oxfordshire in some of the skills required to teach MBCT.

**Methods:** The paper describes the training pathway which was developed,

**Results:** Some of the difficulties in implementing MBCT for health anxiety (based on the development of the good practice guidelines produced by a working party headed by Professor Mark Williams, 2010) are discussed, as are the experiences of those doing the dissemination, and also outcome data.

**Conclusions:** Facilitating the dissemination of MBCT needs to be undertaken with care and is not without its problems. As teachers of this approach, it is important to take account of the quality of what is offered by practitioners, whilst working within organisations which demand a quick response to patient distress.


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**Symposium 56 – Cognitive Behavioural Treatment for Obsessive Compulsive Disorder: developments and enhancements**

**S56-1**

**Cognitive flexibility and set shifting in obsessive compulsive disorder**

Jonsson, Hjalti 1; Salkovskis, P.M. 2; Carter, N. 3; Tang, N. 4; Moncad, H. 4; Read, J. 3; Meghrabian, B. 4

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The treatment of choice for Obsessive Compulsive Disorder (OCD) is cognitive-behavioural therapy (CBT). Such therapy involves helping the patient to change long standing and firmly held beliefs about the significance and meaning of intrusive thoughts and then supporting the patient in changing long standing persistent patterns of repetitive compulsive behaviour. To achieve changes in such well established patterns of thinking and behaving requires that the patient be able to inhibit these perseverative patterns and adopt new ways of reacting to their everyday experience. One way of thinking about this is that it requires patients to exercise cognitive flexibility with respect to their obsessional fears and beliefs; they have to be able to think about what is happening to them in different ways and behave accordingly. Difficulties in treatment can therefore be thought of involving problems in accepting and/or adapting to the alternative less threatening explanation developed as part of therapy (the cognitive-behavioural formulation) and it could be argued in turn that such problems represent difficulties in set shifting or cognitive flexibility. We therefore decided to investigate both set shifting (by means of neuropsychological tests) and perceived cognitive flexibility in everyday activities (by questionnaire) in patients suffering from anxiety disorders, focusing on OCD (n = 65) because of the obvious way in which perseveration and cognitive inflexibility forms part of the presentation of the disorder. In order to examine the impact of anxiety per se a comparison group of anxiety disorder patients (n = 35) was also assessed, together with a healthy control group (n = 35). Results examining the extent and nature of set shifting and cognitive flexibility across these three groups will be presented and implications for treatment and possible prevention will be discussed.
**Cognitive Flexibility and set shifting in the cognitive-behavioural treatment of OCD: does changing your mind help change OCD?**

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Cognitive theories of the maintenance of Obsessive-compulsive disorder (OCD) suggest that part of what goes wrong is that people suffering from this problem become “stuck” in pattern of thinking characterized by thinking that their intrusive thoughts mean that they may be responsible for harm coming to themselves or others. Such beliefs are not usually open to “normal” methods of persuasion (e.g. trying to convince the person that their hands really are clean). Patients with OCD not only show persistent patterns of negative beliefs, but also show high levels of perseverative behaviours (rituals). Cognitive-behavioural treatment typically involves helping patients to consider alternative, less threatening accounts of what their intrusive thoughts might mean; having raised such possibilities in treatment, the patient is then helped to test the alternative way of understanding their problem by changing their behavior to eliminate established patterns of avoidance and ritualizing. To engage in such treatment requires both the ability to think more flexibly and to inhibit long-standing patterns of behavioural response. In this study, the impact of both (i) set shifting (measured using neuropsychological testing) and (ii) self-reported cognitive flexibility in the context of everyday problem solving on treatment of people with OCD is assessed. In addition, the impact of treatment on set shifting and cognitive flexibility is also evaluated. The results will be considered in terms of the extent to which treatment may need to take account of cognitive flexibility as an additional factor.

**A qualitative study of the investigation of reassurance seeking in obsessive-compulsive disorder**

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Objectives: Reassurance seeking is a common problem in clinically anxious populations, and is particularly obvious in obsessive-compulsive disorder (OCD). This study seeks to examine the way individuals with OCD try to seek reassurance and the perceived consequences of such reassurance seeking. Design: The study comprises a qualitative analysis of the perspectives of individuals with OCD who seek reassurance from other people.

Methods: A semi-structured interview was used to ask individuals with OCD to reflect on occasions when they sought reassurance, and its impact on themselves and others. Ten interviews were conducted, transcribed and analysed in detail using Thematic Analysis.

Results: Four overarching themes were identified in terms of reassurance seeking: Interrogating Feelings to Achieve a sense of Certainty, Ceaseless and Careful Effort, Reluctance to Seek Reassurance, and Interpersonal Concern. A thematic map was produced to understand the relationship between themes and sub-themes.

Conclusion: The results suggest that the reduction of uncertainty is a key perceived motivation for reassurance seeking in OCD. Sufferers are motivated to constantly strive to ensure the validity of reassurance they obtain whilst they frequently seek to minimise the negative impact of reassurance seeking and the possibility of linked interpersonal problems.

**Carer’s Perception of and Reaction to Reassurance Seeking in OCD**

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1Institute of Psychiatry, King’s College London, United Kingdom; 2Centre for Forensic Psychiatry, University of Chiba, Japan; 3University of Bath, United Kingdom; 4Centre for Anxiety Disorders and Trauma, United Kingdom

The purpose of the present study is to explore the phenomenology of being asked for reassurance from the perspective of carers. In addition, this study examines how accurately carers perceive the effect of reassurance on the person with OCD by comparing the data obtained from the person they normally offer reassurance to. Forty-five individuals with OCD completed the Reassurance Seeking Questionnaire (ReSQ; Kobori and Salkovskis, submitted). Their carers, defined as someone who the sufferers most commonly seek reassurance from, completed the carer’s version of reassurance seeking questionnaire (ReSQ-C). Results suggest that carers most commonly provide reassurance directly, and they are less aware of the indirect seeking of reassurance. They report that reassurance giving is stressful to them. Many of the carers were also asked to take part in the rituals, and are asked for reassurance everyday. Carer’s perspectives on the impact of reassurance provision proved to be quite accurate; both sufferers and carers perceive that reassurance works only temporarily, but even if the anxiety-relieving effect of reassurance decreases in the long term, it is likely to be perceived as beneficial because they (accurately) perceived that sufferers would feel much worse if carers refuse to provide reassurance.
Symposium 57 - Effectiveness research in anxiety disorders in adults: Outcome and process data from two multicenter effectiveness studies in Norway

S57-1

Stepped care vs. direct CBT for social phobia or panic disorder: A randomised controlled trial
Nordgren, T.¹; Haug, T.²; Øst, L.G.¹; Heivang, E.²; Havik, O.E.¹
¹University of Bergen, Norway; ²Haukeland University Hospital, Norway

The aim of present study was to answer the following research questions: Is cognitive behaviour therapy (CBT) based stepped care treatment as effective as 12 sessions manualized CBT for social anxiety disorder (SAD) and panic disorder (PD)? Are patients who receive high-intensity interventions in the stepped care treatment demoralised as did not benefit from low-intensity interventions? Is a stepped care treatment model feasible in ordinary clinic? Nine outpatient clinics were recruited into the study, including 10 independent assessors and 20 therapists. Patients were randomized to either stepped care or to 12 sessions face-to-face manualized CBT. The stepped care treatment involved three steps: Psychoeducation (one session), Internet-based guided self-help (9-10 weeks), and 12 sessions face-to-face manualized CBT. Patients in the stepped care condition who did not achieve clinically significant improvement after a low-intensity intervention were offered to go on to the next step. Main outcome measures included clinical significant improvement and drop-out on each step. A total of 176 patients were included. Preliminary results show that there was no difference in the proportion who achieved clinically significant improvement between the stepped care and direct 12 session model for PD. However more patients dropped out of the stepped care treatment. For SAD there was no significant difference between the two treatment models regarding clinically significant improvement and drop-out. Clinically significant improvement after low-intensity interventions was achieved by 31% of those with PD and 22% of those with SAD. Clinical implications of the results will be discussed.

S57-2

Guided self-help vs direct CBT for panic disorder and social phobia: Outcome and predictors. Preliminary results from an effectiveness study
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¹Haukeland University, Norway; ²University of Bergen, Norway

The effect of both face-to-face CBT and guided self-help (GSH) for social phobia and panic disorder is well documented through numerous RCTs and meta-analyses. However, in the research literature a need for more research on issues related to dissemination of CBT to ordinary clinics has been highlighted. One way to address these issues is through effectiveness studies conducted in ordinary clinical settings. In addition there is a need to examine potential predictors and moderators for treatment effect, so that patients expected to benefit from different treatments can be more easily be identified. A total of 176 patients from ordinary out patient clinics, 105 for social phobia and 71 for panic disorder, were randomized to direct face-to-face CBT and a CBT based stepped care model consisting of 1.5 hour psychoeducation, 9-10 weeks of GSH through the Internet, and 12 weeks of manualized face-to-face CBT, identical to the direct CBT condition. Patients were assessed before treatment and after each treatment with structured clinical interviews and different self-report questionnaires. The objective of this presentation is to compare psychoeducation + guided self-help (GSH) from the stepped care treatment with direct manualized face-to-face CBT for panic disorder and social phobia. The following research questions will be investigated: Are there differences in effect between psychoeducation + guided self-help (GSH) and face-to-face CBT? Which factors are associated with the treatment result? Are these factors different for CBT and GSH? The data collection is still in process. However, preliminary results from 2/3 of the complete dataset post-treatment indicate that in general there are no differences in effect between direct CBT and GSH for panic disorder or social phobia. In addition a multiple regression analysis indicate that cluster C personality disorders and agoraphobic avoidance is associated with less gain of treatment for CBT but not for GSH for panic disorder. Results and implications will be discussed.

S57-3

An effectiveness study of a brief cognitive-behavioural group treatment programme for Chronic Fatigue Syndrome
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¹University of Bergen, Norway; ²Frihamnsenteret, Skånevik, Norway

Patients with Chronic Fatigue Syndrome were offered a 4 days brief intensive treatment program, after an initial evaluation and motivational interview. The program consisted of psychoeducation, mindfulness sessions, stress reduction, cognitive behavioural treatment sessions, writing sessions and physical activity. Outcome variables were assessed at baseline, prior to group treatment, and at 1 week and 3 months follow-up post-treatment. Data from 18 consecutive groups, each with 8-10 participants will be presented. There were significant reductions in fatigue symptoms and impairment, increase in energy, vitality and general health perception with effect sizes ranging from 0.70-1.50 (Cohen’s d). There was also a significant change in dysfunctional illness perceptions, indicating less illness worries and more positive perceptions about cure and control. Depression, anxiety and sleep problems were also significantly reduced. Based on this naturalistic effectiveness study, we conclude that the applied intervention give reasons for a more optimistic perspective of treatment effect and prognosis in Chronic Fatigue Syndrome.
Predictors of outcome in guided and unguided self-help for Social Anxiety Disorder

Nordgreen, T.; Havik, O.E.; Öst, L.G.; Furmark, T.; Carlbring, P.; Andersson, G.

Internet-based treatments with therapist guidance have showed promise as a way to increase access to effective psychological treatment for individuals with Social Anxiety Disorder (SAD). Unguided self-help has primarily been suggested as a preventive intervention for SAD, however, a subgroup of patients respond to unguided treatment. It is now important to gain more knowledge about predictors of change from guided and unguided self-help for SAD to ensure that these treatment programs can be offered to those who are most likely to respond. The present study examined pre-treatment individual characteristics and program factors as predictors of treatment adherence and treatment effects, defined as diagnosis-free status or reliable change, among 245 individuals who received either guided or unguided self-help for SAD. Results were in line with previous findings from the face-to-face treatment literature as mainly baseline SAD symptoms but not comorbid symptoms predicted outcome in both groups. Higher credibility rating increased treatment adherence, diagnosis-free status, and reliable change of SAD symptoms in the unguided self-help group, and not in the guided self-help group. The findings support the notion that guided and unguided self-help show promise as ways to increase access to treatment of SAD to a more heterogeneous population than previously assumed.

Theory of Generalizability applied to an instrument measuring trauma related shame among patients with posttraumatic stress disorder (PTSD)

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The purpose of this study was to use the statistical framework and analysis of Generalizability Theory (G-Theory) to investigate the reliability of Trauma Related Shame Inventory (TRSI). The psychometric investigation aimed to reduce number of items sufficient to provide a valid and useful short form inventory for measuring trauma related shame valuable for clinical purpose as a screening tool. G-Theory provides a tool that allows us to break down the sources of variation, or facets, in a measurement design and ultimately design a short form measurement that provides optimal reliability. Decision studies (D-studies) provide reliability coefficients, called generalizability coefficients, tailored to clinical use of the measurement. Both the 24 items version of internal and external referenced shame and the 12 items version, which constitute only internal referenced shame, have generalizability coefficients .95 with phi coefficients .95. The adequacy of reliable scores allows the clinicians to use TRSI as a screening instrument for shame with high degree of confidence.
SS8-2

Emotional Processing of Fear – and Guilt, and Shame, and Anger, and Sadness - With Prolonged Exposure for PTSD

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Prolonged Exposure (PE) is rooted in emotional processing theory, which provided a framework for understanding the representation and modification of pathological or excessive fear. Exposure is a potent vehicle for accessing or activating these representations, while providing “corrective information” that serves to modify or correct their unrealistic elements. A vast amount of research has demonstrated the efficacy of exposure in treatment of anxiety disorders. In the case of trauma-related disorder, numerous studies over the past two decades have shown that PE reduces symptoms of posttraumatic stress (PTSD), depression, and anxiety. While PTSD has been conceptualized and codified as an anxiety disorder, clinicians and researchers alike have long been aware that trauma survivors with PTSD often present with trauma narratives and current experience dominated by emotions other than or in addition to fear: anger, shame, guilt, grief, and sadness. Advances in our knowledge of exposure have yielded a richer and more accurate understanding of emotional processing of traumatic memories via imaginal and in vivo exposure. This presentation will focus on the utility and potency of imaginal exposure procedures to help the PTSD sufferer 1) fully access all of the salient information – facts, emotions, thoughts, behaviors, environment - within the trauma memory, 2) contextualize and understand their own reactions and experience of the trauma and its aftermath, and 3) achieve a realistic perspective on the traumatic event and their behavior during it, as well as the impact it has had and will have in the future. Cases descriptions will be used to illustrate the efficacy of standard imaginal exposure in reducing extreme guilt and shame.

SS8-3

Addressing non-fear-based emotions in PTSD: CBT imagery approaches

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Fear is one of many emotions that characterizes post-traumatic stress disorder. Appraisals of the worst moments of a trauma, made at the time or afterward, typically lead to a range of emotions (e.g., Grey & Holmes, 2008), including shame, anger, guilt, and loss. In this talk, we present key CBT techniques to address shame and anger, and key imagery techniques to address guilt and loss with in-session and end-of-treatment outcomes presented. The putative mechanisms by which imagery leads to the reduction in the re-experiencing of difficult emotions will be discussed.


SS8-4

Comparing imagery exposure or imagery rescripting as a component of prolonged exposure: A randomized controlled trial on the moderating effects of non-fear emotions

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Modum Bad/University of Oslo, Norway

Posttraumatic stress disorder (PTSD) is usually conceptualised as an emotional disorder with excessive fear and avoidance at its core. However, sufferers of PTSD often present other distressing emotions associated with the traumatic event such as anger, shame, guilt, sadness and disgust (e.g. Grey & Holmes, 2008). This has led researchers to hypothesize that other emotions than fear may serve important functions in the development, persistence and treatment of this disorder (e.g. Dalgleish & Power, 2004). Imagery Rescripting and Reprocessing Therapy (IRRT; Smucker, 1995) has been proposed as a treatment to PTSD that is potentially more effective than exposure-based treatments when non-fear emotions are predominant in the trauma symptoms. In this study, 71 patients diagnosed with PTSD were randomly assigned to treatment according to either the standard protocol of Prolonged Exposure (Foa, Hembree & Rothbaum, 2007) or a modified protocol. In the modified protocol, the imaginal exposure interventions were replaced with the imagery interventions from the treatment protocol of IRRT. Several trauma-related emotions, including fear, anger, sadness, guilt, shame and others were assessed before treatment and weekly during treatment. Preliminary analysis of the moderating effects of emotions on the two treatments will be presented.
Symposium 59 – Physical exercise intervention in mental disorders

S59-1

Physical exercise in the prevention and treatment of mental disorders

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The state of the art in the field is outlined. Several studies indicate the usefulness of exercise in prevention as well as treatment of various mental disorders, and these are reviewed. Negative effects of excessive exercise, hypotheses about mechanisms, optimal intensity and forms of exercise, as well as motivation of patients for exercise are also described.

S59-2

Acute psychological effects of high aerobic intensity training in patients with schizophrenia: a controlled trial

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The purpose of this study is to investigate the acute psychological effects of high aerobic intensity training in patients with schizophrenia and other psychotic disorders. We want to examine the short term effects following one session of high intensity aerobic training on psychological variables like mood, state anxiety, wellbeing and psychological distress. Patients with schizophrenia will be compared to two other groups: Patients with non-psychotic mental disorders (anxiety and depression) and healthy people with no mental disorder. The project is currently recruiting participants, and preliminary results will be presented at the conference.

S59-3

Chest pain and palpitations – treatment with CBT and physical exercise: a randomized controlled trial

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Objectives: The aims of the study were to evaluate the course after negative cardiac evaluation for patients with chest pain or palpitations and among the patients with sustained complaints, to compare a three-session manualized cognitive behavioural therapy (CBT) intervention with normal care.

Methods: A sample of 160 consecutive patients with chest pain or palpitations was referred to outpatient cardiac evaluation. They were evaluated before and six months after the negative cardiac evaluation. All with substantial complaints at follow-up (N=60), were offered psychological help, and forty patients were included in the treatment trial. They were randomly assigned to a control condition or three sessions CBT. This mainly consisted of helping patients to alternative interpretations of their complaints, and testing these through exposure to physical exercise. The control group received usual care from their general practitioner.

Results: At attendance, 4% had cardiac disease while 40% had a mental disorder; panic disorder and hypochondriasis being most common. Six months after a negative cardiac evaluation the fear of bodily symptoms and depression had increased. The intervention had significant effects on fear of bodily symptoms, depression, avoidance of physical activity because of worry about the heart, and several aspects of quality of life. Patients kept their gains at one-year follow-up.

Conclusions: A substantial proportion of patients with chest pain or palpitations have sustained worry after a negative cardiac evaluation. Three sessions of CBT including a session with physical exposure were effective treatment for these patients.

S59-4

Physical exercise compared to cognitive behaviour therapy as a treatment for panic disorder: a randomized controlled trial

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The current study is an RCT comparing the effects of physical exercise and CBT in panic disorder (PD). Both treatments were manualized and administered in groups. The sample consisted of 36 patients. Effects of the two treatments were assessed and compared at post treatment as well 6- and 12- month follow-up. Preliminary analyses show that in both interventions patients were improved, and detailed results are presented at the conference.
Symposium 60 – Exploring Obsessive-Compulsive Doubt: New Experimental Studies

S60-1

OCD-like reasoning makes an unlikely catastrophe more credible

**Giele, C.L.; Dek, E.C.P.; van den Hout, M.A.; Engelhard, I.M.; Klein Hofmeijer, F.**
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**Objectives:** Obsessive compulsive (OC)-patients engage in perseveration; prolonging or repeating an action beyond the point its goal of the action is reached. Ironically, repeated checking corrupts confidence in memory and prolonged staring induces uncertainty about perception (van den Hout & Kindt, 2003; van den Hout et al., 2009). The reasoning style exhibited by OC-patients has a perseverative flavour as well. When confronted with a disorder-relevant situation OC-patients argue in lengthy, piecemeal and inventive ways how highly improbable catastrophes may result from innocuous situations. This reasoning consists of small steps between a current situation and a fared catastrophe.

**Methods:** In an experiment with 63 healthy undergraduates, it was tested whether OC-like perseverative reasoning induces feelings of uncertainty about a harmful outcome and makes this outcome more credible. Participants were presented with a neutral situation with a catastrophic improbable outcome. In a pre- and a posttest, they rated credibility and uncertainty about this outcome. In between, two experimental groups generated respectively one or five series of intermediate steps between the situation and the harmful outcome, while a control group carried out a filler-task.

**Results:** Perseverative OC-like reasoning enhanced the credibility of a negative and improbable outcome. Making more different series of intermediate steps did not significantly increase this effect.

**Conclusions:** Patients appear to use this reasoning strategy to make sure they don’t overlook potential harmful sequences of events. However, the findings suggest that the OC-like generation of a cascade of events that may take place between a given state of affairs and a negative outcome, ironically serves to increase the credibility of this feared outcome. Therefore, this safety-strategy seems to be counterproductive and potentially serves to maintain OCD problems.

S60-2

Does de-familiarization reduce the confidence underlying effects of OCD-like checking?

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**Objectives:** Critical aspects of automatization are familiarity with and repetition of stimuli. Hence, automatization is alleged to be one of the essential cognitive phenomena in OCD-like checking. It is suggested that familiarity induced automatization is responsible for the detrimental effects of repeated checking on memory confidence. In this experiment the causal status of the alleged automatization is tested. We will examine whether de-familiarization (by altering the visual characteristics of the checked stimuli) reduces or even eliminates the negative effects of repeated checking on memory confidence.

**Methods:** The study will be carried out with healthy participants and will have a three factorial design: Group (relevant checking vs. irrelevant checking) x Time (pre-test vs. post-test) x Novelty at post-test (yes vs. no). Participants are presented a repeated checking task, in which the to-be-checked stimuli in the post-test are perceptually altered by changing the color of the background for the experimental condition.

**Results:** Data will be analyzed using a RM ANOVA. Theory predicts the occurrence of a three-way interaction: compared to irrelevant checking the relevant checking condition will experience a decline in memory confidence, vividness and detail from pre-test to post-test, but this effect will be smaller for the relevant checking condition for the post-test is perceptually novel.

**Conclusions:** The results of this study will gain insight in the effect of de-familiarization on the negative effects on confidence of automatization. Clinical implications will be discussed.

S60-3

The SPIS (Seeking Proxies for Internal States) Account of Obsessive-Compulsive Symptoms

**Liberman, Nira; Dar, R.**
*Tel Aviv University, Israel*

One of the principal symptoms in patients with Obsessive-compulsive disorder (OCD) is persistent doubt, which can invade many domains of actions and feelings and can lead to a variety of pathological behaviors typical of OCD, including excessive self-monitoring, repeated checking, mental reconstruction, repeated questions and demands for external validation or reassurance. Following both classic and modern models of OCD, we have recently advanced the hypothesis that obsessive-compulsive (OC) symptoms, in particular doubting and checking, are related to a deficient sense of subjective conviction. We suggest that this deficit leads people with OC tendencies to monitor and question their own subjective experiences, thereby further undermining confidence in these experiences. Finally, we suggest that OC individuals develop and rely on „proxies“ to compensate for their deficient subjective conviction. By “proxies” we mean a substitute for the internal state that the individual perceives as more easily discernible or less ambiguous, such as rules, procedures, behaviors or environmental stimuli. In contrast to previous models of OCD, we propose that the deficit in subjective conviction is general, rather than limited to OC concerns such as safety and cleanliness. A series of studies in our lab has provided preliminary evidence for our proposal, which we named the SPIS (Seeking Proxies for Internal States) hypothesis. In these studies, we compared the performance of students who were previously classified as high vs. low in OC tendencies on a variety of tasks that examined the extent of seeking and relying on objectively verifiable proxies in
judging one’s own preferences, perceptions, level of understanding and other subjective states. I will briefly present two of these studies. In the first study, which required participants to find the exact mid-point between two colors, OC tendencies were associated with more steps before deciding on the correct response and with more willingness to “pay” for objective feedback. In the second study, which participants had to understand novel text, OC tendencies were associated with more requests for proxies that were previously judged as irrelevant for understanding the material, such as the physical location of a specific sentence on the page.

**Obsessive-compulsive tendencies and undermined confidence are related to reliance on proxies for internal states in a false feedback paradigm**

**Lazarov, Amit**
Tel Aviv University, Israel

**Objectives:** We hypothesize that obsessive-compulsive (OC) tendencies are associated with a general deficiency in subjective conviction regarding internal states, giving rise to feelings of doubt and uncertainty regarding these stats, which leads to compensatory seeking of and reliance on objectively verifiable indicators (proxies) for these states. The present studies tested this hypothesis using a false biofeedback paradigm in the framework of Bem’s (1972) self-perception theory. Based on the assumption that situations in which confidence regarding internal states is low facilitate self-perception effects, we predicted that high OC individuals and undermined confidence participants, as compared with low OC individuals and control participants, will be more susceptible to self-perception effects in relation to internal states.

**Method and Results:** In Study 1, as predicted, high OC participants were more affected by false biofeedback when judging their own level of relaxation compared to low OC participants. In Study 2 we used instructions that undermined the confidence of non-selected participants in their ability to assess their own level of relaxation. As predicted, undermined confidence participants were more affected by false biofeedback when judging their own level of relaxation compared to control participants. Furthermore, there was a significant relationship between OC tendencies and self perception effects within each group of participants.

**Conclusions:** Our findings show that high OC individuals and undermined confidence participants, as compared with low OC individuals and control participants, are more susceptible to the influence of self-perception in determining their own internal states. These findings support our hypothesis that OCD is associated with a deficit in subjective conviction, giving rise to feelings of doubt and uncertainty, and a compensatory reliance on external or “objective” proxies. This hypothesis may partially account for the development of rituals, which can be seen as external proxies designed to compensate for the loss of internal conviction.

**Symposium 61 – Psychological First Aid Kit as prevention: Low-threshold cognitive self-help approach for children, adolescents, and families**

**The Psychological First Aid Kit (PF)**

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The Psychological First Aid Kit (Raknes 2010 a and b) is a self-help tool aiming to promote health and prevent mental health problems among children (aged 8 – 12) and youth (12 – 18). PF is created by psychologist Solfrid Raknes (text) and Per Finne (design) in collaboration with a group of experienced therapists and mental health writers in Norway: Torkil Berge, Atle Dyregrov, Ida Garlev, Marit Hafting, Bente Storm Mowatt Haugland, Leif Edward Ottesen Kennair, Arne Repål and Steinar Sunde. PF intends to teach the user the basic principles of CBT within an amusing context. PF consists of an information leaflet, exercise sheets called «helping hands» and figurines. The cartoonish drawings and the red and green plastic figurines in the PF are designed to make the self-help principles for young people easier and more attractive to learn. The PF is inspired by the wave of self-help literature for adults, the feedback from young exchange students learning the basic principles of CBT before going abroad on an exchange program, and from Paula Barrett’s treatment program FRIENDS. Hence, we aspired to make a self-help material that could be useful for many kids and young people. PF can be applied towards common difficulties in everyday life as well as in therapeutic settings. As mental illnesses are becoming the most expansive and challenging health problem in the industrialised countries, material for guided self-help in preventing mental health problems can be one way of reducing the epidemic impact of this problem. Since PF was published by Gyldendal for the Norwegian market in 2010, we have experienced an overwhelming interest for the project. In the presentation, the content of the Psychological First Aid Kit will be demonstrated, and the developmental process of PF will be described. Further, the process of making this tool available and known will be related. The presentation aims to inspire and share knowledge that can be useful in the process of further development and dissemination of self-help materials.

Psychological First aid kit in short-term therapy for children and adolescents who have been to forensic interviews

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Childrens house Oslo, Norway

In Norway seven «children’s houses» have been opened during the last four years with the aim of giving better services to children potentially exposed to sexual abuse or violence. Forensic interviews, medical examination and short-term therapy are offered in the same localisation. The therapist follows the forensic interview conducted by special trained police officers. During the forensic interviews, children and youth often convey automatic thoughts about self-reproach for the abuse, thoughts about danger or negative thoughts about themselves. Some have already developed anxiety, posttraumatic stress or depression symptoms, while others are vulnerable to developing these symptoms as a result of having been highly exposed to potentially traumatic events. The Psychological First aid kit (PF) is experienced as a useful tool as unhelpful thoughts can be challenged during a few sessions. Maladaptive behaviour like avoidance can be mapped in relation to preceding thoughts and feelings. Caregivers are necessary co-therapists when gradual exposure to the avoided situations is planned and implemented. The PF helping hand is used for a variety of situations, but also for planning exposure and even for planning safety actions when necessary. PF is easy to use even for therapists without extensive cognitive therapy training. This presentation will examine aspects of the use of PF in short-term therapy.


Psychological First aid kit in couple and family therapy

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Research Institute, Modum Bad, Norway

Cognitive therapy is a common mode for the treatment of couple and family problems. However, this approach demands extensive mapping of e.g., individual schemas that may influence destructively on the relational interplay. Using the Psychological First aid kit gives an easier access to the identification of individual patterns of core vulnerability and coping strategies. In this method, the situation, emotions/bodily sensations, automatic thoughts, and behavior are addressed and questioned whether these reactions are in correspondence with the desired individual state or relational goal. If perceived as maladaptive, a motivation in modifying these reactions can form the collaborative effort in therapy. In particular, the client is encouraged to question and challenge the automatic thoughts that in turn are followed by behavior experiments. The client may need to ally with a supporting team that can coach and encourage on welcoming alternative thoughts and behaviors. Based on such experiments, the client may experience positive changes in individual emotions and relational distress. Because individual and relational factors interact, these changes may in turn have an impact on the members of the couple or family, for instance in a more constructive way of communication and interplay. The presentation will demonstrate the use of this tool in couple therapy, also discussing how it may enhance the couple and family’s ability for self-help further on.


Dissemination and Evaluation of Psychological First Aid Kit

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Center for Child and Adolescent Mental Health, Eastern and Southern Norway, Norway

Psychological First Aid Kit (PFAK) is described as promising in Youngmind (“Ungsinn”) - a Norwegian knowledge base for evidence based interventions in treatment, prevention and health promotion in child and adolescent mental health services. PFAK is designed as a self-help tool, and as an approach to be used in professional settings with e.g. therapists, teachers, child protection workers and community health nurses. So far PFAK has not been systematically implemented or evaluated, and a training- and user manual need to be developed. The Norwegian Directorate of Health has allocated 1.8 million Norwegian Kroner to the Centre for Child and Adolescent Mental in Health in the regions of Eastern, Southern, and in Western Norway for dissemination and evaluation of the PFAK tool trough training of professionals working in primary health care settings. The presentation will describe the ongoing project of the dissemination and evaluation of the PFAK the way it is implemented in community based Family Houses or Family Centers. These are multidisciplinary models for organizing primary health care services in order to provide the best care possible for children, adolescents and their families. The aim of the project is (1) to develop guidelines for how to use PFAK, (2) to develop standardized training, (3) to implement the training, (4) to evaluate how and in what settings the tool has been used, and (5) to explore if it has been experienced as useful. This project will form the basis for further implementation and evaluation of the effect of PFAK as a tool in prevention and/or treatment of psychological difficulties with children and adolescents.

Symposium 62 – The effects of psychological support on post trauma recovery following natural disasters in Iceland

S62-1

Disaster victims utilization and perceived effectiveness of post-disaster psychological first aid offered in Iceland after catastrophic avalanches in 1995
1University of Iceland, Iceland; 2University of Iceland and Landspítali - The National University Hospital of Iceland, Iceland; 3Health Care Institution of West Iceland, Iceland; 4Psychologist in private practice, Iceland

Introduction: Psychological support was first offered Icelanders in 1995 after avalanches struck two villages, Sudavik and Flateyri, in the western part of Iceland. The disasters took the lives of many inhabitants and caused immense damage. The aim of this study was to assess victims utilization of psychological support services and whether victims viewed the support as effective.

Method: Participants were residents (n= 291) of the disaster area who were 18 years old and older in 1995. Questionnaires were sent to participants three to four months after the avalanche in Sudavik and 12-14 months after the avalanche in Flateyri. Posttraumatic stress symptoms were assessed with the Impact of Event Scale (IES) and Post-traumatic Symptom Scale (PTSS-10). General health status was assessed with the General Health Questionnaire 30-item (GHQ-30). Psychological support was assessed with questions about whether victims had received psychological first aid and whether they viewed the assistance as effective.

Results: The results show that the majority of respondents, 67% received psychological support. Of those respondents who received psychological first aid, 78% were very satisfied or satisfied with the assistance they received. Results indicate that inhabitants who received psychological first aid were more likely to have poorer general health and suffer from hyperarousal symptoms than those who did not receive assistance.

Discussion: These results provide important insight on the reach and effectiveness of the first psychological post-disaster intervention in Iceland.

S62-2

Early predictors of PTSD 12 months following the 2008 earthquake in Iceland
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Introduction: Historically, earthquakes have been a destructive natural force in Iceland, the most earthquake prone area in Northern Europe. Despite strong earthquakes in Iceland in the last decade, very little scientific attention has been given to their psychological effects and what can be done to prevent the development of long term problems among survivors. On May 29th 2008 a strong earthquake hit South Iceland, causing widespread and significant damage. The purpose of the current report was to examine the psychological impact of this earthquake and how individuals living in the affected area during the earthquake utilized and perceived the extensive professional psychosocial support that was provided after the event.

Method: Participants were 979 individuals (aged 18 to 80 years) who were randomly selected from the National Registry of Iceland and experienced the earthquake as a traumatic event. After agreeing to participate, individuals received questionnaires which included questions about the perception of the earthquake, if they received assistance following the earthquake and questionnaires on post trauma symptoms and depression.

Results: Results showed that 7.0% of participants reported significant post trauma symptoms and 7.1% reported moderate to severe depressive symptoms 2 months following the earthquake. Only 12% of participants reported seeking psychosocial support while the majority (77%) did not feel they needed additional support beyond that of their family and friends. Women were three times more likely than men to seek support. Results show that individuals who reported significant post trauma symptoms were more likely to seek psychological first aid from professionals.

Discussion: The current study provides a unique insight into the comprehensive and costly psychosocial support provided in the aftermath of a recent disaster.

Conclusion: The current findings raise important questions on the cost effectiveness of these services and how best to implement psychosocial support following natural disasters.
Experience of volcanic eruption and effects of support on mental health - a population-based study

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Background: Volcanic eruptions have often occurred in countries with a weak infrastructure and limited means to carry out comprehensive and controlled studies. The Eyjafjallajökull eruption poses unusual opportunities to study the health effects of a volcanic eruption. Iceland presents a modern and affluent society, with a strong infrastructure, not least a well equipped and well controlled health care system and a nationwide social security network. A specific aim of this study was to investigate the effects of support received during the eruption on later mental health.

Methods: In fall 2010, all inhabitants 18-80 years old, living in an area close to the eruption, were contacted (N=1500). They were sent a questionnaire, including questions on demograpics, physical health (respitory, diseases and other somatic symptoms), psychological health (stress and other psychological morbidity), levels of experience of exposure to the eruption (ash, sounds, smell etc) and utilization of services provided. In addition, a control group of 700 people, living in northern part of Iceland, matched for age, was included for comparison.

Discussion: Results are currently being analysed and will be focusing on psychological health consequences for this particular study. They will hopefully give knowledge on how to improve long-term mental health for a population experiencing a volcanic eruption.

Psychosocial support in natural disasters: The civil protection plan in Iceland

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Introduction: Earthquakes, volcanic eruptions and avalanches are common natural disasters in Iceland. Due to the often immense negative effects of disasters an increased attention has been on developing empirically informed early psychological interventions to reduce suffering and preventing the development of chronic psychological problems.

Method: In Iceland the Department of Civil Protection and Emergency Management (DCPEM) is responsible for organizing and implementing measures to protect the well being and safety of the public. In 2010 the DCPEM released a general emergency response plan on how to implement psychosocial support in emergencies. The plan was developed by the DCPEM in collaboration with the Trauma Center at the national hospital, the Icelandic Red Cross, the Directorate of Health, social services and the Evangelical Lutheran Church of Iceland. This plan is based on empirically informed guidelines presented by the World Health Organization and different experts on trauma recovery. Also, the plan has is based on considerable field experience that has formed over the past 16 years in Iceland.

Results: The main goal of the plan is to secure psychosocial support during disasters by coordinating different organizations and their responses during a disaster. The primary focus of the psychosocial disaster plan is to maximize the likelihood of people receiving psychosocial support in the aftermath of a major disaster, reduce the initial stress caused by the disaster and to foster short- and long-term adaptive functioning and coping with the aftermath of the disaster. This plan recognizes that most individuals recover without formal intervention but stresses the importance of prevention by identifying individuals at risk for the development of long term problems and providing the necessary psychological services to foster recovery.

Discussion and Conclusion: The practical and empirical support for the disaster plan will be discussed in the light of scientific findings presented at the symposium.
Symposium 63 – Psychotherapy in older age: Interventions for patients and/or their caregivers

**S63-1**

**Telephone-based Intervention for Caregivers of Stroke Survivors Martin Hautzinger, Klaus Pfeiffer, Dennis Beische, Clemens Becker**

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The goal of our project was to treat burnout, stress reaction and resignation in caregivers by a telephone-based intervention. A further goal was to prevent expensive full-time care of stroke patients in an institution by supporting their family caregiver. Eligible caregiver were intensively assessed and then randomized either to the telephone-based intervention (TIPS) or to regular support available for caregiver (CAUS). TIPS is a problem solving oriented cognitive-behavioral intervention including two home visits and 15 telephone sessions. Both treatment groups were followed over one-year. Major outcome criteria were life quality and depressive symptoms in caregiver as well as the need for professional and institutional help. We included 112 caregiver and present final analysis and results of this controlled study.

**S63-2**

**Comparing cognitive-behavioral (CBT) and acceptance and commitment (ACT) individual therapy in dementia caregivers**

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Caring for an older relative with dementia is a highly stressful situation which usually lasts for years, leading many caregivers to develop important levels of emotional distress (depression/anxiety). Among psychotherapeutic approaches with dementia caregivers, cognitive-behavioural (CBT) interventions show the highest effect sizes, but their efficacy is still moderate. These interventions are mainly focused on changing caregivers’ maladaptive thoughts and beliefs, which are considered to lead to maladaptive coping and emotional distress. However, dementia caregiving also involves situations (e.g., progress of dementia, the associated memory and attention deficits experiences) and internal events (e.g., aversive emotions and thoughts) which are very difficult to be changed. In recent years, the importance of fostering the acceptance of aversive experiences in interventions with caregivers has been highlighted. In fact, recent studies find evidence suggesting that experiential avoidance, or the tendency to avoid or minimize contact with aversive internal experiences (emotions and thoughts), may be potentially involved in the development and maintenance of emotional distress in caregivers. Acceptance and Commitment Therapy (ACT; Hayes, Strosahl & Wilson, 1999) offers new insights to help us gain a better understanding of the core mechanisms involved in caregivers’ distress, and to develop new strategies to help them cope better with caregiving. Fostering caregivers’ ability to accept unavoidable aversive experiences in order to be able to continue actively pursuing their valued life directions seems to be a very promising therapeutic pathway. In this work, we will describe a currently running research project aimed at the comparative analysis of the differential efficacy of brief ACT and CBT individual interventions with caregivers, as a function of caregivers’ profile (scores on experiential avoidance, emotional awareness and maladaptive beliefs about caregiving). A discussion on the role of experiential avoidance in caregiving will be offered and preliminary results of the study will be presented.

**S63-3**

**CBT in patients with incipient Alzheimer’s disease**

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In the early stage of Alzheimer’s disease, symptoms of depression and anxiety are frequently occurring, accelerating the dementing process. CBT interventions, especially increasing the number of pleasant activities, have proven to be successful in reducing these symptoms. However, materials and methods have to be adapted to the patients’ capacities, and caregivers have to be involved in the therapy. In the CORDIAL study, a randomized-controlled trial comparing a combined CBT/neuropsychological intervention with standard treatment (n=201), depression was one of the outcome parameters. Geriatric depression scale scores post treatment and at 6-months follow-up were reduced in female patients, and self-efficacy at follow-up was higher in the CBT group compared to controls. Therapy adherence and acceptance were very high. These results are encouraging as they demonstrate the feasibility of CBT in elderly patients with cognitive disorders and provide further evidence for its effectiveness. However, gender-specific aspects and the development of outcome measures deserve further research.
Cognitive-behavioral telephone intervention for dementia caregivers: Evaluation of short and long term effects

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Introduction: Most patients with dementia live in home care, provided by female relatives. Family caregivers show high prevalence rates of morbidity and mortality, as well as of anxiety and depression. Therefore effective interventions are needed to prevent physical and mental illness. So far, there are very few evidence based interventions that adapt to the special situation and motivation of family caregivers. In this presentation a newly developed innovative and resources activating treatment for family caregivers of persons with dementia is introduced, and results of a randomized, controlled trial are presented.

Method: A multicenter randomized controlled trial (N=229) was conducted to compare treatment group, treated control group (relaxation techniques) and untreated control group. Primary outcome measures were caregiver’s subjective distress (BIZA-D) and perceived treatment success (GAS). Secondary outcome measures were physical complaints, depressive symptoms and quality of life. All measures were administered before treatment (pre), after treatment (post) and six month after treatment (follow-up).

Results: Analyses of process data show that 78 % participants of the intervention group found the treatment very helpful compared to 45% in the treated control group. Caregivers of the CBT intervention group show significant increases in quality of life and reduction in body complaints in comparison to both control groups.

Discussion: Discussion focuses on both the implementation of special treatments for caregivers of persons with dementia into the health system and on our experiences with practicability and acceptance of the intervention for family caregivers.

Symposium 64 – Case conceptualization and treatment of Body Dysmorphic Disorder

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Learning theoretical models of BDD emphasizes evaluative and operant conditioning in the development and maintenance of BDD (Neziroglu et al., 2008). In the development of BDD classical conditioning, i.e. evaluative conditioning is thought to play an important role. A formerly neutral or positive aspect of the appearance obtains a negative valence through association with distressful or even traumatic events. BDD patients indeed often report traumatic events preceding the development of BDD and intrusive images referring to these events (Osman, et al., 2004). The association between the conditioned stimulus (CS) and traumatic memory (UCS/UCR representation) can be of a sequential or referential nature. Interventions are selected based on the nature of this association. CBT interventions, which are most often described in the literature, are exposure and response prevention (ERP) and cognitive techniques. These techniques can be used to falsify sequential associations. However, although these interventions successfully weaken the catastrophic expectations they will not affect the negative valence of patients’ appearance. To address these referential associations counter conditioning and techniques for the processing of traumatic memories might be used. Successfully applied these interventions might free the way to the development of a more positive meaning. An overview of the learning theoretical model of BDD and an algorithm for the selection of interventions is presented.

Visual strategy in analogue BDD individuals and its implications for BDD treatment

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Body Dysmorphic Disorder (BDD) is defined as a preoccupation with a perceived defect in appearance. One explanation assumes that perceptual biases (i.e., selectively attending to particular body parts, leading to heightened self-awareness and to a subjectively perceived magnification of these bodily aspects), maintain BDD symptoms. This suggestion was tested and confirmed by Jansen, Nederkoorn and Mulkens (2005), in a sample of eating disordered patients. The authors exposed eating symptomatic and undisturbed control participants to digitalized pictures of their own body and a control body, while eye movement registration was used to measure the degree of visual selective attention. They found that high symptomatic participants focused relatively less on their self-defined ‘beautiful’ body parts, compared to their self-defined ‘ugly’ body parts. In contrast, in control participants exactly the opposite pattern was found. Mulkens & Jansen (2009) suggested that BDD patients might suffer from a similar visual strategy and discovered that analogue individuals rated their face as less attractive after 3.5 minutes of mirror gazing, compared to a control group. The present study investigated the actual visual strategy of facially dissatisfied individuals and control subjects when looking at a digitalized picture of themselves and at a control picture. Twenty-eight facially dissatisfied (analogue BDD individuals) and facially satisfied (control) female students were exposed to digitalized pictures of their own face and a neutral control face while eye movements were registered. It was hypothesized that the dissatisfied individuals would show a selective visual attention bias towards their own self-defined ugly facial aspect and towards other people’s beautiful facial aspect, whereas the satisfied individuals would show an opposite pattern. Although the results did not confirm this hypothesis, the findings do suggest that facially dissatisfied individuals pay more attention to specific aspects of their face – among which their own ugly facial aspect - instead of observing their face holistically, whereas they observe other people’s face holistically instead of selectively attending to these people’s flaws. In contrast, the satisfied individuals’ viewing pattern was opposite. The results of this study have implications for treatment. Teaching patients to redirect their attention - away from the self and the perceived flaw(s) towards the task and the external environment - plus directing attention more to the body as a whole, could be helpful treatment strategies. Task Concentration Training (TCT) is such a technique that might be considered for BDD.


Trauma treatment (EMDR) as part of CBT for Body Dysmorphic Disorder

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Eye Movement Desensitization and Reprocessing (EMDR) is a widely used and acknowledged treatment modality for PTSD but is still in its experimental phase for other disorders, such as BDD. With EMDR, the vividness and emotionality of unpleasant mental representations, which resulted from one or more traumatic events can be, reduced (Günter & Bodner, 2008). BDD patients often report traumatic events preceding the development of BDD and intrusive images referring to these events (Osman, et al., 2004). Brown et al., (1997) were the first to treat BDD patients for their traumas, using EMDR. The results of their case series were promising but lacked a theoretical base. The learning theoretical model of BDD provides a strong base for the selection of interventions for individual patients and the application of EMDR. This presentation outlines how to select the essential target memories for EMDR treatment in BDD patients. One way is to order etiological and/or aggravating events meaningfully on a time line and select those memories for processing which preceded an increase in BDD symptoms. The other way is to select targets related to anxious expectations and avoidance behaviour. Video fragments illustrate the EMDR process in a BDD patient.

**Symposium 65 – Prolonged exposure for PTSD among people with substance use disorders**

**S65-1**

**Overview of COPE - Concurrent Treatment of PTSD and Substance Use Disorders with Prolonged Exposure**

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Individuals with PTSD are two to four times more likely than individuals without PTSD to have a comorbid substance use disorder (SUD). Among treatment-seeking individuals with SUDs, the prevalence of lifetime PTSD has been reported as high as 50%. Interventions that include exposure-based techniques, which are considered the treatment of choice for PTSD, have not been well studied in substance abusing populations. Concurrent Treatment of PTSD and Substance Use Disorders with Prolonged Exposure (COPE) is a manualized, 12-session psychotherapy that combines both imaginal and in vivo prolonged exposure techniques for PTSD with cognitive behavioral techniques for SUDs. Preliminary studies using COPE demonstrate promise and feasibility, and dispel the myth that substance abuse must be treated before trauma work can be implemented. This presentation will describe the COPE intervention and modifications that have been made since its initial development.

**S65-2**

**Is exposure therapy for post traumatic stress disorder efficacious among people with substance use disorders? Findings from a randomised controlled trial**

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**Objectives:** To present findings from a randomised controlled trial which examined the efficacy of an integrated treatment for substance use disorders (SUD) and post traumatic stress disorder (PTSD).

**Methods:** 103 participants were recruited from SUD treatment services and community referrals in Sydney, Australia (83% response rate). Participants were randomly assigned to receive either i) integrated treatment (IT) for their SUD and PTSD (n=55); or ii) treatment as usual (TAU) for their SUD (n=48). Components of the IT included psychoeducation, CBT for SUD and PTSD, imaginal and in vivo exposure. Participants completed interviews at baseline, 6-weeks, 3- and 9-months follow-up. Over 70% of the sample were re-interviewed at each time point. Intention-to-treat analyses were conducted comparing the outcomes of those who received the IT versus TAU.

**Results:** The mean age of the sample was 35.7 years and 62% were female. The most commonly used substances were benzodiazepines (73%), cannabis (69%), alcohol (67%), heroin (45%) and amphetamines (42%). All participants met DSM-IV criteria for dependence and PTSD. The most commonly reported traumas involved physical or sexual assault. Over 75% had experienced childhood trauma; 55% reported childhood sexual abuse. Over the 9-month follow-up period, both the IT and TAU group evidenced improvements in the severity of their substance use, however, the IT group demonstrated significantly greater improvements in relation to the frequency and severity of PTSD symptoms. The TAU group on the other hand evidenced little change in their PTSD symptoms.

**Conclusion:** Contrary to popular opinion, exposure therapy may be used effectively to treat PTSD among people with SUD.

**S65-3**

**Concurrent Treatment of Co-Occurring PTSD and Substance Use Disorders Among Inner-City Individuals: A Case Example**

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**Objective:** This presentation will provide an overview of the research design, aims, and a case example from a randomized clinical trial being conducted in New York City, United States. This trial assesses the relative efficacy of two active treatments [Concurrent Treatment of PTSD and Substance Use Disorders with Prolonged Exposure (COPE) and Relapse Prevention Treatment (RPT)] compared to a delayed treatment control group for inner-city individuals with co-occurring Posttraumatic Stress Disorder (PTSD) and Substance Use Disorders (SUD).

**Methods:** We aim to recruit and randomize 168 participants who will be assessed at pre- and post-treatment as well as 1-, 2-, and 3-months post-treatment follow-up points. Study interventions will be delivered over a 12-week period. The primary outcomes to be examined will be PTSD symptom severity. Secondary outcomes are substance use symptom severity, global psychiatric symptom severity, and treatment retention and compliance.

**Results:** To date, 69 participants have been randomized to our trial. A case report of a participant who received the COPE treatment will be presented. Implementation issues will be discussed.

**Conclusion:** Preliminary findings suggest the COPE treatment is a promising and feasible treatment for inner-city individuals with co-occurring PTSD and SUD.
Integrated Treatment of Co-Occurring Substance Use Disorders and PTSD Among Military Personnel and Veterans of OIF/OEF

Therese K. Killeen
Medical University of South Carolina, United States

Among current United States military populations, the prevalence of PTSD post deployment is estimated to be between 11% – 19%, with 60% – 80% also meeting criteria for a substance use disorder (SUD) (Seal et al., 2009). Data collected from April 2002 to March 2008 showed that 22% of Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF) veterans who received health care services had a new PTSD diagnosis. However, only 25% of OIF/OEF veterans with PTSD receive minimally adequate treatment (Seal et al., 2010 Tanielian & Jaycox, 2008). Prolonged exposure has not been largely adopted in clinical practice for veterans, and even less so for veterans with comorbid PTSD and SUD. Rosen et al. (2004) found that fewer than 20% of PTSD specialists in the Veterans Administration (VA) system conduct prolonged exposure. Focus groups conducted with OIF/OEF veterans at our site reveal that a significant proportion endorse the use of substances to self medicate distressing symptoms of PTSD. Furthermore, veterans indicated that concurrent treatment for both PTSD and SUDs conducted by the same clinician is preferred. A case report from an OIF/OEF marine who received 12 sessions of COPE will be presented.


The Relationship between Non-Suicidal Self-Injury and Temperament in Male and Female Adolescents based on Child- and Parent-Report. (Part of symposium of In-Albon T.)

Laurence, CLAES1; Baetens, I.1; Willem, L.1; Muehlenkamp, J.2; Bijttebier, P.1

1K.U.Leuven, Department of Psychology, Belgium; 2University of Eau Claire, Wisconsin, United States

Objectives: This study investigates differences in temperament dimensions between community adolescents with and without non-suicidal self-injury (NSSI). Data were collected from 251 adolescents (62.9% females).

Method: NSSI was assessed by means of the Self-Harm Inventory (SHI; Sansone, Songer, & Sellbom, 2006) and temperament by means of the Early Adolescent Temperament Questionnaire-Revised (EATQ-R; Ellis & Rothbart, 2001) filled out by the adolescent and his/her parent(s).

Results: Almost 27% of the adolescents showed at least one type of NSSI and there were no significant gender differences in the overall frequency of NSSI. However, considering specific NSSI methods, females showed significantly more cutting and scratching compared to males. Self-injurious adolescents showed significant higher scores on Negative Affectivity and lower scores on Effortful Control than adolescents without NSSI. Finally, Lack of Effortful Control and Negative Affectivity were the strongest predictors of NSSI in adolescents.

Conclusions: Implications of these findings for the treatment of NSSI in community adolescents are discussed.


Attitudes and temperament and character traits of pupils with deliberate self harm in Basel

Schmid, S.C.M.
Universitäre Psychiatrische Kliniken Basel, Switzerland

Schmid M., Rauber R., Weizenegger B., Schmeck K. Department of Child and adolescent psychiatry of the University Basel, Switzerland Objective: There are only little data among the attitudes of pupils about children and adolescents who practice self - mutilation. There is some evidence that adults and adolescents with Borderline personality disorder differ in the temperament and especially character dimensions in Cloninger’s personality model but there aren’t any studies with self-harming adolescents in community samples.
Method: The prevalence of deliberate self harm and the attitudes was assessed by a self developed questionnaire and the Mousi. For a psychopathology screening the SPS-J was employed. Temperament and character traits were assessed by Junior Temperament and Character Inventory (JTCI-R 12-18). Sample: The sample consists out of 476 pupils aged from 14 to 17 Years (SD = 0.6) (54% female). The representative sample includes 10 schools with the whole spectrum of academic requirements from special schools up to private schools.

Results: The prevalence rates in Basel verified the findings from other European countries. The attitudes of pupils towards deliberate self harm are differentiated and rather neutral and not uncritical. Adolescents suffer from deliberate self harm differ in temperament and especially character traits from the other pupils and the German norm population.

Facial mimicry of dynamic emotional facial expressions in adolescents with non-suicidal self-injury

In-Albon, Tina1; Buerli, M.B.; Krummenacher, K.K.; Schmid, M.S.; Wilhelm, E.H.

1Institute of Psychology, University of Basel, Switzerland; 2Clinical Child and Adolescent Psychiatry, Switzerland; 3Clinical Psychology, University of Basel, Switzerland; 4University of Salzburg, Austria

Objectives: An important factor in social interactions is the way one responds to emotional facial expressions. Facial mimicry, the tendency by which people in social situations imitate or mimic the facial expressions of others, encourages relationships and empathy and therefore represents an important social reaction that may also be deficient in non-suicidal self-injury (NSSI). Facial mimicry is an important prerequisite for emotion regulation (ER). Because adequate ER is important for initiating and maintaining interpersonal relationships, adolescents with NSSI experience interpersonal communication as problematic and distressing, further contributing to their symptoms. This study investigates whether patients with NSSI have deficits in facial mimicry, which could lead to problems in social interactions, which could trigger NSSI and lead to a vicious circle, perpetuating the problem.

Methods: Therefore, we investigate participants’ facial reactions to different dynamic emotional facial expressions (anger, sadness, neutral, sadness, anxiety, happiness) using facial electromyography (EMG). For the dynamic facial expression we use a morphing technique, in which participants see sequences of neutral faces slowly changing to full-intensity of emotional expressions. In addition to the facial mimicry, facial emotional recognition and the influence of the current emotional state are investigated.

Results: So far, we investigated 12 female patients with NSSI, though recruitment is ongoing. Preliminary results indicate that the facial mimicry effect could be replicated using dynamic facial expressions. Further results will be presented and discussed.

Online qualitative Non Suicidal Self-Injury (NSSI) data: Problems, practicalities and benefits

Rodham, Karen; Gavin, J.
University of Bath, United Kingdom

Capurro and Pringel (2002: p189) suggested that “being human is more and more a matter of being online”. In the light of this statement, we explore the problems, practicalities and benefits of using the Internet to collect qualitative NSSI data. Throughout the presentation we draw from our own work and that of others to illustrate the points being made. We begin by focusing on the ethics of conducting research in the online environment, and in particular on the ‘publicly private’ vs ‘privately public’ debate. We also explore issues of consent, confidentiality and how to protect the researcher and the participant in the online environment. We then identify the potential benefits for researchers of turning to the Internet to collect data about NSSI. These include: ability to analyse naturally occurring interactions, ease of data collection and transcription, ability to overcome travel obstacles and concomitant facilitation of cross-cultural comparisons. In conclusion we suggest that whilst the Internet is a fast changing, multi-layered exciting forum which requires flexibility and ingenuity on the part of the researcher, the benefits of working in the online environment outweigh the costs. (Abstract submitted as part of a symposium)
Symposium 67 – How to change the way people see the world: New developments in cognitive bias modification

S67-1
Promoting positive imagery in depression using cognitive bias modification: first steps in the development of a novel treatment
Blackwell, S.E.; Holmes, E.A.
University of Oxford, United Kingdom

Objectives: Depression is characterized by negative interpretation biases (Beck, 1976), that is a tendency to interpret information in a negative way. Depressed mood is also associated with a deficit in generating positive imagery about the future (Holmes, Lang, Moulds, & Steele, 2008). A Cognitive Bias Modification (CBM) paradigm targeting both interpretation bias and positive imagery may therefore have particular potential in developing innovative treatments for depression (Holmes, Lang, & Deeprose, 2009). However, translating a paradigm from the laboratory to the clinic inevitably poses a number of challenges. The current study aimed to bridge this gap by testing the effectiveness of a CBM paradigm targeting imagery and interpretation with a clinical sample of participants experiencing a current major depressive episode, while using participants’ feedback to develop the package from a laboratory procedure to one suitable for future clinical implementation and testing (Blackwell & Holmes, 2010).

Methods: A single case series design was used to investigate the impact of repeated sessions of this CBM paradigm on the interpretation bias, depressive symptoms, and mental health of participants. Seven participants completed daily sessions of CBM at home for one week. Outcome measures were completed pre and post a one-week baseline period, and after the week of daily CBM. Depressive symptoms were also assessed at a 2-week follow-up.

Results: Four of the seven participants demonstrated improvements in depressive symptoms, bias, and/or mental health after one week of CBM, with improvements in depressive symptoms maintained at follow-up. Participants’ feedback of their experience of the CBM provided novel insights into the success or otherwise of a repeated sessions paradigm using mental imagery.

Conclusions: This initial investigation of a CBM paradigm targeting imagery and interpretation in depression provides some promising preliminary evidence for its effectiveness, paving the way for the development of a novel computerized treatment for depression.


S67-2
Multifaceted cognitive bias modification in prevention of social anxiety: Changes in anxiety and cognitive processes
De Hullu, Eva; Sportel, B.E.; de Jong, P.J.; Nauta, P.J.
University of Groningen, Netherlands

According to current models of social anxiety, cognitive vulnerability factors play a major role in the etiology of social phobia. Socially anxious children show an attention bias towards emotionally threatening information and they interpret ambiguous information as threatening relative to non-anxious children. Recent developments in the field of experimental psychopathology have shown that cognitive bias modification (CBM) procedures can be successfully applied to reduce anxiety symptoms. Since CBM promises to be a very cost-effective method to attenuate anxiety vulnerability in highly anxious individuals, we developed a multifaceted CBM training targeting attentional bias, interpretive bias, automatic threat-related associations, and implicit self-esteem in adolescents at risk for social anxiety. This study is part of a larger project (www.projectpasta.nl), aimed at the prevention of social anxiety in secondary school children. A group of 156 adolescents (aged 12-14) at risk for developing social anxiety disorder (elevated social phobia scores but without clinical anxiety disorders) were assigned through a randomized block design into the no-treatment control group or Cognitive Bias Modification (CBM) training. The CBM training consisted of 20-session training, delivered twice a week and supported by telephone and e-mail. We compared children in CBM condition and the no-treatment control condition at baseline, post-treatment, 6-months, 12 months and 24 months follow-up. The focus of the current presentation will be on the effects of CBM on the targeted processes, and how changes in these processes are related to change in social anxiety symptoms. Preliminary results show that the interpretive biases changed significantly in the CBM condition, with large effect sizes, and that the gains were maintained at follow-up. The important question is, however, whether this change in interpretive bias is related to change in symptoms of social anxiety. Results of a mediation analysis will be presented at this symposium.

S67-3
Does working memory training change depressive symptoms?
Onraedt, Thomas; Koster, E.H.W.
Ghent University, Belgium

Objectives: Cognitive impairments at the level of attention and memory biases play an important role in depression. As a central construct within information processing, working memory operations might be underlying both attention and memory biases. Previous cross-sectional research showed that depressed people have difficulties controlling negative emotional information in working memory. In particular, inhibition or updating of previously relevant negative information seems to be problematic.
Thus, there is evidence that a depressed and/or stressful state has a detrimental effect on working memory functioning. However, disturbed working memory processes can also be seen as a potential risk factor for the development, maintenance or relapse of depression.

**Method:** Because cross-sectional research cannot tell us anything about the causality of this relation, an experimental design is needed. In order to demonstrate the presumed causal influence of working memory on depressive symptoms, our research tries to manipulate working memory by using a dual n-back task as training protocol, to subsequently monitor the effects on depressive symptoms. In previous research, this dual n-back task improved working memory performance and fluid intelligence. The results of this study will be presented on the EABCT conference.

**Conclusion:** If working memory training proves to be effective, this will contribute to our knowledge of working mechanisms of depression. Moreover, it can be a valuable supplement to the current therapies for depression.

Joormann et al, J Abnorm Psychol 2008; 117 : 182-192

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**S67-4**

**Moving toward and moving away: Symbolic approach avoidance responses induce implicit and explicit evaluations bias**

Woud, Marcella Lydia; Maas, J.; Becker, E.S.; Rinck, M. Radboud University Nijmegen, Netherlands

Human behavior can sometimes be predicted with a level of certainty: we tend to approach objects we like, and avoid those we dislike. Scientific research along these lines supports this notion. However, due to the bidirectional link between approach-avoidance responses and automatic behavior, the opposite causal direction should also hold true. The present research investigated whether symbolic approach-avoidance responses can influence the implicit and/or explicit evaluation of facial stimuli. Faces with a neutral expression were shown on a computer screen, and participants were instructed to repeatedly move a manikin figure either towards (approach) or away (avoidance) from the face stimuli. Whether the manikin had to approach or to avoid the face was determined by the background color of the face. An affective priming task was used to evaluate implicit changes in face likeability, whereas a direct rating task was used to assess explicit changes. Results revealed that the experimentally-established contingency between symbolic approach-avoidance responses and facial stimuli led to an operant evaluative conditioning effect: we found training congruent changes in liking of the faces in both implicit and explicit evaluations. This presentation will summarize these findings and will discuss their clinical and therapeutic implications. Dysfunctional approach-avoidance tendencies play a prominent role in psychological disorders such as addictions or anxiety disorders. Hence, this approach-avoidance training paradigm may complement current Cognitive Bias Modification (CBM) techniques and may serve as a beneficial, therapeutic tool.

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**S67-5**

**Handheld attention bias modification treatment targeting social anxiety and worry: Feasibility and efficacy in a randomized controlled trial**

Enock, P.M.1; Hofmann, S.G.2; McNally, R.J.1

1Harvard University, United States; 2Boston University, United States

Multi-session attention bias modification (ABM) treatment reduces social anxiety and worry, compared with placebo (PBO) training (for a review, see Bar-Haim, 2010). We tested whether results generalize to handheld devices in the first feasibility study and randomized controlled trial (RCT) of handheld ABM.

**Study 1.**

**Methods:** In the feasibility study (Enock & McNally, 2010, unpublished), we recruited undergraduates (n=16) who owned an iPhone, iPod Touch, or Android phone and reported high levels of social anxiety, worry, or both. A 1- or 2-week baseline of PBO preceded 3 weeks of ABM. Participants trained on their devices for 3 sessions daily and completed online self-report measures 4 times. The same face pairs were presented (for 500 ms) in the dot-probe task to ABM and PBO groups: In the ABM condition, probes always replaced neutral faces, whereas in the PBO condition probes replaced neutral and disgust faces equally often.

**Study 1,**

**Results:** Participants completed an average of 73.5% of sessions. From the start to end of the study (a length of 4-5 weeks), symptom scores decreased (Social Interaction Anxiety Scale, t(15)=3.50, p=.003, Cohen’s d=-1.07; Liebowitz Social Anxiety Scale, t(15)=4.76, p<.001, d = -.85; Penn State Worry Questionnaire, t(15)=2.67, p=.018, d =-.64). Comparisons between symptom changes that occurred during ABM and PBO periods were inconclusive.

**Study 2,**

**Methods:** To test the efficacy of handheld ABM, we are conducting an RCT (Enock, Hofmann, & McNally, in progress). Participants receive either ABM or PBO training for 4 weeks, 3 times per day, where each session consists of 80 trials and lasts 2-2.5 minutes. They complete online self-report measures weekly, as well as 1 month and 2 months post-training. We administer a modified Posner cueing task in the laboratory to participants who live in the Boston area. As of March 2011, 42 participants have completed training, and we expect about 100 additional participants to finish by mid-summer.

**Conclusions:** Handheld ABM is a feasible delivery method, and we will report on its efficacy. We will analyze changes in symptoms and attention bias separately for participants with high social anxiety versus high worry.

New approaches in treating persistent pain and PTSD in refugees

Morina, Naser¹; Maier, T.²; Wittmann, L.³; Rufer, M. ³; Schnyder, U. ³; Müller, J. ³

¹Ambulatorium für Folter und Kriegsopfer (AFK), Switzerland; ²Department of Psychiatry, University Hospital Zurich, Switzerland; ³University Hospital Zurich, Switzerland

Many refugees suffer from comorbid PTSD and persistent pain. To date, successful treatment approaches are lacking for the simultaneous treatment of both conditions. Pain-focused treatment with Biofeedback (CBT-BF) proved to be effective in this population. Therefore, we combined ten sessions of CBT-BF with ten sessions of Narrative Exposure Therapy (NET), which is an established exposure-based CBT-procedure for the treatment of refugees. In this pilot study we treated 15 refugees (mean age 43.1; 9 males) suffering from persistent pain and PTSD. They were assessed before, after and 3-months after the intervention. Results show that the combined intervention proved to be feasible and the findings indicate a reduction in both PTSD symptoms and pain after the intervention. Furthermore participants seem to have improved their quality of life and that CBT-BF appears to increase the motivation for a subsequent trauma focused therapy. Implications and further possibilities to treat this population of extremely traumatized refugees will be discussed.

Prolonged Grief In Traumatized Cambodian Refugees

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¹University of New South Wales, Australia; ²Harvard Medical School, United States

Prolonged grief has been proposed as a psychological disorder for DSM-V. The majority of research that has been undertaken examining the symptoms of prolonged grief has been conducted in Western settings. In contrast, relatively few studies have investigated this disorder in survivors of mass trauma or refugees. The present study examines symptoms of prolonged grief in refugee survivors of the Cambodian genocide residing in the United States. The prevalence and manifestation of prolonged grief symptoms in this group will be explored. Findings will be discussed in the context of the proposed DSM-V criteria for this disorder, and treatment implications will be outlined.

Treating Terrorism-Related PTSD in Thailand: A Randomised Controlled Trial

Bryant, Richard
University of New South Wales, Australia

There is little evidence regarding treating PTSD and complicated grief in settings of ongoing terrorism. This randomized controlled trial was conducted in southern Thailand, which is subjected to very frequent terrorist attacks. The initial step was a collaboration between Australian CBT researchers and the Thai Department of Mental Health in which local clinicians were trained and supervised in a Thai adaptation of CBT. Women (N = 28) who met criteria for PTSD and complicated grief after terrorist killings of family members were randomly allocated to either Thai CBT or Treatment as Usual. Three month follow-up assessments indicated strong superiority of CBT over medication. CBT resulted in greater reduction in PTSD, depression, and complicated grief at follow-up than TAU. Relative to TAU, CBT had stronger effect sizes at follow-up for PTSD (0.62; 95% CI: -0.14-1.39), depression (0.37; 95% CI: -0.38-1.13), and complicated grief (0.38; 95% CI: -0.37-1.38). More patients in the CBT condition (75%) achieved high end-state functioning than participants in the TAU (33%) condition (χ²(N = 28) = 4.86, p < .05). This study demonstrates that CBT can be efficiently trained in non-western settings to non-specialist mental health workers, and this training can translate into successful treatment gains in trauma-affected individuals.

Grief and Attachment in the Context of Islam

Joscelyne, Amy; Bryant, R.A.
University of NSW, Australia

Objectives: Although attachment theory is central to current models of grief, this relationship has not been studied outside western settings. In 2004 the Asian tsunami caused widespread death and destruction in Aceh, Indonesia, where conflict spanning 30 years had already resulted in thousands of casualties. The current study examined the impact of attachment style on grief reactions in the context of a collectivist, Muslim society.

Method and Results: Forty trauma-exposed adult Acehnese participants who had lost loved ones in the 2004 tsunami were asked to complete a social mapping task to indicate how close they currently feel to a deceased loved one. Participants also completed measures of attachment style and yearning for the deceased. The study found that yearning for the deceased was predicted by an avoidant attachment style and also by the tendency to report a close ongoing connection to the deceased.

Conclusions: Consistent with findings in western settings, these findings indicate that an avoidant attachment style may impede grief recovery. Further, the extent to which one maintains representations of the deceased within one’s self-construct appears linked to persistent yearning. These patterns are discussed in the context of current theories of attachment and continuing bonds, and highlight the distinct application of these theories in a collectivist Muslim setting. Implications for treatment are discussed.
Symposium 69 – Internet-delivered CBT. A new and effective dissemination channel for CBT?

S69-1

Internet-delivered CBT. Introduction with a focus on depression

Andersson, Gerhard

Department of Behavioural Sciences and Learning, Sweden

Internet-delivered CBT (ICBT) has expanded rapidly during the last 10 years and has been tested in several controlled trials. Briefly, ICBT is commonly presented as guided self-help, with minimal therapist interaction. All treatment materials are presented online with text, audio and/or video material. Treatments usually mirror face-to-face CBT, with similar length and treatment ingredients. When it comes to guided ICBT effect sizes are similar to what is found in face-to-face CBT, but it is reasonable to assume that ICBT suits some but not all persons. On the other hand there are also patients who prefer ICBT over individual and group treatments. There are a handful of direct comparisons in which patients have been randomized to either ICBT or group-based treatments (or individual treatment). When it comes to the treatment of depression there are now several controlled trials. Effect sizes tend to approach face-to-face trials, but the data clearly suggest that guidance is needed to reduce dropout. The most recent studies from the Swedish group has been on tailored intervention and in another study we tested if ICBT could reduce relapse. We conclude that ICBT should be considered as a complement and alternative to other treatment formats in CBT for depression.

S69-2

Individually-tailored, Internet-based treatment for anxiety disorders – the future?

Carlbring, Per; Bergman-Nordgren, L.; Maurin, L.; Töngren, C.; Linna, E.; Andersson, G.

1Department of Psychology, Sweden; 2Department of Behavioural Sciences and Learning, Sweden

Internet-delivered cognitive behavior therapy commonly consists of disorder-specific modules that are based on face-to-face manuals. A recent development in the field is to tailor the treatment according to patient profile, which has the potential to cover comorbid conditions in association with anxiety and mood disorders. A total of 54 participants, regardless of specific anxiety diagnosis, were included after an in-person, semi-structured diagnostic interview (SCID) and randomized to a ten week treatment program or to an attention control group. Treatment consisted of a number of individually-prescribed modules in conjunction with online therapist guidance. Significant results were found for all dependent measures both immediately following treatment and at 1 and 2 year intervals. Mean between-group effect size including measures of anxiety, depression and quality of life was Cohen’s d = 0.69 at post-treatment, while the mean within-group effect size was d = 1.15 at post-treatment and d = 1.13 and d = 1.04 at 1 and 2 year follow-up respectively. The tentative conclusion drawn from these results is that tailoring the Internet-based therapy can be a feasible approach in the treatment of anxiety in a homogeneous population.

Carlbring, P. et al. (In press). Individually-tailored, internet-based treatment for anxiety disorders: a randomized controlled trial. BRAT.

S69-3

Internet-delivered exposure based CBT in the treatment of irritable bowel syndrome - data from three randomized control trials

Ljótsson, Brjánn; Hedman, E.; Rück, C.; Lindefors, N.; Andersson, G.

1Karolinska Institutet, Sweden; 2Linköping University, Sweden

We will present three studies that have evaluated internet-delivered exposure based treatment for IBS. In analogue to the treatment of anxiety disorders, exposure to IBS symptoms and related feelings may decrease the fear of and attention to symptoms. The studies have evaluated the treatment effects on IBS symptoms, illness related quality of life, general functioning and psychiatric symptoms. Study 1 included 85 self-referred participants randomized to either ICBT or group-based treatments (or individual treatment). When it comes to the treatment of depression there are now several controlled trials. Effect sizes tend to approach face-to-face trials, but the data clearly suggest that guidance is needed to reduce dropout. The most recent studies from the Swedish group has been on tailored intervention and in another study we tested if ICBT could reduce relapse. We conclude that ICBT should be considered as a complement and alternative to other treatment formats in CBT for depression.

A recipe for online treatment of social anxiety: a closer look at the ingredients

Helgadóttir, Fjóla Dögg
The University of Sydney, Australia

The evidence for Internet-based Cognitive Behaviour Therapy (CBT) treatments for social phobia is reviewed. Furthermore, common components of existing treatments are identified. Currently there are two distinct types of online therapies: therapist assisted systems, and systems with no therapist assistance. Research is presented proposing a third approach, which uses virtual therapist assistance. CBTpsych.com is a fully automated Internet-based intervention based on the Clark and Wells (1995) model of social anxiety, and uses virtual therapist assistance (Helgadottir, Menzies, Onslow, Packman, & O’Brian 2009 a,b). The online program builds a model characterizing a participant’s individual psychopathology, and uses the model to create customized cognitive restructuring and behavioural experiments. A phase II trial demonstrated that 78% of those starting the intervention no longer met the criteria for social phobia at post-treatment, and strong effect sizes were observed on measures for avoidance and unhelpful cognitions. The presentation will discuss how a virtual relationship can resemble a face-to-face clinical relationship through the use of modern technologies. This is a potential new direction for the dissemination of evidence-based clinical psychology.


Effectiveness of manual-based CBT for anxiety disorders in Western Norway child mental health clinics

Wergeland, G.J.; Fjermestad, K.W.; Haugland, B.S.M.; Öst, L.G.; Heiervang, E.¹
¹University of Bergen, Norway; ²Centre for Child and Adolescent Mental Health, Norway; ³Førde Health Trust, Norway

Efficacy studies of CBT for childhood anxiety disorders have found positive treatment effects for up to 70% of the patients, but little is known about the effect of this treatment in routine clinical care. The purpose of this study was to investigate the effectiveness of a manualised CBT program carried out in seven child mental health outpatient clinics in Western Norway. The manual was the original group version of Barret’s FRIENDS program, compared with an individual version, and a wait list control condition. The participants were 183 children, aged 8-15 with a principal diagnosis of separation-, generalized-, or social anxiety disorder. Pre-, post- and one year follow-up assessments included the Anxiety Disorder Interview Schedule, the Spence’s Children’s Anxiety Scale and the Short Mood and Feelings Questionnaire with both children and parents as informants. Preliminary results showed significant improvement both for diagnostic status, anxiety and depressive symptoms. The wait-list group did not change significantly on any measures. After treatment, half of the patients did no longer fulfill the criteria for their principal diagnosis. The treatment showed a moderate effect size on anxiety- and depressive symptoms. The effects of treatment were maintained at 1 year follow-up. There were no significant differences between group and individual treatment. The results indicate that treatments developed in efficacy settings can be implemented in ordinary outpatient clinics. Manualised CBT is an effective treatment for childhood anxiety disorders in ordinary clinical care, both at short- and long-term (1 year). The treatment can be delivered equally in an individual- or group format.
Process factors and their relation to outcome in a randomized controlled trial for childhood anxiety disorders

Fjermestad, K. 1; Wergeland, G.J.H. 2; Haugland, B.S.M. 1; Øst, L.G. 1; Havik, O.E. 1; Heiervang, E.R. 2

1 University of Bergen, Norway; 2 Western Norway Regional Health Authorities, Norway

There is a need to replicate findings from efficacy studies of child anxiety treatments in public outpatient clinics with regular clinicians and regularly referred clients. This presentation provides data from a large randomized controlled effectiveness trial for cognitive-behavioral treatment (CBT) for childhood separation anxiety disorder, social phobia, and/or generalized anxiety disorder. Total N is 183 (M age 11.4, SD = 2.8, range 8-15). Children were regular referrals to public outpatient clinics, and the clinicians were regular clinicians. The intervention was the 10-week FRIENDS for life-program (P. Barrett). Children were randomized to one of three conditions: group treatment, individual treatment, and waitlist. Results indicated that at post-treatment, around half the sample had lost their primary diagnosis. There were medium effects for anxiety and depression symptoms. This presentation examines three process factors, namely treatment motivation, treatment beliefs, and therapeutic alliance as potential moderators of outcome. The clients were highly motivated, believed in the treatment, and reported strong alliance to their therapists. Treatment motivation was significantly associated with outcome in both treatment conditions. The other process factors explained little of the variance in outcome. Implications for the delivery of evidence-based programs in regular clinics are discussed.

Did they do it, how well was it done, and how did it relate to outcome? The relationship between adherence/competence and treatment outcome in child anxiety treatment

Bjaastad, J. E. 1; Haugland, B.S.M. 2; Havik, O.E. 3; Øst, L.G. 1; Torsheim, T. 2; Heiervang, E. 2; Oeding, K. 2; Wergeland, G.J. 3; Bjaastad, J. 1; Øst, L.G. 6

1 Haukeland University Hospital, Bergen, Norway; 2 Uni Health, Centre for Child and Adolescent Mental Health, Norway; 3 University of Bergen, Norway; 4 University of Oslo, Norway; 5 Child and Adolescent Mental Health Clinic, Western Norway Regional Health Authorities, Norway; 6 Stockholm University, Sweden

The purpose of this study was to examine the relationship between adherence/competence and post-treatment anxiety symptoms in a sample from an ongoing randomized controlled effectiveness trial carried out in in seven psychiatric outpatient clinics in Western Norway. The participants were children, aged 8-15 with a principal diagnosis of separation anxiety disorder, generalized anxiety disorder or social phobia. The main research questions are: Is there an association between adherence/competence and post-treatment change in anxiety symptoms? How does treatment format (group versus individual) and age-specific treatment interventions (child versus youth version) affect this association? Children and parent(s) filled out the Spence’s Children’s Anxiety Scale (SCAS) pre and post-treatment. Trained psychology students with satisfactory inter-rater reliability rated videotapes for adherence and competence using the Cognitive Behaviour Therapy - Youth Adherence and Competence scale (CBT-YACS), a scale devised for this intervention study. The preliminary results when 140 out of a projected 183 children have gone through the treatment and post-assessment show that both adherence and competence yield significant contributions to the variance in outcome on the anxiety measure, when the pre-treatment scores have been controlled for. The clinical implications of these results will be discussed.
Relationship between parental rearing behavior, child temperament, and symptoms of anxiety and depression in children

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The purpose of this study is to investigate the relationship between parental rearing behaviour (i.e. overprotection), child temperament (i.e. behavioural inhibition), and internalizing symptoms in children with anxiety disorders (GAD, SAD, SoP). Parental overprotection is a frequently reported parental strategy in families with anxious children. We know little about how factors such as gender of the parent, or the child’s age, gender and temperament influence the association between parental overprotection and child anxiety/depression. Overprotective parents are inclined to discourage autonomy and encourage avoidance of new and unfamiliar situations, thereby possibly contributing to the development and/or maintenance of the child’s anxiety. On the other hand, children with a consistent temperamental disposition of shyness and caution may reinforce a pattern of overprotection in parents who often want to shield the child from feeling anxious or uncomfortable. Our hypothesis is that a combination of parental overprotection and behavioral inhibition increases the child’s level of avoidance, and thereby also level of anxiety and depression. Thus, the coexistence of parental overprotection and behavioral inhibition may predict child anxiety and depression better that parental overprotection and behavioral inhibition per se. The participants in this study are 183 children, aged 8-15. The included variables were assessed at baseline before entering treatment. Overprotection was assessed by parents and children completing the Rearing Behavior Questionnaire. Behavior inhibition was assessed by the Behavior Inhibition Questionnaire, with both parents as informants. Symptoms of anxiety and depression were assessed by the Spence’s Children Anxiety Scale, and the Short Mood and Feelings Questionnaire. Preliminary results and clinical implications will be discussed.

Symposium 71 – Effective school-based programs to prevent substance use and related problems in adolescents: From universal to indicated approaches

S71-1

Adolescent cannabis use and its impact into young adulthood: Findings and implications from a prospective Australian cohort study

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Cannabis is the most widely used illicit drug in many countries, with its use peaking in young adulthood. This paper presents results from a 13 year longitudinal study examining prospective relationships between cannabis use and dependence and mental health, other drug use and related psychosocial outcomes in young people. We conducted data analyses of data from the Victorian Adolescent Health Cohort Study (VAHCS), which interviewed a close-to-representative sample of just under two thousand young people in Victoria, Australia on 9 occasions over a thirteen-year period. The findings of this research can contribute to a better understanding of the natural history of cannabis use and the possible mechanisms underlying its relationship with a variety of life outcomes over an important developmental period, as well as the development of strategies to address the impacts of adolescent cannabis use.

S71-2

Universal internet-based prevention. Effects of the ‘Climate Schools: Alcohol and Cannabis’ course in Australia and the UK

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Objectives: This presentation will report results from a cluster RCT conducted in Australia to assess the efficacy of the universal Climate Schools: Alcohol and Cannabis course. The evidence-based course is facilitated by the internet and consists of 12 novel and curriculum consistent lessons delivered over six months.

Methods: A total of 764, Year 8 students (mean age: 13.1 years) from 10 Australian secondary schools were randomly allocated to the internet-based prevention program (n=397, five schools), or to their usual health classes (n=367, five schools).
**Results:** Up to twelve months following the intervention, compared to the control group, students in the intervention group showed significant improvements in alcohol and cannabis knowledge, reductions in average alcohol consumption, binge drinking and frequency of cannabis use, as well as less truancy and less moral disengagement.

**Conclusions:** The course was found to be acceptable by teachers and students as a means of delivering drug education in schools, thereby supporting the use of an internet-based universal approach to school drug prevention. This program is currently been piloted in the UK and preliminary results from this trial will also be reported during the symposium. This is the first trial in the UK of a proven universal intervention to prevent substance use in adolescence.

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**S71-3**

**Efficacy of the, Climate Schools: Cannabis and Psychostimulant' program**

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This presentation will report findings from a large trial assessing the efficacy of the Climate Schools: Cannabis and Psychostimulant program. This program was designed following the success of the Alcohol and Cannabis course to reinforce the material taught and to transfer these skills to the use of other illicit drugs such as psychostimulants. The program was evaluated using a cluster RCT in 21 Australian schools, with 1734 Year 10 students (mean age: 15.44 years). This evaluation revealed the program to be effective in increasing knowledge of cannabis and psychostimulants and decreasing pro-drug attitudes. In the short-term the module was effective in subduing the uptake of ecstasy and decreasing the frequency of use. Females who received the program also used cannabis significantly less frequently than students who received drug education as usual. There were no changes in meth/amphetamine use or harms resulting from cannabis or psychostimulant use in general. The low prevalence of use is the most likely reason for why the intervention did not impact on drug-related harms. In addition, the Climate Schools: Cannabis and Psychostimulant program was effective in decreasing students’ intention to use meth/amphetamine and ecstasy in the future.

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**S71-4**

**The Adventure Trial: Efficacy of personality-targeted interventions for substance misuse as delivered by educational professionals**

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The final presentation will report on the effectiveness of the indicated Preventure program when delivered in real world settings by teachers. The Preventure program, is a brief personality-targeted substance use preventive intervention for high-risk adolescents aged 14-15 years based on cognitive behaviour therapy and motivation interviewing techniques. Unlike universal programs, this selected personality-targeted approach addresses four personality risk factors for early-onset substance misuse and other risky behaviours: Sensation Seeking, Impulsivity, Anxiety Sensitivity and Hopelessness. The Preventure program involves two 90-minute group sessions carried out by clinical psychologists. It is the first and only targeted school-based alcohol and illicit drug prevention program that has been shown to prevent growth in alcohol and substance misuse, and reduce emotional and behavioural problems specific to each of the personality profile in Canada and the UK. The aim of the present study was to determine whether the Preventure program can be equally effective when delivered by trained teachers through the Adventure trial. This trial included 2528 adolescents (mean age 13.7 years) from 18 schools across London, UK. 1158 students met the criteria for personality risk for substance abuse, of which 688 were invited to take part in interventions. Analyses in the high-risk youth indicated the intervention group were less likely to drink alcohol and smoke cigarettes than the control group, and drinkers at baseline were less likely than controls to be binge-drinking at the 6 month follow-up. Receiving an intervention also predicted significantly reduced drinking problems, and depression and anxiety scores. These findings demonstrate that educational professionals can be successfully trained in the delivery of a brief personality-targeted substance misuse prevention programme.
Cognitive-Behavioral Group Therapy vs. Group Psychotherapy for Social Anxiety Disorder among College Students: A Randomized Controlled Trial

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Objectives: In this randomized controlled trial, cognitive-behavioral group therapy (CBGT) for social anxiety disorder (SAD) was compared to group psychotherapy (GPT), a credible, structurally-equivalent control condition that included only non-specific factors of group treatment (such as group dynamics).

Method: Participants were 45 college students at the University of Colorado with a primary diagnosis of SAD. Each treatment condition comprised 8 group sessions lasting 2 hours each. Independent assessors (blind to treatment assignment) assessed participants at baseline and post-treatment with the Clinical Global Impression Scale (CGI) and the Liebowitz Social Anxiety Scale (LSAS).

Results: Both treatments were found to be equally credible. There were five non-completers in the CBGT condition (21.7%) and only one in the GPT condition (4.3%). There were no statistically significant differences post-treatment (controlling for pre-treatment scores) between the two treatment conditions, and both treatments were found to be efficacious. Effect sizes for CBGT were similar to earlier studies, and adherence ratings revealed excellent adherence.

Conclusions: Treatment of SAD appears to be moving toward individual CBT, partly because of high attrition rates and underutilization of group dynamics in group CBT. However, group therapy has unique therapeutic ingredients, and it may be too early to give up on group treatment altogether. Discussion of these findings included future directions with this treatment modality, especially whether these two types of group treatment could be combined and whether such combination might serve to decrease attrition, enhance efficacy, and facilitate dissemination. In addition, to build on Clark and Wells’ CT (1996) in incorporating more formally prevention of safety behaviors into group treatment.

Mediators of Treatment Effects in Cognitive Therapy vs. Interpersonal Psychotherapy for Social Anxiety Disorder

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In a recent trial, we compared the efficacy of cognitive therapy and Interpersonal Psychotherapy with a wait-list control. Both treatments were superior to the wait-list control group in reducing social anxiety, and CT was superior to IPT on primary outcome measures at posttest and follow-up. Using data from 65 patients who completed the treatments (CT: N=31, IPT: N=34 patients), we analyzed whether changes in social phobic attitudes, social phobic cognitions and safety mediators mediate treatment effects on social anxiety. Based on the procedure proposed by Baron and Kenny (1986), LISREL analyses were performed on pre-post changes in the Liebowitz Social Anxiety Scale. Mediators were assessed by pre-post changes in the Social Phobic Attitudes Questionnaire (Clark, 1995), the Social Cognitions Questionnaire (Wells et al., 1993), and the Social Behaviour Questionnaire (Clark et al., 1995). Results from the LISREL analyses show that a reduction in social cognitions and safety behaviors, but not in dysfunctional attitudes, mediated treatment effects. These results suggest that superiority of CT over IPT can be explained by the specific effects of interventions targeting changes in cognitions and safety behaviors.
Symposium 73 – Embodiment in clinical psychology

A phenomenological approach to embodiment in depression

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In this paper, I will present a phenomenological approach to the embodiment of depression. The dimension of subjective experience in depressive states of consciousness is analysed in terms of a phenomenological description of bodily self-awareness. This prerreflective self-awareness has different dimensions, among them: spatiality, temporality and intersubjectivity. 1. Spatiality: The double-aspectivity of the body as being a carrier or “organ” of subjectivity as well as a spatial object among other objects in the world gives rise to a peculiar self-referentiality of the body as touching-and-being-touched, expressing-and-being-expressed, etc. Alterations of this primordial subject-object-structure of the body can be recognised in depression. Symptoms such as the felt heaviness of the body (and also of thoughts) can be interpreted as a shift towards the „material” or objective pole of the subject-object-spectrum. 2. Temporality: The experience of time is also modified in depression, namely by way of a desynchronisation, an uncoupling in the temporal relation of body and environment. The threefold structure of inner time-consciousness can modulated in such a way that the depressed subject feels trapped in the present, for example, which is perceived to last longer than normal. While a standstill in the „ego-time” is experienced, the „world-time” continues. The discrepancy between both aspects of time - the subjectively felt and the objectively measured time - become problematic not only on the level of reflection, but already in the lived bodily experience of the present. 3. Intersubjectivity: The modification of intersubjectivity in depression is interpreted as a reduction of co-affectivity and a detunement in interpersonal encounter. Insofar as clinically relevant phenomena such as the bodily expression of emotions and non-verbal synchrony are not subjectively self-enclosed episodes of personal life, but directed to others, the question of embodiment is already a question of intersubjectivity. It is shown how the reciprocal transfer of affects as well as the reflection on psychological states is mediated by the body, and how verbal as well as non-verbal modes of communication are expressed and understood in the bodily and temporal rhythm of their intersubjective occurrence. This allows for a description of the embodiment and temporality in depression as a disorder of basic self- and other-awareness.
Embodiment, mindfulness, and depression

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In this paper we will present results of a series of studies investigating the embodiment of depression. The first series of studies analyzed gait patterns in depression. Using a motion capture system we investigated (1) whether dynamic gait patterns of currently and formerly depressed patients differ from never depressed people and (2) whether mindfulness-based cognitive therapy (MBCT) normalizes gait patterns of formerly depressed patients. Motion data of 23 formerly depressed patients participating in MBCT, 14 currently depressive inpatients and 29 never depressed participants were collected. The data was analyzed by fourier-based descriptions and computation of linear classifiers. Gait patterns of currently depressed patients as well as formerly depressed patients differed form never depressed people. Moreover, MBCT had some normalizing effect on the way patients walk. We conclude that training in mindfulness might change proprioceptive-bodily feedback that is important in the generation of depressive states. In a second series of studies we investigated the associations between the ability to stay in contact with ones body during mindful breathing and depression related variables. We utilized a new experimental paradigm, which is strongly oriented to breathing meditation, to assess mindfulness. Participants were required to observe their breath during predetermined time periods and to indicate each time they lose their sense of it, e.g. because of mind wandering. Results of a study with 42 undergraduates showed that the ability to stay mindful in contact with ones body during breathing was associated with lower levels of rumination and depression. We are currently exploring the mindful breathing exercise in samples of currently and formerly depressed participants. Results of these studies will also be presented.

Nonverbal synchrony: A marker of embodied communication in psychotherapy

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Objectives: Recent research in cognitive science has shown that embodiment influences interactive behavior in a pronounced manner. This influence is manifested in nonverbal synchrony, ‘contagion’, ‘mimicry’, prosodic alignment etc. yet is commonly unattended by interactands. In psychotherapy process, nonverbal coordination between patient and therapist may thus be a candidate marker of the therapeutic bond; the contribution of the therapeutic relationship is a well-documented common factor of successful psychotherapy. Empirical evidence beyond single case studies for the association between nonverbal coordination and therapeutic bond was unavailable until recently. We wished to test nonverbal synchrony against a control condition (proof of existence) and assess its effects on measures of therapy quality.

Methods: A novel, automated method based on frame-by-frame video analysis was applied to N=105 sessions of dyadic psychotherapy (Motion Energy Analysis, MEA). Sessions were randomly drawn from a large archive of routinely videotaped cognitive-behavioral psychotherapies. Nonverbal synchrony was measured through simultaneous and lagged cross-correlations of movements of patient and therapist. A control condition (pseudosynchrony) was defined by window-wise shuffling of original video data. The level of nonverbal synchrony was then correlated with post-session questionnaires and outcome measures at the end of therapy. Administration of psychotherapy and recording of sessions was independent of our present research on nonverbal synchrony. Multilevel modeling was used as the primary data analytic tool, with sessions nested within patients and within therapists.

Results: Consistent with our primary hypothesis of embodied communication, our data showed that, in psychotherapeutic interactions, synchrony was found at a level clearly above chance. Synchrony was found in both male and female dyads, in all included diagnostic groups, and in initial as well as final phases of therapies. Nonverbal synchrony was positively correlated with the quality of the therapeutic bond (post-session questionnaires) and outcome (post-therapy measures, goal attainment scaling of patients). There was a characteristic pattern of lagged synchrony within the dyads: in the first third of therapy, therapists’ pacing behavior predicted both quality of bond and outcome, whereas in the last third of therapy, leading (patients’ imitation of their therapists) was more highly related to these variables.

Discussion: This is the first empirical validation of nonverbal synchrony in real psychotherapy sessions with randomized sampling and pseudosynchrony as a control condition. Nonverbal synchrony is a significant marker of the quality of the therapeutic bond and of global therapy outcome. These findings may be viewed in light of the general principle of embodiment, which they support. The processes of relationship development and maintenance in psychotherapy are not confined to verbal channels and to facial expression; the bodies of interacting persons reflect properties of their psychological relationship and inner states that become observable.

The joy dance: Jumping movements cause a decrease of depressed affect, and an increase of positive affect and vitality in patients suffering from depression

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Research findings have shown that depressed patients display excessive lateral movements, decreased sagittal movements and a pronounced lack of vertical movements (Michalak et al., 2009). The latter does not even vanish in recovered patients.

Objectives: Our research aimed to investigate whether a circle dance with jumping movements would decrease depressed affect and increase vitality and positive affect in psychiatric patients suffering from depression. We used three different designs.

Methods: In all designs we employed the circle dance “Hava Nagila” from Israel using a jumping step and pronounced vertical movements in a movement therapy experimental setting and measured affect and vitality in a pre-post design with the Heidelberg State Inventory (HSI; Koch, Morlinghaus & Fuchs, 2007). Study 1 was a randomized controlled study that compared patients in the dance condition to patients in a music listening condition (CG1) to control simulation effects, and in an ergometer group (CG2) to control mere physical activity without jumping movement up to the same heart rate as the dance group. Study 2 increased the degree of control by comparing the dance with jumping movements to the identical dance without jumping movements (CG3) and a non-movement control group (CG4). And study 3 compared the dance with jumping movement assumed to decrease depression to a dance with swaying movements assumed to decrease anxiety.

Results: Study 1 suggested that all three groups caused benefits for the patients. The dance group however significantly decreased the depressed affect compared to the other two groups and significantly increased the vitality compared to the music group. Study 2 showed that the dance with jumping movements significantly decreased depressed affect and increased vitality compared to the dance without jumping movements and the non-movement group. And study 3 suggested that jumping movements decreased depressed affect, and swaying movements decreased anxiety.

Conclusions: Jumping movement was shown to be specifically efficient and beneficial in decreasing depressed affect for psychiatric patients suffering from depression. The effect was measured short-term, long term effects have not been investigated. At present the influence of touch within the same circle dance context is investigated, and additional physiological measures have been included (heart-rate variability). Circle dances with jumping movements can be employed at the beginning or at the end of a movement therapy session when it is indicated to decrease depressed affect and increase positive affect and vitality with an immediate effect.

A randomized controlled trial of MBCT versus treatment as usual in depressed and non-depressed patients with recurrent depression

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**Objectives:** Our study examines the efficacy of mindfulness-based cognitive therapy (MBCT) in addition to usual care in comparison with a treatment as usual alone (TAU), for recurrent depressive patients with and without a current depressive episode.

**Method:** A randomized controlled trial comparing MBCT + TAU (N=102) with TAU alone (N=103). The study population consisted of patients with three or more previous depressive episodes. Primary outcome was post-measure depressive symptom scores according to the Hamilton Rating Scale for Depression (HRSD). A secondary outcome measure included Beck Depression Inventory (BDI) scores. Rumination, worry and mindfulness skills were assessed as process measures. Group comparisons were carried out with linear mixed modeling. Additional mediation analyses were performed. Comparisons were made between patients with and without a current depressive episode.

**Results:** Patients in the MBCT group reported less depressive symptoms, worry and rumination and increased levels of mindfulness skills compared to patients receiving TAU-alone. MBCT resulted in a comparable reduction of depressive symptoms for patients with and without a current depressive episode. Additional analyses suggest that the reduction of depressive symptoms after MBCT was mediated by decreased levels of worry, rumination and an increased level of mindfulness skill ‘accept without judgment’.

**Conclusions:** The study findings suggest that MBCT is also efficacious for currently depressed patients in addition to previous research with remitted patients. Directions towards a better understanding of the mechanisms of action of MBCT are postulated.

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Dispositional Mindfulness Moderates the Relation between Neuroticism and Depressive Symptoms

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**Objectives:** Negative emotional reactivity as indexed by neuroticism has been shown to be an important risk factor for the development of depressive symptoms. This study investigated whether the ability to be mindful can protect against the negative effects of this temperamental vulnerability.

**Methods:** Individuals (N = 114) who had completed a neuroticism questionnaire six years previously were assessed for current depressive symptoms and dispositional levels of mindfulness at points of assessment approximately one year apart.

**Results:** Dispositional mindfulness moderated the relation between neuroticism and current depressive symptoms: neuroticism was significantly related to depression in those with low to medium levels of dispositional mindfulness but not in those with relatively high levels of mindfulness. Further analyses focussing on particular mindfulness skills indicated that this effect was carried mostly by the ability to describe inner experience.

**Conclusions:** The results suggest that dispositional mindfulness and particularly the ability to describe inner experience are helpful in dealing with negative emotional reactivity in a way that reduces the likelihood of depressive symptoms to develop.
Mindfulness-Based Cognitive Therapy in People with Recurrent Depression leads to an Open Attention For All Emotional Experiences

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Objectives: It has been demonstrated that Mindfulness-Based Cognitive Therapy (MBCT) can be successful in the prevention of relapse in patients with recurrent depression. However, the underlying working mechanisms remain an important research question. The aim of this study was to investigate whether MBCT influences the processing of emotional information, reducing cognitive vulnerability factors that are observed during and after remission of depressive episodes.

Methods: Using a Negative Affective Priming paradigm, we investigated the effects of an eight week MBCT training versus no intervention on the facilitation and inhibition of sad versus happy faces in a group of people with recurrent depression who were in remission (MBCT group: N = 45; Control group: N = 26).

Results: At baseline, patients with recurrent depression who applied for an MBCT training inhibited positive information, and showed facilitation for negative information. The control group did not show a similar dysfunctional processing. After MBCT, the participants showed a reduced facilitation of negative information and a reduced inhibition for positive information.

Conclusions: Although further research is needed, our results add to the understanding of the underlying processes of mindfulness. This is the first study to investigate the relationship of mindful states and the inhibition/facilitation of emotional information, and the effects of MBCT on a bias that has been related to vulnerability for depression. The finding is that MBCT leads to a reduced facilitation for negative and a reduced inhibition for positive information, which can be interpreted as open attention to all new experiences.
prospectively examined whether reduced extinction learning before trauma predicted later PTSD symptom severity.

**Methods:** Before deployment to Afghanistan, 249 Dutch soldiers were administered a conditioning task (cf. Orr et al., 2000; Hermans et al., 2002) that consisted of an acquisition phase, in which one conditioned stimulus (CS+) was followed by an aversive unconditioned stimulus (US), whereas another stimulus (CS-) was not, and an extinction phase, in which the CS+ and CS- were presented without the US. On-line US expectancies were measured throughout the task. About two months after deployment, 247 (99%) participants were retested, using structured clinical interviews and other measures, including the PTSD symptom Scale (PSS; Foa et al., 1993) to assess PTSD symptom severity.

**Results:** A linear regression analysis with PSS as dependent variable and degree of extinction learning as independent variable revealed that reduced extinction learning predicted higher PSS scores, β=.19, p=.01, even after controlling for PSS scores before deployment (β=.32, p<.001), F=15.81, R²=.14.

**Conclusions:** To our knowledge, this is the first prospective study showing that reduced extinction of US-expectancies before trauma predicts later PTSD symptoms, over and above pre-trauma PTSD symptoms. The findings suggest that reduced extinction learning may be a vulnerability factor that increases the risk of PTSD. The findings are nicely in line with contemporary learning theory that emphasizes the role of CS-US contingencies in the persistence of PTSD and other anxiety disorders (Craske et al., 2008; Mineka & Oehlberg, 2008).

**Method:** At approximately two months after deployment to Afghanistan, 146 Dutch soldiers were administered a conditional discrimination paradigm (AX+/BX-; cf. Jovanovic et al., 2010), including presentation of one set of shapes (danger signal; AX+) paired with a mild electric shock (unconditioned stimulus; US), and another set of shapes (safety signal; BX-) with no shock. AX+ and BX- trials were followed by a fear inhibition test of AB trials, in which the danger signal A and the safety signal B were presented together. The degree of fear inhibition is measured by responses to AX trials: If B inhibits A, then the US-expectancies to AB trials should be lower than to AX+. Higher US-expectancy scores to AB reflect less inhibition. US-expectancy ratings were recorded throughout the task with a visual analogue scale (ranging from 0= do not expect a shock at all to 100= certainly expect a shock). In addition, we measured PTSD symptoms using a self-report measure both at two months and nine months after deployment.

**Results:** A repeated measures ANOVA for US-expectancy ratings, with trial type (AX+ vs. BX- vs. AB) as within-subjects factor, showed a main effect for trial type, F(2, 256)=498.10, p<.001. Post-hoc comparisons revealed that US-expectancy ratings were higher during danger signals (AX+) than during safety signals (BX-) (mean difference = 65.9, 95% CI = 61.8-70.0, p<.001) or during the fear inhibition (AB) test (mean difference = 51.4, 95% CI = 41.6-56.1, p<.001). No significant associations were found between PTSD symptoms and US-expectancy during danger signals (r=.02) or safety signals (r=.08). However, US-expectancy during the fear inhibition (AB) test was significantly correlated with post-deployment PTSD symptoms (r=.26, p<.01).

**Discussion and conclusion:** Our study extends previous findings by showing that the failure to inhibit US-expectancy in the presence of safety signals is associated with PTSD symptoms. During the symposium, prospective study results will be presented, i.e. whether reduced fear inhibition predicts the longitudinal course of PTSD symptoms.


Cognitive factors and adaptation to trauma in an Islamic setting

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Objectives: Cognitive models of posttraumatic stress disorder (PTSD) have been widely accepted and thoroughly researched in western countries. However, these models are yet to be comprehensively tested in either non-Western or Islamic settings. The current studies sought to examine memory and cognitive style in adaptation to trauma in Aceh, a non-western and Islamic society.

Method: Study 1 experimentally manipulated thinking style in forty adult survivors of trauma in Aceh, Indonesia. Participants either received a rumination induction or an equivalent set of instructions encouraging them to think about accepting their past trauma. Study 2 extended these results by comparing an accepting style of thinking with a self-efficacious mode of thinking, and subsequently indexed problem solving skills and optimism.

Results: Across studies, participants who were instructed to engage in a style of thinking that emphasised accepting one’s past reported fewer bereavement-related memories and were less preoccupied with the expectation that future trauma would occur. In addition, self-efficacious thinking style impacted on one’s capacity for problem-solving.

Conclusions: Overall, these studies highlight that within an Islamic context, adopting a cognitive style that emphasises acceptance of negative experiences directly impacts on both memory and coping. Clinical implications for trauma survivors are discussed.

Impact of autobiographical memory recall on the self: Extending the concept of core beliefs to the concept of multiple selves

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Research shows that many patients suffering from psychological disorders experience recurrent intrusive images that are related to past aversive experiences (see Brewin, Gregory, Lipton, & Burgess, 2010). These images play a role in disorder onset and maintenance, partly because they contain encapsulated negative core beliefs (Wells & Hackmann, 1993). They may trigger the activation of these beliefs which, in turn, triggers affective and behavioural responses that may help maintain disorders. Although these findings suggest a close relationship between autobiographical memory (AM) and the self, research in clinical psychology tends to focus on core beliefs while ignoring patients’ broader sense of self. The memory-self relationship has been mainly addressed in cognitive and social psychology. The self-memory system model (e.g. Conway, 2005), for example, suggests that individuals have multiple selves which are activated in response to the recall of AMs that individuals use to adapt to their environment. This paper will present the findings of two studies that test this model. In the first study, participants recalled a positive and a negative memory in two different sessions. After recalling the memory, they completed self-related measures. The measures obtained in the two sessions were then compared. Results showed that, following the negative memory recall, participants reported lower state self-esteem and self-concept clarity than following the positive memory recall. The second study extended the findings of the first one by investigating the impact of positive and negative memory recall on different self-aspects (e.g. goals and self-cognitions) and by focusing on how memory characteristics (e.g. specificity, degree of integration with one’s life story) are related to the impact the memory has on the self. Data analysis for the second study is still in progress. Results are expected to show, among other things, that the retrieval of memories that are more specific and less integrated within the life story is associated with the activation of a more negative self. If the hypotheses of the second study are supported, this study, together with the first one, will provide important insights into the way intrusions influence patients and help maintain psychological disorders. It will suggest that the experience of an intrusive image activates a specific self rather than core beliefs only. If that is the case, it may be argued that CBT promotes the integration of trauma memories with patients’ sense of self and reduces the accessibility of the trauma-related selves. An implication of these findings is that CBT may need to train patients to have greater control over the selves that are activated when they find themselves in stressful situations. In the long run, this training may make CBT more effective and may reduce relapse rates.
Fishing for Happiness: The Effects of Generating Positive Imagery on Mood and Behavior

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**Objectives:** Experimental evidence using picture-word cues has shown that generating mental imagery has a causal impact on emotion, at least for images prompted by negative or benign stimuli. The current experiment sought to explore whether this finding extended to overtly positive stimuli and whether generating positive imagery could be beneficial in alleviating depressed mood. We further examined whether the benefit of generating images about positive future outcomes extended to subsequent behaviour. Dysphoric participants were asked to imagine and rate the vividness of imagery in response to viewing 200 picture-word combinations within one of three conditions: In the positive condition pictures were presented with a caption that created a positive resolution, in the negative condition the same pictures were combined with a caption yielding a negative resolution, while in the control condition half of the pictures were associated with positive and the other half with negative resolutions. Our predictions were that, compared to the control condition, the positive condition would lead to a greater increase in positive mood. Conversely, we predicted that compared to control condition, the negative condition would lead to a greater decrease in positive mood. Furthermore, we predicted that generating mental images in response to picture-word cues would impact on later behavior, with participants in the positive condition performing better on a fishing game behavioural task than those in the control and negative conditions. Finally, we predicted a similar pattern of results on a homophone task completed 24 hours later.

**Methods:** Eighty-one dysphoric participants were randomly assigned to positive, negative or control conditions (N = 27 per condition). Upon completion of a series of questionnaires assessing mood and trait tendency to use mental imagery, participants were given training and instructions to evoke mental imagery in line with our previous work on mental imagery generation (Holmes, Mathews, et al., 2008). They were then presented with 200 picture-word cues and given the following instruction: “Imagine the combination of the next picture and word as if you were actively involved.” After completing this, a 10 min filler task was administrated to minimize the influence of mood differences across groups before post-training assessment tasks. Participants then completed the behavioural task in which they were given the fishing game and asked to catch as many fish as they could in 2.5 min. At 24 hours after the experimental session, the homophone task was delivered over the telephone.

**Results:** In line with our prediction, mood improved in the positive condition, deteriorated in the negative condition and remained stable in the control condition. Our results further showed transfer to later behaviour, with participants in the positive condition performing better on the fishing game task than did those in the 2 other conditions. Finally, our procedure led to congruent effect on interpretations made after a 24 hour time delay, with participants in the positive condition making fewer negative interpretations of homophones than those in the negative condition.

**Conclusions:** Despite a number of limitations, our findings showed that people with dysphoric mood benefited in both mood and behavior from a task involving practice in generating positive imagery. This finding is relevant to the suggestion that a deficit in positive future-oriented imagery in depression may impede recovery from depressed mood. The next step will involve investigating the extent to which the present conclusion can similarly be applied to depressive disorders.

Comorbid ADHD in Children with ODD or Specific Phobia: Implications for Evidence-Based Treatments

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Attention Deficit/Hyperactivity Disorder (ADHD) is a common mental disorder, with the prevalence ranging from 3-7% in school-aged children (APA, 1994). ADHD is characterized by developmentally inappropriate inattentive and/or hyperactive/impulsive symptoms. The presence of ADHD as a comorbid disorder is high within children with internalizing disorders (5-17%; Angold, Costello, & Erkanli, 1999) and children with externalizing disorders (3-67%; Angold et al., 1999). Due to these high rates, researchers have speculated how the presence of ADHD impacts treatment gains. At present, few treatments outcome studies of ODD and anxiety disorders have examined comorbid ADHD as a moderator of treatment gains (see Ollendick et al., 2008). The purpose of the presentation will be to explore the moderation effect of ADHD on treatment outcome in two clinical samples; children with Oppositional Defiant Disorder (ODD) and children with a Specific Phobia. Analyses are underway from our ongoing treatment studies of 120 children with ODD (ages 8-14, 64% males) and 120 children with Specific Phobias (ages 7-14, 50% males). All participants completed a semi-structured interview from which diagnoses were derived. Roughly 60% of the ODD sample and 10% of the Specific Phobia sample met criteria for comorbid ADHD. By dividing the sample into good and poor treatment responders, analyses will be presented on how ADHD, as a moderator, impacts treatment gains in both studies. In the ODD study, a clinical diagnosis of ADHD will be used as a moderator. However, given the small sample size of children with comorbid Specific Phobia and ADHD, the impact of parent rated attention and hyperactivity problems on treatment gains will be examined. The findings will prove interesting in addressing questions such as for whom treatments work and under what conditions. Additionally, theoretical and clinical implications of the findings will be discussed.

Oppositional Defiant Disorder and Anxiety: Implications for Evidence-Based Treatments

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Objectives: There are currently evidence based treatments for children with oppositional behaviors (for a review, see Eyberg, Nelson & Boggs, 2008) and children with anxiety disorders (for a review, see Silverman, Pina & Viswesvaran, 2008); however, we are only beginning to understand the influence of comorbidity on these treatments. Recently, it has been shown for the treatment of specific phobia, other comorbid anxieties do not impede treatment (Ollendick et al., 2010). In fact, a reduction in anxiety overall can be seen when a specific phobia is targeted. While less is understood about the comorbidity between oppositional defiant disorder (ODD) and anxiety, it has been shown that comorbidity between ODD and anxiety does not lessen the effect of treatment outcome when ODD is the target for treatment (Kazdin & Whitley, 2006). However, less is understood in respect to specifically treating both ODD and anxiety concurrently. The current presentation will focus on an overview of the extant literature analyzing comorbidity between ODD and anxiety, with a particular emphasis on the impact of treatment outcome.

Methods/Results: The presentation will present preliminary findings from two RCT studies currently being conducted at our Center, involving approximately 120 children and adolescents between 7 and 14 years of age in each project. The focus will be on the effect of comorbid ODD and anxiety on treatment outcome. The first study presented will be preliminary data from a one session treatment of a specific phobia. This study compares a one session treatment condition to a one session treatment with parental involvement. Preliminary data will be discussed, with a specific focus on the implications comorbid ODD may have on the treatment of a specific phobia. The second RCT compared Parent Management Training and Collaborative Problem Solving in the treatment of youth with ODD and their families. Again, preliminary findings will be presented on treatment outcome, relative to comorbid ODD and anxiety.

Conclusion: This presentation offers the unique opportunity to look at comorbid ODD and anxiety for both a treatment specific to anxiety and a treatment specific to ODD. Additionally, implications for treating both anxiety and ODD concurrently will be discussed in terms of theory, research, and clinical practice.


Clinical Correlates of Comorbid Obsessive-Compulsive Disorder and Depression in Youth

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Objectives: Comorbid conditions are common in childhood OCD, particularly anxiety and mood disorders (Geller et al., 1996). Comorbid depression and OCD has been shown to negatively impact treatment outcome for both adults and children with OCD (Abramowitz, 2004; Abramowitz et al., 2000; Storch et al., 2008). Only a few studies have specifically examined risk factors for the development of comorbid depression in adults with OCD (e.g., Bellodi et al., 1991; Hong et al., 2004; Tükel et al., 2006). However, little is known about the clinical correlates or presentation of comorbid OCD and depression in younger populations. The primary purpose of this study was to examine these clinical correlates associated with co-occurring depressive disorders in a clinical sample of youth with OCD.

Methods: Participants included children and adolescents seeking treatment at a university-based research clinic. One group was comprised of 28 children (ages 10-17 years) who met diagnostic criteria for OCD but had no comorbid depressive disorders, while a second group consisted of 28 children matched for age and gender who met diagnostic criteria for OCD and a co-occurring depressive disorder. The two groups were compared on measures of broad-band psychopathology, internalizing problems, social difficulties, and family characteristics. These measures included the Anxiety Disorders Interview Schedule, Child Behavior Checklist, Children's Depression Inventory, Multidimensional Anxiety Scale for Children, Penn State Worry Questionnaire for Children, and Family Environment Scale.

Results: As anticipated, findings revealed comorbid depression and OCD was associated with more severe internalizing problems, more extensive obsessive-compulsive symptomatology, and more social problems. Youth with comorbid depression and OCD also had differential family environments.

Conclusions: Youth with comorbid OCD and depression report more severe internalizing symptomatology, consistent with previous research. Comorbid OCD and depression is also associated with more severe depression, anxiety, excessive worry, and higher rates of other comorbidities. Treatment implications will be discussed.

Symposium 78 – Predicting the Course of Psychopathology Naturalistically, During and Following Treatment Using Measures of Automatically Activated Attitudes

S78-1

Predictive Validity of Automatic Avoidance of Emotional Faces for the Development of Symptoms of Anxiety and Depression

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Objectives: There is ample evidence that people suffering from emotional disorders are characterized by biased processing of emotional faces. For example, social phobic individuals show automatic avoidance tendencies when exposed to (rejecting) faces, whereas depressed individuals show reduced approach tendencies toward happy faces. Both types of biases are assumed to be reciprocally involved in the maintenance of these disorders. The present study was set out to examine whether an enhanced tendency to automatically avoid rejecting faces and/or a reduced tendency to approach happy faces may set people at risk for developing internalizing symptoms.

Methods: Therefore, we introduced a computerized Approach-Avoidance Task (AAT) in a large prospective population study (N=1816) among Dutch adolescents (Tracking Adolescents’ Individual Lives Survey-TRAILS). The AAT comprised of happy, angry, disgusting, and neutral faces, and non-face control stimuli. Participants were instructed to respond as fast as possible by pulling or pushing a joy stick on the basis of the color filter (grayish vs. yellowish). For each expression, automatic approach-avoidance tendencies were indexed by the difference in RT between pushing and pulling a particular type of expression. In this study, we will investigate (i) the cross-sectional relationship between the emotion-specific AAT effects and internalizing symptoms, and (ii) the predictive validity of the AAT effects for the course of symptoms between baseline and one-year follow up.

Results: We just finished the data-acquisition. Results and theoretical implications will be discussed during the conference.

Conclusions: If indeed results will show that automatic A-A tendencies have predictive value for the onset of symptoms, this would point to the option of training AA-tendencies as a preventive intervention.

S78-2

Are Automatic Self-Associations Predictive for the Course of Depressive and Anxiety Disorders? Results of the Netherlands Study of Depression and Anxiety

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Objectives: Cognitive theories point to the importance of negative self-cognitions in depression and anxiety disorders. Current dual process models distinguish between more implicit and more explicit self-associations in this respect, because both types of associations are assumed to reflect different cognitive-motivational systems (e.g., Gawronski & Bodenhausen, 2006). In line with this, the baseline data of the Netherlands Study of Depression and Anxiety (NESDA) already showed that automatic self-anxious and self-depressive associations are indeed differentially involved in anxiety disorders and depression (Glashouwer & de Jong, 2010). Individuals with an anxiety disorder showed enhanced self-anxious associations, individuals with a depression showed enhanced self-depressive associations, whereas individuals with co-morbid disorders scored high on both automatic self-associations.

Method: In this contribution we will present the 2-year follow-up data of the NESDA, a naturalistic, multi-center, longitudinal, cohort study with patients from different health care settings (www.nesda.nl). Patients (n=2329) and non-clinical controls (n=652) were tested with regard to their automatic self-anxious and self-depressive associations measured with the Implicit Association Test (Greenwald et al., 1998). We investigated whether automatic self-associations at baseline were predictive for the course of anxiety and depressive symptoms over time.

Results: Results showed that stronger dysfunctional automatic self-associations were related to a smaller chance of remission, longer symptom duration and a chronic course trajectory of the anxiety disorder. Furthermore, automatic self-associations were related to a longer time to remission, longer symptom duration and an unfavorable course of depressive disorders. However, none of these effects remained significant over and above various self-report measures.

Conclusions: The present contribution will elaborate on how these results can help us to further disentangle the underlying cognitive processes of depression and anxiety. Finally, the discussion will focus on the implications of these results for clinical practice and how it could lead to fresh options that may improve further the currently available treatments as well as the prevention of depression and anxiety disorders.
Can automatic processes predict treatment effects and relapse? Results of a large-scale clinical study

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Radboud University Nijmegen, Netherlands; University of Amsterdam, Netherlands; salus klinik Lindow, Germany

A considerable number of well-controlled lab studies have demonstrated the relevance of automatic processes in alcohol dependence. For instance, compared to controls, heavy drinkers and alcoholics exhibit biases in a variety of cognitive processes involving attitudes, associations, attention, and approach-avoidance tendencies. Moreover, some of these biases have also demonstrated predictive power regarding later alcohol consumption or treatment success. An open question, however, is whether and how these findings can be translated into everyday practice. Therefore, I will give an overview of a large-scale, ongoing research project in which we try to implement measures of automatic processes into the usual routine of the salus clinic Lindow in Germany. This clinic sees approx. 800 alcoholics per year who spend 3 months receiving individualized cognitive-behavior therapy. At the beginning of their stay, and again shortly before leaving the clinic, they participate in a battery of cognitive measures of associations, attention, executive control, approach-avoidance tendencies, and self-esteem. We aim to determine and successively improve the discriminative validity of these measures (by comparing the alcoholics to other patients of the clinic), their treatment sensitivity (by correlating changes with clinical measures of treatment success), and their predictive validity (by correlating test results and their changes with treatment success and relapse probability). In my talk, I will give an overview of the tasks used in the first wave of this study, then I will concentrate on alcohol-related attitudes and associations which we tested by two versions of a priming task. One task addressed how strongly pleasant versus unpleasant emotions are associated with alcoholic versus non-alcoholic drinks. The other task measured the opposite association direction, namely, how strongly alcoholic versus non-alcoholic drinks are associated with pleasant versus unpleasant emotions. I will report on first results regarding the validity and sensitivity of these tasks.

When wanting to change is not enough: Automatic alcohol motivation predicts the efficacy of clinical interventions

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A central characteristic of addiction is behavioral dyscontrol—substance use despite intentions to restrain. This is supported by data such as high relapse rates (60% in just the first year for alcohol use disorders). Borrowing from cognitive science, addiction researchers have begun to examine dyscontrolled substance use with models that incorporate the concept of automatic mental processes (i.e., ones that are nonvolitional). Initial findings from our lab indicate that automatic associations between the concepts of ‘alcohol’ and ‘approach’ motivation predicts both self-report and laboratory measures of dyscontrolled drinking. Objective: The present two studies examine whether automatic alcohol motivation predicts intervention success in heavy alcohol users.

Study 1
Method: Participants consisted of 38 alcohol dependent individuals who had recently completed inpatient or intensive outpatient treatment. Participants completed a measure of automatic associations between alcohol and approach motivation (using the Implicit Association Test; IAT) prior to completing 8 weeks of further outpatient intervention.
Results: Automatic alcohol motivation predicted amount of alcohol use, alcohol-related problems and severity of dependence at the end of the 8-week outpatient intervention.

Study 2
Method: Participants consisted of 87 hazardous drinkers. In the baseline session, participants completed an alcohol motivation IAT and were randomly assigned to either (a) a single session intervention designed to increase motivation to reduce alcohol use or (b) control. At a follow-up session 6 weeks later, participants reported their drinking over the previous month.
Results: The intervention was successful in increasing self-reported motivation to change. The intervention’s effect on drinking at follow-up was moderated by the IAT, with the intervention being less successful for individuals with stronger automatic alcohol motivation.

Conclusions: The current studies suggest that automatic processes may partially account for the difficulty in changing drinking behavior. Implications for improving interventions are discussed.
Symposium 79 – The paradox of addiction: Identification and modification of implicit processes that play a role in the development and maintenance of addiction

S79-1

Does Cognitive Bias Modification Change Automatic and/or Controlled Processes?

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1University of Amsterdam, Netherlands; 2Radboud University, Netherlands; 3Innoshen clinic, Germany

We recently reported a study on re-training of automatic approach tendencies in 214 alcoholic patients (Wiers, Eberl, Rinck, Becker & Lindenmeyer, in press, 2011, Psychol Science). We found that four sessions of training avoidance movements in response to alcohol pictures resulted in a change from alcohol-approach associations to alcohol-avoid associations, both on new alcohol pictures on the task used for training (alcohol-AAT) and on a different task using words rather than pictures (IAT). The intervention also resulted in increased abstinence a year later. Here we present novel analyses using the Quad model, which has been used to analyse different components underlying responses on a behavioural task. Here we use this technique to determine whether the re-training of automatic approach tendencies changes automatic and/or controlled processes, and whether these underlying processes are related to treatment outcome. These supplementary analyses demonstrate that training changes automatic approach associations rather than control over these associations.

Wiers, Eberl, Rinck, Becker & Lindenmeyer, in press, 2011, Psychol Science

S79-2

To approach or avoid alcohol? Automatic and self-reported motivational tendencies in alcohol-dependence

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Objectives: Motivational conflict is central to alcohol dependence, with patients reporting motivation to limit their drinking at the same time as urges to drink alcohol. In addition, dual process models of addiction emphasise the power of automatic cognitive processes, particularly automatic approach responses elicited by alcohol-related cues, as determinants of drinking behaviour. Our aim was to examine the strength of automatic and self-reported alcohol approach and avoidance tendencies among alcohol-dependent patients relative to matched controls.

Methods: 64 alcohol-dependent patients undergoing detoxification, and 63 light-drinking controls drawn from the local community, completed a stimulus-response compatibility (SRC) task, which assesses the speed of categorisation of alcohol-

S78-5

Indirect measured dimensions of perfectionism in eating disorder patients during treatment

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Introduction: Several systematic reviews have concluded that perfectionism is likely to be a risk factor in developing eating disorders. Additionally, numerous studies support the idea that perfectionism increases, and maintains eating disorders. Nevertheless, it remains unclear whether perfectionism can predict therapy outcome in eating disorders. Therefore, the aim of our research project is twofold. On the one hand we explore to what extent indirect measures of perfectionism can help to further clarify the concept of perfectionism. On the other hand we examine whether indirect measured perfectionism can predict therapy outcome in eating disordered patients.

Method: An indirect measure of an aspect of perfectionism, the Achievement Orientation single category-Implicit Association Test (SC-IAT), was administered in two student samples, together with self-report measures of multidimensional perfectionism. Additionally, the exam performance at the end of the year the students participated in the study, were collected. At the moment, the same direct and indirect measures of perfectionism are collected in an eating disorder sample, together with outcome data after two months of treatment.

Results: As the Achievement Orientation SC-IAT indicated that participants found themselves less achievement striving than other people, the questionnaire measure showed – in both student samples - that they evaluated their self-worth in a larger extent on the basis of reaching high standards. Moreover, in the sample of first bachelor students, the Achievement Orientation SC-IAT could significantly differentiate between those students who succeeded in their first exam period and those who didn’t.

Conclusions: We can conclude that the Achievement Orientation SC-IAT is an indirect measure of an aspect of perfectionism that is linked to the known ‘evaluative concerns’ dimension of perfectionism. Moreover, our results contribute to the predictive validity of our indirect measure. Results concerning how indirect measured perfectionism can predict therapy outcome in the eating disorder sample will also be discussed.
related pictures by making symbolic approach and avoidance movements. We also included modified versions of the SRC task in order to assess automatic motivational conflict, i.e. strong approach and avoidance tendencies elicited simultaneously by alcohol-related cues. Finally, we measured self-reported motivation to drink and motivation to avoid alcohol.

**Results:** Relative to controls, the alcohol dependent group were faster to direct symbolic approach rather than avoidance responses to alcohol-related cues, in marked contrast to their strong self-reported avoidance of alcohol. Furthermore, regression analyses demonstrated that automatic cue approach was a significant predictor of pre-treatment drinking quantity, over and above that predicted by self-report measures (all ps < .05). There was no indication of automatic motivational conflict among the alcohol dependent group.

**Conclusions:** Alcohol-related cues elicit automatic approach tendencies in alcohol-dependent individuals. These automatic responses contrast with a self-report measure of alcohol motivation, and they predict unique variance in pre-treatment drinking variables, as would be predicted by recent dual process models of addiction.

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**S79-3**

**A matter of interpretation: The assessment and manipulation of alcohol-related, interpretive biases in two student samples**

**Woud, Marcella Lydia**¹; Rinck, M.; Wiers, R.W.; Becker, E.S.¹

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Alcohol misuse is characterized by the selective, cognitive processing of alcohol-related information. For instance, models of addiction lead to the prediction that ambiguous cues are interpreted as alcohol-relevant; a construct known as interpretive bias. The aim of the current two studies is to extend these findings. In the first study, we investigated whether heavy drinking students, compared to light drinking students, show evidence of an interpretive bias when being confronted with open ended, ambiguous, alcohol-related scenarios. The results revealed that heavy drinking students exhibited an alcohol-related, interpretive bias as they produced more alcohol-related continuations than light drinking students. Additionally, this bias was positively correlated with drinking related problems. In a second study, we examined whether it is possible to induce an alcohol-related, interpretive bias in moderately drinking students by means of a Cognitive Bias Modification-Interpretation (CBM-I) training paradigm. The CBM-I training consisted of a series of 84 scenarios (alcohol-related and neutral). They were designed to end in a to-be-completed word fragment in such a way that the meaning of the scenario remained ambiguous until resolved by the final word. The participant’s task was to finish each scenario by completing the final word fragment which produced an outcome consistent with either an alcohol-related or neutral interpretation. Preliminary results seem to indicate that this bias modification technique was successful. This presentation will discuss these findings and will integrate them into the broader context of fundamental and applied research in alcohol addiction. Finally, future therapeutic directions regarding this CBM-I technique are discussed.

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**S79-4**

**Appetitive and Regulatory Processes in Young Adolescent Drinkers**

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Dual-process models of addiction propose that alcohol (mis)use develops because of an imbalance between a fast automatic appetitive system, in which stimuli are valued in terms of their emotional and motivational significance and a slower controlled regulatory system, which acts on deliberate considerations. This study focused on the automatic and regulatory processes that are involved in the early stages of young adolescent alcohol use. Participants were 43 young adolescent drinkers, who completed an explicit alcohol valence measure, two versions of an Affective Simon Task (AST), a working memory task and an alcohol use questionnaire. Alcohol use was associated with relatively positive self-reported valence of alcohol pictures, especially for adolescents with lower inhibition capacity. The Affective Simon Tasks did not show stronger automatic approach tendencies in heavier drinkers. This study suggests that in early stages of alcohol use appetitive valence is a more important stimulator for the initiation of alcohol use than automatic approach tendencies, and supports the view that young adolescents with low inhibition capacity are especially at risk for developing alcohol misuse. Prevention therefore should be focused on reducing the attractive valence of alcoholic drinks and strengthening the cognitive control of at-risk children.
Reward-related Attentional Bias and Substance (Mis)Use in Adolescents
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University of Groningen, Netherlands

Objectives: Substance abuse represents a substantial problem with huge impact at both the individual and the societal level. Successful prevention obviously requires insight in the main mechanisms involved in the development of substance use. Current cognitive-motivational theories propose that prioritizing appetitive information may be one of these mechanisms that play a vital role in the development of substance misuse. Following this view, a generally enhanced attentional bias for appetitive, reward-related stimuli would set people at risk for substance misuse as it may facilitate detection of and craving for substances with immediate desirable consequences.

Methods: As a first step to examine whether reward-related attentional bias is indeed involved in substance misuse we tested the relationship between substance use and attentional bias for reward in a subsample (n = 504; age 15-18 yrs) of a large prospective population study (Tracking Adolescents’ Individual Lives Survey-TRAILS). Attentional bias was measured by means of a modified Spatial Orienting Task (SOT) originally designed by Derryberry and Reed (1991).

Results: As the main outcome the results showed that the more participants displayed a difficulty to disengage from potential gain during the SOT, the higher their level of habitual substance use.

Conclusions: Thus these findings are in line with the view that a generally enhanced attentional bias for reward may set people at risk for developing substance abuse. Potential implications for prevention will be discussed.

Is CBT effective in the treatment of distress associated with tinnitus? A systematic review and meta-analysis
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Introduction: Tinnitus is defined as a sound in the ear(s) without external origin. The condition is in most cases untreatable and is a serious health concern for millions worldwide. Given this, various therapies have been developed over the years targeting the processes that are suggested to drive or maintain distress associated with the condition. Yet, the evidence has not been kind. Not a single one, regardless of domain, has a documented effect on tinnitus-specific distress in excess of placebo response. Cognitive Behavior Therapy (CBT) has provided the most promising results so far, but its efficacy in the field is still up for debate.

Aims and Methods: Findings from the most comprehensive review of randomized controlled trials of CBT for tinnitus will be presented (H. Hesser, C. Weise, V. Zetterqvist Westin, & G. Andersson, in press, Clinical Psychology Review). In this study, we aimed to determine whether CBT is effective in reducing distress associated with tinnitus and to examine potentially relevant moderators of the effect. We included randomized, controlled trials that assessed the efficacy of CBT for tinnitus-related distress in adults and conducted searches in electronic databases (PsychINFO, PubMed, the Cochrane Library) and manual searches to identify studies.

Results: Fifteen studies (total of 1091 participants) were included in the meta-analysis. We detected a statistically significant moderate effect size of CBT compared with an active control (sound therapy, education, yoga or relaxation) at post-treatment for tinnitus-specific measures (Hedges’s g = 0.44). A moderate-to-large effect size was detected when CBT was compared with a passive control (i.e., wait-list) at post-treatment (Hedges’s g = 0.70). The effects were robust, i.e. were not influenced by methodological rigor and publication bias, were maintained at follow-up (range = 3–18 months, Mdn = 6 months), and were unrelated to the characteristics of the studies.

Conclusion: The results suggest that CBT is a potentially effective treatment of tinnitus distress. However, and more important, the review highlights some of the limitations of the extent CBT literature in the area, providing valuable insights that can guide further research on behavioral and cognitive therapies in the treatment of distress associated with tinnitus.

Hesser et al, Clin Psych Rev in press
Internet-based cognitive-behavioural treatment of chronic tinnitus – results of a randomized controlled trial

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Objectives: Tinnitus is a considerable problem for about 2-4% of the adult population and leads to several associated problems. Cognitive behavioural treatments (CBT) have been shown to be effective in reducing tinnitus distress, however, the availability of individual counselling is limited. Therefore Internet-based CBT-approaches (iCBT) were developed and showed promising results. The aim of our study was to investigate the efficacy of an iCBT to reduce tinnitus distress.

Methods: 124 patients with distressing chronic tinnitus were randomly assigned to either an Internet-based CBT (n = 62) or an online discussion group (n = 62), both lasting for 10 weeks. The iCBT group works on a self-help program including different tools to improve tinnitus coping. Patients receive weekly e-mail feedback from a therapist. In the online discussion group, patients discuss weekly changing topics related to tinnitus, however not to tinnitus coping. Primary and secondary outcome were assessed pre and post treatment and 6 months after the end of the treatment.

Results: The results showed significant interactions (time x group) in favour of the iCBT. Medium to large between-group effect sizes (Hedges’ g) support these findings. After the end of the treatment, patients of the iCBT group reported significantly reduced tinnitus distress (F(1,117)=43.28, p<.001; g=.88), increased tinnitus acceptance (F(1,117)=37.83, p<.001; g=.80) and fewer depressive symptoms (F(1,117)=22.92, p<.001; g=.43). Results of patients participating in the online discussion group were also improved, however significantly less articulated than in the iCBT group. Follow-up results indicated that the improvements were stable over 6 months.

Conclusion: The guided internet-based CBT treatment was highly accepted and led to significant and long-term stable improvements in tinnitus distress and several associated variables. The efficacy of the iCBT was superior to the efficacy of the discussion group. Due to the use of an Internet-based approach, the treatment was available for tinnitus sufferers situated all over the country. Thus, implementing Internet-based guided-self-help treatments might partially compensate for the lack of face-to-face treatments to reduce tinnitus distress. Further research is needed to investigate which factors influence the efficacy of Internet-based treatments.

Internet-based self-help training and cognitive-behavioral group therapy for chronic tinnitus: A randomized controlled trial

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Introduction: Although the efficacy of cognitive-behavioral therapy in treating chronic tinnitus has been shown in several studies, many patients are not provided with adequate treatment. This can be ascribed to the lack of specialized therapists. Therefore alternative forms of providing cognitive-behavioral strategies for tinnitus patients such as internet therapy are important. The aim of the study was to evaluate the differential effects of an Internet-based, cognitive-behavioral self-help training and a conventional cognitive-behavioral group therapy for chronic tinnitus.

Method: The study included 128 patients with chronic tinnitus and at least moderate tinnitus distress. They were randomly assigned to (a) a 10-week Internet-based self-help training (IT) including weekly email contacts with psychotherapists (n = 41), (b) a 10-session group-based, cognitive-behavioral therapy (GT) implemented in a psychotherapeutic outpatient clinic (n = 43), or (c) a control group with access to an online discussion forum (n = 44). Patients were assessed immediately before and after the intervention. Follow-up assessments will take place 6 and 12 months after post-treatment.

Results: In contrast to the control intervention both treatments reduced tinnitus distress (p < .010), anxiety and depressive symptoms (p < .010) as well as insomnia (p < .010) significantly. Furthermore, in contrast to control intervention both treatments increased tinnitus acceptance significantly (p < .010). Results show no significant differences between IT and GT for primary and secondary outcomes (r=.184 < p < .941). Regarding tinnitus distress the effect size (Hedges’ g) for IT was g = 0.68 (95%-CI: 0.24; 1.12) and for GT was g = 0.84 (95%-CI: 0.40; 1.28).

Discussion: In accordance with current research the results of our study show effectiveness of cognitive-behavioral group therapy in reducing tinnitus distress and associated problems. Furthermore, the results obtain similar positive effects of Internet-based self-help training and group therapy on different tinnitus relevant outcomes.

Conclusion: In conclusion internet training for reducing tinnitus distress and the factors influencing its effectiveness merit further investigation.
Internet-based Acceptance and Commitment Therapy (ACT) for tinnitus patients

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1Department of Behavioural Sciences and Learning, Iceland; 2Linköping University, Sweden; 3Umeå University, Sweden

Objectives: Internet-delivered treatment of tinnitus has been tested in RCTs using CBT. There are no previous studies in which acceptance and Commitment Therapy (ACT) has been provided over the Internet for tinnitus patients.

Methods: We conducted a randomized controlled trial comparing two methods of treatment, ACT (n=35), CBT (n=32) and a control group who participated in an online discussion forum (n=32).

Results: The results showed statistically significant differences between ACT and control in four out of six measurements; Tinnitus Handicap Inventory, Tinnitus Acceptance Questionnaire, Perceived Stress Scale and Hospital Anxiety and Depression Scale (depression). No statistically significant differences between ACT and CBT could be found. Effect sizes within groups were large for both ACT and CBT, with some variation. Clinically significant improvement (50% improvement) was obtained in 37.14% (ACT), 28.13% (CBT) and 9.38% (control).

Conclusions: ACT had a significant effect on tinnitus distress and was found to be as effective as CBT regarding outcome on six given measurements.

Symposium 81 – Mindfulness and Cognitive Behavioural Therapy in adults with autism spectrum disorders

Cognitive Behavioral Therapy in adults with autism spectrum disorders (ASD)

Goosen, Ank

GGZ Eindhoven, Netherlands

In this presentation, the development of efficacious CBT interventions in adults with ASD will be addressed. Based on specific cognitive strengths and weaknesses of individuals with ASD, we modified the existing CBT protocols in order to improve applicability and generalizability. For example, individuals with ASD are usually limited in the ability to detect and describe their emotions, which is an essential element of CBT. In this respect, we incorporated the use of visual aids, for example an emotion thermometer. Furthermore, elements of psycho-education were integrated in the protocol as a helping factor in modifying incorrect assumptions. Adjustment of standard protocols and preliminary results of CBT in adults with ASD will be discussed.

Adapting mindfulness for treatment of comorbid symptoms in adults with ASD

Spek, Annelies

GGZ Eindhoven, Netherlands

In this presentation, the adaptation of Mindfulness-based Stress Reduction (MBSR) to adults with ASD will be the main topic. In order to apply MBSR in adults with ASD it is important to take into account the specific information processing patterns that characterize ASD. In this presentation the presenter will explain how treatment in general and mindfulness in particular should be adapted in order to be suitable for adults with ASD.

Effects of mindfulness-based stress reduction in adults with ASD

van Ham, N.C.

GGZ Eindhoven, Netherlands

This presentation contains the results of a randomized controlled trial in which the effects of MBSR were examined in 20 adults with ASD. Our data show that MBSR group therapy reduces symptoms of depression, anxiety and ruminating in adults with ASD. The interventions also resulted in an increased positive affect and a decreased negative affect.
Papers
Paper Session 1 – Mental health issues in special groups

PA01-1

Behavioral analysis and treatment of a person with hearing and visual difficulties and a Prader-Willi syndrome

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Department of Psychology, University of Jyväskylä, Finland

Psychological treatment of a person with hearing and vision difficulties and possible additional syndromes or diseases can be challenging because of the complexity of the problems. Case formulation models might be useful when persons working with deafblind persons try to understand person’s situation. One of the case formulation models is the Functional Analytic Clinical Case Diagrams. The client was a 35-year old woman. She had poor vision and hearing and Prader-Willi syndrome. She was referred to the treatment due to depression. This case example presents as assessment and treatment of a client having hearing and vision difficulties, Prader-Willi syndrome, mild learning disability, diabetes, depression, chronic pain problem, and overweight problem. The case formulation showed that mood problems among multi problem clients may be difficult to understand because of the complexity of the problem history. Clinical case formulation model can be a useful tool when selecting targets for the treatment, and when making other treatment decisions. This paper presents a long-term treatment of a multi-problem client, and discuss especially possible problems associated with treatments of clients with communication difficulties.

PA01-2

Perceived psychological needs in patients with cardiovascular disease

Kohlmann, Sebastian; Kilbert, M.S.; Ziegler, K.; Schulz, K.H.
Psychological Medicine, University Medical Center Hamburg-Eppendorf, Germany

Background: Cardiovascular disease [CVD] is associated with increased rates of depression (Whooley et al, 2008). However, little is known about patients’ perceived psychological needs. Therefore, this study systematically investigated perceived psychological needs in relation with other supportive-care needs.

Method: Data from N=268 in-hospital patients with cardiovascular disease was consecutively assessed. Using the Supportive Care Needs Survey-34 (score-range 0-100) patients perceived needs were assessed in the following domains: psychological, health information, physical and daily living, patients care support and sexuality. Depression and anxiety was measured with the Hospital Depression Anxiety Scale (HADS). Demographic data, disease severity (comorbidities, laboratory, heart functional status, medication, and referral) and quality of life (Short-Form-12) were analysed as possible confounders.

Results: Psychological needs were indicated by 33.8% of the sample (health information by 39.3%, physical and daily living by 27.3%, patient care support by 22.8%, sexuality by 26.7%). Compared to non-depressed patients (n=194, HADS depression-score<8) depressed patients (n=74) indicated higher psychological needs (M=19.5±22.24 vs. M=52.5±29.4, p<.001) but also higher needs in all other domains (for all: p<.001). Controlling for anxiety ANCOVA no longer indicated differences between depressed and non-depressed patients in all need domains, including psychological needs (for all: p>.10). Anxiety (β=.22-.48, p=.03 - <.001) but not depression remained a significant predictor for all need domains (R2=.20-.65) in multiple regression analysis adjusted for quality of life, demographic data and disease severity.

Discussion: Results confirm high rates of depressive symptoms in patients with CVD. Respectively, psychological needs were indicated as second most frequent. Interestingly, depressed patients indicated not only higher psychological needs but also higher needs in all other domains. Still, anxiety but not depression seems to be predictive of patients’ perceived needs. Low perceived psychological needs in depressed but not anxious patients could be seen as barriers for psychological interventions in patients with CVD.

Whooley et al, JAMA 2008; 305:969-1050
Cognitive Therapy of Anxiety for the Hearing Impaired

Peterson, Katharine Cecilia
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Background: Hearing loss is one of the most common health problems of the Western countries. This damage to the communication apparatus poses some challenges to mental health. There are some indications that some characteristic safety seeking strategies are involved when adequate adjustment to hearing loss does not occur. At a behavior level, these safety seeking strategies share some features with those often observed in patients with social phobia. To our knowledge the assumed negative effect such safety seeking strategies can have on psychosocial functioning has not undergone empirical scrutiny. Participants: Hearing impaired individuals (N=15) voluntarily signed up for and participated in an 8-session cognitive therapy group. Aim: To conduct a pilot study to see whether certain safety seeking behaviors commonly associated with acquired hearing loss would be modified by cognitive therapy.

Results: The level of anxiety symptoms (HADS) did significantly decrease from pre- to post treatment. The level of safety seeking behaviors did significantly decrease.

Conclusion: This pilot confirms that some specific types of social safety seeking behavior is associated with symptoms of anxiety among individuals with hearing loss and that cognitive therapy might offer some interventions that can be used to address these issues. There is need for further studies, specifically, randomized controlled clinical studies within a larger sample with a control group preferably with a follow-up design. We argue that findings from such more extensive studies will not only have implications for distressed hearing impaired individuals. It could potentially give some valuable guidelines on how to address painful experiences that accompany several somatic conditions both in somatic and psychiatric healthcare. Keywords: cognitive therapy, social phobia, anxiety, safety seeking behavior, hearing impairment, hearing loss, psychosocial functioning, somatic health care MESh terms: Hearing Impaired Persons; Life Change Events; Adaptation; Psychological Rehabilitation; Cognitive Therapy; Avoidance Learning; Escape Reaction

Keywords: cognitive therapy, social phobia, anxiety, safety seeking behavior, hearing impairment, hearing loss, psychosocial behavior, hearing impairment, hearing loss, psychosocial functioning, somatic health care MESh terms: Hearing Impaired Persons; Life Change Events; Adaptation; Psychological Rehabilitation; Cognitive Therapy; Avoidance Learning; Escape Reaction

Schatzberg, A.F ., et.al. (2005). Chronic depression. Medication or psychotherapy is effective when the other is not. Archives of General Psychiatry, 62, 513-520.

Comparison of Individual and Group Cognitive Behaviour Therapy and Rehabilitation for Treatment-resistant Chronic Depression

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This is a description of the final results of a study that was presented at EBACT Congress 2007. Follow-up results and further statistical analysis is added. The study started 2002 and follow up ended 2008.

Objectives: Depressed patients do not all respond sufficiently to conventional therapy. Medication, psychotherapy or inpatient treatment do not always sufficiently ameliorate the symptoms and consequences of depression. This lack of response puts a long-term burden on both the individual, family and society.

Methods: Data will be presented on the results of individual and group CBT and control treatment for 176 patients with chronic depressive disorder who had not responded to a full course of antidepressant therapy. They were all admitted to a rehabilitation centre and received 6 weeks of in-patient treatment, offering a wide range of treatment options, including supportive therapy or counselling as needed, individualised physical training and a progressive behaviour-modification programme. In addition, they were randomly allocated to individual, group or no CBT. CBT was provided by a multidisciplinary team. There were 1 and 2-year follow-ups. CBT was manual-based, the same manual being used for individual and group therapy. There were 12 sessions, 2 per week. Group sessions were 90 minutes, individual sessions 50 minutes. Groups had 12-15 participants and 2 therapists. There was 1 and 2-year follow-up. Results indicate that individual CBT was superior to group CBT and control treatment. Group CBT, however, was only superior to control treatment on one measurement and thus did not add significantly to the relatively intensive and programmed inpatient treatment at a rehabilitation establishment, although individual CBT did.

Conclusion: The importance of the therapeutic relationship formed in individual CBT is evident, especially as regards decreasing hopelessness and automatic thoughts. Limitations are the large and diverse groups and incomplete randomization.
Cognitive Therapy vs. Rational Emotive Behavior Therapy vs. Acceptance & Commitment Therapy in the Treatment of Generalized Anxiety Disorder. Preliminary Results of a Randomized Clinical Trial

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Introduction: Generalized anxiety disorder (GAD) is defined as excessive anxiety and worry about a number of events and activities, persisting longer than 6 months. The lifetime prevalence of GAD is estimated at about 5%, and it is highly comorbid with other mental disorders. The standard therapies for GAD evaluated in clinical trials so far are largely based on the principles of cognitive therapy and of behavior therapy.

Objectives: The goal of this study is to compare the efficacy of Cognitive Therapy (CT), Rational Emotive Behavior Therapy (REBT) and Acceptance and Commitment Therapy (ACT) in the treatment of GAD.

Methods: Patients diagnosed with GAD were randomly assigned to one of the following treatment conditions: 14 sessions of CT, 14 sessions of REBT and 14 sessions of ACT.

Results: Preliminary data suggesting comparable effects of the three forms of intervention are presented and theoretical and practical implications are discussed.

Conclusions: Our results are in line with data reported in the literature regarding the efficacy of cognitive-behavioral psychotherapy (CBT) interventions in the treatment of GAD, but add a valuable component by comparing three forms of CBT.

PA02-3

The Effect of Mindfulness-Based Cognitive Therapy for Prevention of Relapse in Recurrent Major Depressive Disorder: A Systematic Review and Meta-analysis

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Background: Mindfulness-based cognitive therapy (MBCT) is a group-based clinical intervention program designed to reduce relapse or recurrence of major depressive disorder (MDD) by means of systematic training in mindfulness meditation combined with cognitive-behavioral methods.

Objective: By means of a meta-analysis to evaluate the effect of MBCT for prevention of relapse or recurrence among patients with recurrent MDD in remission.

Method: Electronic databases were searched and researchers were contacted for further relevant studies. Studies were coded for quality. Meta-analyses were performed by means of the Cochrane Collaboration Review Manager 5.1.

Results: Six randomized controlled trials with a total of 593 participants were included in the meta-analysis. MBCT significantly reduced the risk of relapse/recurrence with a risk ratio of 0.66 for MBCT compared to treatment as usual or placebo controls, corresponding to a relative risk reduction of 34%. In a pre-planned subgroup analysis the relative risk reduction was 43% for participants with three or more previous episodes, while no risk reduction was found for participants with only two episodes. In two studies, MBCT was at least as effective as maintenance antidepressant medication.

Conclusion: Results of this meta-analysis indicate that MBCT is an effective intervention for relapse prevention in patients with recurrent MDD in remission, at least in case of three or more previous MDD episodes.

PA02-4

Publication bias in meta-analyses of psychotherapy research for eating disorders, depression, schizophrenia and posttraumatic stress disorder

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Introduction: Publication bias refers to the fact that studies with statistically significant results are more likely to be published than those with statistically non-significant or null results. As one of the greatest threats to the validity of meta-analyses it may lead to overestimated effect sizes. Publication bias was never profoundly investigated in psychotherapy research. The purpose of the present study is to reanalyze meta-analyses of psychotherapy research for eating disorders, depression, schizophrenia and posttraumatic stress disorder (PTSD) and to control for the impact of a possible bias. Method We include all meta-analyses about psychotherapy research for the named disorders conducted up to September 2010 that provide the necessary data and whose effect sizes can be replicated exactly. Publication bias is assessed using the trim and fill method (Duval & Tweedie, 2000), Begg and Mazumdar’s rank correlation method (1994) and Eggers regression analysis (1997).

Results: In meta-analyses of eating disorders 13.5%, of schizophrenia 10% and of PTSD 4% of the assessed effect sizes are significantly affected by publication bias, using trim and fill. Work is still in progress for meta-analyses of depression. All effect sizes adjusted for publication bias and results for Begg and Eggers methods will be presented at the conference. Most meta-analyses dealt with the effectiveness of cognitive behavioral therapy (CBT).

Discussion: In spite of significant reductions due to publication bias the overall effectiveness of psychotherapy, especially CBT, for
the assessment of publication bias. Every meta-analysis should routinely control whether its impact is negligible or severe.


Efficacy of cognitive behavioral therapy in the treatment of mood and anxiety disorders in adults - Review

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1Landspítali, Iceland; 2Landspítali, Iceland; 3Uni of Bath, United Kingdom

Introduction: Cognitive behavioural therapy (CBT) represents the form of psychotherapy which has the most research data to build on in the treatment of mental disorders for adults.

Method: In this review we will introduce CBT and present the results of pertinent outcome research for mood and anxiety disorders. Efficacy at the end of the treatment will be discussed, as well as long term effectiveness and the efficacy of combined treatment with medication and CBT

Results: The results of this review show that CBT is an effective treatment for mood and anxiety disorders; depression, dysthymnia, GAD, panic disorder, social phobia, OCD, PTSD and specific phobia. Results of follow-up studies also show that the efficacy of CBT lasts for a considerable time after the termination of treatment. CBT is more effective than other forms of psychotherapy except for behaviour activation and interpersonal therapy in treatment for depression and EMDR in treatment for PTSD. When CBT is compared with medication (SSRI) results reveal that CBT is as effective or more effective than medication. This is true except for the treatment of dysthymia, especially when the long-term effects are considered. Results are contradictory regarding whether medication improves or reduces the efficacy of CBT, e.g., there are indications that the medication reduces the efficacy of CBT for some disorders, like panic disorder.

Discussion: It is clear that CBT is an effective treatment for most common mental disorders. Side effects are almost never a problem and long-term success is a good. Further research is needed on combined treatment – CBT and medication.

Conclusion: Numerous studies support the efficacy of CBT for common mood and anxiety disorders and its good long term effects.

Binge drinking and adolescent brain development: Implications for prevention

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Introduction: Adolescence is a critical period for brain development, with active rewiring of circuitry that is necessary in successful development of “adult” adaptive patterns of behaviour, such as the frontal lobe and its connections. Adolescence is also a time of onset for alcohol consumption and binge drinking. Binge drinking may interfere with the development of these important circuits. Aims: The available evidence supports the hypothesis that heavy adolescent alcohol consumption disrupts cortical development and promotes continued impulsive behaviour, alcohol abuse and risk of alcohol dependence. However, there are few studies of the brain particularly targeted to binge drinking effects in adolescent humans and none examining the crucial development of connectivity in relation to cognition.

Results: This paper will present a review of evidence in this area and present preliminary data (N = 22) which shows significant cognitive and structural deficits in binge drinkers compared to controls, as well as gender specific responses to binge drinking.

Discussion: Implications for prevention research will also be discussed.
Are the current DSM-IV diagnostic criteria for alcohol use disorders appropriate for diagnosing young adults?

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Estimates of the prevalence of alcohol use disorders (AUD i.e. abuse and dependence) are consistently higher for younger adults compared to their older counterparts. However, questions remain as to whether this “youthful epidemic” of AUD is real or a methodological artifact of the prevailing classification criteria. There are reasons to believe that the criteria used to diagnose AUD may not be optimal for diagnosis of AUD in young adults. These diagnostic criteria were largely developed and standardized in adult clinical populations and have subsequently been applied to younger age groups with little empirical support. Furthermore, differences between younger and older adults in brain development, personality characteristics, patterns and social contexts of use may make the criteria inappropriate for use with young adults. The current study sought to explore potential shortcomings in the AUD criteria. The analyses presented here focus on the tolerance and larger/longer criteria. A group of experts in substance use disorder classification were asked to identify potential problems in the content, structure and wording of the criteria using a systematic procedure known as the Question Appraisal System. Hypotheses about young adults’ interpretations of the criteria were then developed. These hypotheses were tested through a novel investigative technique known as cognitive interviewing, which was used to reveal how young adults interpret the criterion and to examine whether their interpretations match the intent of the criteria. The cognitive interviews were administered to a sample of 102 young adults aged 18 – 24, recruited from the general community. Results indicated that the tolerance criterion is understood as intended by young adults, but that the larger/longer criterion is susceptible to false-positive endorsements. These findings suggest that changes need to be made to some AUD criteria in order to improve the detection and description of alcohol use disorders in young adults.

Improving the Odds: Randomised Controlled trial of Internet-based treatment of Pathological Gambling

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Objectives: This project explored the efficacy of an Internet-based treatment program for pathological gambling. Known as Improving the Odds, this project was the first Australian study to examine the use of the Internet in providing psychological treatment to pathological gamblers and to our knowledge the only study in the world to date to compare Internet-based CBT for pathological gambling to an internet-based active treatment control condition (Internet-based Motivation, Feedback, and Support) in addition to a waitlist control condition.

Method: One hundred and seventy-four participants were randomly allocated to Internet CBT (I-CBT), Internet MFS (I-MFS) or Waitlist Conditions. The dependent variables assessed included frequency of gambling, amount ($) spent of gambling and gambling severity as well as gambling correlates such as gambling urges, gambling cognitions, gambling refusal self-efficacy, depression, anxiety, stress, alcohol use, quality of life, satisfaction with life and coping.

Results: I-CBT resulted in substantial improvements relative to waitlist control. Compared to participants completing the waitlist control condition, participants completing I-CBT noted significantly greater reductions in gambling amount, gambling frequency, gambling severity, gambling urge, gambling related cognitions, depression, anxiety and stress. They also reported increased gambling refusal self-efficacy as well as improved quality of life and satisfaction with life. Fewer differences were noted between I-MFS and the waitlist control condition: compared to participants completing the waitlist control condition, participants completing I-MFS noted significantly greater reductions in gambling severity and were more likely to note improved quality of life. Compared to participants completing the I-MFS condition, participants completing I-CBT noted significantly greater reductions in gambling urge, gambling related cognitions and stress and reported higher treatment satisfaction. Therapeutic gains for I-CBT and I-MFS were maintained at follow-up (3-, 6- and 12-months post-treatment).

Conclusions: Use of an active treatment control condition suggests that the effects of I-CBT cannot simply be attributed to non-specific effects associated with engaging in treatment via the internet.
Paper Session 4 – Anxiety disorders: Focus on children/adolescents

PA04-1

A pilot evaluation of the Cool Kids Anxiety Program in an Educational University Clinic in Aarhus, Denmark

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Introduction: Anxiety disorders are the most common psychiatric disorder among children and adolescents with severe negative consequences in academic and interpersonal functioning. Evidence supports the use of CBT in the treatment of children with anxiety disorders. The Cool Kids program has been evaluated in three studies by Rapee and his co-workers with encouraging results (Hudson JL, Rapee RM et.al. 2009), but not by independent research groups. The efficacy of a CBT protocol for childhood anxiety disorders has not been examined in Denmark, or, to our best knowledge, in other Scandinavian countries. The Cool Kids program was introduced in a training program for students at the Research and Teaching Clinic, Dept. of Psychology, Aarhus University in 2009. The presentation will report on a pilot evaluation of the treatment program’s efficacy for the first 24 children and their parents who joined the program. A waitlist RCT of the program is in progress.

Method: 24 children age 8-12 with an anxiety diagnosis and their parents participated in the 10 session group family treatment (6 families in each group) and a booster session after 3 months. Diagnostic interviews were conducted separately with children and parents before and 3 month after treatment. Children and parents completed self-report measures before, after and 3 month after treatment.

Results: 68 % of children did not meet diagnostic criteria of an anxiety diagnosis 3 month after treatment. The Spence Children’s Anxiety scale showed large pre-post (d = 0.69 [children], 0.98 [parents]; and pre-3-month follow-up effect sizes (d = 1.13 [children], 1.19 [parents]). Results will be further elaborated and discussed with respect to the treatment program’s efficacy and feasibility, as well as its usefulness within a university clinical training program.

PA04-2

Behavioral inhibition as a vulnerability factor of anxiety disorders symptoms in children

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Introduction: Behavioral inhibition refers to the tendency to react with restraint, withdrawal, and caution to new and unfamiliar situations or persons. In such situations, inhibited children can be identified by a number of behavioral characteristics such as social withdrawal, proximity to a caregiver, long latencies to speak, and reluctance to play and explore the environment. In addition, these children display a number of physiological features: they have been demonstrated to display a right frontal EEG asymmetry, high stable heart rates and higher salivary cortisol levels in unfamiliar situations (Fox et al., 2005). Since behavioral inhibition can be seen as a vulnerability factor for the development of anxiety problems in children, it seems important to identify behaviorally inhibited children at a young age. The present longitudinal study examined the predictive validity of a short parent-report instrument for measuring behavioral inhibition, the Behavioral Inhibition Questionnaire (BIQ; Bishop, Spence, & Mc Donald, 2003), and its predictive value in the development of anxiety disorders symptoms in a large Dutch sample of non-clinical children.

Method: Parents of 2439 2- to 5-year-old non-clinical children (1248 boys and 1191 girls) visiting infant welfare centers in Rotterdam, The Netherlands, completed the BIQ. A year after filling out the BIQ, some parents were contacted again and asked to fill out the BIQ for a second time, along with a set of other questionnaires, including the Preschool Anxiety Scale – Revised (PAS-R; Edwards, 2007). In addition, the Anxiety Disorders Interview Schedule for DSM-IV: Parent Version (ADIS-P; Silverman, & Albano, 1996), a semi-structured interview designed specifically for the diagnosis of anxiety and other related disorders in children, was administered. Parents of 628 children agreed to participate in this follow-up assessment (330 boys and 298 girls). In this way, it became possible to investigate the stability of behavioral inhibition in these young children, as well as the predictive validity of this instrument in the development of anxiety disorders symptoms.

Results: The 12-month test-retest correlation coefficient of the BIQ indicated moderate stability of behavioral inhibition (r = 0.72, p < 0.001). Regarding the convergent validity, it was found that the BIQ was substantially associated with scores on the PAS-R (r = 0.54, p < 0.001). In addition, preliminary results of 112 ADIS-P interviews indicated that behavioral inhibition significantly predicted ADIS-P anxiety disorders symptoms, b = .07, t(111) = 2.85, p < .01.

Discussion/Conclusion: These preliminary results indicate that the BIQ is a reliable and valid instrument for measuring behavioral inhibition as an index of anxiety vulnerability in children. Early detection of these vulnerable children would make it possible to implement prevention programs, which focus on children’s behavior (i.e., encouraging these children to use problem-focused instead of emotion-coping strategies) as well as parenting strategies (i.e., teaching parents to reduce anxious and overprotective parenting strategies).

Overprotective Parenting Behavior and Comorbid Externalizing Symptoms in Anxious Children

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Introduction: Children with anxiety disorders are often found to have comorbid externalizing disorders, in particular, Attention Deficit Hyperactivity Disorder (ADHD) and Oppositional Deviant Disorder (ODD) (e.g., Kendall, et al., 2010). Parallel to research on comorbidity, the field of child anxiety disorders is interested in parenting behaviors that relate to child anxiety. A meta-analysis by McLeod, Wood and Weisz (2007) concluded that higher levels of parental control are linked with higher levels of child anxiety. Unfortunately, most studies of this relationship have not controlled for comorbid externalizing symptoms. Some research indicates that overprotective parenting behavior may be closely related to externalizing behavior problems in children, and even more so than to internalizing problems (Roelofs, Meester, ter Huurne, Bamelis, & Muris, 2006). When controlling for externalizing symptoms, the relationship between overprotective parenting behavior and child internalizing symptoms is reduced and may even disappear (Pereira, Canavarro, Cardoso, & Mendonça, 2009).

Objectives/Methods: This present study examines 122 children, from Norway, who met diagnostic criteria for a primary anxiety disorder. Mothers and fathers’ overprotective parenting behavior was assessed by self- and partner reports on a modified version of the Mother-Father-Peer Scale (MFP). The study will conduct tests to examine whether: 1. overprotective parenting behavior is related to child anxiety symptoms, as measured by the Multidimensional Anxiety Scale for Children (MASC), as well as to comorbid externalizing symptoms, as measured by the Child Behavior Checklist (CBCL/6-18) and 2. the relationship between overprotective parenting behavior and child anxiety changes when controlling for comorbid externalizing symptoms.

Results/Conclusions: Results will be presented and discussed in terms of the specificity of overprotective parenting to general versus specific child disorders.

Kendall et al, Journal of Anxiety Disorders 2010; 24:3
McLeod et al, Clinical Psychology Review 2007; 27:2

Investigating a Socially Anxious-Impulsive Subgroup of Adolescents in relation to problem behaviors: A Prospective Community Study

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Objectives: Findings in the literature concerning whether social anxiety is protective against adolescent risk behaviors are contradictory. Even though a number of studies have shown protective effects for early adolescents concerning delinquency and alcohol use, social anxiety has also been linked to alcohol misuse in late adolescent and adult samples. Furthermore, social anxiety has been associated with delinquency in adults, and late adolescent boys. In this study, we tested two explanations: (a) a developmental explanation (mainly relevant for drinking), in which social anxiety is protective in early adolescence when drinking is highly normbreaking, but a risk factor in later adolescence when it is more normative and requires less daring and (b) an anxious-impulsive-subgroup explanation, in which a subgroup of socially anxious youths who are also high on impulsivity might begin to engage with problematic peers and then enter into both drinking and delinquency. This social anxious-impulsive subgroup has been identified in adulthood, but has not been identified in adolescence so far.

Methods: In this study, we cluster-analyzed longitudinal data from 328 adolescents when they were 13, 15, and 17 years old.

Results: We identified the typical socially anxious groups at each time point and the atypical, socially anxious-impulsive group. Results supported the anxious-impulsive-subgroup explanation, in that the atypical cluster was higher on delinquency than any other cluster except an impulsive group. However, they also supported the developmental explanation, in that this difference only appeared at Time 3.

Conclusions: This is the first time the social anxious-impulsive subgroup has been indentified among adolescents and considered as an explanation for the contradictory findings in the literature. Our results also point to the necessity of moving beyond stereotypical views of social anxiety, in order to learn more about how we can prevent problems for some socially anxious individuals in the future.
Paper Session 5 – Symptom management using acceptance and commitment therapy and other strategies in pain management

**PA05-1**

**Searching for a “golden strategy” for pain management: experimental results**

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*Philipps-University of Marburg, Germany*

**Objectives:** Acceptance based treatments for chronic pain have become increasingly popular during the last years. Some studies using experimental designs proved that acceptance strategies were superior to strategies like distraction or suppression in increasing pain tolerance. For pain intensity, studies showed that distraction strategies were more effective than acceptance strategies. None of these studies compared acceptance strategies with strategies aiming at cognitive restructuring painful thoughts. The aim of the present study is to investigate differential influences of three types of instructions (acceptance, distraction and cognitive restructuring) on pain tolerance, intensity and on electrodermal activity (EDA).

**Methods:** 109 female students participated in this study. Pain was induced through a thermode within a 3x2x2 design. The between subject factor was ‘type of strategy’ and the repeated measure within factors were ‘time point of measurement’ and ‘heat pain vs. cold pain’. We conducted ANCOVAs using ‘adherence of instruction’ and ‘baseline measures of the outcome variables’ as covariates. The temperature at which subjects stopped the thermal stimulus served as a measure of pain tolerance. Participants filled in visual analog scales in order to measure pain intensity.

**Results:** The type of strategy had no significant effect on pain tolerance or EDA. With respect to pain intensity, subjects who used distraction as a strategy, had lower ratings than subjects who were asked to accept painful thoughts and feelings.

**Conclusions:** Our finding that an acceptance strategy was as useful as strategies to distract or to cognitive restructure is in line with some but not all prior studies. A meta-analytic review (in preparation) verified the equivalence of acceptance and symptom control strategies for the management of painful stimulation. The benefit of distraction over acceptance strategies in decreasing pain intensity is in line with assumptions made by Acceptance and Commitment Therapy for chronic pain. A strategy to cognitive restructure pain directed thoughts did not prove to be superior either to acceptance or to distraction. It may be more worthwhile to investigate possible moderators for the effective use of a strategy than to search for one “golden strategy”. Results have to be validated within clinical samples.

**PA05-2**

**The reincarnation of acceptance strategies? A meta-analytic review on the comparison between experimental acceptance and symptom control strategies**

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**Objectives:** Acceptance based interventions are a core part of the third wave of cognitive-behavioral treatments. However, it is still unclear whether such interventions are more effective than the traditional cognitive-behavioral approach. Although meta-analytic reviews investigated the benefits of Acceptance and Commitment Therapy, a review examining results of experimental comparisons between acceptance and symptom control strategies (e.g. suppression, distraction, reappraisal) is still missing. The present meta-analytic approach aims at filling this gap.

**Methods:** A literature search was performed with PsychINFO and PubMed and effect sizes (Hedge’s g) were calculated from reported data. The search determined 30 relevant studies, which varied in sample type, number of participants, experimental manipulation and content of acceptance strategies and of symptom control strategies.

**Results:** Despite the fact that many studies reported that acceptance strategies were superior when compared to symptom control strategies regarding pain tolerance, negative affect and believability of thoughts, we found that medium to large effect sizes (ES) show overlapping confidence intervals (CI) for pain tolerance (ES for acceptance=0.58, 95% CI[0.27, 0.9]; ES for symptom control=0.41, 95% CI[0.19, 0.63]) and negative affect (ES for acceptance=-0.78, CI[-1.13, -0.43], ES for symptom control=-0.8, 95% CI[-1.18, -0.43]).

**Conclusions:** To conclude, acceptance strategies did not prove to be superior to symptom control strategies. Future research should address which characteristics of participants lead them to respond to either acceptance or to symptom control strategies. Nevertheless, acceptance strategies are as useful in treatments for chronic pain and depression as symptom control strategies.
Do online diaries and written situational feedback based on Acceptance and Commitment Therapy stimulate living according to values? - a randomized controlled trial

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Objectives: Multidimensional rehabilitation including cognitive behavioral intervention and exercise program is recommended for patients with chronic widespread pain. However, behavior changes can be difficult to maintain after completion of a rehabilitation program and interventions delivered at home to support values-based actions may be helpful. The aim of this study was to investigate the effects of an inpatient pain management program with and without a smartphone delivered follow-up intervention based on Acceptance and Commitment Therapy (ACT). This presentation has focus on results regarding living according to own values.

Methods: Women (n=140) with chronic widespread pain completing a four-week inpatient rehabilitation program were randomized in two groups; with or without a follow-up intervention. The follow-up intervention included a face-to-face interview and four weeks of written online communication via a smartphone. Participants filled out three diaries daily to support self-monitoring of thoughts, feelings and behavior using the phone. The registered diaries were immediately available to a therapist who submitted daily a tailored feedback accessible online on the phone. Both groups had access to a non-interactive web page with descriptions of selected ACT exercises and audio files with mindfulness exercises. The participants rated their success in values-based living on the Chronic Pain Values Inventory (McCracken et al, 2006) before and after the rehabilitation program and after the follow-up.

Results: Preliminary results indicate that the follow-up intervention is effective in promoting success in values-based action. Short-term effects and results of regression analysis will be presented.

Conclusions: Smartphone delivered follow-up intervention based on ACT seems to enhance the effect of traditional rehabilitation and could be developed as a part of standard care.

McCraken et al, Pain 2006; 123:137-145

Cognitive behavior therapy for chronic pain: Results of a randomized controlled trial in an interdisciplinary pain management intervention

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Introduction: The co-morbidity of pain and depression has been supported by recent research (see review by Williams, Jacka, Pasco, Dodd & Berk, 2006) and the experience of pain can be intensified by the coexistence of a depressive disorder. Cognitive behaviour therapy (CBT) has been extensively evaluated and shown to be effective in terms of its impact on a number of biopsychosocial variables in chronic pain (see Linton, 2000; Otis, Pincus & Murawski, 2011; Winterowd, Beck & Gruener, 2003). An interdisciplinary pain management programme as described by Main and Spanswick (2000) is the main model in the rehabilitation setting at Reykjalundur Rehabilitation Centre. Ólason (2004) studied the outcome of the programme over a three year period and concluded that although analgesic drugs were withdrawn, the pain level was significantly reduced. Anxiety and depression were treated with CBT and decreased significantly but there was no control group in that study. The aim of this study is to evaluate the outcome of CBT in an interdisciplinary pain management intervention, to examine whether CBT is more effective than pain management treatment as usual, in improving health outcomes.

Method: A longitudinal study was conducted at Reykjalundur to evaluate the outcome of CBT in an interdisciplinary pain management intervention. The research question was whether rehabilitation including CBT was more effective than pain management treatment as usual, in improving health outcomes compared with a waiting list control group. Every fifth patient referred to the pain section at Reykjalundur Rehabilitation Centre was allocated to the study by systematic randomization, a total of 115 chronic pain patients. All participating patients received conventional interdisciplinary pain management treatment for 6 weeks. The program consisted of, in addition to physical endurance and fitness training, stress management, a relaxation program, attending a back-school program that addresses the nature of chronic pain and coping methods, education of nutrition, sleep, exercise and a healthy lifestyle. To evaluate the outcome, the results from a series of measures; questionnaires, clinical examinations and evaluations were analyzed six weeks prior to admittance to the rehabilitation program (baseline – waiting list), at the start of the treatment and after six weeks of rehabilitation. In addition, patients received a follow-up assessment that was one and three years after rehabilitation. Patients who met the criteria for CBT based on series of measures (Beck’s Inventory’s for depression and anxiety, fear and avoidance behavior (FABQ) and catastrophizing (PCS)) were randomly divided into two groups; one group receiving CBT and the other not. The CBT group received in addition to treatment as usual, 12 sessions of individual manual-based CBT, delivered by CBT trained therapists; psychologists, nurses, social workers and occupational therapists. Follow-up period was one and three years respectively.
Results and Conclusion: Demographic and pain-related information was gathered where the majority of patients participating were women (64%), 38% were married, mean age was 38 years (SD: 11.62, range: 17-68), 12% were unemployed, 44% had had a chronic pain problem for 5 years or longer and 53% reported that their pain problem was caused by an accident. Results indicate that the 6 weeks interdisciplinary pain management program is very effective in improving health outcomes. A group (3) x time (5) repeated measures ANOVA indicated a significant effect for time for all tested outcome variables. The symptoms of anxiety and depression were substantially reduced (p< .001) for all groups. Interestingly, though both CBT and Non-CBT groups experience more symptoms in the one year follow-up after treatment, the CBT group has more symptom improvement in the three year follow-up than the other groups. However there is not a significant difference in health outcomes, at the end of treatment, between the group that received additional CBT treatment and the one who received the usual interdisciplinary pain management treatment.

Discussion: The interdisciplinary pain management programme at Reykjalundur started over 15 years ago and behavioural approach has flavoured the programme from the beginning. The preliminary results of the on-going study reported here did not show CBT to be more effective than pain management treatment as usual, in improving health outcomes. Both the CBT treatment group and the control group showed a significant reduction in anxiety and depression. Although there was not a difference in outcome at the end of treatment between the groups, the improvements seem to last longer for the CBT group in the three year follow-up. Concluding, the interdisciplinary pain management programme with CBT is effective in reducing symptoms of anxiety and depression and is possible that the technique patients learn in the CBT individual manual-based treatment gives them an head advantage for long term recovery.

Manipulating Presence to Increase Virtual Reality CBT

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Introduction and Objectives: Virtual Reality (VR) technology has been effectively implemented in conventional Behavior Therapy (BT) as an effective alternative to exposure. However, treatment efficacy varies among clients. Presence has been suggested as important in increasing efficacy of VR. "Presence" is the subjective feeling that the client’s subject experiences as if s/he is "in" the situation even though it is not real. This presentation will report on attempts to increase the efficacy of VR by manipulating meaning of the exposure as well as by taking sensory style and anxiety level into consideration.

Method: Undergraduate psychology students completed questionnaires, listened to a taped induction (half of the group a placebo tape and half of the group guided imagery relevant to the VR experience), experienced exposure in a virtual environment (a plane) and completed presence questionnaires.

Results: Sensory seeking and anxiety levels correlated with presence, in the manner we anticipated. However, we failed to find any effect of meaning attribution on presence. Therefore we are replicating this study using a public speaking VE (Virtual Environment) and guided imagery which will tie it to relevant lectures the students must present. We anticipate having these additional results in time for presentation in Iceland.

Discussion and Conclusions: It is important to consider sensory seeking and anxiety levels (both state and phobic) when implementing VR. These findings are an addition to our previous results which revealed that locus of control, immersive tendencies, empathy, and attachment influenced presence levels. Additionally, our findings suggest that the subject’s imagination has an important role when the virtual environment is limited.
Method: Sixty-eight volunteers were recruited from different faculties of the University of Barcelona. All participants completed the entire task designed for the study. In addition, some self-reported questionnaires were administered before the task to assess personality, affect and alexithymia variables. This is a within subjects repeated measures design.

Results: On the whole, results show no differences between presentation conditions of facial emotion expression (photos vs. virtual reality); however, disgust and anger emotions present discrepancies between conditions. The Linear Regression Model reveals that the alexithymia variable made a significant unique contribution to the prediction of the errors in the virtual reality condition. Finally, participants with schizotypy traits failed in recognition of sadness.

Discussion: According to previous research, these findings indicate that virtual reality is able to generate emotional expression, which individuals recognize as they would with photographs. The inability to express feelings with words seems to be one of the key characteristics of the individual to predict his errors in the emotion recognition task.

Conclusions: This is a background to develop a virtual reality tool to study and treat mental disorders. VR offers important advantages such as realistic environments, within which the individual has space for interaction. Thus, we can create more elaborated programs to train patients to be more socially effective.

Kohler et al, CNS Spectr. 2004; 9: 267
Ekman, Psychol Rev. 1992; 99: 550

PA06-4

An open study of the effectiveness of a tailored Internet-delivered cognitive behaviour therapy treatment for symptoms of depression and anxiety in a primary care setting

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Objectives: This study investigated the effectiveness of an Internet-based guided self-help CBT-intervention (iCBT) for patients with symptoms of depression and anxiety. Most studies on iCBT have mainly focused on a single diagnosis. Recently tailored versions of guided ICBT have been tested for depression and anxiety. The aim of these approaches is to treat a main diagnosis and to cover comorbidity as well. The efficacy of these approaches are promising but it is not known if these variants of iCBT works in primary care settings.

Method: The tailored iCBT treatment was delivered in a primary care clinic. The patients were all referred to iCBT by their GP. All therapists were from the primary care clinic or from primary care centers connected to the clinic.

Twenty-two consecutively referred patients with reported symptoms of depression and/or anxiety were included in the study. A structured clinical interview (MINI) was conducted for all patients before inclusion. The interview aimed at identifying relevant diagnoses and conducting an individually tailored treatment plan. Mean age was 36.4 (SD 12.33) and the sample consisted of 77.3% women. Mean pre-treatment score on the PHQ-9 and the GAD-7 was 12.73 (SD 5.62) and 12.36 (SD 4.52) respectively.

The treatment consisted of self help material dealing with cognitive restructuring, behavioural activation, introceptive exposure, worry time, stress management, concentration training, sleep management, applied relaxation, mindfulness, assertiveness training among other things. Mean number of treatment modules prescribed was 7.8 (SD 0.97) and most treatments were planned for 10 weeks.

Results: Mean post-treatment score on the PHQ-9 and the GAD-7 was 8.68 (SD 6.99) and 7.59 (SD 6.28) respectively. Paired-samples t-tests showed a significant change on the measures from pre-treatment to post-treatment. Within-group effect sizes were d=0.64 on the PHQ-9 and d=0.88 on the GAD-7. The proportion of patients who had less than 10 on the PHQ-9 and the GAD-7 at post-treatment was 63.6% and 72.7% respectively (compared to 31.8% on both measures at pre-treatment).

Conclusions: The results indicates that tailored iCBT for depression and anxiety can be effective within a regular primary care setting. However, a larger randomized trial should be conducted, directly comparing tailored iCBT to TAU within such a setting.

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Objectives: Anxiety disorders are common, disabling, and of co-occur, but many people cannot access evidence-based care. Emerging evidence indicates anxiety can be effectively treated transdiagnostically (i.e. more than one disorder targeted by the same protocol) and that using Internet-delivered cognitive behavioural therapy (iCBT) programs may improve access to evidence-based treatment. This study asks: Is transdiagnostic iCBT for anxiety disorders efficacious and acceptable? Does transdiagnostic iCBT result in change in target disorders? Can good clinical outcomes be obtained when supported by a technician (non-clinician)?

Method: RCT (n=131) comparing three groups: Clinician-assisted (CA) vs. technician-assisted (TA) vs. waitlist control (Control). Individuals met DSM-IV criteria for a principal diagnosis of GAD, social phobia (SP) or panic disorder with or without agoraphobia (Pan/Ag). Treatment consisted of an 8 lesson /10 week iCBT program with weekly contact from a clinician or technician and were followed up 3-months post-treatment.

Results: Outcomes for the pooled treatment group (CA+TA) were superior to the Control group across measures of anxiety, depression and disability, and were maintained at 3-month follow-up. Significant reductions were found for disorder-specific
outcomes for each of the three principal diagnoses, and were associated with large effect sizes. TA participants achieved similar outcomes to CA participants at post-treatment, but had significantly lower symptom severity scores on general anxiety, panic-disorder, depression and disability at follow-up. Less than 70 minutes of clinician or technician time was required per participant during the program.

Conclusions: These results are consistent with recent meta-analyses indicating the efficacy of both transdiagnostic treatment and iCBT. Possible reasons for the difference between TA and CA outcomes, as well as future research directions, will be discussed. Transdiagnostic iCBT appears promising, with changes observed in both general and disorder-specific symptoms. When supervised, non-clinicians may produce results equivalent to clinicians.


**PA06-6**

Acceptability of a Computer Game Based CBT Intervention to Clinician’s and Young People

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Objectives: David Gnatenborough’s Island is a new computer-game based CBT intervention designed for young people with emotional difficulties to play in session with their therapist over the course of 6 appointments. As combining computer gaming with CBT intervention is a novel approach the aim of this study was to evaluate its acceptability as a mode of delivering a CBT Intervention to clinicians with different professional backgrounds (psychologists, child psychiatrists, social workers, psychotherapists) and to young people with emotional difficulties.

Methods: 300 child and adolescent mental health professionals were trained in the use of the Computerised CBT (C-CBT) intervention and evaluated its content, format, pace, and utility for their work. 6 young people attending a Child and Adolescent Mental Health Service completed the intervention with their therapists and rated their perception of the programme.

Results: Clinician and client ratings of the C-CBT intervention were very positive. Both groups found it to be an acceptable user friendly mode of CBT intervention delivery.

Conclusions: David Gnatenborough’s Island is a unique combination of a computer game format with a CBT intervention for young people that is used in session with their therapist. Professionals from a variety of backgrounds and young people with emotional difficulties find its format acceptable in therapeutic work. Implications for future programme development are discussed.

**Paper Session 7 – PTSD and trauma: interventions and treatment effectiveness**

PA07-1

**A brief intervention cognitive behavioural intervention for traumatised clients of substance abuse treatment services**

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1University of New South Wales, Australia; 2Northern Sydney Central Coast Area Health Service, Australia; 3University of Newcastle, Australia

Objectives: Trauma exposure and post traumatic stress disorder (PTSD) are highly prevalent among clients of alcohol and other drug (AOD) treatment services. There is expert agreement that to improve the outcomes of individuals with substance use disorders (SUD) who have experienced trauma, AOD treatment services need to incorporate trauma-specific interventions. There are however, very few evidence-based treatment options for AOD clients who have experienced trauma and/or have PTSD. Those that do exist possess a number of characteristics that inhibit their ability to be implemented in AOD services; they tend to be lengthy, treatment retention is relatively poor, and they require extensive training and clinical supervision. A brief intervention (BI) for trauma-related symptoms may be more attractive, feasible and sustainable to both clients and AOD clinicians. BIs are less time and resource intensive, and they may be applied across a variety of settings, by a range of clinicians, with minimal training. The present study sought to pilot test, in an uncontrolled trial, the feasibility of a BI for traumatised clients of AOD services.

Methods: The study aims to recruit 32 AOD clients who are currently suffering from PTSD or subsyndromal PTSD. A structured interview utilising validated instruments will be administered to participants upon entry to the study. The BI will be delivered as soon as is practical following the baseline assessment; ideally, this will be within one day. The intervention consists of a single one-hour session with a therapist involving: i) psychoeducation regarding the symptoms people commonly experience following trauma and how these may relate to a person’s substance use; ii) brief discussion of symptom management; and iii) the provision of a self-help booklet. Follow-up interviews will be conducted at 1-week, 1- and 3-months post the BI.

Results: This presentation will present preliminary findings on the potential efficacy and feasibility of the intervention. Data collection is due to be completed by July 2011. At the time of writing, a 90% response rate has been achieved and client satisfaction is high. The feasibility of the treatment will be discussed, including implementation issues, treatment retention and client satisfaction.

Conclusion: The findings from this study will contribute significantly to our understanding of how AOD clinicians could feasibly address PTSD symptoms among clients of AOD services.
PA07-2

Internet-based CBT and EMDR for post-traumatic stress disorder: the results from two trials
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Objectives: Post traumatic stress disorder (PTSD) is a severe, distressing, and chronic condition. Limited availability of appropriately trained professionals is a significant barrier to accessing appropriate treatment. This presentation reports the results of two pilot studies: (i) a pilot RCT of Internet-based cognitive behavioral therapy (CBT); (ii) an open trial of Internet-based eye movement desensitization and reprocessing (EMDR) for PTSD. RCT: Internet-delivered CBT

Methods: 43 people with PTSD were randomly allocated to receive clinician-assisted Internet-based treatment for PTSD, or to a waitlist control condition. Participants in the clinician-assisted version received access to the 7-lesson PTSD program plus regular emails from a clinician, automatic reminder emails, and access to an online discussion forum.

Results: Participants reported significant reductions in PTSD symptoms, depression and anxiety (Cohen's d respectively: 1.3, 1.2 and 0.7). Furthermore, participant satisfaction with the treatment program was high.

Conclusions: PTSD is a disabling disorder, but access to treatment is limited for many people. Developing additional effective techniques for treating patients with PTSD is an important priority for mental health clinicians.

OPEN TRIAL: Internet-delivered EMDR

Methods: This trial is due to commence in March, 2011 and will run for 8 weeks. It involves 15 people with PTSD allocated to receive internet-based EMDR in addition to the existing internet-based CBT protocol used in the above RCT. To our knowledge, this is the first time that EMDR has been delivered via the internet or tested despite EMDR being recommended as a first-line intervention for PTSD by several treatment guidelines for PTSD [1, 2]. We expect that clinically significant improvements will be observed and that participants will rate the EMDR module as acceptable.


PA07-3

Do the Five Factor Model personality traits moderate dropout and acute treatment response in post-traumatic stress disorder patients?
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Objectives: While proven generally efficacious in randomized clinical trials, a substantial minority of post-traumatic stress disorder (PTSD) patients does not sufficiently or permanently benefit from cognitive-behavioral treatments. This study investigated the influence of the Five Factor Model (FFM) personality traits on dropout and acute treatment response in adult PTSD patients.

Methods: Data were obtained from a randomized controlled trial among participants (N = 123) allocated to trauma-focused cognitive behavioral therapy, structured writing therapy, or waitlist control. Change in self-rated post-traumatic stress (PTS) symptoms and clinician-rated PTSD diagnostic status was measured with the Impact of Event Scale and the Structured Clinical Interview for DSM-IV axis I disorders, respectively. FFM personality traits were measured with the NEO-Five Factor Inventory. Moderation of dropout and treatment outcome was tested using linear and logistic multiple regression models.

Results: After controlling for baseline PTS symptoms, lower scores on Openness to Experience predicted less favorable treatment outcome. A marginally significant effect was found for lower scores on Conscientiousness. No predictive associations were found between FFM personality traits and PTSD diagnostic status or dropout. The observed effects of these traits were modest relative to that of baseline PTS symptoms, which emerged as the strongest predictor of posttest PTS symptoms.

Conclusions: Despite the modest predictive relationships of Openness to Experience and perhaps Conscientiousness with acute response to cognitive-behavioral treatments for PTSD, it is concluded that the efficacy of these treatments is generally robust to individual differences in terms of FFM personality traits.

Van Emmerik et al, Psychother Psychosom 2008; 77:93
A randomised trial on Dialectical Behaviour Therapy for PTSD related to childhood sexual abuse including patients with Borderline Personality Disorder

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Objectives: Individuals with a history of childhood sexual abuse (CSA) have a substantially increased risk of subsequent development of mental disorders. Most prominent are posttraumatic stress disorder (PTSD), alcohol abuse, depression and borderline personality disorder (BPD). BPD affects about 25% of the individuals with PTSD and about 60% of those with PTSD after CSA. Individuals with co-occurring BPD-PTSD have a poorer quality of life, more co-occurring Axis I conditions, worse functioning, and more frequent hospitalization. Cognitive-behavioural therapies have been shown to be successful in treating adults with PTSD related to CSA. However, most studies either excluded subjects with current self-harm and suicidal intents or patients with BPD did not profit from the interventions. Furthermore, in clinical practice it is often feared that exposure based treatment leads to an increase in self-harming behaviour and suicidality. We modified standard DBT to meet the specific needs of adult patients experiencing PTSD related to CSA plus co-occurring psychopathology such as BPD.

Methods: 82 patients suffering from PTSD related to CSA and co-occurring psychopathology were randomised to receive either a three month DBT-PTSD residential treatment or a waiting list allowing for treatment as usual (WL-TAU). Patients were assessed prior to randomisation, post treatment, at 6 weeks and 3 months post discharge. The two primary outcomes were the Clinician-Administered PTSD Scale and the Posttraumatic Diagnostic Scale. Secondary outcome were the Borderline Symptom List, the Dissociative Experiences Scale, the Beck Depression Inventory-II and the SCL90-R. In the presentation we present the effects of DBT-PTSD in patients suffering from BPD in comparison to patients without BPD.

Results: Patients in the DBT-PTSD group showed significantly greater improvement on all primary outcome measures than patients in the WL-TAU group. This applies to participants with 5 or more BPD criteria and participants with less than 5 BPD criteria. Between-group effect sizes for primary outcome measures were large. For secondary outcome measures, the between-group effect sizes ranged from medium to large. Results were confirmed for the subgroup with BPD. The rate of self-harming behaviour remained constant during treatment. Suicidal ideation did not accelerate.

Conclusions: Data suggest that DBT-PTSD is safe and has high promise for reducing PTSD in patients with co-occurring BPD.
Adverse childhood experiences and common mental disorders antenatal

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Introduction: Adverse life-experiences in childhood have been associated with an increased likelihood of depression and anxiety in adulthood, but it is less clear which adverse childhood experiences are associated with antenatal common mental disorders. The main objective of this study was to investigate the relationship between adverse experiences in childhood (sexual abuse, physical abuse, being bullied, witnessing serious physical violence, living with a close family member with alcohol and drug abuse or with serious psychiatric disorder) and common mental disorders among pregnant Icelandic women.

Methods: This study is a part of a larger ongoing longitudinal study of common mental disorders in the perinatal period among Icelandic women. 1933 pregnant women receiving antenatal care in primary health care clinics in Iceland were screened for depression and anxiety three times antenatal (16., 25., and 36. weeks gestation) and around week 9 postpartum. A semi-structured psychiatric interview was conducted with women who screened positive and a random sample of woman who did not screened positive. The Mini International Neuropsychiatric Interview – Plus was used for diagnostic purposes and women were further asked if they had experienced certain adverse conditions in childhood. Screening instruments used were the Edinburgh Postnatal Depression Scale (EPDS) and the Depression Anxiety Stress Scales (DASS), both reliable and valid screening instruments.

Results: Results indicated that approximately 70% Icelandic women suffering from antenatal common mental disorders have experienced one or more of the following adverse experience in childhood: sexual and/or physical abuse, witnessing serious physical violence, serious psychiatric illness in a close family member and serious alcohol and drug abuse in a close family member. Logistic regression showed that of these experiences, sexual abuse and living with a close family member with serious psychiatric disorder explained the biggest proportion of variance in antenatal depression and anxiety.

Conclusion: Pregnant women with a history of childhood sexual abuse and a history of living with a close family member with serious psychiatric disorder are at increased risk of antenatal depression.

Exploring the relationship between Resilience and CBT Outcomes for anxiety and depression in a clinical setting

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Introduction: A number of studies on resilience demonstrate that despite the presence of known risk factors for developing anxiety and depression, it is possible to identify resilience-related practices that can inform preventive measures and health promoting/illness-prevention clinical interventions. For example, early interpersonal trauma is a known risk factor for adults developing anxiety and depression. Yet, not all maltreated children experience mental health symptoms as adults. Additionally, some adults respond better and recover more quickly to evidence based therapies such as CBT as compared with others. They are identified as ‘resilient’ in this study.

Methods: The aim of the study is to explore resilience in adults presenting with anxiety and depression in a representative clinical sample, and predictors of effective symptom reducing, health promoting, illness-preventing treatment outcomes. A clinical sample of N= 100-200 participants aged 18 to 65 receiving CBT for anxiety or depression will be obtained from a specialist outpatient service. A semi-structured interview tool including a history of anxiety, depression and other mental health symptoms, personality/social functioning assessments and retrospective reports of childhood abuse, along with standard measurements such as the Connor- Davidson Resilience Scale (CD-RISC), DASS 21, Fear questionnaire, and Impact of Event Scale-Revised will be used to collect data. The following hypotheses will tested via correlation and multiple regression analyses: 1.There is a relationship between Resilience, experiences of early interpersonal trauma and adults with depression and anxiety. 2.Adult experiences and access to support mediate the relationships between childhood maltreatment and the development of adult anxiety and depression. 3.Evidence based interventions construct positive adaptations in adults with at-risk backgrounds, who present with anxiety and depression.

Results, Discussion, Conclusion: Data is currently being collected. Preliminary results, discussion and tentative conclusions looking at how resilience behaves in adults with anxiety and depression will be presented.

The effect of prospective and retrospective reasoning on the extinction of fear: Possible pathways to relapse after treatment, and to preventing it

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Objectives: Exposure therapy is a well-established treatment for anxiety disorders such as specific phobia or social anxiety. However, there is still room for improvement: existing exposure formats can be further optimized, and it is important to gain more insight in factors that lead to relapse after successful treatment. One approach into increasing our understanding of how anxiety disorders can best be treated is experimental research based on the conditioning model of anxiety. The goal of the present research is to examine the impact of reasoning processes on the extinction of conditioned fear. Importantly, our research findings are translatable into concrete guidelines for clinical practice.

Method: In the course of several studies, student samples were subjected to a differential conditioning procedure. In all cases, half of the participants were encouraged to make either prospective or retrospective inferences on the absence of the unconditioned stimulus (US) during extinction.

Results: We found that reasoning on the absence of the US during extinction significantly affected the level of relapse after extinction, although all participants had shown a regular extinction pattern (i.e., extinction had, at first sight, elapsed successfully). If participants allocated the absence of the US to a third factor that had been present during extinction, they showed a return of fear afterwards, both on explicit ratings and on psychophysiological measures such as skin conductance responding.

Conclusions: The present results indicate that clinical practitioners should carefully index patients’ rational and irrational reasoning processes before, during and after exposure, as both prospective and retrospective reasoning processes can lead to a return of fear, even after successful extinction.

Conditioned Fear Cues Elicit an Impulsive Avoidance Tendency

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Objectives: Fear-conditioning is the dominant paradigm for the experimental investigation of fear and anxiety disorders. Through this paradigm, great insight has been gained in the psychological processes of fear learning and extinction as well as its neurobiological correlates. Nevertheless, fear conditioning research so far has not addressed a core characteristic of anxiety disorders, i.e., the behavioral avoidance tendencies present in all anxiety disorders. In the present study, we assessed whether impulsive avoidance tendencies can be established through fear conditioning.

Methods: We first used a fear acquisition task in which 2D projections of one neutral geometrical object were paired with shock (CS+), whereas projections of another object were not paired with shock (CS-). Then, participants performed an approach-avoidance task in which they had to move a small manikin towards and away from the CS projections.
The effect of disgust-related vicarious learning on children’s fear beliefs for animals

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Objectives: Studies indicate a link between the disgust emotion and animal phobias. However, relatively few studies have used experimental methods, making conclusions about causality problematic. Using an experimental procedure, Muris et al. (2008) recently demonstrated increased fear beliefs in children given disgust-related information about animals. The current study utilised Askew & Field’s (2007) paradigm to investigate whether disgust-related vicarious (observational) learning experiences also contribute to the development of children’s fears.

Methods: Pictures of three Australian marsupials (the quoll, quokka and cuscus) were presented to 56 children (aged 7 - 10 years) on a computer screen. One animal was presented with pictures of faces expressing disgust, one with faces showing happiness and a third with no faces (control) in three counterbalanced within-subject conditions. Measures of fear-related and disgusted-related beliefs for the animals were taken before and after the animal-face presentations. In addition, children’s approach-avoidance behaviour for the animals was determined by measuring the distance between where they placed a figure representing themselves on a board (the ‘nature reserve’) and each of the animals.

Results: Children’s fear beliefs increased for animals they had seen with disgust faces. These increases were positively associated with increases in disgust-related beliefs for these animals. In addition, the nature reserve task indicated children preferred to avoid the animal they had seen with disgusted faces.

Conclusions: The study demonstrated that observing adults’ disgust responses to animals can encourage children to form fear beliefs and avoidance behaviour for those animals. This suggests a possible causal link between vicarious learning, the disgust emotion and fear-related responses to animals. Thus the findings have implications for our understanding of the role of vicarious learning and disgust in the development of fears and phobias in childhood.

Askew et al, Behav Res Ther 2007; 45: 2616
Muris et al, Behav Res Ther 2008; 46: 137

Paper Session 10 – OCD treatment

PA10-1

Behavioural group therapy for obsessive-compulsive disorder in Norway. An open community-based trial

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Although there is increasing evidence within the field of CBT that the findings from research can be generalized to routine clinical situations, there is in general a great lack of data on the generalizability of RCT results to routine settings (Shafran et al., 2009). To date, no research directly examines the issue of generalizability of group treatment for OCD in community based settings. The primary aim of the current study was to test the effectiveness of ERP-based 12 weeks group therapy in a Norwegian community mental health setting. As far as we know, this is the first study to examine whether group CBT can successfully be administered in a community-based clinic conducted by therapists with limited training in the CBT treatment of OCD. The sample consisted of 54 patients diagnosed with OCD. The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS), the Beck Depression Inventory (BDI) and the Spielberger State Anxiety Inventory (STAI-S) were administered before treatment, after treatment and at 3- and 12-month follow-ups. Analyses with mixed models for repeated measurements showed that group behavioural therapy offered to OCD patients significantly improved ratings of obsessive-compulsive symptoms, depression and anxiety. These improvements were maintained at 3- and 12-month follow-ups and an additional reduction in obsessive-compulsive symptoms was observed from post- treatment to 3-month follow- up. However, the delayed effect of therapy was no longer present at 12-month follow-up. In conclusion, this study shows that group behavioural therapy offered to OCD patients in a real-world setting produced large effect sizes, low drop-out rate and a large proportion of recovered patients.

Evidence-based psychological treatment of obsessive-compulsive disorder: Development of German practice guidelines

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Introduction: Obsessive-compulsive disorder is a debilitating disorder with chronic course in the majority of cases. Psychological as well as somatic treatments have been developed that can ameliorate symptoms considerably. Guidelines have been published to help practitioners to select efficient treatment strategies. Currently, a new German guideline is in progress.

Method: An exhaustive literature search was performed with a focus on studies in adult patients. Reports were systematically filtered for relevance and evaluated according to criteria of the Oxford Center for Evidence-Based Medicine. Questions that should be answered by the guideline were formulated. At present, the process of attaining consensus about recommendations derived from the reviewed evidence is under way. Here, we present a selection of reviewed evidence and preliminary recommendations.

Results: Cognitive behavioral psychotherapy (CBT) is effective in treating obsessive-compulsive disorder (11 randomized controlled trials). The mean effect size is above 1.0. Clinical significant changes are obtained in 40-60 % of cases. CBT in group settings is also effective but effect size is somewhat lower. No sufficient evidence exists for psychodynamic therapies, hypnosis, client-centered therapy, and other humanistic psychotherapies. Evidence for third-wave CBT techniques is preliminary as yet. The combination of CBT and pharmacotherapy is not superior to CBT alone, unless the patient is severely depressed. Adding CBT to pharmacotherapy increases improvement and reduces the risk of relapse.

Discussion: Although there is clear evidence for general efficacy of CBT in OCD, a number of practical issues remain unresolved. Surprisingly, any support from controlled studies is still lacking for psychodynamic therapies despite their wide distribution in German health care.

Conclusion: CBT is the first-choice intervention for obsessive-compulsive disorder and should be offered to any affected patient. Further studies examining long-term outcome and procedural aspects like duration and intensity of treatment as well as the inclusion of relatives and spouses in treatment should be conducted.

The Nordic Long-term OCD Treatment Study (NordLOTS) in childhood and adolescence

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NordLOTS Nor Christian Torp Ph.D candidate and Kitty Dahl Ph.D. The Centre for Child and Adolescent Mental Health, Eastern and Southern Norway Keywords: Multisite Longitudinal Treatment Study, CBT for Pediatric OCD. Obsessive-Compulsive Disorder (OCD) affects approximately 1 in 100 children, severely disabling their daily functioning. Cognitive Behavior Therapy (CBT) in form of exposure and response prevention (E/RP) is the first treatment of choice for children and adolescent with OCD.

Objectives: NordLOTS is a Nordic long term, multisite stepped-care treatment study in Norway, Sweden and Denmark for patients between 7 - 18 years with a primary OCD diagnosis. The aims of the study are 1) to identify and treat children and adolescents with moderate to severe OCD in local clinics, and 2) to evaluate the effectiveness of the treatment. The rational and design of Step 1 of the NordLOTS will be outlined and discussed.

Method: The first step of the NordLOTS treatment trial includes 14 sessions of CBT following recommended guidelines for exposure and response prevention therapy for all patients. None responders will be randomized to either continued CBT or medication with SSRI in step 2. Inclusion criteria into the study are broad. Approximately three hundred patients with primary OCD will be recruited between September 2008 and December 2011. Assessment are done by an independent evaluator, at baseline and repeated at week 7 and 13. The main outcome measure is the Children’s Yale-Brown Obsessive Compulsive Scale (CY-BOCS). Clinical remission is defined as a CY-BOCS score less than or equal to 15. All patients will be evaluated and followed for every 6 month for three years in order to describe short and long term treatment benefits.

Results: Some preliminary outcome data will be presented. Good treatment response from Step 1 is obtained in all participating countries. Our data indicate that the E/RP treatment produces a reduction in CY-BOCS total score. At present 649 children have been screened for participation in the study, in which 213 patients have been included. Of the 125 patients who has finished step 1, 79 % patients are responders.
PA11-1

Testing a DSM-V reformulation of posttraumatic stress disorder: Impact on prevalence, comorbidity, and treatment response among treatment-seeking civilian trauma survivors

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Objectives: We investigated a recent reformulation (Brewin, Lanius, Novac, Schnyder, & Galea, 2009) of posttraumatic stress disorder (PTSD) in treatment-seeking civilian trauma survivors.

Methods: Diagnostic data from a previous randomized controlled trial were subjected to the DSM-IV and Brewin et al. criteria for PTSD.

Results: Results revealed no changes in PTSD prevalence, comorbidity, or treatment efficacy, though substantial but roughly equal numbers of participants lost (12.7%) or gained (13.3%) a PTSD diagnosis under the Brewin et al. criteria. Fewer participants met the Brewin et al. reexperiencing and hyperarousal criteria, while more participants met the avoidance criterion.

Conclusions: The Brewin et al. criteria demonstrated high utility and altered the diagnostic status of a substantial number of participants without influencing PTSD prevalence, comorbidity, or treatment response.

Brewin et al, J Trauma Stress 2009; 22:366
Van Emmelk et al, Psychother Psychosom 2008; 77:93

PA11-2

The early course of Posttraumatic Stress Disorder and associated psychopathology in children and teenagers

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Intro The Acute Stress Program for Children and Teenagers (ASPECTS) is a clinical trial investigating the benefits of a cognitive behavioural program to help young people (8-17 years) suffering from Posttraumatic Stress Disorder (PTSD) three months after frightening events. Currently, treatment might be offered - if at all - several months or even years after, when symptoms might already have significantly disrupted the child’s learning and development. One of the biggest barriers to carrying out early intervention is identifying, at an early stage, those young people who might benefit from treatment. This paper presents the findings of a screening protocol set up in this trial to assist to identify and then subsequently monitor the early course of PTSD and associated psychopathology in children.

Method: All eligible young people (8-17 years) involved in Criterion A events that led either to an admission to the Emergency Department, Addenbrooke’s Hospital, or Victim Support Services, Cambridgeshire, were invited to participate. Children took part in two similar screening interviews (2-weeks, 2-months) to assess PTSD, mood, anxiety, and associated psychopathology. Parents answered demographic questions and rated their perceptions of the child’s adjustment. All measures included were derived from existing cognitive theory (Ehlers & Clark, 2000) and empirical research.

Results: Data from the first 75 participants will be presented. A series of regression analyses will highlight significant risk factors to the disorder’s development at 2-months.

Discussion: The implications of these findings for determining the optimal time to carry out interventions (i.e., when natural amelioration ceases), and, the feasibility of developing a screening tool to identify children at risk of developing PTSD, are discussed.

Conclusion: The routine early screening of PTSD in community and health care settings has the potential to improve the ability of health professionals to implement early interventions to treat paediatric posttraumatic stress disorder.


PA11-3

Rumination in PTSD as well as as in Traumatized and Non-Traumatized Depressed Patients: A Cross-Sectional Clinical Study

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Introduction: Although rumination is a key process in the onset and maintenance of depressive symptoms and a powerful predictor of persistent PTSD, little is known about the differences and similarities of rumination in these conditions. Previous research has also not always differentiated between rumination and other types of intrusive cognitions. Aims: We sought to systematically evaluate rumination and to gather more information about its content and associated emotions in three patient groups (PTSD, depressed with and without trauma, N=65). Furthermore, we examined the interaction between rumination and intrusive images.

Method: A multi-method assessment of rumination, including a questionnaire and a log (kept for one week), was employed.

Results: Rumination was found to be a complex mental activity that is comprised of different subcomponents ("why" and "what-if" types of thoughts, thoughts related to stress event, depressive thoughts, unproductive thoughts). The diagnostic groups did not differ with respect to how frequently they engaged in these thought processes. Rumination also made all groups feel worse. There were, however, also important differences: rumination triggered more frequently intrusive trauma images in the PTSD group than in the traumatized depressed group, whereas there were no differences between the groups regarding the triggering of intrusive images of critical life events. The traumatized participants (PTSD and depressed with trauma) spent more time ruminating than the non-traumatized depressed patients.
Conclusions: The results corroborate the assumption of rumination being a transdiagnostic process, with similarities but also with differences across diagnostic groups. The findings further support recent research on the intricate relationship between different types of intrusive cognitions.

PA11-4

War-related bereavement: association with mental and physical health
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Objectives: Little is known about mental health of civilian war survivors who have lost first-degree relatives during war. The aim of this study was to assess prevalence rates of mental disorders and dysfunction in lone female war survivors whose husband was killed during war as well as in young adults who lost their father due to war-related violence in childhood or adolescence.

Methods: Face-to-face structured interviews were conducted in two studies. In study 1, 100 widowed lone mothers and 71 married mothers, both of whom had also experienced the Kosovo war ten years previously were interviewed. In study 2, face-to-face interviews were conducted with 179 bereaved young adults and 175 non-bereaved young adults.

Results: Study 1 revealed that a decade after the war, only 4% of widowed lone mothers did not meet criteria for a mental disorder. Widow mothers were more likely to suffer from major depressive disorder (MDD) as well as posttraumatic stress disorder (PTSD) than non-bereaved female war survivors (OR = 10.16, 95% CI 4.69-21.97; OR = 12.34, 95% CI 5.5-27.69, respectively). Two thirds of widowed mothers met criteria for prolonged grief disorder. Widow mothers were further more likely to report current suicide risk than non-widowed mothers (OR = 4.18; 95% CI 1.93-9.03). Study 2 yielded that nearly 60% of bereaved young adults suffered from either MDD or PTSD compared to 40% among non-bereaved survivors of war. A third of bereaved young adults met criteria for prolonged grief disorder. Finally, meeting criteria for prolonged grief disorder was associated with significantly higher suicide risk as well as greater physical distress. Conclusions: War-related killing of the husband or the father can constitute a significant factor for substantially elevated mental distress, suicide risk, and somatic symptoms among survivors of war.

PA11-5

Preventing children’s post-traumatic stress after disaster with teacher-based CBT intervention: A controlled study
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Objective: The objective of this study was to describe the effects of a universal teacher-based preventive CBT intervention implemented on Israeli students before the rocket attacks that occurred during Operation Cast Lead, compared to a non-intervention but exposed control group.

Methods: 1488 fourth and fifth grade students in a city in southern Israel who were exposed to continuous rocket attacks during Operation Cast Lead participated in the study. 53.5% of the children composed the intervention group. The intervention led by the teachers was implemented three months before the traumatic exposure. The intervention protocol consisted of 14 sessions each lasting 45 minutes. Sessions provided psycho-educational modules, cognitive behavioral techniques, identification and processing of emotions and attention control exercises. There was emphasis on practical implementation of knowledge and the techniques between the sessions with daily class stressors. The intervention protocol didn’t deal with traumatic material at all. In the control group, 46.5% matched by age the preventive intervention was not implemented. Children filled out the UCLA-PTSD Index and the Stress/Mood Scale three months after the end of the rocket attacks.

Results: The intervention group displayed significantly lower symptoms of post-trauma and stress/mood compared to the control group (p < .001). Children in the control group had 57% more cases of PTSD. This difference was significantly higher among boys (4.4% vs. 10.2%) and less among girls (10.1% vs. 12.5%).

Conclusions: The teacher-based resilience-focused CBT intervention is a universal cost-effective approach enhancing preparedness of children to mass trauma and to prevent the development of PTSD.

When shame memories become central to adolescents’ identity: Implications to psychopathology

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Objectives: Recent research has shown that shame experiences from childhood and adolescence can function as traumatic memories and become central to one’s identity and life story and are related to shame feelings and psychopathology in adulthood (Matos & Pinto-Gouveia, 2009; Pinto-Gouveia & Matos, 2010). However, research investigating the impact of shame memories in adolescence is scarce. Furthermore, adolescence developmental features turn it into a period of increased vulnerability to the impact of adverse experiences such as criticism, rejection, abuse, bullying, etc. Also, one of the major tasks of this stage is the process of identity formation (Wolfe & Mash, 2006). Therefore, this study explores the relationship between the centrality of shame memories to one’s identity and life story and current shame feelings (external and internal) and psychopathology, specifically depression, anxiety and stress, in adolescents.

Methods: 350 adolescents with ages ranging from 15 to 18, recruited in the regular school system, will participate in this study. Data are still being collected through the use of the following self-report instruments: Centrality of Event Scale (CES; Bernsten, & Rubin, 2006); Internalized Shame Scale (ISS; Cook, 1996); Others As Shamers (OAS; Goss, Gilbert, & Allan, 1994); Depression, Anxiety and Stress Scale (DASS–21; Lovibond & Lovibond, 1995).

Results: In this study we expect that shame experiences that become central memories to ones’ identity and life story would influence the formation of self-schema (e.g. feelings and perceptions of self as unworthy, inadequate, flawed, a.k.a. internal shame) and the development of self-others schema (e.g. to believe one exists negatively in the mind of others perceived as critical, rejecting, threatening, a.k.a. external shame), that would determine subsequent emotional, cognitive processing and behavior, and thus may impact on psychological adjustment in adolescents.

Conclusions: Results will be discussed in terms of the role shame memories may play in the formation of identity and in the development and maintenance of psychopathology in youngsters. Clinical implications will be addressed.

Increasing frustration tolerance in order to decrease students’ anger and aggression – the efficiency of a secondary prevention program based on rational emotive education (REBE)

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Low frustration tolerance (LFT) represents the demand that reality should be as we wish it to be. LFT is hypothesized to have greater importance for some self-control problems. The present study’s aim is to support the efficiency of a prevention program based on frustration tolerance increasing in reduction of anger and aggressive behaviors in students. There were selected 214 students characterized by teachers as being difficult to interact with because indiscipline problems. The sample was composed by 72 fifth grade students, 54 ninth grade students and 88 tenth grade students. They were split into experimental (87), placebo (58) and control (69) groups. The subjects completed The LFT scale for students (Trip & all., 2009), CASI (Bernard & Cronan, 1999), MPACI (Millon & all., 2005), MACI (Millon & all., 1993), STAXI–CA (del Barrio & all., 2003). The fifth grade experimental students attended 10 REBE activities and the placebo group 10 discussion meeting about the school’s rules. The ninth grade experimental students participated to 8 REBE classes and the placebo group had 8 classes on different topics as love, friendship etc. The tenth grade experimental students attended 16 REBE activities and the placebo group 16 health education classes. The control groups were not involved in any intervention. The statistical analysis showed a decrease of irrational beliefs and especially of LFT beliefs to all students from the experimental samples. No anger modification was supported. The data indicated minor statistically significant increasing of problematic behaviors as the students showed less submissiveness and more egotistic and unruly patterns. It seems that short term prevention program based on tolerance increasing is efficient only in changing irrational beliefs in students. It has no effect on anger. It raised the awareness of the problematic behaviors, their scores became higher as usually happens in the first phase of therapy for behavioral problems.

Defining, assessing and treating self-injury in teenagers and young adults

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Learning objectives: The aim of the workshop is to give to the professionals more information about self-injury, how to conceptualize and to assess it in teenagers and young adults. Treatment indications will be discussed too. In particular, during this workshop the phenomenon of self-injury will be described starting from literature, clinical experiences and our researches (neither the DSM IV TR nor the ICD-10 define specific criteria for it). Favazza (1998) defines it as the intentional self-destruction or alteration of body tissue without deliberate suicidal intent. Self-injury frequently emerges during adolescence and most teenagers appear to do so as a morbid but effective form of coping and self-help, so preventing, assessing and knowing how to deal with it is very important. For achieving this, a questionnaire, born for studying and assessing self-injury, will be presented, pointing out the connection between these behaviours and some psychological components. Finally, the possible psychotherapeutic interventions will be discussed through clinical cases and working in small groups. Training modalities: Five parts will be proposed with a 10 minutes coffee break in between: 1-Part one- didactic - (30 minutes, run by MGC & MGM) - Theoretical framework for the interventions (explanation models for self-injury) 2-Part two - experiential - (30 minutes, run by MG & MGM) – Presentation of a questionnaire for studying and assessing self-injury 3-Part three – experiential - (30 minutes, run by MGC & DS) – Presentation of clinical cases about self-injury 4-Part four- experiential - (60 minutes, run by MGC, MGMT, DS, MG) – Working in small groups about the treatment of self-injury 5- Part five – discussion and questions- (20 minutes- run by MGC, MGMT, DS, MG) - Maria Giuseppina Caneviso, is a Clinical Psychologist, Psychotherapist, trained in CBT and family therapy, Teacher and supervisor of AIAMC, co-director of Centro Moses, a Centre of psychotherapy, clinical research and training in Northern Italy. Margarida Gaspar de Matos, PhD, is a Clinical Psychologist, Professor at Lisbon T University (UTL), trained in CBT in Lyon with Dr Jean Cottraux. Coordinates the a Consultation Center for young pupils at UTL.


Characteristics of treatment-seeking anxious youth: An international comparison of similarities and differences between an American university clinic and Norwegian outpatient clinics

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Recently there has been increasing focus on transporting empirically-supported treatments (EST) into the community. Few children in community outpatient clinics receive ESTs, emphasizing the need for improved dissemination (purposeful distribution of relevant information to clinicians) and implementation (adoption of treatments in clinical practice; Lomas, 1993) of these interventions. One obstacle contributing to the low rates of ESTs being applied in community settings, may be the perceived differences between the patients participating in randomized controlled trials typically conducted at university research clinics and the patients seen by “real-world” therapists in the community. For example, treatment-seeking youth seen in community service clinics may present with more severe symptoms (Weisz, McCarty, & Valeri, 2006). Others suggest that such differences may be exaggerated (e.g., Stirman, Crits-Christoph, & DeRubeis, 2004). Very little research has been conducted comparing youth presenting at research clinics to youth seeking treatment in community settings. Preliminary research suggests that youth with anxiety disorders (AD) treated in community clinics may have higher levels of externalizing problems compared to youth with ADs seen in research clinics (Southam-Gerow, Weisz, & Kendall, 2003), however, this finding needs replication. Increasingly, we also see treatment manuals being translated and applied across countries. Sound adaption of ESTs across countries further suggests a need for more knowledge about similarities and differences in client characteristics that may contribute to modifying treatment outcome. Participants in the present study are treatment-seeking anxious youth from (a) five Norwegian community clinics for child and adolescent mental health (N = 111), and (b) a university research clinic in Philadelphia, USA (N = 143). Descriptive analyses will compare the two samples on family characteristics and pre-treatment client characteristics such as level of internalizing and externalizing symptoms as measured by the Multidimensional Anxiety Scale for Children (MASC), Child Behavior Checklist (CBCL), Teacher Report Form (TRF), presenting diagnosis as measured by the Anxiety Disorders Interview Schedule (ADIS), and global level of functioning as measured by the Children’s Global Assessment Scale (CGAS). Analysis of variance will test the significance of any differences observed.

PA13-1

Intrusions may Fuel Emotional Cascades and Subsequent Dysregulated Behavior

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Objectives: In their emotional cascade model (ECM) Selby and colleagues (2008) postulate that people often engage in dysregulated behaviors such as binge eating, excessive alcohol consumption or social reassurance seeking to avoid or end extreme, aversive emotional states. They suppose these states to be triggered by a self-perpetuating cycle of negative affect, the dysfunctional attempt to regulate the aversive emotions by rumination and negative emotional thoughts, finally cumulating in behavioral dysregulation.

Methods: We aimed at replicating the findings of Selby et al. (2008) in a randomly assessed German population sample of N = 414. Furthermore, we introduced intrusions into the ECM as a mediating variable between rumination and behavioral dysregulation using a structural equation model approach.

Results: We could confirm the original ECM. Intrusions turned out to fully mediate the effect of rumination on a broad array of dysregulated behaviors (drinking alcohol to cope, binge eating, anger expression, social and medical reassurance seeking and urgency/impulsivity, all loading on one higher order factor). This mediation even endured when controlling for symptoms of depression.

Conclusions: These findings support the idea that only if rumination (how people think: negatively, repetitively) is fuelled by intrusions (what people think: high levels of negative cognitive content), emotional cascades may take place, ending up in dysregulated behaviors as attempt to end the accompanying aversive emotional state. Therefore, addressing the combined consideration of rumination and intrusions in psychotherapy may improve the treatment of disorders characterized by intrusions, dysregulated behaviors and/or extreme aversive emotional states such as obsessive-compulsive disorders or generalized anxiety disorder.


PA13-2

Cognitive processes in excessive worry: a comparison of three theoretical models

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Objective: The aim of this study was to investigate the applicability of three theoretical models of worry in a multi-ethnic sample of university students. These models are the avoidance model of worry and GAD (Borkovec et al., 1998), the metacognitive model of GAD (Wells, 1995) and the intolerance of uncertainty model (Dugas et al., 1998).

Methods: A total of 1224 students (611 Black, 613 Caucasian) completed the Penn State Worry Questionnaire (PSWQ), the Metacognitions Questionnaire-30 (MCQ-30), the Meta-Worry Questionnaire (MWQ), the Why-Worry II Scale (WW-II), the Thought Control Questionnaire (TCQ), the Intolerance of Uncertainty Scale (IUS), the Cognitive Avoidance Questionnaire (CAQ) and the Negative Problem Orientation Questionnaire (NPOQ). Hierarchical regression analyses were conducted with the MCQ-30, MWQ, WW-II, TCQ, IUS, CAQ and NPOQ scores as predictor variables, and PSWQ scores as the criterion variable.

Results: The metacognitive model of GAD (consisting of the MCQ-30, MWQ, WW-II and TCQ scores) accounted for 38.0% of the variance in PSWQ scores and is significant at the 1% level [F11;1208 = 39.464]. The intolerance of uncertainty model (consisting of the MCQ-30, WW-II, IUS, CAQ and NPOQ scores) accounted for 35.3% of the variance in PSWQ scores and is significant at the 1% level [F13;1205 = 50.490]. The avoidance model of worry and GAD (consisting of the MCQ-30, WW-II and CAQ scores) accounted for 26.4% of the variance in PSWQ scores and is significant at the 1% level [F11;1208 = 39.464].

Conclusion: It is apparent from the results that the metacognitive model of GAD (Wells, 1995) and the intolerance of uncertainty model (Dugas et al., 1998) account for almost the same amount of variance in worry intensity of the total sample, while these models address different constructs. Although the cognitive avoidance model of worry (Borkovec et al., 1998) accounted for a significant amount of variance in worry intensity, the percentage of variance in worry intensity was lower in comparison to the metacognitive model or the intolerance of uncertainty model. It is possible that the three cognitive models of excessive worry, despite their focus on different constructs, share a common emphasis on the importance of avoidance of internal experiences. It could therefore be hypothesised that all three cognitive models of worry under investigation appear to offer valuable insights of their own into the development and maintenance of excessive worry and GAD.

Anxiety-related negative and positive attentional biases in older adults

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Background: Previous research has demonstrated that individuals with high levels of anxiety vulnerability show a tendency to selectively attend to negative information. This attentional bias may play a causal role in the development and maintenance of anxiety symptoms (MacLeod, Koster and Fox, 2009). Typically, studies have used samples of young adults so knowledge regarding the presence of anxiety-related attentional bias in elderly population has been neglected. However, age-related studies have revealed that older adult have reduced incidence of anxiety disorders (Jorm, 2000), and favour positive over negative information, and used this positive effect as an emotion regulation strategy (Mather and Carstensen, 2005).

Objective: To study the presence of attentional bias in a sample of older adults with low and high levels of trait anxiety to explore whether attentional characteristics of anxiety vulnerability change with age.

Results: A mixed design analysis of variance was carried out for attentional bias scores, with one between-subject factors, trait-anxiety (high/low), and two within-subjects factors emotional valence (negative/positive) and SOA (100/500). The three-way interaction was significant, F(1,115) = 4.5, p < .05. There were not significant results at 100 ms, but at 500 ms HTA participant play attention to positive images.

Discussion: This study do not replicated with older adults the results founded with anxious young samples: high trait anxiety was not associated with an attentional bias towards negative information. Instead, as age-related studies suggested, HTA participants used their gaze to regulate their emotion, and had a tendency to process positive information.

Conclusions: HTA participants show a positive effect. This result suggests that cognitive mechanisms underlying anxiety vulnerability change with age, and could help to explain the low incidence of anxiety disorders in older adult.


Can’t fight this feeling: Automatic negative evaluations of somatosensory stimuli are related to the experience of somatic symptom distress

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Introduction: Cognitive theories of medically unexplained (“somatoform”) symptoms (MUS) (e.g., Brown, 2004) stress the importance of specific schemata that (mis-)guide the processing of afferent somatosensory information. These schemata, which are conceptualized as the result of prior illness episodes or high levels of arousal and negative affectivity, are hypothesized to bias attention, memory, and appraisal processes of bodily sensations in a negative way. Although this schema-approach of MUS would suggest more negative automatic evaluations of somatosensory events in people with MUS, this hypothesis has never been directly tested using experimental paradigms. The current study aims at closing this gap.

Method: In the first study, a modified version of the affect misattribution procedure (AMP) by Payne et al. (2005) with aversive and non-aversive tactile stimuli (non-painful electric vs. vibration stimulus) was piloted in 40 college students. In a second study (N=50), associations between negative automatic evaluations of aversive tactile stimuli (measured with the tactile AMP) and individual levels of somatic symptoms (in the PHQ) were explored.

Results: In study 1, reliable tactile affect misattribution effects could be observed (i.e., neutral target stimuli following aversive tactile prime stimuli were evaluated significantly more negative compared to neutral targets following non-aversive vibration stimuli; p=.02; d=0.61). This main effect was replicated in study 2. Additionally, automatic negative evaluations of aversive tactile stimuli were found to be positively associated (r=.35) with somatic symptom distress (PHQ). This association was significantly moderated by negative affectivity (i.e., stronger in people with higher levels of negative affectivity).

Discussion: The findings are in line with cognitive theories MUS. The tactile AMP is suggested as a promising paradigm to study automatic evaluations of body sensations in people with somatoform disorders and related clinical conditions.

Conclusion: Higher levels of MUS are related to more negative automatic and involuntary evaluations of aversive somatosensory stimuli. This association appears strongest in combination with higher levels of negative affectivity.


Self-focused attention during a social interaction situation – a novel eye-tracking paradigm

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Objectives: Cognitive models of social anxiety disorder (SAD) have suggested that self-focused attention (SFA) not only precludes the perception of potentially positive feedback from the audience (and ensures perception of potentially negative cues of the self), but it also siphons attention away from important sources of external information inherent to the task at hand. It is assumed that this impairs social performance and makes feared consequences more likely. In the present study public selfconsciousness (or SFA) is measured directly during a social interaction situation using a novel eye-tracking paradigm.

Methods: 20 female patients with SAD and 20 healthy controls engaged in a video conference conversation with an attractive male confederate (participant and confederate were sitting in different rooms). The participant watched a synchronous video presentation of herself and of the confederate during the conversation on a computer screen. SFA was measured by the absolute time of the participant watching her own video presentation during this conversation. Self-report questionnaires measured social anxiety, underestimation of social performance (defined as the discrepancy between self-perceived and observer-perceived social performance), and actual (observer-perceived) social performance.

Results: Preliminary results show that socially anxious participants focused more on themselves than low socially anxious controls. The opposite was the case for other focused attention. Socially anxious participants focused longer on spots on the computer screen where no videos were presented, and the total time focusing on themselves or on the confederate was lower than in low socially anxious controls. Final results will be presented.

Conclusions: Socially anxious participants might indeed focus more on themselves as seen by their conversation partner (public self-consciousness) than on their conversation partner. Further, socially anxious participants seem to be less task-concentrated. The significance of this study lies in the novelty of the paradigm, which makes direct measurement of SFA during a social interaction situation possible for the first time.

Contamination fear in OCD: the relation between guilt and disgust sensitivity

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Introduction: Research has demonstrated the role of disgust sensitivity in contamination-related OCD, particularly in patients who are not afraid of specific threatening consequences which might follow becoming contaminated. The relation between the fear of guilt and obsessive-compulsive symptoms has also been supported: many patients are afraid of being responsible for harming themselves or someone else because of their own carelessness or negligence. It remains unclear whether these two pathways that lead to the genesis of OCD are independent or not. Our hypothesis is that disgust sensitivity is strongly related to guilt and that the preservation of a self-image of moral integrity may be underlying all forms of OCD. When OCD sufferers do have experiences that threaten this self-image, even if only imaginative, they feel extremely guilty, mentally contaminated and disgusted by themselves. The sense of moral dirt manifests itself with an increase in disgust sensitivity that triggers the onset of a consequent contamination fear.

Method: More than 450 non-clinical subjects were asked to complete a battery of self-report questionnaires (Guilt Inventory, Disgust Scale Revised, Contamination subscale of Vancouver Obsessive-Compulsive Inventory, Beck Depression Inventory-II). Structural equation modelling assessed the relationships among disgust sensitivity, guilt and contamination fears, controlling for depression.

Results: Even if preliminary results are still not available, we expect that guilt (moral dirt), disgust sensitivity and contamination fear will be strongly related, even when controlling for depressive symptoms. Otherwise, we expect that the model will support our hypothesis that disgust sensitivity has a mediating role between guilt, loss of a self-image of moral integrity and contamination fear.

Discussion and Conclusion: The findings will be discussed in comparison to previous studies about the role of guilt and disgust sensitivity in contamination-related OCD and its implications in clinical setting.
Suppression of disgust related thoughts in participants high and low in disgust sensitivity/propensity

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Introduction: According to contemporary cognitive-behavioural models of obsessive-compulsive disorder (OCD), dysfunctional beliefs underlie negative appraisals of otherwise normal intrusive thoughts that lead to counterproductive control strategies such as compulsive rituals and thought suppression. These strategies are aimed at reducing distress (i.e. fear, anxiety). Although the focus in these models is on the role of fear and anxiety resulting from perceived threat, the role that the feeling of disgust has as a revulsion response related to potential contamination has also been linked with OCD symptoms. The objective of the present study was to investigate the effect of suppression of disgust related thoughts in groups of subjects that were sensitive or not for disgust related stimuli.

Method: University students scoring high or low in an internet survey on a self-report questionnaire measuring disgust propensity and sensitivity participated in the study. Participants were tested individually where they filled in questionnaires and watched a disgust related film fragment before they were randomized to performing a traditional suppress-monitor or monitor-monitor thought task with the film related thoughts where thought frequency and disgust was measured. Finally, all subjects participated in a behavioural avoidance task related to the film material. At this time point, 28 subjects of 60 participants in total have been enrolled in the study that will finish before 1st of April 2011.

Results: Results using mixed ANOVAS show that within the group of participants high in disgust propensity/sensitivity (n=15), thought frequency declined in the thought monitoring group between interval 1 and 2 but not in the thought suppression group. No significant effects were observed in the low disgust propensity/sensitivity group (n=14). Ratings of disgust after both thought intervals were very low in the low disgust group and did not differ between the suppression and monitoring groups. In the high disgust group, level of disgust declined between intervals in the monitoring group but not in the suppression group. The low disgust group finished significantly more steps on the behavioural avoidance task than the high disgust group but the interaction with experimental instructions (suppress vs. monitoring) was not significant.

Conclusions: Preliminary results indicate that in participants vulnerable for experiencing disgust, thought suppression leads to sustained thought frequency and feelings of disgust after suppression seizes in contrast to monitoring thoughts that leads to reduction in frequency and feelings. Partial support is therefore obtained for the detrimental effects of thought suppression in this study.

Examining the Influence of Threat on Judgments of Contamination Spread

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Throughout history and still today, humans have had to deal with the threat of infectious diseases. However, there is great variability in people’s concern about the spread of infectious agents and in their associated washing and avoidance behaviour. Some people are not sufficiently aware of the possibility of contaminant spread—they are the target audience of public health and occupational health campaigns. Other people, however, can be excessively concerned with the spread of contamination—for example, people with Obsessive-Compulsive Disorder (OCD), whose contamination obsessions and washing compulsions can severely disrupt their ability to function in everyday life, have a tendency to view contamination as spreading exceedingly easily.

Objective: In an effort to better understand what accounts for this variability, the present two studies examined whether threat information influences people’s judgments of contaminant spread.

Method: 75 people participated in each of the studies, and were randomly assigned to judge how far either one of the following substances spread: a threatening contaminant (disease-causing bacteria), a non-threatening contaminant (harmless bacteria) or a non-contaminant/food (vegetable juice in Study 1, yogurt containing probiotic bacteria in Study 2). In order to ensure participants’ safety, these substances were not actually present—rather participants were led to believe that one of the three substances was placed on a cutting board and then spread to a series of objects.

Results: We had hypothesized that participants would judge the disease-causing bacteria to spread further than the harmless bacteria and food substances. However, interestingly, participants did not judge threatening bacteria as spreading further than non-threatening bacteria, even though they rated the threatening bacteria as more dangerous and something that ought to be avoided. Rather, participants rated the contaminants (threatening and harmless bacteria) to spread the same as one another and further than the food substances, regardless of whether the food was described in bacterial terms or not.

Conclusions: These findings suggest that people’s judgments of spread are influenced by whether the substance is seen as a contaminant or food, but not by perceived threat. Findings are discussed in terms of their implications for understanding contamination fear in OCD.
Investigating thought control in relation to OCD symptoms in students, using the thought dismissal/removal experimental paradigm: Removing neutral, negative and personal intrusive thoughts

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Introduction: According to contemporary cognitive-behavioural models of obsessive-compulsive disorder (OCD), dysfunctional beliefs underlie negative appraisals of otherwise normal intrusive thoughts that lead to counterproductive control strategies such as compulsive rituals and thought suppression. These strategies are aimed at reducing distress (i.e. fear, anxiety). However, research results have been inconsistent concerning the detrimental effects of thought suppression in OCD. The objective of the present study was to investigate control over personal intrusive thoughts by comparing it with control over a neutral and a negative thought by using a thought dismissal or removal experimental procedure.

Method: At this time point, 48 subjects have been enrolled in the study, of the 70 that will participate in total. Participants were university students that were tested individually where they filled in questionnaires, solved two neuropsychological tests that measure word fluency (i.e. cognitive flexibility) and resistance to proactive inhibition (i.e. cognitive inhibition) and performed the thought dismissal/removal task where they had to form a personal intrusive thought, neutral thought and a negative thought and subsequently remove it by forming a neutral replacement thought. Thought formation and replacement reaction times were measured and subject’s evaluation were obtained of the emotionality and qualities of the thoughts (how real, vivid and picture like they were) as well how difficult it was to replace them.

Results: Paired t-tests showed that thought formation latencies did not differ significantly between neutral, negative and personal intrusive thoughts but replacement latencies were significantly longer for personal intrusive thoughts compared to neutral thoughts. Negative and personal intrusive thoughts did more often intrude when being replaced, compared to a neutral thought. Replacement latencies of personal intrusive thoughts had weak but marginally significant correlation with estimated negative emotionality and discomfort of the thoughts, but this was not the case for the neutral and negative thoughts. Emotionality and discomfort was related to self-reported difficulty replacing both negative and intrusive thoughts. Relationship between formation/replacement latencies and self-reported OCD symptoms and neuropsychological tests were not as clear.

Conclusions: These preliminary results indicate that intrusive and negative thoughts are more difficult to replace than neutral thoughts and this is related to the emotionality of the thoughts. The results also indicate that thought dismissal/removal may be a useful experimental paradigm for investigating control over negative and intrusive thoughts in clinical psychology.

To be perfect or not to be: Maladaptive perfectionism and psychological maladjustment in a student sample

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Objectives: To examine whether a novel measure of maladaptive perfectionism (based on a cognitive behavioral conceptualization) is associated with psychological maladjustment.

Methods: 220 undergraduate students (150 female) completed three measures: The Maladaptive Perfectionism Questionnaire (MPQ) (Ohring, unpublished), the Obsessive Compulsive Inventory-Revised (OCI-R) and the Beck Depression Inventory (BDI).

Results: The MPQ was positively associated with the both the OCI-R and BDI. In further analysis MPQ predicted obsessive compulsive symptoms when controlling for depressive symptoms.

Conclusions: This study provides preliminary support for a novel measure of maladaptive perfectionism. Further research in clinical samples and with other psychological problems is recommended.
Improving the provision of psychological therapies in inpatient care; the DOORWAYS project: preliminary results

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Dr Rumina Taylor and Dr Emese Csipke

Introduction: Less than half of the 52% inpatients wanting psychological therapies receive any. Providing psychological therapies to inpatients is sometimes said to be impossible due to: the lack of access to clinical psychologists; the perceived inability of nurses to implement therapies and the acuity of patients’ symptoms. We believe that it is possible to overcome these concerns. DOORWAYS aims to increase the access of inpatient service users to psychological therapies and activities, as well as providing training to nursing staff to give them the skills and confidence to provide these.

Method: Every six months the eight wards taking part were randomised and two allocated to the treatment arm, repeated until all received treatment. Preceding each randomisation, the project team collects data concerning the atmosphere of the ward from both nurses’ and service users’ perspectives. The treatment involves a clinical psychologist training and supporting staff until they are able to independently run groups (e.g. problem-solving skills, hearing voices, emotional-coping skills).

Results: The project has demonstrated that nurses are able to deliver psychological therapies. The view that this would be beyond their abilities is sometimes to be impossible due to: the lack of access to clinical psychologists; the perceived inability of nurses to implement therapies and the acuity of patients’ symptoms. We believe that it is possible to overcome these concerns. DOORWAYS aims to increase the access of inpatient service users to psychological therapies and activities, as well as providing training to nursing staff to give them the skills and confidence to provide these.

Conclusion: The uptake of these interventions by both staff and service users demonstrates the feasibility of psychological therapies in an acute inpatient service. It helps if nurses who are interested and competent to do group work are recruited in the first place. We look forward to presenting further data, when it becomes available, which demonstrates whether implementing these interventions leads to a statistically significant improvement in ward atmosphere, patient and staff satisfaction.

VOICE: Developing a Measure of Service Users’ Perceptions of Acute Care

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Introduction: Acute psychiatric wards are often viewed by service users as untherapeutic and coercive environments. The aim of this study was to develop a self-report questionnaire (VOICE) measuring service users’ perceptions of acute care.

Method: VOICE was generated using an inclusive, participatory methodology: service users were involved throughout the whole process. A reference group comprising users and representatives from mental health organisations met to identify the core dimensions of acute care and generate a topic guide. Focus groups of service users were convened to discuss their experiences of acute care. Thematic analysis of the data generated items for the measure, which was refined and validated by expert panels of users and the reference group. Following a feasibility study, the measure was tested for its psychometric properties.

Results: VOICE is a 19 item measure of perceptions of acute care, which includes issues such as admission, staffing, safety, activities and diversity. The measure has high internal consistency, good test retest reliability and high criterion validity. A factor analysis revealed two subscales of security and care.

Discussion: We have produced an outcome measure which is valued by service users and encompasses the issues they consider most important. The methodology ensures that a high degree of participation, interest and ownership are maintained and that the resulting measure is user friendly, has high face validity and acceptability. Some of the inherent difficulties in translating qualitative data and psychometric testing will be discussed.

Conclusion: Using a participatory method, we have developed a user valued outcome measure with sound psychometric properties. VOICE is currently being used as the primary outcome measure in a randomised controlled trial evaluating health and social care interventions on acute wards. It is anticipated that in comparison to traditionally developed measures, ours will be more acceptable to service users and show greater sensitivity to change.
Effectiveness of activity scheduling among inpatients in an acute psychiatric unit: a pilot study

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Activity scheduling is a behavioral treatment for which research has indicated positive effects for depressed patients. Patients learn to regulate their thoughts, feelings and daily activities, increase the pleasant activities and to increase positive interactions with their environment. In this study activity scheduling was used in an acute in-patient psychiatric unit.

Method: A quasi-experimental research design using the Beck Depression Inventory, Beck Anxiety Inventory and the Pearlin Mastery Scale as well as questions on patients’ self-care abilities, recreational activities and social interactions. The purpose of this part of the study is to evaluate the effects of activity scheduling for inpatients on an acute ward. Focus group research will also be conducted among nurses who work with participants on their activity scheduling. The main purpose is to identify the main benefits and hindrances nurses experience in this work.

Results: The sample (n=12) were inpatients at a psychiatric unit at the National University Hospital. Patients received treatment as usual in addition to activity scheduling. Age range was between 18 and 65 years. The mean intervention time was 12 days. The most common diagnoses were depression, anxiety disorders and personality disorders and the majority of patients had more than one admission to the ward. Preliminary results indicate that scores lower significantly on BDI and BAI during the treatment period. Lowering of scores on the Pearlin Mastery Scale was not significant. Self care abilities, recreational and social abilities had improved at the end of the treatment, but the improvements did not reach statistical significance.

Discussion: Quantitative results show positive changes in depression and anxiety among participants post treatment. Data gathering is currently ongoing The focus group research will be completed during the summer 2011 and the authors will report both quantitative and qualitative results at the conference.


Randomized Trial of Community-Based Cognitive Behavioral Risk Reduction Interventions for Adolescent Women

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Introduction: A randomized trial of a cognitive behavioral risk-reduction intervention consisting of small group sessions, individual counseling and support groups for African- and Mexican-American adolescent women with STI and abuse history and evaluate the effects of the intervention model versus enhanced counseling for this group on STI at 6 and 12 month follow-up.

Methods: Mexican- and African-American adolescent women (n=409, 13-18 years) with STI and a history of abuse (physical, psychological, sexual) were recruited from public-health clinics in a metropolitan area of the US. Following enrollment participants received targeted physical exams including contraception counseling and interviews including assessments for abuse, sexual risk behavior, substance use, contraceptive use and STI. Participants were encouraged to return for unscheduled visits as needed for counseling or suspected STI or pregnancy. Scheduled follow-up rates at 6 (93%) and 12 (93%) months were high. Participation in risk-reduction interventions was also high (92%). Surveillance for STI and pregnancy at off-site clinic visits was conducted and documented throughout the study.

Results: At study entry, participants reported sexual (58.9%), physical (76.8%) and psychological (82.4%) abuse histories, ever pregnant (45%), currently pregnant (18.7%), ever used birth control (29.9%), currently in school (63.2%), previous arrest (56.2%), home runaway (54.5%), any substance use (94.1%) including marijuana (82.6%), cigarettes (74.6%), alcohol (77.5%), cocaine (41.1%) and benzodiazepine (45%); forced sex (29.1%) and sex with friends for benefits (36.2%). More workshop vs control group participants reported physical abuse (82.9% vs 71.0%), home runaway (63.1% vs 46.4%), cigarettes (78.9% vs 70.5%) and alcohol use (81.4% vs 73.8%). More control group participants were currently in school (68.1% vs 58.1%) and had used condoms (95.3% vs 86.4%). These variables plus age/ethnicity were initially included in the regression model for analysis of data from 0-6 and 0-12 month follow-ups. Significantly fewer STI re-infections for intervention vs control group participants at each study interval were identified; physical abuse and substance use remained in the model.

Conclusions: Community-based cognitive behavioral interventions may reduce of STI among African- and Mexican-American adolescent women with STI and a history of abuse.
Formulation of a cognitive behavioral group program to prevent psychological distress among Icelandic university women students

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According to international literature the prevalence of psychological distress among university students ranges from 20% to 30% and most results show that the prevalence is significantly higher among women. Icelandic research has shown that psychological distress in the form of depression and anxiety among university women students is 22.5% and 21.2%, respectively. However, less than one third of the distressed women receive professional help. Based on these results, the main objective of this project was to formulate a cognitive-behavioral treatment (CBT) program to prevent psychological distress in university women students. First, a cross sectional study of university women students in Iceland was carried out. A logistic regression analysis was done to identify variables significantly predicting depression and anxiety. Secondly, a four session group CBT program, based on the regression results and the INSIGHT program written by Dr. Verona Gordon, was formulated and provided to a sample of 19 women using experimental design followed by qualitative interviews asking participants about their experiences concerning the CBT program. The interviews were transcribed and content analyzed. Results from the prevalence study showed that perceived stress and burden, sense of mastery and self-esteem predicted symptoms of depression. The same variables as well as academic stress, significantly predicted symptoms of anxiety. Content analysis of the interviews revealed four main themes, each having 3-6 sub-themes. They are: positive experience, change in feelings and emotions, helpful strategies in daily life and suggestions for future services. Results from the prevalence study made a significant contribution to the structure of the CBT program and results from the experimental research and qualitative data contributed to the further modification of the intervention. More specifically, it was decided to increase the number of sessions from four to five and offer a boost session about 4-8 weeks later. In the presentation the author will describe in more detail how the intervention was formulated and modified based on results from the prevalence study, experimental study and qualitative interviews.

Out of Hopelessness - Problem Solving Training in Suicide Prevention

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Modifiable and non-modifiable risk factors are very important to recognize in the field of suicide prevention. Depressive thinking style and hopelessness belong to modifiable risk factors with vague, overgeneralized autobiographical memory and poor problem solving abilities in the background. Their relationship is described in the entrapment model of suicidal danger by Williams (2004). Problem solving training (PST) is a widely and frequently used method, evidences support its effectiveness in suicide prevention. Our study focussed on the enhancement of problem solving skills.

Objectives: to adopt the Means End Problems Solving Inventory and the method of Problem Solving Training in Hungary as well as to elicit change in the level of problem solving skills.

Methods: eight session problem solving training was provided for patients with chronic depression and previous history of attempted suicide. The PST was applied in group setting at our outpatient psychotherapy service. BDI, BAI, Hopelessness Scale, Means End Problems Solving test, Ways of Coping Questionnaire by Folkman and Lazarus were used as measures. Results indicated significant change in the level of depression and hopelessness and an improving tendency in problem solving skills of the participants. Also, experiences with the adaptation of the Means End Problems Solving Inventory will be discussed. We hope that PST will soon be applied in our country as part of suicide prevention because short, focussed and evidence based interventions much needed in psychiatric care. Keywords: suicidality - modifiable risk factors - hopelessness - vague autobiographical memory - poor problem solving skills - Means End Problems Solving Inventory - problem solving training

CBT Group therapy for adults with ADHD

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ADHD and ADD in adults have been associated with long term unemployment, criminal behavior and substance abuse. A number of CBT programs have proved effective in the treatment of ADHD but few studies exist that specifically target adults with ADHD and a history of long term unemployment. As part of a strategy to adress unemployment and ADHD in the city of Copenhagen, a project was conducted at Kognitiv Psykologcenter a private psychological clinic, sponsored by the municipality of Copenhagen. In the project participants underwent daily group sessions of CBT, ADHD skills training, mindfulness as well as individual therapy over a 12 week period, after which efforts were made to integrate the participants into the job marked. The results show that with intensive treatment, adults with ADHD do show a reductions in symptoms and are able to participate in vocational or educational programs.
**Paper Session 17 – Panic disorder treatment**

**PA17-1**

**Stepped care treatment for panic disorder with or without agoraphobia: a comparison of 10 weeks guided self-study, when necessary followed by manualised CBT and care as usual**

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**Objectives:** Panic disorder is a burden for society. Medical and social costs are high. CBT and treatment with antidepressants are first choice treatments though CBT has higher cost-effectiveness. CBT is not always easy available and waiting lists are long. Therefore, stepped care models can be of use. Stepped care models should be investigated carefully. Advantages are clear: patients get the less intensive treatment as possible and costs are less. A disadvantage can be demoralization. The following research questions will be addressed: A: how many patients are in remission after 10 weeks of guided self-help, compared to 10 weeks of care as usual? B: Are there prognostic factors for treatment effect in the guided self-help? C: Are there any differences in the process of the second step (manualised CBT of 12 sessions) after the first step (guided self-help), compared to the process of the care as usual? D: What can we say about demoralization?

**Method:** In the present study 130 patients (multicenter) will be randomized to one of two treatment conditions: 1. Care as usual according to the guidelines; 2. A brief CBT intervention (guided self-study) of 10 weeks followed by CBT (13 sessions) when necessary (PAS >8). Assessments: treatment outcome: MINI, PAS, ACQ, MI, BSQ, scale for remoralization, OQ prognostic factors: SCID II, PDSS, and LSAS. Results will be presented and discussed.


**PA17-2**

**15 – 20 years Follow-up Study of Panic Disorder with Agoraphobia**

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Panic disorder and agoraphobia are generally considered to be severe disorders that have a chronic course. Although studies report a decrease in symptoms and remission of the criteria specific to the disorder immediately after treatment, we know little about the course of these disorders after a relatively long follow-up period. The objective of the present study is to investigate the long term course of these disorders.

**Method:** The study includes 96 participants who received treatment for panic disorder and agoraphobia 14 - 20 years ago. There are four subsamples in the study treated in a group format with different treatment modalities: subsample one (n = 37) underwent exposure and psychodynamic treatment; the second subsample (n = 16) received cognitive treatment; subsample three (n = 15) had guided mastery therapy; the last subsample (n = 28) received schema focused therapy. The therapy for sample two, three and four respectively, was guided by treatment protocols, while the treatment for the first subsample has been well described in previous articles. The therapists received supervision on a weekly basis during the treatment period. All the participants in the study were treated in an inpatient clinic. The participants were measured immediately before treatment start, directly after treatment discharge, at 1 year, 2 year and between 15 to 20 years follow-up. The participants in the study were asked to complete the same self-report measures at all the measuring points and the SCID I and II were administered each time. Also, the participants were interviewed about whether or not they had used any medication or received additional treatment during the follow-up period and they were interviewed about their life situation at the time of the follow-up interview.

**Results:** The results will be presented at the conference.
Uncertainty and health-seeking behavior during and after the initial panic attack within the scope of etiological concepts of panic disorder – Results of the SHIP-Study in Pomerania

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Objectives: Even though 20% of the population experience panic attacks during their lifetime, only a few (1-3%) develop a full-blown panic disorder, which starts with the so-called initial panic attack (IPA). Besides others, the current study investigates intolerance of uncertainty, experience of uncertainty and health-seeking behavior as important factors in the development of panic disorder.

Method: Using the representative population-based epidemiological Study of Health in Pomerania (SHIP) (N=2259) we administered the structured "Interview for the assessment of the initial panic attack" which comprises items on characteristics, environmental factors and reactions to the IPA. Additionally the participants were examined with the Munich Composite International Diagnostic interview (M-CIDI).

Results: Among the respondents 319 persons with initial panic attacks could be identified, which comprise four mutually exclusive subgroups: anxiety attacks (ANX) (n=70), limited symptom attacks (LSA) (n=87), full-blown panic attacks (PA) (n=88) and panic disorder (PD) (n=74). In reaction to the IPA persons with PD suffered from more sustained feelings of uncertainty than did those with PA. Following the IPA, the PD-group was more likely to focus their attention on bodily symptoms, engaged in significantly more health-care utilization and more often got the diagnoses "anxiety", "panic attack" or "depression" than the PA-group. While members of the PA-group were relieved independent of diagnose-type, PD-group members were concerned when faced with a psychological diagnose (e.g. stress, anxiety or depression) but were relieved when they got a physical diagnose.

Discussion and Conclusion: Persons with PD more often experience feelings of uncertainty according the IPA than those with PA. PD-group members also engage in more health-seeking behavior but do not succeed to reduce feelings of uncertainty. This might enhance the possibility to appraise a similar future-situation as threatening, enhance the degree of anticipated anxiety and interfere with adaptive reappraisal-processes, which therefore promotes the development of PD. The results of the study help to understand the development of panic psychopathology and expose a feasible docking point for the development of therapeutic prevention-programs in this area.

Mechanisms of change in psychotherapy for depression: preliminary results from an ongoing clinical trial

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Objectives: While it is well known that Cognitive Therapy (CT) and Interpersonal Therapy (IPT) are effective treatments for depression, the underlying mechanisms that can explain therapeutic change, are still largely unknown. Research into the mechanisms of change in psychotherapy for depression is limited and no one has succeeded in creating a model yet in which the causal pathways that explain change in depression are fully demonstrated. Although theories explain improvement in depressive symptoms in terms of causal processes, namely that decrease in depressive symptoms is caused by change in cognitions (CT) or improvement of interpersonal functioning (IPT), the majority of existing studies is not designed to draw any causal conclusions. However, proper research into mechanisms of action in psychotherapy is very important since knowledge about the active ingredients may lead to treatments that are more efficient and effective in the future.

Method: Taking into account the shortcomings of previous research designs, we designed a new study to investigate the mechanisms of change in CT and IPT for depression. For the current presentation, measures of treatment specific factors of both therapies (such as interpersonal functioning, negative cognitions, and dysfunctional attitudes) at 3 time points during treatment (0, 3, 7 months) will be used. At this moment (February 2011), not all data have been collected yet. It is expected that in spring of 2011, 140 out of 180 participants have completed the treatment phase. Results will be presented. First, we will examine the theoretical framework of both therapies: ‘do change in cognitions (CT) and interpersonal functioning (IPT) indeed precede the change in depressive symptoms?’ Furthermore, mechanisms of action will be revealed by using both the McArthur guidelines for mediation as well as by examining the temporal aspect. To conclude, IPT and CT will be compared to examine specific treatment effects. Since both therapies originally stem from different theoretical backgrounds, one might expect different mechanisms of action in both therapies. But is this really the case?

What are the mechanisms of change in cognitive therapy? Investigating the affective impact and neural correlates of a cognitive microintervention

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Introduction: The efficacy and effectiveness of cognitive interventions is well established for a broad range of disorders. However, much is still unknown about the mechanisms and factors underlying and determining psychotherapy outcome. A promising design for investigating those mechanisms is the study of psychotherapeutic microinterventions which target smaller units of cause and effect in psychotherapeutic settings. Aim of the present study is to investigate the efficacy and electrocortical correlates of cognitive restructuring, delivered as a 90-minute psychotherapeutic microintervention.

Method: Participants who reported either moderate or low levels of dysphoric symptoms were randomly assigned to a restructuring microintervention or to one of two comparison conditions. Subsequently, the effects of the different conditions were examined using recordings of event-related potentials as well as self-reported mood change. In a EEG session, participants viewed unpleasant pictures, with the instruction to either restructure the picture content or to simply attend to it. Following each trial, participants were asked to rate the intensity of their emotional response as well as their success of following the instruction to either restructure or to attend.

Results: The restructuring microintervention, compared to the two comparison conditions, had specific effects which were reliably detected, particularly on the ERP measures. Notably, participants who received the cognitive microintervention manifested significant enhancement of mean frontal LPP amplitude following the instruction to restructure.

Discussion and conclusion: The present study provides evidence that a single session of a cognitive restructuring microintervention reliably influenced affect regulation. The observed changes may reflect a strengthening of executive control processes mediated by the PFC, which in turn may help to dampen the perceived emotional intensity of unpleasant stimuli.

Emotional Processes in the Psychotherapy of a Traumatized Woman. A case study

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The aim of this study was to identify main emotional processes that emerged during the psychotherapy of a traumatized patient.

Method: This was a naturalistic, data-informed, single-case study at the Jyväskylä University Psychotherapy Training and Research Center. The randomly selected patient was a 45-year old traumatized woman whose main complaints were depression, binge eating and traumatic memories concerning events five years ago and in her childhood. She actually suffered a kind of PTSD. The psychotherapist was an experienced cognitive psychotherapist. The psychotherapy consisted of 32 sessions mainly once a week during 15 months. The BDI and the SOC-13 were administered at four instances. The client was also interviewed after the therapy. All sessions were videotaped and transcribed wholly or partly. The videotapes were analyzed to find out main emotional processes that emerged repeatedly in the sessions.

Results: The BDI and SOC-13 values showed a lift in the client’s depressive mood and a rise in her general well-being and sense of coherence. Three main emotions were identified: emotional numbness, guilt and shame. Each emotion was talked about, worked on and changed during the process repeatedly. Emotional numbness was focused on the most, guilt was first to change and shame was last to change.

Conclusion: Emotional numbness functioned to cover aggression. Working on guilt and shame enabled the patient to modify her attributions of her childhood maltreatment and of her traumatic experiences later in life. This allowed her core self beliefs to be transformed and she got a new sense of self-worth. Emotional changes were further linked to behavioral changes in her current relationships and to the increase of her self-assertiveness

Cognitive reappraisal and Acceptance: an experimental comparison of two emotion regulation strategies

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Objectives: The last two decades has seen a rising discussion regarding the clinical usefulness of strategies focusing on changing versus accepting experiential content. Given this background, the purpose of the present study was to compare the effects of cognitive reappraisal and acceptance on subjective distress, physiological reactions and behavioral avoidance in relation to aversive emotional states elicited by film-clips.

Method: Ninety-four participants were randomized to one of three groups. The Reappraisal group was instructed to think about what they saw in a way that minimized negative emotional reactions, the Acceptance group was told to let their feelings come and go without trying to control or avoid them while the Watch (control) group was told to watch the film-clips.

Results: Compared to the control condition, both reappraisal and acceptance led to significant reductions of subjective distress, physiological reactions associated with aversive emotions and behavioral avoidance. On the three types of measures there were few significant differences between the Reappraisal and Acceptance groups, but when such differences existed they were to the benefit of the Reappraisal condition. In the reappraisal condition there was however a positive correlation between elicited aversive emotion and avoidance, while no such correlation existed in the acceptance condition.

Conclusions: The results are interpreted and discussed in relation to the theories underlying reappraisal and acceptance as well as the conceptual framework for emotion regulation established by Gross (2007). In conclusion, the present study expands the theoretical framework for emotion regulation established by Gross (2007). In conclusion, the present study expands the research on cognitive reappraisal and acceptance as emotion regulation strategies and provides several interesting findings on the similarities and differences of cognitive reappraisal and acceptance that is of interest to the theories underlying both traditional cognitive behavioral therapies and the so called third wave behavior therapies.


Internet delivered CBT for co-morbid insomnia and depression, a randomized controlled trial

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Introduction: Depression and insomnia very often co-occur. Internet delivered CBT (ICBT) has been shown to help patients suffering from insomnia or depression. Present clinical practice tends to treat depression as the primary condition and insomnia as a secondary symptom. Recent research indicates that insomnia often precedes depression and predicts depression relapse, hinting that insomnia perhaps ought to be the primary target for treatment.

Method: 785 Swedish citizens filled out screening questionnaires via the internet. After initial screening, a telephone interview, and face-to-face assessment by a psychiatrist, 43 were diagnosed with both insomnia and depression, and randomized into two groups. One group received ICBT for insomnia (INS), the other ICBT for depression (DEP). Main outcome measurements were Insomnia Severity Index (ISI), Montgomery Asberg Depression Rating Scale (MADRS) and sleep diary data.

Results: Post treatment, intent-to-treat analyses showed that within-group changes were significant, and effect sizes were low to moderate for both treatments and conditions (Cohen’s d for ISI being 0.87 for INS and 0.59 for DEP, and d for MADRS being 0.66 for INS and 0.67 for DEP). No interaction effects (group x time) were found. Clinical improvement, defined as < 11 points on ISI and < 13 on MADRS, were for insomnia 14% (DEP) and 41% (INS), and for depression 24% (DEP) and 32% (INS). Sleep diary data, 3- and 6- month follow up results will be included in the presentation.

Conclusions: Both groups improved, but not as much as patients with only one of the conditions in previous studies. Insomnia treatment showed a tendency towards better results than treatment for depression. The participants in this study had more severe symptoms of both depression and insomnia than participants in many previous studies, with patients suffering from only one of the two conditions (but often with other co-morbid problems). The results do not support the clinical practice that proposes to start with treatment for depression, but rather that these patients need a different treatment altogether.

Staner, L. 2010; Comorbidity of insomnia and depression. Sleep Medicine Reviews 14, p 35–46
Manber R. et al. 2008; Cognitive behavioral therapy for insomnia enhances depression outcome in patients with comorbid major depressive disorder and insomnia. Sleep. 31(4):489-95
Preventing Chronic Insomnia: the role of sleep preoccupation in acute sleep disturbance and acute insomnia

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Objectives: Despite a high prevalence of chronic insomnia in the general population (12-15%), to date there has been little focus on its prevention, or management during its acute phase (Ellis et al, in press). One concept that has been shown to be an important correlate of insomnia severity is levels of catastrophic sleep-related thinking (i.e. sleep preoccupation) (Harvey, 2002; Morin, 1993; Tang et al, 2004). However, the role of sleep preoccupation in the development of insomnia remains largely untested. The aim of this paper is to examine the role of sleep preoccupation under two circumstances; during a naturally induced stressor, creating an initial sleep disruption, and during the early phases of insomnia disorder (i.e. acute insomnia).

Methods and Results: In the first study sleep parameters (Sleep Onset Latency, Number of Awakenings, and Sleep Efficiency) and levels of sleep preoccupation were examined over a period of three weeks in a group of vocational students undergoing exam conditions (n = 92) during the middle week. The results showed that changes in sleep status (Sleep Efficiency), towards insomnia, significantly correlated with increased sleep preoccupation (r = 0.4, p<.05). The second study compared levels of sleep preoccupation in a sample of people with acute insomnia (n = 124) with normal sleepers from the general population (n = 192) and a sample of people with chronic insomnia (n = 158). The results demonstrated significant differences in preoccupation between those in the acute phase to both normal sleepers and people with chronic insomnia. Furthermore, sleep preoccupation was the single biggest predictor of insomnia severity, within those who were currently experiencing acute insomnia, explaining 18.4% of the variance.

Conclusions: The results clearly demonstrate that sleep preoccupation is a facet of both acute sleep disturbance and acute insomnia. Furthermore, it appears that individuals move from proximal to distal cognitions as there insomnia develops. These findings are discussed in terms of early-intervention CBT to prevent the transition to chronic insomnia.


Internet-based CBT for Insomnia in comparison to an active treatment control

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Introduction: CBT has been shown to help patients suffering from Insomnia. The lack of CBT-therapists and other obstacles to reach those in need might be reduced by the use of CBT delivered via the Internet (iCBT). Some previous studies show promising results, but so far no RCT has used an active control treatment as a comparison group.

Method: 785 Swedish citizens filled out screening questionnaires via the Internet. After a structured diagnostic telephone interview, 148 were found eligible for the study and randomized to one of two groups. The first (iCBT) was an Internet-based self-help intervention including established CBT methods to alleviate insomnia symptoms, an interactive sleep diary, weekly ratings of insomnia and depression, a web forum to discuss the treatment with other participants, and regular therapist contact via the website. The second group (Control), was an active control treatment with the same sleep diary, web forum and weekly ratings but without therapist contact, and with a shortened self-help manual, excluding the most potent CBT ingredients for insomnia; sleep restriction and stimulus control.

Results: Post treatment, Intent-to-Treat analysis showed that the iCBT group had significant higher reductions compared to Control on subjective sleep problems measured by Insomnia Severity Index (ISI; F[1,146]= 27.1, p<0.001; between groups effect size (Cohens d) = 0.83), sleep latency onsets (F[1, 146]= 13.5, p<0.001) sleep efficiency (F[1,146]=16.4, p< 0.001), and sleep quality (F[1, 146]= 7.2 p<0.001). As is common in CBT for insomnia, total sleep time did not differ significantly, but termination or reduction of sleep medications was significantly more common in iCBT. Results from 6-month and 1-year follow-ups will also be presented, along with a health economics analysis.

Discussion: The positive and specific effects of iCBT on insomnia symptoms and sleep parameters were clearly shown, especially in light of the rather large symptom reduction in the Control group (Cohens d pre-post = 0.98). Only 67% filled out the sleep diaries at post treatment, but the Intent-to-Treat analysis and high response rate for the ISI (86%) makes any bias unlikely.

Conclusion: iCBT is effective in reducing insomnia symptoms, also compared to an active treatment control. Due to the structured format and high accessibility of iCBT, if paired with thorough assessment, it could be a realistic and highly valuable alternative to sleep medications.
Cognitive-Behavioral Self-Help Treatment for Nightmares: Long-Term Effectiveness
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Introduction: Nightmares are a common disorder with a prevalence of 2-5%. Nightmares have serious consequences and lead to daily impairments. Several cognitive-behavioral techniques are effective in reducing nightmare frequency. Recently, two of those interventions — imagery rehearsal and exposure — showed short-term efficacy in a self-help format compared to a waiting-list and a group that recorded their nightmares.

Method: This paper reports the long-term results of the imagery rehearsal (n = 103) and exposure (n = 95) interventions. Participants were assigned randomly to a condition after completing baseline measurements; they received a 6-week self-help intervention and completed questionnaires 4, 16, and 42 weeks after end of treatment.

Results: Initial effects on nightmare measures were almost completely sustained after 42 weeks (d = 0.50 - 0.70); no differences were found between exposure and imagery rehearsal.

Discussion and Conclusion: The results showed that nightmares can be targeted specifically and that self-help CBT is a promising treatment option. Although not all patients benefitted from this treatment, it seems that self-help for nightmares, in the future, could be incorporated into currently available treatments; especially in the context of stepped-care. This would allow offering nightmare treatment to large groups bypassing issues such as ever growing waiting-lists and increasing costs.

Faces in a crowd: high socially anxious individuals overestimate how many people are looking at them
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Objectives: Social anxiety is characterized by an excessive concern of being critically observed by other people. The present experiment explored the processes that underlie this concern. In particular, we examined whether high socially anxious individuals overestimate how many people are looking at them and whether the magnitude of overestimation increases with self-focused attention.

Methods: 43 high (HA) and 38 low socially anxious (LA) participants conducted a computer task that involved viewing 44 pictures of crowds of people. In each of the pictures, some of the people in the crowds were looking in the direction of the participant and others were not, and participants were asked after each picture to indicate the proportion of people that were looking at them. Participants conducted the task once in an enhanced self-focused (mirrors present) and once in a neutral condition (no mirrors present). Self-focused attention during the task was measured with self-report measures. Mixed ANOVAs with anxiety group (HA, LA) as between factor and mirrors (yes, no) as within factor were used to analyze the data. To investigate time effects, a mixed ANOVA with group, mirrors, and time block (trial 1-14, trial 15-30, trial 31-44) was conducted.

Results: Compared to LA, HA participants overestimated the proportion of people looking at them (F(1, 79) = 10.63, p = .002). The presence of mirrors increased ratings of self-focused attention (F(1, 79) = 304.10, p < .000) in both groups. A three-way interaction of anxiety group x mirrors x time block (F(2, 78) = 3.40, p = .036) indicated that in the first time block (trial 1-14) the overestimation of HA compared with LA participants was bigger in the mirrors than in the no-mirrors condition.

Conclusions: The present study showed in an experimental design that high socially anxious participants overestimate the proportion of people looking at them compared with low socially anxious participants. Additionally, that the study suggested that this effect is moderated by self-focused attention. The results of the present study deliver further support that self-focused attention plays a role in social anxiety and that its reduction may help decreasing social anxiety. The link between self-focused attention and overestimation of people looking at oneself could be relevant for the treatment of social anxiety disorder.
Social anxiety as psychobiological dimension: insights from fractal analysis of fMRI signal

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Introduction: Several fMRI studies have shown differential behavior in brain functional architecture and response in Social Phobic Patients (SP) as compared to healthy controls. As a matter of fact, the analysis of the literature on social anxiety (SA) sustains the hypothesis of a continuum from normality to fully symptomatic SP disorder. In this study we used a novel approach to fMRI data, the calculation of the Hurst Exponent (HE) to explore this hypothesis. HE is a fractal index describing the complexity of a system, namely the degree of predictability (an HE of 1 describes a system that is completely predictable, while an HE of 0.5 a totally chaotic system).

Methods: 26 healthy subjects were recruited for the study (12 women; mean age±s.d. = 26±3 were recruited for this study). All subjects were drug free and did not report any psychiatric disorder in the clinical interview. However, seven of them had a score at the Liebowitz Social Anxiety Scale (LSAS) over the cut-off of 30 that is considered diagnostic for SP. A single time series was obtained in each fMRI session. The whole brain was acquired 450 times for each time series. Subjects were instructed to lie in the MRI scan with eyes closed, relaxing and not sleeping. After HE calculation of each voxel, we performed a linear regression analysis on the whole brain in which the score of LSAS has been used as an independent variable to estimate the HE.

Results: We found clusters of voxels in which LSAS score predicts the HE in the left anterior cingulate cortex (ACC), in the left amygdala and in the left precuneus (PCUN). The HE in ACC and amygdala decreased with the increased of LSAS score, while in the PCUN the HE increased with the increased of the LSAS score (p < 0.01, corrected).

Conclusions: Our results indicate that the brain pattern of spontaneous activity is influenced by the degree of SA on a continuum from shyness to SP. In particular the pattern in the amygdala and in ACC becomes more chaotic. We suggest that this might be related to the state of general arousal in social anxiety. Moreover, we found an increase of HE in the PCUN. This region was put in relationship with the self-focused attention of anxiety. Moreover, we found an increase of HE in the PCUN. This might be related to the state of general arousal in social anxiety. However, the nature of social goals is unclear. It is possible that several subtypes of approach and avoidance goals exist. Certain types of approach and avoidance goals may be more predictive of relevant social and emotional outcomes. In addition, certain types of goals may be more amenable to change, providing a focus for interventions aiming to shift the balance of approach and avoidance. This paper will discuss a content analysis aimed at identifying different categories of social goals and the development of a measure of social approach and avoidance goals relevant to social anxiety.

Methods: Two hundred fifty eight undergraduate participants listed goals for an anticipated social interaction. An additional 50 undergraduates completed the new measure of social approach and avoidance goals along with measures of general approach tendencies, affect, and social anxiety.

Results: A content analysis of the interaction goals supported the existence of two categories of social avoidance goals and five categories of social approach goals. The most common approach and avoidance categories were further content analyzed and subjected to statistical analysis to identify specific goals that were likely to differentiate between socially anxious and non-anxious participants. These goals were used to construct a measure of social approach and avoidance goals. The psychometric properties of this measure will be discussed.

Conclusions: Given the connections between approach, avoidance, and social anxiety, a measure of social goals could have important implications for the study of social anxiety and could serve as an index of change for interventions that aim to shift the balance of approach and avoidance to promote more positive outcomes in social anxiety. Further implications of these findings will be discussed.

Observer perspective imagery in social anxiety: effects on quality of interaction and desire for future interactions
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Objectives: Socially anxious people often imagine or recall social events from an observer perspective. They imagine their own appearance, often focusing on visible anxiety symptoms. These images have been shown to have wide-ranging negative effects such as increased anxiety and poor social performance. An alternative is the field perspective, in which the event is pictured from the person’s own point of view. This is generally believed to be a more adaptive imagery style. Observer perspective images have been implicated in the onset of social anxiety. One possible mechanism by which this may occur is investigated in this study. It may be that observer perspective images have some of their effect by diminishing a person’s enjoyment of social events and discouraging them from seeking out social interaction in future.

Method: An independent measures study was conducted with two independent variables: anxiety (high vs low) and imagery type (field vs observer). Participants engaged in a conversation with the first author while focusing on an observer or field perspective image. They then completed measures of the quality, intimacy and level of disclosure during the interaction, and their desire for future interaction (DFI).

Results: As expected, high anxious people reported lower quality of interaction and DFI. These effects were qualified by significant interactions between anxiety and imagery. The low anxious participants who used a field perspective image reported higher quality of interaction and DFI than all other groups. Further, an observer perspective image was found to decrease intimacy and disclosure among low socially anxious individuals (all ps<.05).

Conclusions: The key findings of this study suggest that observer perspective images have negative effects on interaction quality for low socially anxious people. Their scores were often indistinguishable from those of the high anxious participants. Levels of social anxiety seemed to be more relevant than imagery type, in that differences between the perspectives were not significant among high anxious participants. Past research which emphasises the importance of observer perspective images in social anxiety is supported. Findings suggest that an observer perspective can cause non socially anxious individuals to view social interactions in a more negative light, and be less likely to engage in similar interactions again. Future research is planned which will investigate the reasons for this in more detail.

Investigating a socially anxious-impulsive subgroup of young adults in relation to depressive symptoms
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Objectives: Socially anxious persons are typically thought of as being behaviorally inhibited; however, an atypical subgroup has recently been found that is impulsive rather than inhibited. Theoretically, inhibition and impulsiveness are different strategies for coping with anxiety that have the same goal—escape from negative emotions—but they seem to have different implications. In a recent study (Tillfors, Van Zalk, & Kerr, submitted), we found that an atypical, socially anxious-impulsive subgroup of late adolescents was higher on antisocial behavior than the typical, inhibited subgroups, and a no-problem group. The question is whether these subgroups experience different levels of depressive symptoms. This question arises because of the high comorbidity between both antisocial behavior and depression and social anxiety and depression. One possible consequence of behaving impulsively like for example getting intoxicated at a party and having one-night stands, in combination with high levels of rumination that socially anxious persons exhibit, may result in depressive symptoms.

Methods: In this study, cluster analysis was used to identify subgroups of young adults characterized by different profiles of social anxiety and impulsivity. These profiles were examined in relation to depressive symptoms, and moderating effects of gender. Young adults (20-24 years old; N = 773) participated in a cross-sectional study.

Results: We identified six clusters, including two typically inhibited socially anxious groups (performance/observational social anxiety and generalized social anxiety) and an atypical, socially anxious-impulsive group. An interaction effect between gender and the cluster solution was found, indicating that women in the atypical subgroup and the generalized subgroup reported the highest depressive symptoms. Among both men and women, however, those in the performance/observational subgroup did not report more depressive symptoms than those in the no-problem group.

Conclusions: This suggests that different social anxiety subgroups may differ in consequences, and early detection of these subgroups may be important to prevent maladjustment.

PA21-1

The Role of Appearance Schemas and Body Checking Cognitions in Body Dissatisfaction

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Objectives: This study aimed at demonstrating the effects of Self-Evaluative Salience (SES) and the Safety Beliefs and Body Control (SBBC) activation on body dissatisfaction.

Methods: The authors conducted a screening test using SES and SBBC scales with 418 female undergraduate students in Japan. Participants were 24 students who scored the average or higher on both scales and agreed to participate in the experiment. They were assigned to an SES activation condition (mean age 19.88, SD=1.13), SBBC activation condition (mean age 19.63, SD=1.51), or non-activation condition (mean age 20.25, SD=1.28). The authors measured body dissatisfaction before and after the experimental manipulation.

Results: Two-way ANOVA was performed to test the effect of SES and SBBC activation on body dissatisfaction. Results showed that there were no significant interactions between the condition and the period for dissatisfaction with and anxiety about one’s body size and the entire body. However, dissatisfaction with the entire body significantly increased in all conditions (F(1,21)=5.82, p<.05). For appearance-related negative thoughts, there was a significant interaction between the condition and the period (F(2,21)=8.26, p<.01). Fisher’s least significant difference (LSD) tests showed that the SES activation condition significantly increased the appearance-related negative thoughts while the non-activated condition did not (p<.01). Similarly, the SBBC activation condition tended to increase the appearance-related negative thoughts while the non-activated condition did not (p<.10).

Conclusions: The results indicated that the activation of SES and SBBC increased the appearance-related negative thoughts. This suggested that both SES and SBBC are the causal factors of body dissatisfaction. The findings support Cash’s (2002) cognitive behavioral model of body image.


PA21-2

Cognitive-behavioural body image therapy enhances Extrastriate Body Area activation in patients with eating disorders: A randomised-controlled fMRI-study

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Introduction: A number of neuroimaging studies demonstrated the role of the Extrastriate Body Area (EBA) in the visual processing of the human body, whereby the EBA is more strongly activated when individuals look at their own body compared to someone else’s body. Previous research provided first hints on a reduced EBA activity in eating disorders, possibly underlying body image disturbance. The aim of the present study was to test the convertibility of the EBA activity elicited by viewing one’s own body by means of a specialised cognitive-behavioural treatment.

Method: Thirty-two females with eating disorders were randomly assigned either to a strictly manualised body image therapy consisting of ten group sessions, or to a waiting list control condition. Using functional magnetic resonance imaging, brain responses to viewing photographs of one’s own body (taken from 16 standardised perspectives while participants were wearing a uniform bikini) were acquired before and after the intervention and the waiting time, respectively.

Results: In a region-of-interest-analysis, the extracted signal changes in the EBA were analysed in a two-way-ANOVA with the factors Time (pre versus post) and Group (intervention group versus control group) revealing a significant Time-by-Group interaction. For the intervention group, post-hoc t-tests indicated an increase in EBA activity from pre to post body image therapy, whereas in the waiting list control group, no significant change over time was found.

Discussion: The enhanced EBA activity following body image therapy points to a more intense neuronal processing of the patients’ own body. This change is possibly due to treatment components as mirror exposure or confrontation tasks in real life, aiming at overcoming body-related avoidance behaviour.

Conclusion: These results do not only indicate that the neuronal correlates of a disturbed body image are modifiable, but also provide further hints on the role of the EBA in eating disorders.
The immediate impact of body checking behaviour on positive and negative emotions in eating disorders: An ecological momentary assessment approach

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Introduction: Body checking represents the behavioral manifestation of body image disturbance. In eating disorders, this behaviour can be expressed by compulsive scrutinizing one’s own body in the mirror or by frequently weighting oneself. According to cognitive-behavioural theories, this behaviour leads to an immediate reduction of negative emotions and is therefore maintained by operant mechanisms. However, this aspect has not yet been empirically tested in patients with eating disorders. Therefore, the present study aims to examine the immediate consequences of body checking in the daily life of patients with eating disorders as compared to healthy controls.

Methods: Forty-eight females, of whom n = 24 were patients with eating disorders and n = 24 were healthy controls, were included in the present study. During a body checking episode (event-contingent sampling) as well as after a received signal from a handheld computer (signal-contingent recording), participants were instructed to answer an electronic questionnaire containing the Positive and Negative Affect Schedule in their daily life during one week.

Results: As expected, patients with eating disorders demonstrated body checking behaviour more frequently than healthy controls (p = .005). However, both groups did not differ in the kind of body checking behaviour displayed. In contrast to our hypotheses, patients with eating disorders as well as healthy controls demonstrated an increase in negative emotions (p < .001) and a decrease in positive emotions (p = .003) from the time point before to after the body checking episode.

Discussion: The increase of negative emotions after body checking stands in conflict with the assumptions of cognitive-behavioural theories of eating disorders, hypothesising a negative reinforcement of this behaviour by a reduction of negative emotions.

Conclusion: Future research needs to shed light on the mechanisms of maintenance of this assumingly dysfunctional behaviour in eating disorder.

„Enjoy eating”: A Program Based on Cognitive Behaviour Therapy for Obese Women

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Objective: Obesity is one of the biggest public health problems of the 21st century and during the past 20-30 years prevalence has increased over 10% worldwide. The objective was to develop and evaluate a program based on Cognitive Behaviour Therapy and Appetite Awareness Training (CBT, AAT), for overweight and obese women with the aim of reducing the risk of physical and psychological problems associated with the condition.

Methods: The program lasting 15 weeks was evaluated by crossover design in a convenience sample of 20 women, age 19-44 and BMI 30-40. Participants were split randomly into group A and B. Group A attended the program consisting of 14 group sessions from August – December 2010 while the waiting control group B received the program during January – April 2011. Additionally participants received three individual sessions. The following outcome measures were used: weight, BMI, blood pressure, serum lipid, glucose, vitamin D, iron, and body fat and BDI-II, BAI SF-36 and OP-scale were administered.

Results: Participants in group A significantly reduced their weight (p<0,033), BMI (p<0,031) and body fat (p<0,038). Mean weight loss was 3.08 kg compared to 0.5 kg in control group B. There were significant reductions in depression scores (P< 0,011) in group A and higher but non-significant quality of life scores on the OP-scale (P< 0,051) compared to the control group.

Conclusion: „The Enjoy eating” is a promising weight loss program for obese women reflected in a clinically meaningful weight loss and a reduction of depressive symptoms.
Assessing Affective Variability by Pulse and Spin in Eating Disorders: Affect Spins Less in Anorexia Nervosa of the Restrictive Type •

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Objective: Theory on eating disorders states that restriction serves to pre-empt the activation of affect whereas bulimic behavior serves to cope with overwhelming affect once it is activated. The goal of this study is to examine whether patients with Anorexia Nervosa-Restrictive Type (AN-RT) have lower mean levels of affect and show less affective variability than patients with Bulimia Nervosa (BN) with patients with Anorexia Nervosa-Binge Purging Type (AN-BPT) being situated in between.

Method: Based on the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) 21 patients with AN-RT, 16 patients with AN-BPT, and 20 patients with BN reported their momentary affect at nine random times a day during one week by means of a handheld computer using an Ecological Momentary Assessment protocol. Patients’ distinctive affective states at particular moments in time are represented as different positions over time in the core affect space, a two-dimensional space which is defined by the orthogonal dimensions of valence and activation. Affective variability was measured in terms of pulse and spin, two new concepts that quantify variability in the intensity and variability in the quality of core affect over time respectively.

Results: Results indicate that although the three diagnostic groups did not differ from one another in mean valence and activation, AN-RT patients are characterized by less spin. This implies that patient with AN-RT show more variability in the quality of core affect but not in the intensity of core affect in comparison with patients with AN-PT and BN-PT.

Discussion: By using an EMA protocol and measures like pulse and spin insights in eating disorders may be revealed that remain hidden with assessment methods that have a lower time resolution.

Relapses in recurrent depression one year after therapy: The importance of therapeutic adherence, competence and therapeutic alliance

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Introduction: Psychotherapy proved to be an effective method of treatment in the prevention of relapses in recurrent depression. However, little is known about the processes that could be responsible for this success.

Method: In the present study, 90 patients with recurrent depressive disorder (currently in remission) were treated by means of cognitive-behavioral maintenance therapy (CMBT). Therapeutic adherence and competence and therapeutic alliance were considered to be possible predictors of relapse. Videos from 80 therapy sessions were analyzed for the acquisition of therapeutic adherence and competence. Furthermore, therapeutic adherence was acquired by means of a questionnaire.

Results: No correlations were found between therapeutic adherence or competence and time to relapse one year after treatment ended. However, Therapeutic alliance showed a moderate correlation with time to relapse ($r = .22$). Furthermore, an increase in the alliance-outcome-correlation could be observed when only patients with five or more previous depressive episodes were taken into account ($r = .53$). This correlation could not be observed when only patients with four or less previous episodes were taken into account. Discussion: Unlike therapeutic adherence and competence, therapeutic alliance proved to be an important factor in the prediction of relapses in recurrent depressive disorder. Special attention should be given to therapeutic alliance with regard to successful treatment.
Interpersonal problems as predictors of therapeutic alliance and symptom improvement in cognitive therapy for depression

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Background: The degree to which interpersonal problems of depressed patients improve over the course of cognitive therapy (CT), and relate to the quality of the therapeutic alliance and to symptom improvement, remains unclear.

Methods: We analyzed data of adult outpatients (N = 523) with major depressive disorder participating in a clinical trial to determine the factor structure of the Inventory of Interpersonal Problems – Circumplex (IIP-C) and to relate the observed factor scores to the quality of the therapeutic alliance and symptom improvement over the course of CT. Patients received 16-20 sessions protocol (50-60 min each) of individual CT according to the treatment manual by Beck, Rush, Shaw & Emery, 1979.

Results: We found a three-factor structure (interpersonal distress, agency, and communion) of interpersonal problems. Interpersonal distress decreased (d = .90), but interpersonal style did not change substantively during CT (communion d = .03; agency d = .14). High initial agency scores related negatively to the therapeutic alliance (β = -.12), whereas high initial communion scores related positively to the therapeutic alliance (β = .15). Elevated pre-treatment interpersonal distress scores were related to both weaker therapeutic alliances (β = -.13) and higher symptom levels throughout treatment (β = .10).

Discussion and Conclusions: This study supports the use of the IIP-C as a comprehensive measure of patients’ interpersonal style and interpersonal distress. The IIP-C measured before CT showed some predictive validity with respect to therapeutic alliance measured at the midpoint and therapy outcome. The clinical importance of these findings is discussed.

Working with Cognitive Behavioral Therapy (CBT) in reducing psychological barriers for employment in complex cases in a private clinic: The process of dissemination

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Introduction: Complex, chronic and long lasting psychological problems may prevent a person from seeking education or finding and keeping employment. And unemployment may increase susceptibility to mental stress, loss of self esteem and lead to anxiety and depression. The present study is an ongoing collaboration between Danish Government and the City of Copenhagen and Cognitive Psychology Centre – a private outpatient CBT treatment centre. The objectives of the project are to reduce or remove psychological barriers for employment among unemployed citizens with psychological problems. Of particular interest in this process is the dissemination of empirically supported cognitive behavioural treatment methods in working with psychological barriers for employment in complex cases.

Method: 21 patients went through 1) an assessment period, consisting of a test battery and Mini International Neuropsychiatric Interview (MINI), before 2) receiving individual therapy and 3) participating in relevant group therapy. The sample in this study is expected to increase to approximately 60 patients by the time of the congress.

Results: Results from paired samples t-tests showed significant decreases in scores on 1) Becks Depression Inventory, t(20)=4.08, p<.001, 2) Becks Anxiety Inventory, t(20)=2.48, p<.022, and 3) Fear of Negative Evaluation Scale, t(7)=3.42, p=.011. Discussion: Through a systematic assessment of the patient needs and strengths, the present project has been trying to disseminate cognitive behavioural treatment methods to meet the needs and characteristics of a patient group containing many complex cases being referred from the City of Copenhagen. The present findings are to be considered relevant in the debate on how to disseminate empirically supported cognitive behavioural techniques to meet the needs of specific contexts. And it will be interesting to see if the findings still keep their status when more client data is being collected during the next months.

Conclusion: Research on dissemination of cognitive behavioural techniques seems both valuable and highly needed.
Regulating anger – the effects of rumination, distraction and reappraisal

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Introduction: Anger is a frequent emotion in everyday life, with significant, often disruptive effects on the person experiencing it and on interpersonal functioning. The regulation of anger is thus of considerable importance, both at the individual and at social level.

Objectives: The goal of the present study was to compare the differential effects of three distinct emotion regulation strategies -- rumination, distraction and reappraisal -- on the regulation of anger in a group of adolescents aged 14-18 (N=66).

Method: Anger was induced by means of negative scenarios that participants were asked to imagine themselves in. After checking for manipulation effect, participants were given the rumination, distraction or reappraisal instruction.

Results: Our results indicate that participants who ruminated over a negative event reported the same intensity of anger as they did after the negative mood induction, while those who were distracted and those who reappraised the event reported less anger.

Conclusions: The study points out the differential efficacy of individual emotion regulation strategies, with implication at both non-clinical and clinical levels. These implications are briefly discussed.


The Association between Effective Utilizing Positive Emotions, Positive Affect and Depression. A Mediation Analyses

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Introduction: Numerous studies point towards deficits in general emotion regulation skills being linked with the development, maintenance and treatment-outcome of a broad range of mental disorders, including depression. Previous studies however have only focused on emotion regulation strategies for negative emotions.

Objective: The aim of the current study is to analyse associations between skills necessary for the effective utilization of positive emotions (positive emotion regulation skills: PERS), positive affect and symptoms of depression. In particular, we will test the hypotheses that PERS, irrespective of the intensity of these emotions, are associated with symptoms of depression and that this association is partly mediated by the frequency of positive affect.

Method: In a sample of N = 300 patients meeting criteria for major depressive disorder, we assessed PERS, the intensity of positive emotions, frequency of positive affect as well as depressive symptoms using self-reports. Linear regression analyses and bootstrapping-enhanced mediation analyses were utilized to assess associations between these variables as well as potential mediation effects.

Results: PERS is associated with symptoms of depression even if the intensity of positive emotions is statistically controlled (c = -.43). This association is partially mediated by frequency of positive affect (c' = -.27). Discussion: These findings are in line with the assumption that PERS has an effect on the symptoms of depression by an amplification of the frequency of positive affect while simultaneously directly reducing depressive symptoms.

Conclusion: If these findings can be replicated in studies with multiple measurements, using specified methods for the identification of causal associations in longitudinal studies, PERS should be considered a major target in the treatment of MDD.
Unhealthy Perfectionism and depression: The mediating role of unconstructive repetitive thoughts

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Objective: The current study has examined (1) the unique and interactive effects of personal standards perfectionism (PSP), an healthy form of perfectionism, and evaluative concerns perfectionism (ECP), an unhealthy form of perfectionism, on depressive symptoms and constructive and unconstructive negative repetitive thoughts (NRT); (2) whether unconstructive NRT mediates the relation between ECP and depressive symptoms.

Methods: Participants (n=103) filled in the mini-Cambridge Exeter Repetitive Thoughts (mini-CERTS), that measures an unconstructive form of NRT—the abstract analytic thinking (AAT) and a constructive form of NRT – the concrete experiential thinking (CET); the Hewitt and Flett’s Multidimensional Perfectionism Scale (HMPS), the Frost’s Multidimensional Perfectionism Scale (FMPS). ECP scores were derived from the HMPS socially prescribed perfectionism and the FMPS concern over mistakes, and doubts about actions sub-scales and PSP scores were derived from HMPS personal standards sub-scales.

Results: Hierarchical regression analyses showed that unique effects of ECP on AAT and depressive symptoms were significant, the higher ECP was and the higher AAT and BDI score were. Unique effects of PSP and ECP on CET were significant, the higher PSP was and the higher CET was and the higher ECP was and the lower CET was. Interactive effects of ECP and PSP were not significant in any analyses. Results from bootstrapping yielded a significant mean indirect effect of ECP on depressive symptoms through AAT.

Conclusion: Healthy perfectionism is associated with more constructive repetitive thoughts whereas unhealthy perfectionism is associated with less constructive and more unconstructive repetitive thoughts and with more depressive symptoms. As expected, the present data statistically supports the notion that unconstructive repetitive thoughts are a mediator of the relationship between dysfunctional perfectionism and depressive symptoms. Implications for the treatment of people with disturbing perfectionism will be discussed.

Positive thinking is a quick fix: Beyond Wood, Perunovic and Lee (2009)

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Wood, Perunovic and Lee (2009) [Wood, J. V., Elaine Perunovic, W., & Lee, J. W. (2009). Positive self-statements: Power for some, peril for others. Psychological Science, 20(7), 860-866] illustrated that people high in self-esteem may have some benefits from repeating positive self-statements, while people low in self esteem may subsequently have disadvantages. In an effort to expand their findings, we argued that self-statements denote beliefs and therefore are not simply classifiable along a positive/negative continuum. The dysfunctional-functional axis on which these beliefs situate themselves is an essential factor that must be taken into consideration.

Objectives: It was out goal to build a finer grained picture, by disentangling different types of self-statements at varying levels of self-esteem. To this purpose, we compared four types of self-statements, inspired from cognitive-behavioral models of psychopathology (positive functional, positive dysfunctional, negative dysfunctional and acceptance). We also assessed the moderating role of self-esteem.

Methods: Ninety participants were asked to practice one of these statements following a self-esteem threatening situation. We employed momentary evaluations of state self-esteem, as well as implicit and explicit measures of mood.

Results: Our results show the positive functional and the positive dysfunctional self-statements did not differ in their efficiency to boost momentary self-esteem and dampen anxiety and negative emotions. The acceptance statement did not differ from the negative statement in its efficiency on transitory self-esteem and mood. Moderating effects of trait self-esteem were subsequently analyzed, showing no influence of trait self-esteem on the differential efficiency of the positive rational and irrational statements.

Conclusions: The results point to the robustness of positive self-statements in being a “quick fix” in response to situations where self-esteem is challenged or one is beginning to experience distress. It seems that, at least short term, thinking positive trumps thinking rationally.

Wood et al, Psychol Sci 2009; 20:866
Implicit and Explicit Self-Esteem in Previously and Never Depressed Individuals: The Impact of Rumination versus Distraction

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**Introduction:** In contrast to cognitive theories and research that emphasize negative self-views in depression, recent studies have demonstrated that previously depressed individuals have high implicit self-esteem (SE) compared to never depressed controls (e.g., Franck et al., 2008). The present study was designed to replicate and extend these findings. Specifically, we tested whether the impact of a rumination versus distraction manipulation on implicit and explicit SE varied between previously depressed and never depressed individuals.

**Method:** Sixty one previously depressed and never depressed participants completed an Implicit Associate Test for self-esteem, as well as self-report self-esteem items, before and after a rumination versus distraction manipulation. In this manipulation, individuals silently read 45 statements asking them to reflect on their internal state (rumination condition) or external objects in the world (distraction condition). Each participant completed both the rumination and distraction conditions in sessions separated by one week (counterbalanced order).

**Results:** A 2 (Group: previously depressed vs. never depressed) x 2 (Condition: rumination vs. distraction) x 2 (Time: pre-manipulation vs. post-manipulation) mixed ANOVA with repeated measures on both Condition and Time indicated a statistically significant Group x Condition x Time interaction, t=2.58, p<.05, on implicit SE. Previously depressed individuals had higher implicit self-esteem at baseline compared to never depressed controls. Distraction compared to rumination increased implicit self-esteem among never depressed individuals, but had no effect on previously depressed participants. Although previously depressed individuals reported lower explicit SE at baseline compared to never depressed individuals, the main effect of the rumination versus distraction manipulation and its interaction with depression history were not statistically significant.

**Conclusions:** Consistent with past research, this study suggests that previously depressed individuals experience high implicit SE, but report low explicit SE, compared to never depressed persons. While our experimental manipulation had no impact on previously depressed individuals, distraction appears to increase implicit SE among never depressed persons. Our findings are consistent with work suggesting disassociations between implicit and explicit SE, which have implications for understanding depression.

Self-esteem in depressed patients: do they ‘secretly’ like themselves?

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**Objectives:** According to the cognitive theory of depression, the self-schema of depressed patients is negatively biased. Although there are strong indicators that implicit self-schemas are important in the aetiology of depression, research investigating the relation between negative core beliefs and depressive symptoms, is still highly oriented on explicit measures. Furthermore, the few studies that have actually focused on the underlying implicit constructs, unexpectedly found results contradictory to the cognitive theory. More research that combines implicit and explicit measures is badly needed.

**Method:** Therefore, we designed a study with a central focus on investigating self-associative measures of depressed patients and healthy control subjects on both the implicit and explicit level. We examined whether there are differences in self-esteem between the two groups, and compared the level of self-esteem in patients before and after psychotherapy. A total of 106 depressed patients and 34 healthy controls participated in the study. Depression severity was measured by the Beck Depression Inventory-II (BDI-II). The Self-Liking and Self-Competence Scale Revised (SLSC-R) was used as an explicit measure of self-esteem. Implicit associations with the self were measured using a Single Category Implicit Association Task (Sc-IAT) adapted to specifically measure the core beliefs of depression. To our knowledge, this is the first study in which a SC-IAT is specifically adapted for this target group.

**Results:** Analyses showed that even though depressed patients reported lower levels of self-esteem on the explicit level as compared to healthy controls, there seemed to be no difference on the implicit level. Both patients and controls reported positive implicit associations with the self. After therapy, the level of explicit self-esteem in depressed patients had increased significantly, but was still lower than the scores of healthy controls. Implicit self-esteem did not show any change. However, since depressed patients already displayed healthy levels of implicit self-esteem at baseline, one would not expect a significant change after therapy.

**Conclusion:** It can be concluded that self-esteem will stay a point of special interest in the treatment of depression. In the present study, I will explain these results more extensively, and discuss the strengths, weaknesses and recommendations for future research.

Social phobia in adolescence: implicit and explicit self-esteem after social-threat activation

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Objectives: Empirical results regarding the role of implicit and explicit dysfunctional beliefs towards the self according to cognitive models of social phobia (SP) are inconsistent. Contrary to the assumption of negative self-esteem, SP was associated with weaker but still positive implicit self-esteem (Tanner et al., 2006). Since self-esteem has solely been assessed by the implicit association test (IAT) we should not jump to the conclusion that revisions of the cognitive models are needed. To date, there is no study assessing implicit and explicit self-esteem in a clinical adolescent socially phobic sample. In this study, two implicit measures (IAT and affect misattribution procedure, AMP, Payne et al., 2005) were used to examine self-esteem after a social-threat-activation task in socially phobic versus healthy adolescents (14-20 years). It was hypothesized that adolescents with SP show more negative reactions after self-referent primes when negative mood has been induced before compared to healthy controls in the AMP. Regarding the IAT, it was expected that socially phobic adolescents respond faster in the incompatible condition, whereas faster reactions in the compatible condition occur in healthy adolescents after mood induction.

Methods: Participants were 20 youths diagnosed with SP according to DSM-IV-TR (K-SADS) and 20 healthy adolescents (matched in age and gender). The IAT and AMP were administered before and after a social threat activation task (videotaped speech) in a balanced order. Preliminary results indicate that SP is associated with positive implicit self-esteem but significantly less positively than in the healthy group. Associations between implicit and explicit measures of self-esteem, socially phobic attitudes and cognitions will be presented.

Conclusion: The findings are discussed in relation to other studies using implicit measures in SP and in relation to the applicability of Clark and Wells’ cognitive model of SP (1995) in adolescent populations.


Treatment integrity and potential obstacles to successful implementation of evidence-based treatments: an ethical analysis

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Objectives: The aims is to examine ethical issues arising from the fact that, although considerable resources are invested in research into the development of efficacious, evidence-based, treatments, quality assurance of routine clinical practice still largely relies on clinicians’ own evaluation of their practice. This is the case in spite of available empirical evidence showing that self-evaluations of skill have tended to be inaccurate in a wide range of different fields, including psychotherapy.

Methods: Available empirical research into the accuracy of clinicians’ assessments of own skill will be reviewed. The literature review will be complemented with a philosophical analysis of the ethical implications, using the example of Motivational Interviewing (MI). Although MI has a robust evidence basis, there is less evidence of successful implementation of MI in routine clinical practice. Indeed, research has shown great variation in the ability of clinicians to acquire and retain MI skills. Therefore, MI may routinely not be delivered to the standard shown to be efficacious in clinical trials. However, several validated treatment integrity instruments developed to measure MI skill exist, which enable comparisons between clinicians’ own assessments of skill and that of independent expert raters.

Results: Like in many other areas, clinicians’ self-evaluations of own skill in using MI appear often to be inaccurate. Ethical concerns raised by lack of treatment integrity assessment include the risk of discrediting treatments/methods themselves, wasting societal resources, substandard care provision, disincentives for clinicians to seek ways to improve their own practice, and the undermining of validity of patient consent, or violations of patient autonomy (where clients believe they receive a treatment that they do not in fact receive).

Conclusions: Considerable resources are invested in research into the development of efficacious treatments. However, the demonstrated inaccuracy of clinicians’ self-evaluations mean that we may not know whether clinicians deliver the treatment they are supposed to deliver, unless we can independently assess treatment integrity using validated objective instruments. The lack of knowledge of the extent to which treatment is delivered to patients raises severe ethical concerns. Treatment integrity assessment is a vital part of any successful implementation strategy for evidence-based treatment.
Implicit processes in sweet-eating behaviour

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Dual process models (e.g. Strack & Deutsch, 2004) differentiate between two separate but interacting systems: one more explicit/deliberate system and one more implicit/automatic system. Especially in the case of unwanted habits this implicit system seems important, since unwanted habits occur automatically and are guided by implicit processes. This presentation will focus on two different implicit processes in sweet-eating behaviour: automatic action tendencies (approaching versus avoiding food) and automatic attitudes (liking versus not liking food). We conducted a study in which we compared participants who were bothered by their habit of eating sweets to participants with another unwanted habit. Sweet-eaters showed impaired avoidance towards food stimuli, while they showed negative implicit associations with the same stimuli. These results are in line with Berridge’s (1996) neurocognitive model, which states that ‘wanting’, reflected by the automatic action tendencies in this study, seems to be more important in explaining problematic sweet-eating behaviour than ‘liking’, reflected by the automatic attitudes in this study. Although wanting and liking go together most of the time – food is liked and therefore approached – when eating becomes an unwanted habit, wanting and liking may diverge. Research into these implicit processes not only promotes our understanding of the etiology and maintenance of unwanted habits (and more severe impulse control disorders), but it furthermore has been shown that these processes can be changed and that this change reduces relapse (Wiers, Eberl, Rinck, Becker, & Lindenmeyer, 2011). The measurement and training of these implicit processes can therefore be an interesting addition to clinical practice.


Can(not) take my eyes off food: Attention bias, craving and overeating

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Background: An explanatory model from addiction research (Franken, 2003) was adapted to study overeating and the development of obesity. The central idea of this model posits that the attention grabbing properties of the high-fat foods in our environment are not the same for all people, but are larger for overweight and obese people and that this bias in selective attention causes craving, which leads ultimately to food consumption beyond physiological needs. The aim of the current study was to examine attention biases for food cues, craving and overeating in overweight and healthy weight participants and to test whether these attention biases are related to weight gain during a follow-up period of one year. Design: Attention biases towards food cues were studied in initial gaze direction, first fixation durations and total dwell time as indexed by recordings of eye-movements in a sample of 22 overweight/obese and 29 healthy weight female students during a visual probe task with food pictures. In addition, self reported craving and actual food intake during a bogus “taste-test” were assessed. Participants’ weight was re-assessed at six and twelve-month follow-up.

Results: Overweight participants showed an approach-avoidance pattern of attention allocation towards high-fat food: Overweight participants directed their first gaze more often towards food pictures than healthy weight individuals, but subsequently showed reduced maintenance of attention on these pictures. For overweight participants, craving was related to initial orientation towards food. Moreover, overweight participants consumed significantly more snack food than healthy weight participants. The results of the six and twelve month follow-up assessments are now collected and will be presented at the Annual Congress of the European Association of Behavioural and Cognitive Therapy. Discussion: To our best knowledge the current study is the first to identify, in overweight/obese individuals, a distinctive pattern of cognitive bias in specific components of attention, which were directly assessed through eye movement recording: i.e., enhanced initial orientation to palatable food cues, which was positively related to food-craving, but which was rapidly and immediately followed by reduced attentional maintenance on those food cues.

Conclusion: These results highlight the importance of clarifying the role of attentional mechanisms contributing to craving and overeating in overweight individuals.

An Experimental Study on Eating Disorders: the role of mindfulness in emotion regulation
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Introduction: Mindfulness-based therapies have been developed and implemented with success in the field of Eating disorders, known to be associated with significant distress and dysfunction. Given the importance of mindful awareness for adaptive emotion regulation, this paper addresses the study of emotion regulation in Eating Disorders, specifically the role of dispositional mindfulness in making adaptive choices about how to respond in stressful situations and regulate certain emotional states.

Method: Approximately 80 individuals participated in this study. Our nonclinical group was a convenience sample which comprised a selection of participants with high scores on the three core Eating Disorders Inventory (EDI) subscales — Drive for Thinness, Bulimia and Body Dissatisfaction, who volunteered to participate in the study. Participants from the clinical sample were recruited from the Eating Disorders Consultation at the University of Coimbra Hospital. All patients met diagnostic criteria for Anorexia Nervosa, Bulimia Nervosa or Binge Eating Disorder. For both samples the study comprised two sessions. In the first, participants who provided informed consent after being informed about the nature of the study (aimed at studying the intellectual ability) completed a questionnaire package with measures of: mindfulness (MAAS), experiential avoidance (AAQII; BI-AAQ), emotion regulation (ERQ; DERS; DST), coping (CSQ3) and specific features of eating disorders (EDE-Q). Participants from both the normal and the clinical sample were then randomly assigned to receive either success or failure feedback on the alleged test of their intellectual ability. The second session was divided into five distinct moments: 1) at the start of the experiment participants completed measures of emotional state (PANAS; DASS21; anxiety, stress and sadness Likert scales); 2) the experimental task (a game of visual perception) was administered; 3) at the end of the game participants received the randomized feedback (negative vs. positive); 4) and completed PANAS, DASS21, Likert scales, a self-perception questionnaire assessing their cognitive and emotional reactions to their game performance, and a self-report questionnaire evaluating different emotion regulation strategies (purposely created for this study); 5) at the end, participants were debriefed on the real aims of this investigation.

Results, Discussion and Conclusions: Results will be presented and discussed.


Physical appearance as a central domain in social rank: Its impact as a mediator between weight and dieting
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Introduction: Social comparison is a fundamental process for human beings, by helping them to enhance their qualities. However, it can also generate perceptions of inferiority and inadequacy in relation to a comparison target. Physical appearance comparison, with superior (e.g. models) or proximal (e.g. peers) targets, seems to be particularly pernicious for women, by possibly contributing for the development of eating difficulties. This study sets out to explore if the appearance-based social ranking perceptions influence how the dissatisfaction with current weight affects drive for thinness.

Method: A battery of self-report questionnaires was used to assess social ranking through the subjective comparison of physical appearance with others (SCPAS), the dissatisfaction with current weight (the discrepancy between the real and the ideal BMI), and eating disorders symptomatology (EDI) in a non-clinical sample of 828 female participants from normal population, and in a clinical sample of 91 eating disordered patients’. Linear models were used to test the effects of the mediator (SCPAS) on the relationship between the independent (BMI-real/ideal) and the dependent variable (drive for thinness).

Results: The mediator analyses showed that a perception of a high discrepancy between one’s current weight and the desired weight was associated with a higher tendency to drive for thinness, via how physical appearance is taken as a salient domain to establish one’s social rank.

Discussion: These results add to the previous knowledge by suggesting that the dissatisfaction with the current weight does not necessarily lead to disordered eating, and other processes, such as the attribution of a social status based on the physical appearance, are likely involved in such relation.

The Relevance of Therapists Adherence and Competence on Outcome - Results of a Cognitive-Behavioral Telephone-therapy for Dementia Caregivers

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Objectives: Cognitive-behavioral interventions have shown positive effects on mental and physical health, wellbeing and burden on dementia caregivers. Differences in therapeutically procedure will be analyzed to understand the effectiveness of the treatment and from which interventions caregivers benefit most.

Methods: 50 randomly from the telephone therapy sessions chosen records were rated by two trained and independent raters mainly focused on treatment adherence and competence. Therapist competence was assessed by an enlarged version of the German Cognitive Therapy Scale (CTS; Weck, Hautzinger, Heidenreich & Stangier, 2010). For assessing adherence a self-drafted scale was used. Furthermore self-ratings of the therapists were also existent. The primary outcome-variables were mental (German version of CES-D) and physical condition (GBB-24) as well as quality of life (WHOQOL-Bref).

Results: Interjudge reliability for adherence and competence was good to excellent. First results show that adherent and competent performed therapies are correlating with an improvement in subjective physical health (GBB, adherence r=.53; competence, r=.55) of the caregivers. Particularly the adherent and competent use of homework and psychoeducation are correlating with outcome. Competent performed therapies also suggest an improvement of quality of life (WHOQOL-Bref, r=.44). Especially the use of CBT – techniques like cognitive restructuring (r=.42), increasing activities (r=.61), grief work (r=.59) and the use of homework (r=.67) seem to be associated with outcome. For the outcome-variable depressive symptoms only correlations for self-ratings of the therapists were found (adherence r=.55; competence in cognitive restructuring r=.75). Moreover satisfaction of caregivers with the intervention is correlating with adherence (r=.35). Discussion: Clinical implications of assessing treatment adherence and competence for psychotherapy studies and daily practice will be discussed.
multidisciplinary milieu staff walks hand in hand with clinical praxis, treatment plans and research. It was recently decided to implement this plan in the whole psychiatric capital region and the implementation, educational plans and organisation as well as future perspectives will be presented and the different needs of education, will be discussed. The problems of competence at different levels when working with CBT treatment plans as well as securing quality in daily treatment, will be described. The challenge of including all these comprehensive areas: Clinical practice, research, education and training are part of the process in offering the best possible psychiatric treatment to the patients. Training and education as well as organizational skills, decides how successful the whole process turns out in the end, but our intentions of creating models of simple clarity and practical and useful programmes, must not prevent us from developing sophistication in both scientific and artistic competence in cognitive therapy.

PA26-4

Young psychotherapists today: the impact of a four years training in an Italian CBT school

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Objective: The study aims to investigate the impact on trainee psychotherapists of four years postgraduate specialist training, as required by Italian laws, in a Cognitive-Behavioral school.

SUBJECTS. All participants are part of the Quadriennial postgraduate School in Cognitive and Behavioral Psychotherapy of Milano: ASIPSE. Member of the AIAMC (Italian Association of Behavior Analysis and Modification) and, as such, affiliate EABCT. The sample consist of No. 105 subjects, distributed into three groups: 35 subjects attending the first two years in training, 35 subjects attending the last two years in training and 35 subjects in the first and second year post training. Subjects are described according to socio-demographic variables such as age, sex, place of origin, employment status, etc.

Method: The dimensions investigated by standardized self-report questionnaires are: self-esteem (BASIC SE - Basic Self Esteem Scale), assertiveness (SIB - Scale for Interpersonal Behaviour), explanatory style and coping (); stress and quality of life (satisfaction scale of life, Diener - Happiness Measure - Fordyce), personality characteristics (ACL - Adjective Check List). Self-report questionnaires built ad hoc on expectations and evaluation of change, linked to cognitive-behavioral training, are also administered. Since this research is set up as cross-sectional study, data are analyzed comparing the scores distribution of each dimension for the three groups.

Conclusions: From the comparison between groups and the statistical analysis, we expect to find that changes would go in the direction of a general increase in the investigated dimensions (such as, for example, self-esteem and assertiveness), and that these changes are maintained over time. Attending a CBT school is therefore not only a journey of acquiring knowledge, but also a crucial way for increasing personal competence and well-being.

Paper Session 27 – Cognitive control processes and personality

PA27-1

Irrational beliefs, personality structure and affective disorders

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Objective: Many theories, from biological to psychological try to explain the ethiopathogenesis of affective disorders. According to all of these theories trauma or stress is one of the most important risk factors for provoking mood disturbance to vulnerable individuals. The greatest question is what is mediator between depressed reactions and their biological base. This question is still unsolved and is still very controversial. According to cognitive theories, cognitive interpretation of stressful events is a major factor in the development of mood disturbance. On the other hand there are theories that emphasize the main role of personality in modeling our emotional expressions.

Method: The sample consists of 800 participants. The participants were: undergraduate students and patients suffering from affective spectrum of disorders (unipolar depression, recurrent depression and bipolar disorder). They were administered: General Ability and Belief Scale (measuring general irrational beliefs), Beck’s Personality Inventory (measuring specific irrational beliefs), Neo Pi-R (measuring personality dimensions), and measures of anhedonic depression and general distress from MASQ.

Results: Variables of personality showed greater effects in the prediction of mood symptoms than irrational beliefs. This effect is strongest among the patients’ group then in the control group. Low level of Conscientiousness and Self-demeaning beliefs are the greatest risk factors for developing Anhedonic Depression and General Distress Depressive Symptoms as well. Anhedonic Depression is also explained with Introversive. General Inflexibility in thinking makes people also prone to General Distress Depressive Symptoms. Among the patient’s group Anhedonic Depression is explained with Introversive, Irrationally seeking love, Neuroticism and Self-demeaning beliefs. General Distress Depressive Symptoms are explained with a high level of Neuroticism and factor of Demeaning towards others.

Conclusion: From all of these results we can reach the general conclusion that the apart of personality which has a main role in developing mood symptoms there is also a part of irrational beliefs that could independently predict mood symptom.
Forgetting the Unforgotten Affective Autobiographical Memories in Subclinical Dissociators

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Inefficient memory inhibition has been observed in subclinical and clinical dissociators. Yet, dissociators often report unusual forgetfulness. Investigating how forgetting emerges in dissociators may uncover the antecedents for their self-report memory problems. We postulated that set switch can link inefficient memory inhibition to forgetting. Recollection detour which involves affect switch may elicit forgetting of previously uninhibited memories in subclinical dissociators. This hypothesis was verified in participants with high- and low-dissociation proneness via a retrieval practice paradigm using positive and negative autobiographical memories. After the study and retrieval-practice phases, memories of the practiced affect category were tested without and with intervening recall of the unpracticed affect category in the control and detour condition, respectively. Non-dissociators showed reduced recall in the control condition, replicating the retrieval-induced forgetting (RIF) effect. Recollection detour did not alter the RIF effect. By contrast, subclinical dissociators showed the RIF effect in the detour condition but not in the control condition. Detour to recollecting memories of another affect category rendered an aftereffect of forgetting of previously uninhibited memories in subclinical dissociators.


Effortful control mediates the relationship between functional avoidance and borderline symptoms

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Introduction: Functional avoidance (FA) is defined as a learned coping style, consisted of cognitive processes aimed at avoiding the activation of painful autobiographical content. It is hypothesized that FA is effective on the short term, but detrimental on the long term. Indeed, research results suggest that FA could be considered an important mechanism in the maintenance or high relapse rates of emotional disorders. FA in relation to autobiographical memory is believed to involve a wide range of processes (e.g. rumination, dampening of positive feelings, vantage perspective during the recollection of events, intentional thought suppression), and products (e.g. overgeneral memory, dissociative or detached state).

Objectives: We studied the role of FA in relation to borderline symptoms. Furthermore, we hypothesized that the relationship between FA and borderline symptoms would be mediated by measures of effortful control (EC), a temperament characteristic which expresses the ability to suppress dominant (attentional) responses to perform subdominant (attentional) responses.

Methods: Questionnaires and tasks measuring borderline symptoms (Borderline Symptom Inventory; Assessment of DSM-IV Personality disorders), EC (Adult Temperament Questionnaire), and FA processes (Ruminative Response Scale; Response to Positive Affect Scale) and products (Autobiographical Memory Test) were administered in a belgian community sample of 149 subjects.

Results: We found out that FA is indeed associated with more borderline complaints. Furthermore, attentional and activation control are found to mediate the relationship between FA processes and borderline symptoms.

Conclusions: The expansion of one’s attentional and activation control is useful in order to reduce borderline symptoms. We will discuss our findings in the light of therapeutic strategies that aim to expand these temperament characteristics.
Relation hip between irrational beliefs, childhood traumas and personality dimensions in distinguishing psychotic from non-psychotic forms of depression

Vukosavljevic-Gvozden, Tatjana; Perunicic, I.; Maric, Z.

Objective: Many theories try to identify causes of Major Depression Disorder. Much research has shown that traumatic childhood experiences especially childhood abuse can lead to MDD in later life. Cognitive style has also been noted as being involved in MDD. Studies based on individual differences postulated that the main cause of MDD is seen in personality dimensions as indicators of biological markers. The aim of this study was to investigate the role of traumatic childhood experiences, general and specific irrational beliefs and personality dimensions in distinguishing psychotic from non-psychotic forms of depression.

Method: The sample consists of 150 patients suffering from Major Depression; half of those were diagnosed to have psychotic symptoms and the other half had depression with no psychotic symptoms. They were administered: General Ability and Belief Inventory (measuring exposure to abuse and neglect during childhood and Becks Depression Inventory.

Results: The result show that childhood trauma and general irrational beliefs are the variables that significantly distinguish psychotic from non-psychotic depressed patients. Psychotically depressed patients reported to have much more early traumatic events then non-psychotic depressed patients, but non psychotic depressed patients have much more irrational beliefs. Childhood traumas are related to personality dimensions (Neuroticism is the best predictor).

Conclusion: Using personality dimensions, personality beliefs related to personality disorders, general irrational beliefs and childhood traumatic events in distinguishing psychotic from non-psychotic forms of depression we found that childhood trauma and general irrational beliefs are the best indicators. That can be due to the fact that psychotic depressions are much more attribute to biological causes and genetic factors and that way of thinking is more influential in developing non-psychotic forms of depression.

Effectiveness of mindfulness-based stress reduction in adults with autism spectrum disorders: a randomized controlled trial.

Spek, Annelies; Ham, van, N.C.

Introduction: Individuals with autism spectrum disorders (ASD) are at increased risk for developing comorbid psychiatric disorders. Research shows that depressive symptoms are the most common psychiatric concern in ASD, especially in higher functioning individuals. Mindfulness-based stress reduction (MBSR) is a relatively new form of treatment that has been found particularly effective in treating mood and anxiety disorders in clinical populations. Because the identification and analysis of thoughts and emotions are not the primary focus of this therapy, MBSR may be particularly suitable for individuals with ASD, considering their impairments in theory of mind and communication.

Method: Participants were recruited at a mental health institution. Assessment was done using the ADI-R and an interview based on the DSM-IV criteria of ASD. 20 individuals received the mindfulness training and 20 individuals received treatment as usual. For the mindfulness intervention, the MBCT program described by Segal and colleagues (2002) was followed, leaving out the cognitive elements. Furthermore, the 8-week program was extended with one session. Measurements included symptoms of depression and rumination and general functioning.

Results: The results showed a decrease in symptoms of depression, negative affect and rumination scores and increased positive affect after the intervention. The difference with the control group was significant for all variables (all p < .05).

Discussion: The present study shows positive results of a mindfulness training in adults with ASD. The mindfulness training provides applicable techniques they can use to reduce of prevent stress and increase wellbeing. Overall, mindfulness may be a suitable coping strategy for individuals with ASD.

Conclusion: Mindfulness is a promising therapy in adults with ASD, both in decreasing and preventing symptoms of comorbid disorders.

A pilot study of CBT for stressed teenagers

Makower, Irena; Schraml, K.; Perski, A.

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between life events and different vulnerability factors. An individual’s reaction to the environment is mediated by the subjective evaluation (i.e., appraisal) of the environment, and the process of coping with a stressful appraised event (Lazarus & Folkman, 1999). Appraisals of situations and coping behaviour are influenced by personal characteristics, such as personality, social skills, and problem-solving skills. The single most important factor that predicts stress vulnerability is neuroticism (Mathews. et. al. 1998). Adolescents with comorbid depression and anxiety reported the highest level of stress generation in their relationships with others. A potential mechanism through which high N, depression and anxiety, may influence stress generation can be a common cognitive vulnerability factor. High N is related to negative self-appraisal, self-critical emotion focused coping and pessimism as explanatory style (Matthews et. al, 1998). There is data pointing to stress-buffering effects of self-enhancing beliefs (Taylor & Lerner, 2003). There is also evidence of a more potent cognitive vulnerability–stress interaction for adolescent girls compared with adolescent boys (Connolly et. al. 2010).

The main aim of the present study was to investigate which factors contribute to the experience of stress symptoms and to develop a CBT program to reduce stress among teenagers. We screened 475 first grade high school students, 247 males and 228 females from two schools in a comparable upper middle-class Stockholm suburban area. They answered a stress-screening questionnaire about symptoms of stress, anxiety and depression, life style and self-esteem. The response rate was as high as 93% in both schools. The average age of our sample was 16 years. Girls were significantly more stressed; had more anxiety and depression and lower self-esteem than boys. In Regression analysis the final model explained 60% of variation in stress symptoms. Anxiety accounted for most variance, 36%, gender for 12% and global self-esteem for 9% of variance. The recruitment of participants for the individual CBT treatment was based on high scores in the Shirom-Melamend Burnout Measure (SMBM) (Shirom & Melamed, 2006). Altogether, fourteen extremely stressed individuals were chosen as potential participants in the individual CBT. Finally, five students (all girls) actually joined, followed through and finished the CBT intervention. The other nine high school students, who chose not to join the intervention, didn’t differ significantly on any measure from CBT participants. A 10 weeks individual CBT package consisted of basic stress management, traditional cognitive-behavioural techniques applied to academic and social stress, defeating repetitive thinking style: ruminations and worry, and boosting of self-esteem and defeating perfectionism and unassertiveness (Fenell, & Jenkins, 2004). The CBT participants underwent a pre-treatment assessment of symptoms with Beck Youth Inventory-I (Beck, et.al. 2010). Mean BYI anxiety among CBT participants at pre-treatment was higher than the corresponding mean in a clinical group of teenagers with anxiety disorders (Beck, J. et al. 2010). After completed treatment (approximately 3 month later) and at follow up (approximately 6 month later) they answered the same stress-screening questionnaire as before treatment and Beck Youth Inventory-II (BYI-II). Among CBT participants’ significant reduction of stress, anxiety and depression and increase of self-esteem after treatment were detected. At follow up two patients had slightly heightened anxiety and depression symptoms and a general increase in PBS (Performance-based self-esteem) (Hallsten et al., 2005) was observed. CBT interventions focused on achievement stress and social stress and boosting of self-esteem seem to be promising treatment alternative for stressed teenagers. However, between post treatment and follow up, it was difficult to keep the effect of lowering perfectionism and standards. An important result of this study is that stress reaction among teenagers is mediated by anxiety and that girls were significantly more stressed than boys. A potential value of developing a CBT specifical-ly for girls was discussed. There is need for larger-scale randomized trials and longer follow up intervals. Table 1. Changes in scores from pre-treatment to post-treatment and follow up and effect sizes within group for CBT participants (n=5)

Towards a better understanding of the stress experience: A comprehensive measure for stress

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Introduction: Modern language usage defines ‘stress’ as a configuration of anxious symptoms experienced in a negative, and often pejorative, way. Ever since Selye’s original definition, the main scientific concepts underlying stress processes have been that of adaptation and a search for homeostasis. Yet, the subjective experience of stress has demonstrated to clinicians that recurrent stress in daily life can result in the manifestation and the relatively permanent installation of a large number of disagreeable physical and psychological symptoms. While people from all countries and socio-economic levels experience stress, France is currently concerned following the publication of several studies demonstrating serious workplace problems including poor collegial relationships, poor job performance, and burn-out, as well as several suicides implicated in workplace stress. The current ongoing study seeks to better define the subjective experience of stress through the creation of a comprehensive multifaceted measure as well as a thorough exploration of measurement data to better understand the different elements involved in stress experience from a large general population in France.

Method: A comprehensive tool measuring stress in terms of physiological and psychological symptoms, as well as regular daily stressors and cognitions was developed and put through face validity and initial test validity studies. The current ongoing study examines convergent and divergent validity with other validated measures (Beck Depression Inventory, Spielberger State Anxiety Inventory, and the Mesure du stress psychologique – Psychological Stress Inventory) as well as internal validity from item inter-correlations and factorial structure.

Results: Results are expected to provide data regarding the utility of the new measure for both research and clinical practice as well as data regarding a detailed understanding of stress experience through profile data.

Discussion and Conclusion: It is expected that the use of a comprehensive tool to measure stress experience will provide detailed information for better development of individual treatment strategies including medical and psychological service delivery where appropriate.


The role of negative automatic thoughts in anxiety of college students

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Introduction: Research data as well as our experience working with students at the university counseling center indicate an increase in the number of students manifesting severe symptoms of stress and anxiety in the last decade. Our previous data indicate an increase of anxiety level during the 2nd year of college. The aim of this study is to follow the students during three years to see the changes in anxiety level. We also wanted to check the role of some possible contributors of the symptom change.

Methods: The representative sample of 260 students was followed through the first three years of college. They were assessed three times with a battery of measures. During their adaptation period (1st semester) we have assessed their anxiety as a trait (STAI-T), as well as their present anxiety symptoms (BAI). Next year we have again assessed their anxiety symptoms, as well as their test anxiety, automatic thoughts during study and taking exam and their attributions of success. During the 6th semester we have again assessed their anxiety level and their academic success.

Results: The results show that anxiety as a trait is a significant predictor of anxiety symptoms at the second year of study, but it does not differentiate students with increase and decrease of anxiety level after one year at the university. Negative automatic thoughts related to fear of disappointing parents can best differentiate students with increase and decrease in anxiety symptoms. Further analyses will include the data from the third measurement as well as some more possible predictors of the change in anxiety level.

Conclusions: Our results show that worry about academic failure, especially fear of not fulfilling parents’ expectations contribute to increase of anxiety symptoms in college students, especially in males. Possible interventions to prevent increase in anxiety are discussed.
The effects of an Internet-based psychological training program for elite athletes: A randomized controlled trial

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Objectives: Psychological skills training is widely used in order to increase the athletic performance. In several studies the effects of psychological training is both supported and questioned. The use of psychological training face-to-face is sometimes practically difficult since the regular elite athlete travels around the world practicing and competing. In order to overcome the barriers of being in a specific place at a certain time for psychological training a more flexible administration is needed. The present study examined the effect from of an internet-based psychological training program specifically developed for elite athletes.

Methods: Following an online screening procedure including the Perceived Stress Questionnaire, the Ottawa Mental Skills Assessment Tool – 3, the Modified Competitive State Anxiety Inventory-2 and the Dispositional Flow Scale-2 a total of 115 participants were randomized to treatment or to a control condition. All participants had access to a computer with an Internet connection and could print out training instructions, thought records, and other exercise materials. The material was divided into six modules and was based on Cognitive Behavioral Therapy and Acceptance and Commitment Therapy. Each module ended with five to eight questions. Participants were asked to explain, in their own words, the most important sections of the module they had just completed. The questions were intended to encourage learning and to enable the research supervisors to assess whether the participants had assimilated the material. Individual feedback was given usually within 24 hours of the participants sending their answers. On the basis of the homework reports, an assessment was made to judge whether the participant was ready to continue; if so, the password to the next module was sent. If not, the participant received instructions on what needed to be completed to be able to get to the next step.

Results: A total of 115 participants are now at the end of the training program and post assessment data will be available in the end of March. By the time of the conference pre, post and follow-up data will be available and will be presented in accordance with the intention-to-treat principle.
Effectiveness of mindfulness based stress reduction for nonclinical adults provided in private practice

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Objective: Although the efficacy of the 8-week mindfulness-based stress reduction (MBSR) program has been examined in controlled studies, few reports on the effectiveness of MBSR under the less controlled conditions of groups offered in private practice exist. The purpose of this study was to examine the effectiveness of MBSR in groups offered by independent MBCT instructors in Switzerland for nonclinical but stressed participants. In addition, factors possibly moderating the effectiveness of MBSR were explored.

Methods: This study included 187 adults participating in MBSR-groups in Switzerland. The sample and setting can be described as nonclinical, although participants on average had elevated levels of psychological distress. Groups were led by certified MBSR instructors, mostly trained in Europe, and were offered in private practice. There were few dropouts.

Results: Moderate to large effect sizes were found. Effect-sizes were $d = 0.45$ ($d = 0.35$ in an intention-to-treat analysis, ITT) for psychological distress, $d = 0.22$ ($d = 0.17$, ITT) and $d = 0.55$ ($d = 0.42$, ITT) for two facets of emotion regulation, $d = 0.85$ ($d = 0.66$, ITT) for mindful awareness of present experiences, $d = 0.62$ ($d = 0.48$, ITT) for a non-judgemental, accepting attitude towards experiences and $d = 0.79$ ($d = 0.61$, ITT) for overall mindfulness. Effect sizes were larger in more distressed participants and in participants without previous experience with mindfulness meditation. Effects were not moderated by gender, age, or education of participants. No differences in effectiveness among instructors were found.

Conclusion: MBSR was consistently effective in reducing psychological distress, and fostering mindfulness in nonclinical but stressed adults. Effect sizes were comparable to results from controlled studies. The results support the notion the MBSR can be effective not only when provided in the context of medical clinics or academic settings but also when provided by individual MBSR instructors in private practice.
Paper Session 30 – Couples and family issues

PA30-1

The role of emotion regulation processes on self-efficacy to deal with infertility

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Objectives: The impact of an infertility diagnosis on the psychological well-being of people involved has been receiving increasing attention in the latest years, particularly when assisted reproduction techniques are applied. Little is known about emotion regulation processes of psychological flexibility/acceptance, self-compassion, and coping styles in infertility and the way they may exert a protective function towards self-efficacy to deal with infertility. The aim of this study is to explore the role of emotion regulation processes on self-efficacy to deal with infertility.

Method: One hundred couples without known fertility problems and 100 infertile couples completed the instruments: Coping Styles Questionnaire, Acceptance and Action Questionnaire, Self-Compassion Scale and Infertility Self-efficacy Scale. T-tests were used to compare the groups and multiple regression analysis were performed to explore the relationships between the variables studied in the infertile group.

Results: Infertile couples presented statistically significant lower scores both in psychological flexibility/acceptance and self-compassion than the control group. This pattern was particularly identified in women who also tended to use less an emotional/ detached coping style. In men, multiple regression analysis showed that psychological flexibility/acceptance, rational and avoidant coping styles were predictors of self-efficacy to deal with infertility. The same analysis in women showed that self-compassion emerged as the only significant global predictor.

Discussion: Emotion regulation processes seem to influence the infertile patients’ self-confidence to deal with their infertility condition. In fact, the ability to take in a private event or situation, in an aware and nonjudgmental way, without undertaking efforts to manipulate, follow, escape or avoid it, along with the ability to be kind and understanding towards oneself in instances of pain and failure seems to be an adaptive attitude toward perceiving one’s self-efficacy to deal with infertility.

Conclusion: Considering that interventions that target emotion-regulation skills may improve the effectiveness of psychotherapeutic interventions, our results suggest that these issues should be addressed in a therapeutic context with these couples, namely through cognitive-behavioral approaches such as Acceptance and Commitment Therapy, Mindfulness Based Cognitive Therapy and Compassion Focused Therapy.


PA30-2

Individual Distress and Dyadic Adjustment over a Three-Year Follow-up Period in Couple Therapy: A Bi-directional Relationship?

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Introduction: This Norwegian naturalistic effectiveness study examined the relationship between depressive symptoms (Beck Depression Inventory – BDI-II) and dyadic adjustment (Dyadic Adjustment Scale – DAS), as well as between interpersonal problems (Inventory of Interpersonal Problems – IIP-64, and Young Schema Questionnaire, YSQ-75) and dyadic adjustment (DAS), during residential couple therapy and at one- and three-year follow-ups (N = 106).

Method: Mixed models were used in the analyses.

Results: Significant improvement (p < .001) occurred on all measures from admission to discharge (effect sizes .27 - .83) and from admission to three-year follow-up (effect sizes .52 - .79).

With exception from a temporary relapse in DAS from discharge to one-year follow-up, the achieved levels at discharge were maintained and to some extent improved at the follow-ups. During the observation period, improvement in depressive symptoms at a time point predicted improvement in dyadic adjustment at the subsequent time point. Further, the dyadic adjustment level at discharge predicted improvement in depressive symptoms in the follow-up period. There were only modest associations between personality variables and dyadic adjustment. Discussion: In light of family systems theory, as well as from previous research findings, we had expected to find a mutual, bi-directional association between the variables of depressive symptoms and dyadic adjustment. Instead, finding a stronger association from BDI towards DAS than the opposite direction in this study challenges this understanding, suggesting for further research.

Conclusion: The clinical implication is that in couples suffering from co-existing relational and symptomatic distress, couple therapy should include the aim to lower the depressive symptoms.

Couples and depression: Examining buffering effects for partners of depressed patients in a partial hospital.

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This exploratory study examining potential buffers to depression in couples was grounded in Interpersonal Theory, which postulates that individuals that occupy social roles that allow for a sense of satisfaction and self-efficacy are at decreased risk for depression. Since partners of depressed individuals are at greater risk for depression (Benazon & Coyne, 2000; Coyne, 1987; Tower and Kasl, 1995, 1996a, 1996b) this theory was expanded to incorporate intimate couples. This study aimed to test the hypothesis that role quality (i.e. personal satisfaction derived from occupying a particular social role such as parent or employee), the number of multiple roles an individual occupies (i.e. employee, friend, parent, partner), self-efficacy in multiple roles, and the product of self-efficacy and role quality, serve as buffers to depression for spouses of depressed partners. Participants were 42 couples in which one partner was a patient at the Behavioral Health Partial Program (BHP) at McLean Hospital. Patients were assessed for depression, and partners were assessed for depression, number of social roles occupied, the quality of these roles, and self-efficacy. Findings revealed a significant positive association between patient and partner depression. Results demonstrated support for the hypotheses that Job Role Quality (specifically Job Demands and Schedule Control) and Friend Role Quality significantly moderate the association between patient and partner depression, while Parent Role Quality and Marital Role Quality did not significantly moderate this association. Neither self-efficacy nor total number of social roles occupied significantly moderated the association between patient and partner depression. However, using OLS regression, self-efficacy predicted 30% of the variance in partner depression, and number of roles occupied predicted 8.6% of the variance in partner depression.

The Integration of the CBT and Positive Psychotherapy Approaches to Couple and Family Resilience, Growth and Flourishing after Crisis, Trauma and Adversity – A practical, experiential and interactive workshop (or paper)

Inbar, Jacinto

Bar Ilan University, Israel

In our cognitive-behavior and positive psychotherapy approach, the couple and the family are not only viewed as the systemic context for individual growth, but also as the central social unit that grows, changes and “re-invents” itself through the identification, recruitment and implementation of personal and systemic resources. Both approaches, in couple and family resilience, growth and flourishing, as psychological constructs, are related not only to prevent psychopathologies, but rather to the promotion of positive mental health, to well being and to the quality of life, to the enhancement of hope and happiness. Resilience, in our positive approach, is also related to the pro-active prevention of depression in couples and in the family system, and the ability to ‘bounce back’ after a crisis event – including infidelity and betrayal - or from adversity and to continue to grow, to flourish and to search for valid meaning and purpose. The workshop, a practical, experiential and interactive event, integrated with relevant theoretical aspects and conceptualizations, will present several models of post-crisis and post-traumatic growth using evidenced based research. The workshop, which emphasizes the centrality of cognitive-behavior therapy integrated with the positive psychotherapy approach, principles of cognitive behavior, acceptance commitment and emotional focus therapies in the development of family and couple resilience, growth and flourishing, will consist of: a. Models of family and couple resilience, growth and flourishing after crisis, trauma and adversity, from a CBT and positive multimodal and an integrative approach perspective. b. Identification of family and couple coping resources and strengths as relevant to resilience, hope and growth... c. Descriptions and exercise of cognitive behavior, positive and pro-active strategies, interventions and techniques with both families and couples. d. Principles for designing an idiosyncratic family or couple plan in order to enhance resilience, growth, flourishing, hope, optimism and the constructive “reinventing” of their life.

Posters
Changes in symptom severity in patients with panic disorder (PD) following acceptance and commitment therapy in a group (ACT-g) compared with cognitive-behaviour therapy in a group (CBT-g)

De Vlaming, Irene; Arts, W.
GGZ Delfland, Netherlands

Objectives: Acceptance and Commitment Therapy (ACT) focuses on experiential learning and value-related behavioural activation. We investigated whether group ACT (ACT-g) leads to decreased anxiety in patients with PD with or without agoraphobia. Results were compared with group CBT (CBT-g). We also explored whether clinical improvement in ACT-g was associated with changes in acceptance.

Methods: In a naturalistic study, 40 patients followed a twelve-session ACT-g. The treatment programme was a modified version of the programme outlined by Eifert and Forsyth (2005). Treatment results were compared with the treatment results of 54 patients with PD with or without agoraphobia who had previously followed a CBT-g. Anxiety was used as the primary outcome measure, assessed with the BSQ. Changes in acceptance of feelings and thoughts were assessed with the AAQ-II as the main process variable.

Results: Anxiety decreased significantly in both groups in an equivalent way. Additionally, a substantial proportion of patients in both groups could be clinically classified as recovered. In ACT-g, acceptance increased. Changes in acceptance and anxiety were related from pre- to mid-treatment. Cross-lagged correlations demonstrated that pre- to mid-treatment changes in acceptance were not related to mid- to post- treatment changes in anxiety.

Conclusions: Levels of anxiety improved meaningfully in both groups. Earlier changes in acceptance did not predict later changes in anxiety. This finding might still support the ACT model, as changes in anxiety and acceptance went hand-in-hand. Although this study has its limitations, the potential ACT has to improve the functioning of patients with PD appears to be comparable with CBT.

A case study of addiction treatment dropout: exploring patients’ characteristics
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Universidad Pública de Navarra, Spain

Objectives: Determining the characteristics of patients who drop out allows clinicians to carry out initiatives to increase retention in intervention programs. This study explored the variables associated with treatment dropout in drug-dependent patients.

Methods: Sample: A sample of 122 drug-addicted patients (84 treatment completers and 38 treatment dropouts) who sought outpatient treatment at the “Proyecto Hombre Addiction Treatment Programme” in Pamplona (Spain), during the period from January 2008 to January 2009. All participants were assessed at entry to the therapeutic programme in order to collect information on socio-demographic and addiction related variables, as well as about criminal behaviour. Assessment: The patients were evaluated by the EuropASI (Kokkevi & Hartgers, 1995), the Symptom Checklist-90-Revised (Derogatis, 1992) and the Millon Clinical Multiaxial Inventory (Millon, 1997).

Results: Completers and dropouts were compared on all studied variables. According to the results, dropouts scored significantly higher on the EuropASI variables measuring employment/support, alcohol consumption and family/social problems, as well as on the schizotypal scale of MCMI-II. Because most of significant differences were found in EuropASI variables, three clusters analyses (2, 3 and 4 groups) based on EuropASI mean scores were carried out to determine clinically relevant information predicting dropout. The most relevant results were obtained when four groups were used. Comparisons between the four groups derived from cluster analysis showed statistically significant differences in the rate of dropout, with one group exhibiting the highest dropout rate. The distinctive characteristics of the group with highest dropout rate included the presence of an increased labour problem combined with high alcohol consumption. Furthermore, this group had the highest scores on three scales of the MCMI-II: phobic, dependent and schizotypal.

Conclusion: The implications of these results for further research and clinical practice are discussed.

Derogatis LR. The SCL-90-R. Baltimore: Clinical Psychometric Research; 1992

Differential profile between addicted patients with and without criminal behaviours
Arteaga, Alfonso; López-Goñi, J.J.; Fernández-Montalvo, J.
Universidad Pública Navarra, Spain

Introduction: The aim of this study was to carry out an accurate assessment of criminal behaviours in addicted patients, as well as to compare patients with and without criminal behaviour in several variables in a Spanish sample.

Method: Sample: The sample was composed by 252 addicted patients (203 males and 49 females), who sought outpatient treatment at the “Proyecto Hombre Addiction Treatment Programme” in Pamplona (Spain), during the period from November 2008 to August 2010. All participants were assessed at entry to the therapeutic programme in order to collect information on socio-demographic and addiction related variables, as well as about criminal behaviour. Assessment: All of them were evaluated by the EuropASI (Kokkevi & Hartgers, 1995), the Symptom Checklist-90-Revised (Derogatis, 1992) and the Millon Clinical Multiaxial Inventory (Millon, 1997).

Results: The 34.1% (n = 86) of the sample had been charged at least once. Men were charged in a greater proportion than women (38.9% vs. 14.3%; X2 = 10.6; p < .01). Comparison between addicted patients with and without criminal behaviours showed statistically significant differences in several variables (mainly in sociodemographic, consumption and personality variables). In general, patients with criminal behaviours showed more severity than non charged patients in both the addiction and the consequences of the addiction.

Discussion: The results of this study showed a high prevalence rate of criminal behaviours between users of a Spanish drug addiction treatment programme. These findings indicate the need to assess the presence of legal problems in addicted patients. Likewise, it justifies the development of studies about the effectiveness of treatment programmes for drug addicted patients who have criminal behaviours.

Derogatis LR. The SCL-90-R. Baltimore: Clinical Psychometric Research; 1992
The CAP intervention: A comprehensive model to substance use prevention

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Introduction: The use of alcohol and drugs by young people is a serious concern, yet the majority of prevention programs show minimal effects in reducing drug use (1). It is therefore essential to focus on increasing program efficacy. Ideally, preventive interventions should delay onset in low-risk youth who may be influenced to use substances due to peer influence, as well as high-risk youth whose underlying vulnerability to psychopathology can lead to substance misuse. Yet, there appear to be no models that do this. Our proposed model addresses this gap by developing a comprehensive approach to substance use which combines the effective ‘universal’ Climate (2) and ‘indicated’ Preventure programs (3).

Method: The CAP intervention will be implemented in two stages; the first is to modify the UK based Preventure program for use in Australia. To do this, we will be conducting focus groups in May 2011 with students, teachers and health professionals to ensure the content and scenarios of Preventure are relevant to Australia. We then seek to demonstrate the effectiveness of the CAP intervention by running a cluster RCT in 24 Australian schools in 2012. Schools will be randomised to either (1) the ‘Control’ condition, (2) the ‘Climate’ condition, (3) the ‘Preventure’ condition, or (4) the ‘Climate and Preventure’ condition. All students will be assessed at baseline, post, 6, 12, 18 and 24 months after the intervention on their levels of drug knowledge, drug use, related harms, and mental health symptoms.

Results: Findings from the focus groups to modify Preventure will be presented.

Discussion: If the program can reduce drug use by levels equal or greater than that of the stand-alone programs, then it will be a significant contribution to health promotion and to reducing the burden of disease, social costs, and disability associated with substance abuse.


Evaluation of a Web-Based Program for Preventing Alcohol-Related Consequences among First Year College Students

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Objectives. Heavy drinking and negative alcohol-related consequences represent significant problems on university and college campuses. Effective prevention efforts for heavy drinking among college students include brief programs using motivational enhancement, cognitive-behavioral strategies, and personalized normative feedback (Larimer and Cronce, 2007). Web-based programs have also been used to disseminate prevention programming targeting heavy drinking. Research indicates web-based prevention programs are effective in reducing both heavy drinking and alcohol-related consequences in college students (Carey, Scott-Sheldon, Elliot, Bolles, & Carey, 2009). These studies, however, have relied on self-report measures to determine program efficacy. This study extends the literature by using an objective outcome measure, university sanctions received for violating the campus alcohol policy, to examine the effectiveness of a web-based prevention program. It was hypothesized that first year students participating in a web-based prevention program would receive fewer sanctions for campus alcohol policy violations than those who did not receive the program.

Method: First year students participating in university orientation activities (N = 350) were randomly assigned to the web-based program, electronic CHECKUP TO GO, or the control condition. University sanctions received for violating the campus alcohol policy were tracked throughout the academic year. At the end of the academic year, the relative frequency of receiving a sanction between the two groups was examined.

Results: Results indicated that the control group received 73% of the sanctions received by this group of first year students. Additionally, for heavy drinkers, sanctions were received by significantly more students in the control group than in the electronic CHECKUP TO GO group. Specifically, for heavy drinkers, 9% of the control group received a university sanction compared to 2.8% receiving the electronic CHECKUP TO GO.

Conclusion: Results suggest that providing a web-based personalized normative feedback program during first year orientation activities is an effective strategy for preventing negative alcohol-related consequences across the first year.

Carey et al., Addiction 2009; 104 Larimer et al., Addictive Behaviors 2007; 32
P008

Reaching out towards cannabis: Approach-bias in heavy cannabis users predicts changes in cannabis use

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Aims: Our main aim was to study the approach-bias in heavy cannabis users with the newly developed cannabis Approach Avoidance Task (cannabis-AAT) and to investigate the predictive relationship between an approach-bias for cannabis-related materials and levels of cannabis use, craving, and the course of cannabis use.

Methods: Approach and avoidance action-tendencies in response to cannabis and neutral images were assessed with the cannabis AAT and compared between 32 heavy cannabis users and 49 non-using controls. Craving was measured pre- and post-test with the multi-factorial Marijuana Craving Questionnaire (MCQ). Cannabis use frequencies and levels of dependence were measured at baseline and after a six-month follow-up.

Results: Heavy cannabis users demonstrated an approach-bias for cannabis images, as compared to controls. The approach-bias predicted changes in cannabis use at six-month follow-up. The pre-test MCQ emotionality and expectancy factor were negatively associated with the approach-bias. No effects were found on levels of cannabis dependence.

Conclusion: Heavy cannabis users with a strong approach-bias for cannabis are more likely to increase their cannabis use. This approach-bias could be used as a predictor of the course of cannabis use to identify individuals at risk for increasing cannabis use.

P009

Reward-related attentional biases and adolescent substance use

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Current cognitive-motivational theories of addiction propose that prioritizing appetitive information plays a vital role in the development and maintenance of substance abuse (Franken, 2003). Following this, an attentional bias for appetitive (rewarding) stimuli (appetitive bias), may set people at risk for substance abuse and addictive behaviors. That is, appetitive bias may lower the threshold for being seduced by the presence of potentially addictive stimuli. This study aimed to test whether appetitive bias can be considered a contributing factor to the development of substance use and abuse. Participants were 502 members of the non-clinical research group of the Tracking Adolescents’ Individual Life Survey (STAIRS), a large prospective population study of Dutch adolescents with bi to triennial measurements from age 11 to at least age 25. Participants completed an Spatial Orienting Task (Derryberry & Reed, 2002) and a substance use questionnaire (STAIRS, 2001). The generally appetitive stimuli in this orienting task are relevant to the task, which allows room for both more voluntary (supervisory) and more automatic attentional processes (Dennyberry & Reed, 2002). Further, this task can differentiate between separate components of attention; the tendency to shift attention towards reward (attentional engagement) versus difficulties in shifting away from reward (attentional disengagement). It was expected that adolescents with heavier substance use would be characterized by enhanced engagement towards appetitive cues (i.e., easy seduction by opportunities for reward) and a difficulty to disengage from appetitive cues (i.e., attention is locked, which will lead to stronger craving). Preliminary results will be presented.

P010

Using indirectly measured attitudes to predict alcohol use: the role of attitude accessibility

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Objectives: Indirect attitude measures can be valuable for the prediction of alcohol-related behavior, because they have proven superior to direct measures when attitudes are socially sensitive and behavior is under little conscious control. However, their predictive validity has not always been confirmed, leading us to investigate whether the accessibility of the attitude from memory is a moderator of this relationship. Attitude accessibility is determined by the associative strength between the attitude object and its valence and influences the degree to which an attitude is automatically activated. We hypothesized that an indirectly measured attitude would reliably predict behavior especially or only when this attitude was highly accessible.

Method: We tested this hypothesis in a student population (N = 81) with regard to beer-related attitudes and behavior. A picture-picture naming version of the Affective Priming Task was used to indirectly measure the attitude towards beer (relative to that towards water). We were interested in predicting whether participants would choose to take home a bottle of beer or water and the amount of beer (relative to the amount of water) they would pour and drink during a so-called taste test. Attitude accessibility was operationalized as response latency during the speeded evaluative categorization of beer stimuli (the more accessible, the shorter the response latency), controlled for the response latency of speeded semantic categorization.

Results: The indirectly measured attitude towards beer was found to be predictive of choice behavior, regardless of its accessibility and even after controlling for the directly measured beer attitude. In contrast, and partially confirming our hypothesis, this indirectly measured attitude was only predictive of the amount of beer poured and drunk during a taste test when it was highly accessible.

Conclusion: This study adds to the evidence that indirectly measured alcohol attitudes can be valid predictors of alcohol-related behavior. Furthermore, it suggests that attitude accessibility can sometimes be a moderator of this relationship. More research is needed to investigate the circumstances under which accessibility is relevant for behavioral prediction.
Constructive and unconstructive repetitive thoughts in inpatients with alcohol dependence

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Objectives: The current study has examined whether (1) patients admitted in a cognitive-behavioural (CBT) program for alcohol dependence report more unconstructive and less constructive repetitive thoughts compared to normal control participants; (2) unconstructive repetitive thoughts predict category membership as an alcohol dependent patient, independently of depression. Compared to previous studies (Caselli, Bortolai, Leoni, Rovetto, & Spada, 2008; Caselli, Ferretti, Leoni, Rebecchi, Rovetto, & Spada, 2010), the present study distinguishes between constructive vs. unconstructive negative repetitive thinking (NRT).

Methods: Participants suffering from alcohol dependence admitted in a CBT program (ADP, n=29) and participants without alcohol dependence (NC, n=29) filled in four questionnaires: the mini-Cambridge Exeter Repetitive Thoughts (mini-CERTS) that measures an unconstructive form of NRT-the abstract analytic thinking (AAT) and a constructive form of NRT – the concrete experiential thinking (CET); the Ruminative Response Scale (RRS) that measures two forms of NRT, brooding that is clearly unconstructive and reflection that is a more ambiguous form of rumination; the Spielberger State Trait Inventory (STAI); and the Beck Depression Inventory-second edition (BDI-II).

Results: ADP reported less CET, more AAT, more brooding, and more reflection, compared to NC. ADP were also more depressed and more anxious. AAT, brooding and reflection, but not CET, predicted category membership as an alcohol dependent patient. However, those effects were no longer significant when BDI was added to the model.

Conclusion: The results suggest that alcohol dependent patients demonstrate higher level of unconstructive rumination and lower level of constructive rumination. Moreover, unconstructive rumination predicts category membership as an alcohol dependent patient. However, contrary to Caselli’s et al. (2010) results, the present study failed to evidence that these effects are independent of depression. Implications for the treatment of alcohol dependent patients are discussed.


Temptation vs. Confidence. A New Measure of Specific Self – Efficacy in Heroin Addiction

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Objectives: Self efficacy (Bandura, 1977) conceptualizes a person’s perceived ability to perform on a task as a mediator of performance on future tasks. A change in self-efficacy can predict a lasting change in behavior if there are adequate incentives and skills. The Transtheoretical model of change (Prochaska et al, 1994) assesses specific self-efficacy in addiction by forming a ratio of two scores. Overall confidence score assesses person’s confidence in ability of staying sober through a variety of situations. Situational temptation score assesses how tempted people are to engage in a problem behavior in the same situations. The aim of our research was to develop a measure of specific self-efficacy in heroin addiction, following the examples of various self-efficacy scales concerning various addictive behaviors within the Transtheoretical model.

Method: The Specific Self-Efficacy Scale for Heroin Addiction (SSEH 2008) consists of 30 emotionally charged situations. For each situation, the participant is asked to mark on his/her level of confidence in ability of staying sober and Situational temptation on two symmetrical 4 point Likert scales. The participants were 209 outpatients, receiving Methadone substitution treatment.

Results: Both Confidence (Cronbach’s $\alpha = .963$) and Temptation scale (Cronbach’s $\alpha = .932$) show very high reliability. Principal component analysis of the Confidence scale isolated 4 components with significant positive correlations in, explaining 65.3% of variance. The same analysis of the Temptation scale also isolated 4 positively correlated components, explaining 65.5% of total variance. However, Scree-tests suggest a single principal component in both of the scales, explaining 48.4% of total variance for Confidence scale, and 50.3% for Temptation scale.

Conclusion: Evidently, SSEH2008 has a potential of measuring specific self-efficacy in a way that is conceptualized by Transtheoretical model of change. The results suggest that this scale has a promising future in exploring the role of self-efficacy in investigating clinical and therapeutical changes of problem behavior among heroin addicts. The practical and theoretical implications of these findings will be discussed.

The Role of Cognitive Structuring in Addressing Uncertainty as a Result of State Anxiety

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Pressures and tensions are inseparable parts of life and cause distress, restrict normal functioning, and impair the quality of life. The present research addresses the relationships between state anxiety and uncertainty and discusses cognitive restructuring as a key concept explaining these relationships. The research examines the role of cognitive restructuring as a variable moderating between uncertainty and state anxiety. The research extends the understanding of the processes of dealing with uncertainty while emphasizing the influence of the cognitive structuring on these processes.


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Cognitive Therapy for Paruresis

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**Presenting Problem.** Although cognitive conceptualizations have shown to be an effective treatment for social phobia, research and case reports investigating cognitive interventions with clients who are ashamed to urinate in public toilets are missing. This case report aims to illustrate the possibility to apply cognitive interventions according to the model by Clark and Wells [1995] for paruretic clients.

**Case Conceptualization and Intervention.** A 19-year-old man, who was unable to urinate in public toilets when others are present since the age of 10 reported to be ashamed of his problem and fears that others might not think of him as a real man, if he is unable to urinate. 25 sessions of individual therapy were applied. Major treatment components included formulation of a cognitive model, demonstration and modification of self-focused attention and safety-behaviors (not drinking, avoiding public toilets), behavioral experiments, and cognitive restructuring.

**Outcome.** Treatment effects were assessed using questionnaires for paruresis, social phobia, and anxiety at beginning of the treatment and to treatment termination. The results were encouraging with clinically significant improvement in symptoms of paruresis. These improvements were accompanied by a reduction in social anxiety and dysfunctional beliefs and attitudes about urinating in public toilets. The patient also reported a corresponding improvement in daytime functioning and depression.

**Review and Evaluation.** These findings highlight the potential benefits of incorporating cognitive interventions into existing treatments for paruresis and presents a complement for hitherto existing behavioral treatments.


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The Case of Erik: Applying the Cool Kids Program in Denmark to a child with anxiety disorders

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**Introduction:** This case study deals with a 12 year old boy with cognitive delay, suffering from multiple anxiety disorders (Generalized Anxiety, Specific Phobias, Social Phobia and Separation Anxiety) in Cognitive Behavior Therapy (CBT) (the Cool Kids® Program: Rapee, Wignall, Hudson & Schniering, 2000) in the Research and Teaching Clinic, Dept. of Psychology, Aarhus University. CBT was conducted in a group format, where both children and their families took active part and included cognitive restructuring, gradual exposure, parent training and skills training in areas such as assertiveness. The primary aim of the study was to investigate the mechanisms of change in this successful case.

**Results:** Therapy effectively reduced the anxiety symptoms, as measured by the Anxiety Disorder Interview Schedule for Children and Parents and Spence Children’s Anxiety scale. Additional quantitative as well as qualitative data revealed an overall positive therapeutic outcome, which was maintained 3 months and 15 months after treatment.

**Discussion:** This case study highlights the importance of accommodating to the child’s developmental level. It supports that while cognitive distortions may be associated with childhood anxiety, cognitive interventions may prove to be difficult for younger children. Erik’s cognitions were successfully challenged initially through gradual exposures while eventually, as a result of the help received by his parents and his advancing cognitive maturation he was able to also integrate cognitive restructuring into his thinking. Furthermore, this case emphasizes the importance of engaging parents, who are taught skills that support the child in future anxiety provoking situations and alter parental expectations and behaviors, as Erik’s mother, who learned how not to overprotect him, but instead control her own anxiety and function as a positive role model.
Self-focused attention and social anxiety in children

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Objectives: Self-focused attention is a well-proven central factor in cognitive models of maintenance of social anxiety disorders in adulthood. To date only two studies examined self-focused attention in children with social anxiety and found controversial results (Fernandez et al., 2007; Higa & Daleiden, 2008).

Methods: The present study experimentally investigated if social anxiety is associated with self-focused attention in children. A sample of 130 school children participated in a probe detection task. Before the task the children were told that they have to sing a song in front of a camera after the detection task. This information induced anticipatory social anxiety. In the probe detection task, children were watching pictures of faces of children with neutral, angry or happy emotional expressions and had to detect as fast as possible an external probe, a letter “E” displayed at the picture, and an internal probe, a stimulus vibrating at their body. Participants were let to believe, that the pictures were members of the child jury that would afterwards judge their song. Self-focused attention was defined by the relative reaction time to the internal and external probes. Social anxiety was measured with a questionnaire.

Results and Conclusion: Preliminary results suggest that school children are focusing more externally than internally in a social stress situation. If children with high social anxiety show more internal focused attention than children with low social anxiety will be presented and discussed.

Fernandez et al., Unpublished manuscript 2007; Higa et al., Journal of Anxiety Disorders 2008; 22(3):441

Identification Bias of Emotional Facial Crowds in Social Anxiety

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Objectives: We investigated whether socially anxious individuals present a biased negative evaluation of facial crowds (e.g., faces combinations).

Methods: Facial crowds were connoted positively or negatively by different ratios of neutral–angry–happy faces. Twenty highly socially anxious (SA) participants and 19 non-anxious controls (NACs) were asked to assess two dimensions of evaluation: disapproval and emotional cost for interacting. We postulated that SAs would rate more negatively predominantly disapproving audiences as compared to NACs for both evaluations. Second, we expected different patterns of response for 2 types of neutral crowds. Specifically, no differences should be observed for crowds with only neutral faces but SAs should rate more negatively crowds with mixed emotional faces (6 angry, 6 happy and 4 neutral).

Results: Results supported the two hypotheses, even though for the evaluation of disapproval the difference between the groups was nearly significant.

Conclusion: These findings highlight that socially anxious individuals present a negative evaluative bias towards disapproving emotional facial expression when presented as complex stimuli with conflicting information.

Age at onset and symptom dimensions in adult obsessive-compulsive patients

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Introduction: Obsessive-compulsive disorder (OCD) is an heterogeneous condition. Recent studies have identified five symptom dimensions in OCD: symmetry/ordering, hoarding, contamination/cleaning, aggressive/checking and sexual/religious (1). Two typical ages of onset have been described for OCD: childhood onset (before 10 years) and early adulthood onset (around 17). Previous data in clinical adult samples suggest that OC (obsessive-compulsive) symptom dimensions are stable (2,3). However, no studies to date have investigated whether OC symptom dimensions starting in childhood predict OC symptom dimensions during adulthood. Pediatric OCD seems to be a more “maturational” subtype, which appears to be different from OCD.
in adults. In pediatric samples, symmetry/ordering and hoarding have been reported to be associated with an earlier age of onset. Scarce data of the pattern of onset of OCD are available for adult patients(4). Goals: To analyze in a sample of adults with OCD: 1) The age of onset of each of the most common OC symptom dimensions 2) Whether the presence of each OC symptom dimension during childhood increases the risk of presenting the same or other dimensions during adulthood.

**Method:** Participants: 225 patients (130 male and 95 female) with a primary diagnosis of OCD recruited from the OCD-Unit at Bellvitge Hospital (Barcelona, Spain). Mean age=34.5 (range: 17-66). Assessment: Dimensional Yale-Brown Obsessive Compulsive Scale (DY-BOCS). Variables definition: Early onset= participants with interfering symptoms before the age of 10. Adult onset= participants with interfering symptoms after the age of 18. Statistical analyses: -One-Way ANOVA (Dependent variable: age of onset. Independent variable: OC dimensions) to compare the mean age of onset across OC symptom dimensions. Significant level: p<0.05. -Odds rations with 95% confidence intervals (95% CI) to assess the association between OC symptom dimensions in childhood and OC symptom dimensions in adulthood.

**Results:** Table: Association between child and adult OC symptom dimensions in OCD patients (n=225).

**Conclusion:** There were no significant differences in age of onset across OC symptom dimensions. However, symmetry/ordering and hoarding dimensions were reported by the patients as beginning at earlier ages than the other symptom dimensions. Individuals reporting symptoms in one OC symptom dimension in childhood are more likely to endorse symptoms in the same dimension in adulthood, suggesting that OC symptom dimensions are stable (5).

Individuals reporting Sexual/religious symptoms in childhood have also an increased risk of presenting Contamination/cleaning symptoms in adulthood.


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**PO20**

**GAD or the uncertain cat**

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**GAD or the uncertain cat Introduction:** General anxiety disorder (GAD) is a chronic disorder affecting about 5% of the general population. Though, a few studies measured the GAD prevalence as a co-morbidity of substance use disorder (SUD) as it is quite hard to set a diagnosis of GAD in this population. Cognitive distortion of GAD is based on an uncontrollable and disproportioned worry about everyday things linked to the intolerance of uncertainty. In quantum physics Schrödinger’s cat is a thought experiment elaborated on the paradoxical Heisenberg’s uncertainty principal. So this study compares both uncertainty concepts to see if the Schrödinger’s cat model could help in setting the diagnosis of GAD in the SUD population. The study verifies the application of the cat model to the GAD patients as these patients can’t tolerate uncertainty and express a pessimistic point of view of the situations.

**Method:** This cross sectional pilot study measured the prevalence of GAD in a Swiss heroin prescription program. It consists of 18 participants examined for GAD using Freeston &Ladouceur’s worry and anxiety scale (WAS). From it we compared the level of anxiety in the SUD population with the level of that of 10 control subjects from the care unit. Finally we evaluated the Schrödinger’s cat experiment as a possible way to detect patients suffering from...
Attention Retraining and OCD: A Scrupulosity Case Study

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Presenting Problem: The following case study evaluates the effectiveness of attention retraining (AR) on symptom severity in Obsessive Compulsive Disorder (OCD). The case presented was diagnosed with OCD in the high moderate range, based on the Yale-Brown Obsessive Compulsive Scale. The participant’s OCD symptoms centered around the domain of scrupulosity, which is notoriously resistant to change and related to poorer treatment outcomes (e.g. Rufer, 2006).

Case Conceptualization: Following the participant’s refusal of exposure and response prevention, the case was hypothesized to be a candidate for AR. A limited number of studies have reported an attention bias (AB) to threat words in OCD and preliminary support for the effectiveness of AR in changing AB to threat (e.g. Najmi & Amir, 2010). AR was administered using a modified dot-probe task, utilizing an idiosyncratic list of 52 threat-neutral word pairs relevant to the participant’s OCD. One baseline and eight treatment sessions were conducted, followed by two weeks of symptom observation.

Outcome: Results indicated a 26.1% reduction in OCD severity and reductions of 50%, 63.64%, and 27.64% in depression, anxiety, and overall distress scores, respectively. These gains were stable across two weeks of symptom observation. Reduction in anxiety was significantly correlated with the number of AR sessions. A qualitative analysis of the participant’s treatment experience indicated satisfaction with the treatment and its outcomes; however, the participant expressed concerns regarding the effects of the treatment on his religious standing, reducing motivation to complete AR. An inverse relationship was observed between symptoms and overall distress, due to these religious concerns.

Review: These results indicate the AR paradigm can be an effective treatment for OCD, however, when used with scrupulosity, adjunctive cognitive therapy may be necessary to address concerns over violating one’s faith. This study is applicable to the stream of anxiety.

Exploring Possible Mechanisms of Change: Therapy outcome and process in a group of children with anxiety disorders attending group CBT with a family component

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Objective: The aim of the present embedded case study was to assess the therapy outcome and explore possible mechanisms of change in a group of children aged 8-12 (three boys and three girls) with a variety of anxiety disorders that attended Cognitive Behavior Therapy (CBT) (the Cool Kids® Program: Rapee, Wignall, Hudson & Schniering, 2000) in the Research and Teaching Clinic, Dept. of Psychology, Aarhus University.

Method: The first part of the study investigated the therapy outcome through multiple sources of informants (student therapists, children, parents) using a diagnostic interview (Anxiety Disorders Interview Schedule for DSM-IV) and quantitative measures (Spence Children’s Anxiety Scale and Children’s Anxiety Life Inference Scale) undertaken at different points in time (pre-treatment and at 3 and 15-month follow-ups). The second part of the study investigated the therapy process by examining differences among responders and non-responders to treatment through qualitative assessments (journal notes from the course of therapy and semi-structured interviews at the 15-month follow-up).

Results: Based on diagnostic status and CGI ratings, a long-term positive response to treatment was found in four out of six children at the 15-month follow-up. Findings indicated that besides children’s differential response to individual treatment components; changes in parental behaviors as well as constructive group processes were related to a positive therapy outcome. In addition, several mediating and moderating variables were identified, such as children’s motivation and cognitive developmental level as well as paternal engagement in therapy.

Conclusion: Several therapy related processes and children and parents’ characteristics are influencing therapy outcome and ought to be considered when exploring possible mechanisms of change. Due to the limited number of cases the results of the present study should be interpreted with caution, pointing to the need for more extensive studies in mediation-outcome research designs.

Behavioral treatment of choking phobia for liquids only

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Presenting Problem: Choking phobia is characterized by fear and avoidance of swallowing food, pills, or fluids. Cognitive and behavioral therapies, as well as antipanic drugs, have been of proven efficacy. Although the literature contains many case reports, there are two reviews on this topic [1,2]. No controlled trials have been conducted to evaluate treatments for choking phobia. Surprisingly, there is just one case report described of fear of choking on liquids but not fear of choking on solid food [3].

Case Conceptualisation and Intervention: Subject: The present report concerns the treatment of a 43-year-old woman with a 22-year history of choking phobia. She fears choking whenever she drinks any liquid or semiliquid, but she does not fear of choking on solid food. At the time she gets to our Mental Health Primary Unit she sips all liquid (spending a lot of time and feeling very anxious).

Assessment: In order to get a baseline, the patient recorded for a week the fluids that she drank each day. She was asked to register time and anxiety (Subjective Units of Distress from 0 to 100) associated to every intake. Pre- and post-treatment the patient answered the Beck Depression Inventory and the Beck anxiety Inventory.

Treatment: Eight sessions (one per week) of 45 minutes have been done until now. First 2 sessions consisted in data gathering to identify behavioral problems and maintenance variables. At third session psychoeducation about normal swallowing was given and a hierarchy of phobic liquids was done. Graduated exposure in vivo exercises were planned to do at home for the next sessions and patient’s irrational assumptions were challenged.

Outcome: At the time of writing this abstract the patient is still in treatment. So far she is able to eat jelly, caramel custard and fruit in less than 5 minutes and with no anxiety at all. About
water, she passed from drinking 70 ml in 15 minutes and SUDs of 100 to drink it in 2 minutes and SUDs of 40. She is still doing exposures to the water intake only.

**Review and Evaluation:** This case study shows the efficacy of behavioral treatment in a patient with choking phobia for liquids. Graduated exposure exercises and repeated practice allow the patient to challenge her assumptions about suffocation when drinking. The most difficult thing to manage in this case is the learned response of retaining liquids before swallowing.

**References:**

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**P026**

Neural correlates of dysfunctional beliefs in Obsessive-Compulsive Disorder

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Cognitive models of Obsessive-Compulsive Disorder (OCD) hypothesize that beliefs leading to misinterpretation of the significance of intrusions are important in the etiology of OCD: (1) overestimation of threat/inflated responsibility, (2) importance of, and need to control, intrusive thoughts and (3) perfectionism. Our aim was to analyze differences on regional brain anatomy between OCD patients and healthy controls on cerebral regions correlated with these dysfunctional beliefs.

**Methods:** Dysfunctional beliefs were assessed in 59 OCD patients (30 men/29 women, 34.4 ± 9.3 years) and 27 healthy controls (HC) (13 men/14 women, 34.0 ± 3.8 years) using the Obsessional Belief Scale (OBQ-44). High resolution T1 weighted 3-D volumes were acquired for each subject in a 1.5T scanner. Images were pre-processed using SPM8 and the VBM8 toolbox.

**Results:** OCD patients exhibited higher scores on all OBQ subscales (responsibility: OCD 68.7 ± 25.2 vs HC 40.5 ± 14.2; t=5.4, p< 0.001; importance of thoughts (IT): OCD 43.7 ± 15.9 vs HC 22.4 ± 7.7; t=6.5, p< 0.001; perfectionism: OCD 73.7 ± 21.0 vs HC 53.4 ± 16.9; t=4.41, p< 0.001). The left temporal pole, which volume was negatively correlated with perfectionism and IT, was significantly smaller in OCD patients (t=4.20, P FWE corrected = 0.017). A significant between-group interaction was observed in the right temporal pole (t=3.86, P FWE corrected = 0.037), with OCD patients showing a positive relationship between the volume of this region and perfectionism and HC showing a negative relationship. OCD patients also showed a positive relationship between IT scores and volumes of left dorso-lateral prefrontal (t=3.90, P FWE corrected = 0.049) and frontopolar cortex (t=4.10, P FWE corrected = 0.027), while HC displayed the opposite pattern of correlation.

**Conclusion:** Volume differences on temporal, dorso-lateral prefrontal and fronto-polar areas may be related to dysfunctional beliefs hypothesized to underlie the development of OCD.


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**P027**

Why do compulsions start, how do compulsions stop, and what happens in between? Diary records of compulsive rituals by individuals with obsessive-compulsive disorder

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**Introduction:** Two decades of research on obsessive-compulsive disorder (OCD) has helped us develop a strong understanding of obsessions and the discomfort to which they give rise. This work has also helped us to understand why obsessions are often followed by the performance of a compulsive act. What we have understood less well is why that act is repeated, even though it often results in an increase, rather than decrease, in discomfort. Emergent ideas suggest that compulsions may persist for many reasons beyond negative reinforcement. These include poor memory confidence, elevated evidence requirements for establishing that an action has been completed properly, and rules for discontinuation of the act that are based on factors other than objective evidence of its completion. These new ideas promise a fresh new perspective on the persistence of OCD, and compulsive checking in particular. At present, however, these ideas are to some extent quite speculative, in part because there have been so few detailed studies of the phenomenology of compulsive rituals.

**Method:** In the present study, individuals with a principal diagnosis of OCD completed a structured diary of their compulsions as they occurred naturally over a three-day period. They recorded the circumstances leading to the compulsion and reported on the acts involved in the ritual, the duration and repetitiveness of the compulsive ritual, and the criteria used to determine completeness of the ritual.

**Results:** Analysis of the diary responses will yield both quantitative qualitative information regarding the initiation of compulsive rituals and the criteria involved in ritual termination.

**Discussion:** Results will be discussed in terms of theoretical and clinical implications.

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**P028**

Preventing the renewal of fear: a lab study comparing a dual-task with exposure

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**Introduction:** After treatment of anxiety disorders, fear may return, i.e., outside of the therapeutic context. This is known as “ABA renewal”: acquisition takes place in context A, then extinction takes place in context B, and finally conditioned stimuli (CSs) are presented in context A, which results in renewal of conditioned responses (Bouton, 2004). Thus, fear extinction is context-dependent: the cognitive representation of the fear memory (unconditioned stimulus: US) remains intact and is activated in the original acquisition context. It has been proposed (e.g., Davey, 1997) that devaluation of the US representation, such that it becomes less aversive, is needed to prevent ABA renewal. Numerous studies have shown that making eye
brief cognitive behavioral group treatment for body dysmorphic disorder: a pilot study

Johns Hopkins University, United States

Body dysmorphic disorder (BDD) is thought to be an underdiagnosed condition, and many people suffering from this disorder are very reluctant to seek psychological help. In addition, cognitive behavioral treatment for BDD shows promising first results. In order to reach members of the community suffering from BDD we developed a brief psychoeducational structured treatment. The aim is to provide the participants with better coping with extreme body dissatisfaction (as a central feature of BDD). The present uncontrolled study sets out to investigate the feasibility and effectiveness of BDD as a group treatment. The present sample consists of 32 self-referred participants satisfying the DSM-IV-TR diagnosis of BDD. In a small group format, six two-hour sessions were devoted to various components of body dysmorphic disorder. Topics covered were, cognitions, behaviors, selective attention, and personal characteristics (such as perfectionism and self-esteem). Mini-lectures, demonstrations, exercises and focused group discussions were among the techniques used to socialize participants in the model and to provide them with ways to change their BDD thoughts and behaviors. A semi-structured interview to establish BDD severity (BDD-Y-BOCS), and questionnaires measuring body dissatisfaction, depression, social anxiety, and obsessive-compulsive features were administered at pretest, posttest and three months follow-up. Results showed that the initial average scores on all measures were within their clinical ranges. At post-assessment and at follow-up most of them showed a statistically significant decrease over time. This was especially the case for BDD behaviors, social anxiety, and depression. No drop-outs and a high attendance rate were observed. It can be concluded that even a brief focused cognitive behavioral psychoeducational group approach may have the potential to contribute to a decrease in BDD symptomatology. The clinical experience with the present approach indicates a more than satisfactory feasibility to deliver brief psychological treatment for BDD in a group format.

Posters

Obssesive Compulsive Consequences Scale-Clinical Version: A comparison of the two forms

Virginia Tech, United States

Introduction: The following study builds upon previous findings that obsessive compulsive behavior is related to treatment motivation, as measured by the stage of change model, willingness to participate in future treatment, and perceived effectiveness of past and future treatments. Overall, the construct of functional consequences is an important factor for understanding treatment resistance and differences in treatment motivation. Positive and negative functional consequences are evaluated using the Obsessive Compulsive Consequences Scale (OCCS). In order to increase clinical utility, a revised version of the OCCS (OCCS-CV) was created. The current study evaluates the factor structure and validity of the OCCS-CV.

Method: 502 participants were administered the OCCS-CV. Factor structure was evaluated using a principal components analysis with a varimax rotation. Relationships with symptom severity, stage of change, willingness to participate in future treatment, and perceived effectiveness of future treatment were analyzed to assess validity.

Results: Principal components analysis resulted in a four component structure accounting for 56.08% of the variance. Components include ‘general positive consequences’, ‘negative consequences’, ‘keeping people safe’, and ‘acceptability’. These components closely replicate components of the previous version. The main exception is the combination of the general and socially based negative consequences into one component (‘negative consequences’) for the OCCS-CV. Furthermore, preliminary analyses indicate the OCCS-CV is related to treatment motivation and symptom severity in the expected direction.

Discussion: Overall, analyses indicate the revised version of the OCCS-CV is highly comparable to the original version and a good measure for understanding treatment resistance. The OCCS-CV retains its ability to tap into the construct of motivation with OCD patients while increasing feasibility and clinical utility. Given the relationship of functional consequences to treatment difficulties, this poster fits into the veins of identifying problems in OCD treatment and anxiety.

Cognitive-Behavioral Therapy for children and adolescents: a presentation of a randomized controlled trial

Department of Psychology, Aarhus University, Denmark

Introduction: The following study builds upon previous findings that obsessive compulsive behavior is related to treatment motivation, as measured by the stage of change model, willingness to participate in future treatment, and perceived effectiveness of past and future treatments. Overall, the construct of functional consequences is an important factor for understanding treatment resistance and differences in treatment motivation. Positive and negative functional consequences are evaluated using the Obsessive Compulsive Consequences Scale (OCCS). In order to increase clinical utility, a revised version of the OCCS (OCCS-CV) was created. The current study evaluates the factor structure and validity of the OCCS-CV.

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Discussion: Overall, analyses indicate the revised version of the OCCS is highly comparable to the original version and a good measure for understanding treatment resistance. The OCCS-CV retains its ability to tap into the construct of motivation with OCD patients while increasing feasibility and clinical utility. Given the relationship of functional consequences to treatment difficulties, this poster fits into the veins of identifying problems in OCD treatment and anxiety.


Meta-analytic results (James et. al. 2009; Silverman et. al. 2008; In-Albon & Schneider 2007; Ishikawa et. al. 2007; Cartwright-Hatton et. al. 2004) provide evidence that cognitive behavioral therapy (CBT) is an efficacious treatment for anxiety disorders in
Are hypochondriacal traits really specific for patients with hypochondriasis? – A comparison between patients with hypochondriasis, panic disorder, and medically unexplained physical symptoms

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Introduction: Cognitive theories of hypochondriasis stress the importance of cognitive, affective, perceptual, and behavioral aspects in the pathogenesis of severe health anxiety. However, since models of hypochondriasis, panic disorder, and somatization disorder are highly similar with respect to cognitive and behavioral factors (e.g., body focused attention, catastrophization, reassurance seeking behavior), it remains unclear which specific factors may distinguish between hypochondriasis on the one hand and other mental disorders marked by multiple physical sensations on the other hand. As most studies on hypochondriacal traits focused on the general population and students, comparative data in patients is scarce. Our study therefore aimed at comparing patients with hypochondriasis to patients with other somatoform disorders, panic disorder, and healthy controls regarding hypochondriacal traits.

Method: Four groups of participants were recruited and diagnosed with the SCID-I interview according to DSM-IV: 35 patients with hypochondriasis (HYG), 30 patients with somatization disorder (SGF), 26 patients with a panic disorder (PDG), and a control group (CG) of 32 people with no current DSM-IV disorder. The Multidimensional Inventory of Hypochondriacal Traits (MIHT; Longley et al. 2005) was used to assess cognitive, affective, perceptual, and behavioral hypochondriacal traits.

Results: Patients in the HYG revealed the highest values on each of the four MIHT subscales and differed significantly from the three comparison groups regarding the affective (Cohen’s d: HYG vs. SFG: 1.54; HYG vs. PDG: 1.99; HYG vs. CG: 5.02), cognitive (Cohen’s d: HYG vs. SFG: 0.65; HYG vs. PDG: 0.97; HYG vs. CG: 2.26), and perceptual subscale (Cohen’s d: HYG vs. SFG: 1.38; HYG vs. PDG: 1.03; HYG vs. CG: 1.73). Regarding the behavioral facet (i.e., reassurance seeking), the HYG had significantly higher scores compared to the CG (d=1.12) and SFG (d=0.87), but not the PDG (d=0.40).

Discussion: Three of the four MIHT subscales turned out as highly specific for patients with hypochondriasis. Only the behavioral subscale (assessing reassurance seeking behavior) was elevated in patients with panic disorder as well.

Conclusion: This study represents the first to demonstrate that cognitive, affective, and perceptual hypochondriacal traits (MIHT) are specific for patients with hypochondriasis. Suggestions to subsume hypochondriasis among the somatoform disorders appear questionable.

Longley et al, Psychological Assessment 2005; 17: 3-14
Discussion: BDD often began during childhood or adolescence and was associated with greater risk of attempting suicide and with more Axis I and Axis II comorbidity. Further research is needed to confirm these findings and to increase understanding of early-onset BDD.

P034

Treating aerophobia: Specific and detailed elements related to patients’ psychological functioning in a group consulting for fear of flying

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Introduction: Industrialized countries report a 10-30% incidence in aerophobia. Fear of flying, experienced on a continuum of seriousness, can hamper professional, social, and familial activities. According to the DSM-IV, fear of flying is theoretically a generalization of other phobias related to the natural environment, including fear of heights, storms, instability, etc. The DSM-IV also notes high co-morbidity with other phobias. Patients consulting for aerophobia often manifest excessive levels of anxiety that severely hamper normal life in terms of using airline travel. These patients also demonstrate specific symptoms that appear to impact their ability to follow through with treatment interventions aimed at alleviating their fear of flying. The current study qualitatively examines the specific manifestations of a group of patients consulting for aerophobia as well as provides quantitative data regarding symptom manifestation.

Method: Nine patients enrolled in a 4-session group intervention over 3 weeks aimed at treating their aerophobia completed the Flight Anxiety Questionnaire (FAS), the Flight Anxiety Modality Questionnaire (FAM), the Beck Depression Inventory (BDI), the Spelberger State-Trait Anxiety Inventory (STAI-Y), The Fear Survey Schedule (FSS III), as well as were evaluated by independent professionals regarding their overall psychological adaptation.

Results: The results provide data indicating that the treated group demonstrated a highly homogenous manifestation of aerophobia in terms of anxiety specific to fear of flying as well as other more general data. In addition, this sample seems to manifest specific cognitive components, demonstrated by both qualitative and quantitative data, which compound their fear of flying.

Discussion and Conclusion: Individuals who consult for fear of flying require careful evaluation in order to fully understand the manifestations and difficulties they experience with respect to aerophobia. A full clinical picture of patients suffering aerophobia provides not only data in helping understand the patient’s suffering, but also provides indications for appropriate treatment modalities.

P035

Tackling anxiety disorders: A working memory intervention

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Objectives Past research shows that high levels of anxiety are associated with a reduced ability to perform complex cognitive tasks. Researchers state that this reduced ability is linked to a depletion of capacity-limited cognitive resources, especially working memory. Recently it has been found that working memory can be improved by means of a working memory training. Moreover, it can lead to a decrease of symptoms in people with attention problems such as ADHD (Klingberg et al., 2005). The present study was the first to systematically examine whether training specific working memory processes involved in the onset and maintenance of anxiety disorders will improve anxious symptomatology.

Methods: During this double-blind study a randomized clinical trial (RCT) was used in 120 patients with an anxiety disorder. The participants were randomly assigned to either the experimental working memory training, or a bogus/control working memory training. The training consisted of tasks which target specific working memory abilities that are deficient in anxiety disorder patients: the AB-AC-AD task (to train resistance to proactive interference), the Number Letter task (to train shifting) and the Running Span task (to train updating). Participants performed the training 3 times a week for 1 month using their own computer at home.

Results: Participants who performed the experimental working memory training showed an improvement of their working memory abilities. More importantly, they also showed a reduction of their anxiety symptoms. Participants who were assigned to the control training showed no improvement of their working memory, nor a reduction of their anxiety symptoms.

Conclusion: This study confirms the finding that working memory can be trained. Furthermore, it is the first study that demonstrates that symptoms of anxiety disorders decline when working memory is improved. Clearly, this study has important implications for the future treatment and prevention of anxiety disorders.

Klingberg et al, J Am Acad Child Adolesc Psychiatry 2005; 44:177-186
Disgust propensity/sensitivity and OCD symptoms: Investigating the link between disgust, inflated responsibility, not-just-right experiences and contamination fear in a student sample

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Introduction: Although numerous studies have shown that symptoms of Obsessive Compulsive Disorder (OCD) are associated with harm avoidance (avoiding harm or bad things from happening), they are also associated with incompleteness that is the sensation that things are not complete or not “just right”. Overestimation of threat and responsibility probably plays a role in contamination fear with related compulsive behaviour (washing) being aimed at reducing fear and preventing harm (i.e. harm avoidance). Recent findings indicate that the tendency to experiencing disgust (disgust propensity/sensitivity) may play a role in contamination based OCD symptoms. Because disgust is often induced by stimuli that are associated with dirtiness, it can be that subjective appraisal of threat and responsibility to prevent bad things from happening, mediates the relationship between disgust and fear of contamination. However, no studies have explored the relationship between disgust and incompleteness. The purpose of the present study was to investigate if disgust propensity/sensitivity is related to a measure of things being not complete or “just right” (i.e. incompleteness) and inflated responsibility (i.e. harm avoidance) and to see if inflated responsibility and not-just-right experiences mediate the relationship between disgust and fear of contamination.

Method: In total, 273 university student filled in questionnaires that measured disgust propensity/sensitivity (DPSS), inflated responsibility (RAS short form), not-just-right experiences (NJRE-Q-R, frequency of experiences), fear of contamination (subscale of the PI), checking, obsession and ordering symptoms (subcales of the OCI-R) and symptoms of anxiety and depression (HADS).

Results: Disgust propensity/sensitivity had a weak relationship with not-just-right experiences and inflated responsibility (r ranging from 0.22 to 0.27). Disgust was moderately related to fear of contamination (r=0.50) but was to a lesser degree related to checking, ordering and obsessive symptoms (r ranging from 0.23 to 0.30). Traditional mediation analysis was conducted using hierarchical regression analysis with inflated responsibility and not-just-right experiences being assessed as mediators simultaneously. Results showed that both variables partially mediated the relationship between disgust and fear of contamination with the indirect effect through not-just-right experiences being stronger. When same analysis was carried out with depression and anxiety as covariates, only not-just-right experiences partially mediated the relationship between disgust and fear of contamination.

Conclusion: Results indicate that disgust propensity/sensitivity may be related to both inflated responsibility (i.e. harm avoidance) and not-just-right experiences (i.e. incompleteness) in OCD. There may be two ways that disgust experiences result in contamination fear, that is, through a cognitive pathway of appraisal of personal responsibility and through a more affective or sensation based pathway of the experience of things not being “just right” or incomplete.

Executive Functioning among Children with ODD: Effects of Comorbid ADHD and Anxiety Disorders

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Objectives: Most children with ODD have a comorbid disorder. It is therefore important to understand correlates – such as executive functioning (EF) – of such comorbid disorders, given that they may confer additional impairment among ODD youth. Indeed, ADHD and anxiety often co-occur with ODD, and may impair EF domains. Poor inhibition, working memory (WM), and monitoring are particularly relevant for ADHD, whereas inflexible thinking may relate more to anxiety (Sorensen, 2010). Despite theories suggesting inhibitory effects of anxiety, recent research found that comorbid anxiety and ADHD was associated with higher hyperactivity/impulsivity than either disorder alone (March et al., 2001). We investigate similar outcomes among ODD youth, and expect the poorest inhibition, WM, and shifting for those with comorbid ADHD+Anxiety, yet the poorest monitoring in the presence of ADHD.

Method: Participants included 108 children ages 7-14 (68% male) with ODD alone (n = 23), ODD+ADHD (n = 41), ODD+Anxiety (n = 21), and ODD+ADHD+Anxiety (n = 23). We assessed the Inhibit, Working Memory, and Monitor Subscales of the BRIEF (parent report of executive functioning domains), with higher scores reflecting more impairment.

Results: One-way ANOVAs revealed significant differences on scales of Inhibit [F (3, 105) = 6.70, p < .001], WM [F = (3, 105) = 6.44, p < .001], Monitor [F (3, 105) = 6.90, p < .001], but not Shift (p = .30). LSD comparisons revealed that children with ODD+ADHD+Anxiety as well as children with ODD+ADHD had higher WM, Monitor, and Inhibit scores (reflecting more impairment), relative to children with ODD alone and ODD+Anxiety.

Conclusion: Our findings suggest that, among ODD youth, impaired ability to regulate emotions and behavior (via inhibition), retain and organize information (via working memory), and self-evaluate (via monitoring), may be ADHD-specific. Indeed, the presence of ADHD was related to group differences in these domains - as children with comorbid ODD and ADHD (with or without anxiety) showed significantly more impairment on these EF measures relative to other groups. These results do however bear replication, particularly with a larger sample. Moreover, future research would benefit from assessing the “real-world” implications of these effects - perhaps illuminating the ways in which certain EF domains may confer impairment in interpersonal, behavioral, and affective areas of functioning.
**P038**

**Success and failure reactivity relate uniquely to manic and depression tendencies and combine in bipolar tendencies**

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**Objectives.** The present study examined simultaneously the relations between success and failure reactivity on the one hand, and depression, manic, and bipolar tendencies on the other hand.

**Methods.** Participants were 161 students who completed measures of success and failure reactivity, current manic and depressive symptoms, and tendencies towards depression, mania and bipolarity.

**Results:** Results showed that respondents with a greater tendency towards depression evidenced greater (negative) reactivity to failure, whereas those with a greater tendency toward mania evidenced greater (positive) reactivity to success. Depression vulnerability was unrelated to success reactivity and manic vulnerability was unrelated to failure reactivity. Tendencies toward bipolarity correlated significantly with both failure and success reactivity in a negative and positive manner, respectively.

**Conclusion:** These findings add to the growing body of literature suggesting that different features or cognitive tendencies are related to depression vulnerability versus manic vulnerability (Carver & Johnson, 2009; Eisner et al., 2008), and imply that these 'mirrored' cognitive features both form part of vulnerability to bipolar disorder.


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**P039**

**Goal-striving and positive overgeneralization predict prospective increases in hypomanic symptoms: A preliminary comparison of additive and weakest-link approaches in a behavioral high-risk sample**

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**Introduction:** Bipolar disorder (BD) is characterized by high Behavioral Approach System (BAS) sensitivity, and individuals at risk for BD exhibit high levels of goal-striving and positive generalization following success. Cognitive styles characterized by goal-striving and positive overgeneralization have been shown cross-sectionally, but not prospectively, to be associated with risk for (hypo)mania. Cognitive vulnerability in unipolar depression has been conceptualized using several approaches, including instrument subscale scores, as well as additive (total score) and weakest-link (highest subscale score) approaches. However, these approaches have not been evaluated in individuals at risk for BD. We compared these approaches in evaluating whether goal-striving and positive overgeneralization predicted increases in hypomanic symptoms among individuals at risk for BD.

**Method:** This study used a behavioral high-risk design among individuals ages 14-19 with high BAS sensitivity, but without history of (hypo)mania. Participants completed an initial assessment evaluating hypomanic symptoms (HS) and measures of goal-striving (WASSUP; Johnson & Carver, 2006) and positive overgeneralization (POG; Eisner et al, 2008). Six months later, participants again completed the measure of HS.

**Results:** Multiple regression analyses indicated that goal striving relating to political influence marginally significantly predicted HS at follow-up, controlling for initial HS, but additive and weakest-link approaches did not increase prediction of HS. In terms of positive overgeneralization, none of the subscales predicted HS individually, but the weakest link marginally significantly predicted HS, controlling for initial HS. Ongoing data collection and analysis with a larger sample will evaluate whether additive and weakest-link scores interact with life events that are relevant to the BAS to increase prediction of HS.

**Discussion:** These preliminary findings demonstrate partial support for the use of the weakest-link approach in individuals at risk for BD. Future research should further investigate additive and weakest-link approaches to evaluating cognitive styles that confer risk for hypomania in interaction with relevant life events.

Family Interventions are Relevant for Therapeutic Programs
Hospital de Mollet del Valles, Spain

Background: The partial hospitalization is a valuable modality for the treatment of the acute phases of the severe mental disorders. It provides a structure and at the same time it maintains the implication of the family and the community.

OBJECTIVE: To determine the predictive factor of response (improvement or clinical worsening) in patients with personality disorders treated in a day hospital.

Design & method: 40 patients. Sociodemographic, historical and clinical variables (SCL-90-R/GSI/BDI) were collected at the admission. The following variables were assessed throughout the treatment: Social Adaptation Self-evaluation Scale (SASS), Coping Orientations to Problems Experienced (COPE) and the Simplified questionnaire of adhesion and therapeutic compliance. Data collected at discharge: SCL-90-R/GSI, personality (SCID-II), intelligence (WAIS-III) and questionnaire of satisfaction with treatment. The analyses were focus from two perspective: bivariant test (Chi-Square, t of Student and Mann-Wittney U) and logistic regression.

Results: The patients who improve present a suitable fulfillment of the pharmacological treatment and think that the attention given to the family has helped them enough or very much.

Conclusion: It is indispensable to incorporate the relatives in the therapeutic work in order to favor a relation of collaboration between these and the patients, whose end is to contribute to the well-being and clinical stabilization of the patient and to the relief of the own relatives, as well as to search the generation of knowledge, ability and social skills to improve the condition of the psychiatric disease and to improve the quality of life of the patients and of their families.


Attentional bias in adolescents at risk for social anxiety: A target for early prevention?
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In adult populations, attentional bias to threat has been shown to have a causal role in the maintenance of anxiety disorders. Recent studies using Cognitive Bias Modification (CBM) techniques have shown that training anxious individuals to point their initial attention towards positive information in their environment, and not automatically towards threat, can have clinically relevant effects on anxiety. However, it is still unclear whether an enhanced attentional bias to social evaluative cues is also involved in the onset of social anxiety in adolescents; which would make attentional bias in at-risk adolescents a target for early preventive interventions. We explored this question by comparing 179 children (aged 13-15) at-risk for social anxiety from a larger study aimed at the prevention of social and test anxiety in adolescents (www.projectpasta.nl) to 193 adolescents with few or no symptoms of social anxiety. We found that an attentional bias to threat is evident for all adolescents, irrespective of social anxiety. This effect was found using dot-probe tasks with rejecting and friendly faces and with rejecting and friendly words. Together, these results cast doubt on the alleged causal role of attentional bias in the development of social anxiety. Next to exploring baseline differences in attentional bias, we also studied change in attentional bias to threat after a preventive CBT group training, online CBM training or no intervention, with assessments before intervention, afterwards, and after 6, 12 and 24 months. Preliminary results showed that CBM did not influence attentional bias to threat immediately post training, nor at 6 and 12 months follow up. Implications of these results for the role of attentional bias in the etiology of social anxiety will be discussed.
Clinical Features of Obsessive-Compulsive Disorder with Pervasive Developmental Disorder

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Introduction: The presence of pervasive developmental disorder (PDD) in difficult adult cases of obsessive-compulsive disorder (OCD) has received research attention in recent years. A method for recognizing the presence of PDD at an early stage could lead to improved treatment of the disorder. Therefore, in this study we investigated the prevalence of PDD in adult OCD patients, and the clinical characteristics of OC-symptoms.

Method: The subjects were 64 patients with OCD recruited from the Kawasaki Medical School Hospital (aged 18-60). All patients exhibited moderate to severe symptoms (total Yale-Brown Obsessive Compulsive Scale [YBOCS] score >16) and possessed normal IQ levels. Diagnosis of PDD was undertaken using DSM-IV criteria, supported by the Pervasive Developmental Disorders Autism Society Japan Rating Scale (PARS) and the Autism Spectrum Quotient Japanese version (AQ-J). We used a subscale of the YBOCS symptom checklist to compare OC-symptoms between the two OCD patient groups (with and without PDD) and investigated differences in the specific features of OC-symptoms and various clinical characteristics.

Results: The results revealed that 18 of 64 patients with OCD (28%) were diagnosed as suffering from PDD (hereafter referred to as PDD+). We found a number of items in the YBOCS symptom checklist that exhibited significantly higher rates in PDD+ individuals. In the Obsessions section, significant differences were found in “Need for symmetry or exactness”, “Hoarding/Saving” and “Miscellaneous”. In the Compulsions section, there were significant differences in “Repeating rituals”, “Ordering/Arranging” and “Hoarding/Collecting”.

Discussion: Among the items mentioned above, “Need to know or remember” and “Fear of losing things” in “Miscellaneous” obsession, and “Hoarding/Collecting” seemed to be closely related, and “Need to know or remember” was considered to be the core idea. This relationship was found only in the PDD+ group, and could become a useful clinical guide for identifying PDD.

Validation of the Portuguese version of the Mindful Attention and Awareness Scale

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Objectives: Distinct researchers have defined mindfulness as paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally (Kabat-Zinn, 1994). With the increasing interest in Mindfulness in the past decades, several measures of this construct have been developed. This poster addresses the study of the psychometric properties of the Portuguese version of the Mindful Attention and Awareness Scale (MAAS: Brown, & Ryan, 2003; Carlson, & Brown, 2005).

Methods: In study I, 530 subjects from the Portuguese general population, 84% females (N=445), mean age of 28.28 (SD=13.37), and 16% males (N=85), mean age 35.37 (SD=15.75), completed the MAAS, as well as some other measures of emotional state, emotion regulation and psychopathology and we conducted an Exploratory Factor Analysis (EFA) of its internal structure. In study II, 335 subjects from the general population, 274 females (81.8%), mean age 24.19 years (SD=9.83), and 61 males (18.2%), mean age 28.98 years (SD=11.00), completed the measure under investigation and we continued the exploration of the latent structure of the Portuguese version of the MAAS with a Confirmatory Factor Analysis (CFA), specifying all the aspects of the model according to the results of our prior empirical analysis using EFA. In study III, in the same sample of study I, we investigated the convergent and discriminant validity of the Portuguese version of the MAAS through its correlations with measures of several psychopathological constructs.

Results: In study I, the final results of the EFA showed a single-factor solution accounting for 41.78% of the variance after factor extraction and the removal of one item. The Alpha coefficient for the scale was computed and the obtained value of .90 is indicative of an excellent estimate of internal consistency. In study II, the overview of the global adjustment indices of the final CFA, after removing one item, allowed us to consider the present model to have an acceptable global model fit [CFI = .93, TLI = .91, RMSEA = .076], since all are above the recommended cut points. The Cronbach’s alpha coefficient for the Portuguese version of MAAS in this study was .88. In study III, the scale behaved as expected, positively correlating with measures of mindfulness and positive affect, and negatively correlating with measures of depression, anxiety, stress, rumination and thought suppression, among other psychopathological constructs.

Conclusion: This study results are similar to the original study results, suggesting that the Portuguese version of the MAAS shows itself as appropriated and valid to the Portuguese population.

Psychotherapy outcome: a comparison of usual and retrospective effect sizes

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Introduction: It is a widespread assumption, that retrospective methods overestimate psychotherapy outcome (Hill & Lambert, 2004). However the extensive refusal of retrospective pretests as basis for effect size calculations is not based on indisputed empirical findings (Hill & Betz, 2005). It is highly questionable whether retrospective effect sizes overestimate change per se and wether less validity in displaying change can generally be shown.

Method: In this study, N=83 psychotherapy outpatients are asked to complete the Brief Symptom Inventory (BSI) and the Beck Depression Inventory (BDI) before (pre) and after their course of therapy. Measurement at termination of therapy includes a usual status measurement (post) and a retrospective pretest (retro) for BSI and BDI. Effect sizes using both types of pre test (pre & retro) are tested for mean differences and correlations with additional outcome measures. For a subsample (N=20) correlations between both types of effect sizes and katamnestic estimates of overall helpfulness of psychotherapy and satisfaction with treatment are calculated.

Results: Significant mean differences of both effect size types can only be shown for BSI, but not for BDI. Usual and retrospective effect sizes show similar correlation patterns with other outcome measures and katamnestic data.

Discussion: Assuming an overestimation of psychotherapy outcome by retrospective effect sizes is not appropriate per se, instead it seems to depend on the construct being assessed. Both methods show equal validity in displaying change. Higher means for retrospective effect sizes may represent a valid change of frame of reference due to the psychotherapeutic intervention, rather than a biased overestimation (Rapkin & Schwartz, 2004). Therefore underestimation using pre-post effect sizes seems to be an equally valid assumption. A best use research (Hill & Betz, 2005) is recommended to clarify under what conditions which procedure reflects “real” change best.

Rapkin & Schwartz, Health and Quality of Life Outcomes 2004; 2, 14.

Physical appearance as a measure of social comparison: The development of a new scale

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Introduction: Social comparison is a fundamental process for human beings, by helping them to enhance their qualities. However, it can also generate perceptions of inferiority and inadequacy in relation to a comparison target. Physical appearance comparison, with superior (e.g. models) or proximal (e.g. peers) targets, seems to be particularly pernicious for women, by possibly contributing for the development of eating difficulties. In addiction, research show that unfavourable social comparisons play an important role in eating disorders. This study presents the development of the Social Comparison through Physical Appearance Scale (SCPAS), a new measure that specifically focuses social ranking evaluation through the subjective comparison of physical appearance with others, and sets out to assess its psychometric characteristics.

Method: Principal Components Analysis, and internal consistency, concurrent and divergent validity and test-retest reliability analyses were carried out for each part of the instrument (Part A: Peers and Part B: Models) in a sample of 828 female participants from normal population.

Results: The Part A: Peers presents a two-factor structure (Attractiveness/Rank and Group Fit) that explains 72.142% of the variance; the Part B: Models presents a one-dimensional structure that explains 69.191% of the variance. Findings show very good internal consistency coefficients and test-retest reliability. The two parts of the SCPAS are significantly associated to social comparison and shame measures, to anxiety, depression and stress indicators, and to eating disorders symptomatology. Additionally, non-clinical participants (n=102) and eating disordered participants’ (n=91 patients) score significantly differently in each part of the SCPAS.

Discussion: SCPAS is a brief and valid measure, with clinical and research usefulness, namely for eating disorders.

The Minimal Instructions Autobiographical Memory Test
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Objectives Overgeneral autobiographical memory (OGM), i.e., the tendency to retrieve summary-type (e.g., “When my boyfriend and I go for a picnic”) instead of specific autobiographical memories (e.g., “When my boyfriend and I had a picnic in the park three weeks ago”), is a known vulnerability factor for depression (for a review, see Williams et al., 2007). Autobiographical memory specificity (AMS) is typically assessed using the Autobiographical Memory Test (AMT; Williams & Broadbent, 1986). In the AMT, respondents are presented with a series of emotional cue words and asked to retrieve a specific memory in response to each cue word. In clinical groups, AMS on the standard AMT has shown to be significantly correlated with depressive symptomatology and rumination. However, in non-clinical groups, the standard version of the AMT seems insufficiently sensitive to detect OGM: it typically leads to (1) a very low frequency of overgeneral memories and (2) nonsignificant correlations between AMS and depression/rumination. In an attempt to design a more sensitive version of the AMT, better suited for use in nonclinical populations, we developed the Minimal Instructions AMT (MI-AMT), in which the instruction to respond with specific memories is omitted.

Methods: In the present study we investigated the usefulness of the MI-AMT to detect OGM in nonclinical samples. Participants were 314 first-year psychology students. We manipulated the type of AMT-instructions they received in a between-subjects design. In the traditional instructions group (TIG; n = 153) participants were explicitly asked to respond with specific memories (standard AMT instructions), while in the minimal instructions group (MIG; n = 161) they were asked to generate memories in response to the cue words, without stressing that these should be specific.

Results: Analyses revealed that participants in the MIG retrieved significantly less specific and more overgeneral memories, as compared to participants in the TIG. Further it was found that depression and rumination correlated negatively with proportion of specific memories in the MIG, but not in the TIG.

Conclusion: Our findings suggest that by not explicitly instructing respondents to retrieve specific memories, one can increase the AMT’s sensitivity to detect reduced memory specificity in non-clinical individuals. The MI-AMT may prove useful as a screening instrument in (primary) prevention to detect depression-prone individuals.

Williams & Broadbent, J Abnorm Psychol 1986; 95:144 Williams et al, Psychol Bull 2007; 133:122

Behavioural inhibition and psychological features in patients with obsessive compulsive disorder and pathological gamblers
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Introduction: Because of several phenomenological, chemical and genetic similarities, Obsessive compulsive disorder (OCD) and pathological gambling (PG) have been hypothesized to pertain to a compulsive-impulsive spectrum. Both OCD and PG patients usually report an inner drive to perform repetitive behaviours and the inability of inhibiting or delaying them: this may reflect a deficit in suppressing certain pre-potent responses, in accordance with frontal lobe alterations found in both disorders. To our knowledge only few studies, aimed at verifying if pathological gamblers’ cognitions and symptoms resembled OCD ones, have been conducted and results are inconsistent. Objectives: The present study was performed to investigate whether these two clinical groups showed the same impairment in behavioural inhibition and similar dysfunctional beliefs or patterns of symptoms.

Method: To date, a preliminary sample including 13 OCD patients, 9 pathological gamblers and 13 healthy controls was recruited. Participants filled in a battery of self-report questionnaires and performed a Go/Nogo task. The following self-report measures were administered: the Obsessive Beliefs Questionnaire (OBQ), the NIRE Questionnaire Revised (NIRE-Q-R), and the Obsessive Compulsive Inventory – Revised (OCI-R). The Go/Nogo task comprised a practice sequence and four experimental blocks. Each block consisted of 100 stimuli (75 Go and 25 Nogo), presented in a randomized order.

Results: OCD patients scored higher than the other groups on both the NIRE-Q-R and the OBQ, whereas PG and OCD groups showed significantly higher scores on OCI ordering and mental neutralizing subscales than controls. PG group made more omission errors on the Go/Nogo task than controls, while OCD patients neither differed from controls nor from gamblers. No differences between groups in the number of commission errors and reaction times were found.

Conclusion: These preliminary data may support the compulsive-impulsive hypothesis, since we found similarities between OCD patients and pathological gamblers both in neuropsychological performance as well in specific OCD symptomatology.
Religion-related disciplinary practices among people born or raised in isolated authoritarian groups

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Introduction: Inappropriate disciplinary practices have been found among children in “isolated authoritarian groups” (IAG) (see Bardin, 2009). The detrimental effects of dysfunctional parenting practices have been largely documented, especially those concerned with corporal punishment (Gámez-Guadix, Straus, Carrobles, Muñoz-Rivas & Almendros, 2010), and may constitute facets of child abuse and neglect. On the other hand, religion-related abuse has been found to have significantly more negative implications for its victims’ long-term psychological well-being than non-religion-related abuse (Bottoms, Nielsen, Murray & Filipas, 2003).

Method: As part of a survey being conducted among people born and/or raised in IAG, a group of 15 originally English-speaking (USA: 72.7%) participants responded to a battery of standardized instruments for the measurement of discipline dimensions, negligence, psychological abuse, physical abuse, and sexual abuse, which were taken from the International Parenting Study Questionnaire (Straus & Fauchier, 2007). A set of questions were included to determine to what extent those practices were related to religion. Other groups of respondents from prior publications of the authors of this work were used with comparison purposes.

Results: The majority of respondents reported that discipline was often or sometimes too hard for what they did wrong and a higher degree of punitive methods, such as corporal punishment and psychological aggressions used as corrective discipline strategies, than reports from comparison groups. For a majority of them, the child rearing practices were done in a religious setting, by a religious authority or because of a religious prescription, while all reported the practices were influenced by the group’s belief system.

Discussion: These results outline the importance of further studying the parenting practices, discipline and victimization of children in IAG, which may be religion-related or ideologically based, as well as their mental health outcomes, so as to inform treatment and prevention efforts.


Psychological abuse in intimate partner relationships among Spanish university students

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Objectives: Some research (e.g., Marshall, 1999) suggests that psychological abuse may not only have a deleterious impact on subjects, but sometimes have a greater and more enduring impact than physical abuse. Most research has focused in verbal aggressions and other dominating and controlling acts, which are overt or obvious and closer to physical abuse. However, among the difficulties in the assessment of victims of intimate partner violence outstands that it is not always easy for the victim to recognise the psychologically abusive behaviours as such. As a result of the influence and the gradual and subtle ways of carrying out the abuses, the victims may perceive themselves as agents of their own changes, dependent and with diminished personal resources. These subtle abuses may precede other forms of abuse (e.g. physical), being relevant its identification in dating relationships.

Methods: The sample was made up of 510 heterosexual Spanish university students (81.3% women) from the Community of Madrid. Their mean age was 26.60 (SD = 7.32). The majority of them reported over a present partner relationship (60.2%) while the rest responded over relationship that had ended a mean time of 3.25 (SD = 3.13) years earlier. Several instruments for the measurement of received psychological abuse (overt and subtle), justification of the partner and the aggressions and involvement in the relationship were used. A cross-sectional design for obtaining data was used.

Results: A high percentage of students reported psychologically abusive behaviours by their partners. The group of students reporting over past relationships showed more physical, sexual and psychological abuse, as well as higher degrees of justification of the aggressions and their partners than those in present relationships. Men reported suffering higher levels of subtle forms of psychological abuse and influence strategies than women, both in present and past relationships.

Conclusion: Results highlight the importance of early detection of incipient forms of psychological abuse and the relevance of their consideration for prevention and intervention efforts.

Psychological abuse in abusive intimate relationships: group and partner

Objectives: The study of psychological abuse (PA) has gained increased attention over the past decades. Initially considered within the context of physical abuse, the conceptualization of psychological abuse is now considered a separate entity. Several authors noted the similarity between controlling systems and the experience of people who have been taken hostage, prisoners of war and concentration camps, people who are members of cults, and victims of domestic violence (e.g. Rodriguez-Carballeira, Almendros, Escartin, Porrúa, Martin-Peña, Javaloy, F., & Carrobles, J.A., 2005). The present work empirically compares the responses of victims of abuse in different intimate relationships: group and partner violence, which has little precedence in the available literature (Wolfson, 2002).

Methods: Two groups of self-identified former members of abusive groups (FMG) participated in our study. One was composed of 128 people from originally English-speaking countries (71.1% women) and the second included 118 Japanese (55.4% women). Beside these, a group of 72 Spanish women victim of intimate partner violence (IPV) participated in a study that included parallel forms, adapted to the language and to the intimate context, of the instruments used with the FMG. Additionally, samples of university students in the different countries were gathered for both the abusive groups (n=206 North-American; n=136 Japanese) and abusive partner studies (n=490 Spanish) with comparison purposes. Several instruments for the measurement of psychological abuse, influence and involvement in the abusive relationship were used. A cross-sectional design for obtaining data was used.

Results: The IPV group reported suffering more physical abuse than the FMG groups, whereas the last showed more degree of involvement, and a higher level of psychological abuse and influence strategies.

Conclusion: Results should be taken with caution regarding the developmental stage of the measures employed for the present work.


The Portuguese version of the Infertility Self-Efficacy Scale: Psychometric properties

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Objectives: Until recently, psychological assessment specifically designed to address topics related to an infertility diagnosis has not received particular attention in Portugal. This work aims at presenting the Portuguese version of the Infertility Self-Efficacy Scale (ISE-P), a 16-items self-report measure, and its psychometric characteristics in a sample of infertile patients. Self-efficacy has been addressed as an important construct studied in several health areas (e.g. cancer, diabetes, arthritis, physical activity, and condom use). In infertility, self-efficacy can be defined as the patients’ confidence levels on their cognitive, emotional and behavioral skills related to infertility and its treatment.

Method: A total of 275 participants (142 women; 133 men) with a diagnosis of infertility were recruited at public and private infertility clinics through their medical doctors and through the Portuguese Fertility Association website. A set of self-report instruments was administered: ISE-P, Beck Depressive Inventory, Spielberger State Anxiety Inventory, Fertility Problem Inventory, Coping Styles Questionnaire and Acceptance and Action Questionnaire.

Results: Principal component analysis extracted a single component with an eighenvalue of 9.85, explaining 61.58% of the variance. Component loadings ranged from .69 to .88; communalities ranged from .48 to .77. The Cronbach’s alpha estimate of internal consistency was .96, the item-total correlations ranged from .65 and .85. Ten-week test-retest reliability in a sample of 80 women was of .63 (p<.01). Correlations with the other measures were as expected, suggesting for its convergent and discriminant validity. Men presented significant higher scores than women.

Discussion: ISE-P allows the assessment of the patient’s confidence level on cognitive, emotional, and behavioral skills linked to infertility. It demonstrated a single component structure easy to interpret, high internal consistency, good test-retest reliability, convergent and discriminant validity. Similar to other infertility specific measures gender differences were also found, suggesting that women tend to be less confident in their ability to deal with infertility.

Conclusion: The ISE-P appears to be a reliable and valid measure of self-confidence to deal with an infertility diagnosis and its medical treatment. This can be an easy to use self-report instrument for clinical research and a useful tool in counseling and therapeutic settings.

Development of a clinical questionnaire for the assessment of strategies to regulate negative affect

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Objectives: Some relation between the ability to regulate affect and the incidence of mental disorders has been demonstrated. However, there is no instrument available so far that assesses a broad and clinically relevant spectrum of affect regulation strategies including behavioral strategies. Thus, we developed the Negative Affect Repair Questionnaire (NARQ) in order to provide a new instrument that assesses the well-established regulation strategies “reappraisal” and “suppression” (e.g., Gross & John, 2003) using new behavior-related items together with a new scale measuring clinically relevant “risk behavior”.

Methods: A total of 684 students (STUD; age M=23.3, SD=3.5; 53.6% women) and 372 inpatients from a psychotherapeutical hospital (PAT; age M=36.0, SD=14.6; 71.2% women) filled in a questionnaire consisting of 55 affect regulation items. The student sample was divided into two for reasons of cross validation (STUD1/STUD2). Confirmatory factor analyses (CFA) with three factors were conducted. Tucker-Lewis-Index (TLI) and Root-Mean-Square-Error of Approximation (RMSEA) were used as measures of fit, and internal consistency (Cronbach’s Alpha) was calculated.

Results: CFA resulted in a 17 items solution with TLI of .958, .939, and .960 for the samples STUD1, STUD2 and PAT. RMSEA was .064, .067, and .076. Across all participants Cronbach’s Alpha was .722 for the factor “reappraisal”, .794 for “emotional expression” and .719 for “risk behavior”. Factor loadings of all items were good.

Conclusion: Analyses revealed good results of model fit and factor loadings and acceptable internal consistency for all samples. The 17 items solution consists of five items on “reappraisal”, five items on “emotional expression”, and seven items on “risk behavior”. Thus, the study succeeded in initially developing a new psychometrically sound instrument for the assessment of negative affect repair strategies. Its strengths are the behavior related formulation of items regarding reappraisal and emotional expression. Furthermore, the new scale “risk behavior” allows for the assessment of problematic behavioral affect regulation strategies in the clinical context. This might facilitate consideration of these strategies in clinical practice, for example through a more objective assessment of change in these strategies across time. Future studies should provide further information on the instrument’s psychometric characteristics, e.g. its sensitivity to change.


Motivational goals and their fulfillment in different personal meaning organisations

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Objectives: The aim of this study was to investigate how the participants (n=146) in different personal meaning organisations assessed their motivational goals and incongruence in goal fulfillment. The cognitive-constructive theory of Vittorio Guidano (1991) assumes that all information about the self or the environment is selected on emotional basis, preferring cues that contribute to a continuous and consistent self-view. Guidano identified four patterns of self-enhancing information selection and preference: the depressive, phobic, eating disorder and obsessive meaning organisation.

Methods: Eighty of the participants were psychotherapy outpatients, and 66 were university students attending to a basic level course in psychology. The participants were assigned to four groups based on the Finnish dichotomous version of the Personal Meaning Questionnaire (PMQ-D, Valjakka 2006). The motivational goals and incongruence in their fulfillment were measured by the Inventory of Approach- and Avoidance motivation and the Incongruence questionnaire (IAAM and K-INC, Grosse Holtforth & Grawe 2000; 2003).

Results: The personal meaning organization (PMO) groups differed significantly in the importance they gave to motivational approach goals incongruence in their fulfillment. The depressive PMO group gave little value to seeking help and self-reward, and perceived avoiding vulnerability as important. The phobic PMO group was characterized by the pursuit of autonomy. Eating disorder PMO group assessed pursuing autonomy and self-reward as unimportant and avoiding vulnerability as important. The obsessive PMO group was characterized by high avoidance of hostility, and low avoidance of vulnerability. Participants with a depressive PMO were dissatisfied in the fulfillment of a wide range of motivational goals, and participants with an eating disorder PMO were dissatisfied with receiving admiration and avoiding failure.

Conclusion: Personal meaning organization seems to have significant influence on the importance of motivational goals, particularly autonomy, self-reward and the avoidance of vulnerability. In addition, individuals with a depressive organization seem to be broadly dissatisfied, and individuals with an eating disorder organization dissatisfied in their image in the eyes of others. Awareness of the motivational goals specific to different personal meaning organizations helps clinicians to target goal schemas that are individually important for their patients.

A randomized, controlled, open study to evaluate the efficacy of neurofeedback vs drug therapy in Attention-Deficit/Hyperactivity Disorder (ADHD): Preliminary Data

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Introduction: The neurofeedback has been proposed as an alternative therapy for treatment of ADHD. However, to date, neurofeedback remains a controversial therapy. This is due in large part to the important methodological limitations of previous studies. Our aim is to improve these methodological limitations and compare the effectiveness of the neurofeedback with standard drug therapy.

Method: A randomized, controlled, open study with two sites was carried out. A sample of ADHD children from 7 to 14 years old was randomized into two groups, controlling sex, age and comorbidity: the pharmaceutical (PHA) group and the neurofeedback group (NFB). PHA group received standard drug therapy, according to the prescriptions of each child’s paediatrician, and NFB group received a neurofeedback theta/beta training protocol over a period of 20 weeks, with 2 sessions per week. Participants were evaluated by their parents and teachers on the scales of distraction, inattention, hyperactivity, impulsivity, behaviour problems, negative effects of ADHD on family life, and academic performance. The evaluations were collected at the following periods: pre-treatment, during treatment (three assessments), post-treatment and follow up (two assessments).

Results: Currently we have the data of 8 participants (4 in the PHA group and 4 in the NFB group), but we hope to have data from at least 20 participants in May. These data refer to the following assessments: pre-treatment, post-treatment and first follow-up. A mixed design ANOVA of two factors (treatment and assessment) was used but its interaction effect was no significant. However tendencies analysis showed a linear tendency because the behavioural problems scales tended to improve for both treatments on post-treatment assessment, and academic performance measures tended to increase. At follow-up there was a slight regression to the mean on most measures in both treatments.

Discussion: These are only preliminary and limited data, but the neurofeedback shows a similar relative efficacy to the pharmacology.
Child ADHD Symptom Frequency: Differences in Executive Functioning, Emotion Regulation and Parenting in an ODD Sample

Objective: Attention-Deficit/Hyperactivity Disorder (ADHD) is one of the most common disorders among school-aged children, with approximately 3-7% of children affected and about 40% are also diagnosed with Oppositional Defiant Disorder (ODD). Additionally, children with ADHD and ODD may have greater levels of executive function deficits, emotion regulation difficulties, and negative parent-child interactions. For instance, one study found that children with comorbid ADHD/ODD showed more severe executive dysfunction in everyday life scenarios than those with ADHD only. In addition, poor parenting strategies are common in families with children with ADHD and ODD. We hypothesize that children with more ADHD symptoms will experience greater levels of executive function deficits, emotion regulation difficulties, and more negative parenting behaviors.

Methods: Although enrollment in a clinical trial for the treatment of ODD is ongoing, currently, data have been collected on 130 children and adolescents who were assessed for inclusion. Child ADHD symptoms were measured using the Disruptive Behavior Disorders Rating Scale. The Inattentive and Hyperactive symptom frequencies were summed to form an overall ADHD symptom score. Then, high and low levels of ADHD symptoms were calculated by a quartile split (low ≤ 23.75, 49% and high ≥ 38, 51%). Therefore, only 57 children are currently included in the analyses after the quartile split (65% male; mean age 9.68; 87% Caucasian). Executive functioning was measured using the Behavior Rating Inventory of Executive Function (BRIEF), emotion regulation was measured using the Emotion Regulation Checklist (ERC), and parenting behaviors were measured using the Alabama Parenting Questionnaire (APQ).

Results: MANOVAs were used to assess differences in executive functioning, emotion regulation, and parenting by high or low levels of ADHD symptoms. For executive functioning, results indicated significant differences in the BRIEF behavioral regulation index (BRI) [F(1, 53) = 22.42], the BRIEF - metacognition index (MI) [F(1,53) = 60.97], ERC - mother report of lability and negativity [F(1, 43) = 12.27], APQ - Positive Parenting [F(1, 48) = 10.40], and APQ - Corporal Punishment [F(1, 48) = 4.41].

Conclusion: Children with more frequent ADHD symptoms experienced greater executive function deficits, had more lability and negativity, and experienced less positive parenting and more corporal punishment.

Interaction with a therapy dog enhances the effects of Social Story method in autistic children

Objective: We performed an exploratory investigation which combined two methods that have proved to enhance the social abilities of autistic children: Social Story (Gray, 2000) and Animal Assisted Therapy. Our hypothesis is that a naturally enriched social environment (the presence of a therapy dog) would improve the effectiveness of Social Story method in autistic children.

Methods: We targeted two social skills (i.e. the ability to greet a social partner and the ability to introduce oneself to a social partner), where we followed the standard single-subject research design. Three preschool children (two boys and a girl, aged 7-8 years) were included in the study; We used an ABAC design (for two of the participants) and an ACAB counterbalanced design for the third participant. Each phase consisted of six sessions. In the baseline phase (A), each child was observed for 15-minutes during social interactions that required the use of specific social skills, which were aimed to be improved by the Social Story intervention (B) or by the Social Story plus Animal Assisted Therapy intervention (C). The dependent variables were: (1) the frequency of the appropriate social interactions relevant to the target social skill, (2) the level of prompt needed to provide the expected social response and (3) the frequency of social initiations.

Results: All the participants showed a statistically significant increase in the frequency of the social initiations in the presence of the therapy dog and a decrease of the level of prompt needed to perform the target social behavior. Compared to the baseline and the Social Story intervention phases, the frequency of social initiations was significantly higher for all the three autistic children at the introduction of the Social Story plus Animal Assisted Therapy intervention. Our results indicate that the dog might have acted as a facilitating agent of the social interactions for the autistic children, in the context of Social Story reading.

Conclusion: Our data suggest that the presence of a dog while reading a social story can bring important social improvements by increasing the frequency of social initiations and by decreasing the level of social prompt that the autistic children usually need to perform appropriate social interactions. These findings come in line with the results of previous studies on the effectiveness of Animal Assisted Therapy in enhancing the social motivation and communication of autistic children.

Social Competence and Hyperactivity among Children with ODD: Illusory Self-Perceptions across Comorbid ADHD and Anxiety Disorders

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**Background:** Children with externalizing disorders, such as Oppositional Defiant Disorder (ODD), tend to over-inflate estimates of self-competence relative to some external criterion (e.g., parent/teacher report)– known as Positive Illusory Bias (PIB). Little is known about PIB among youth with ODD, yet there is reason to believe that it may be influenced by comorbid ADHD and anxiety. Indeed, given deficits in EF and self-awareness related to ADHD, but also given mitigating effects of anxiety, we hypothesize that, in a sample of ODD youth, ADHD will be associated with greater PIB, but that anxiety will be related to relatively less PIB. Moreover, we examine illusory bias in social competence and hyperactivity domains, given the salience of these two domains in children with ODD, and that PIB may be strongest in areas of most impairment.

**Method:** Participants included 108 children ages 7-14, with ODD alone (n = 22), ODD+ADHD (n = 42), ODD+Anxiety (n = 21), and ODD+ADHD+Anxiety (n = 23). PIB was calculated as the discrepancy between standardized parent and child scores of social competence and hyperactivity on the BASC-2 questionnaire.

**Results:** One-way ANOVAs revealed significant differences in PIB for social competence \[F (3, 104) = 4.00, p = .01\] and hyperactivity \[F (3, 104) = 2.92, p = .04\]. LSD comparisons suggested that PIB for social competence was lowest in the ODD+ADHD+Anxiety group, relative to the other three groups. Additionally, PIB for hyperactivity was greater in the ODD+ADHD group compared to the ODD alone and ODD+Anxiety groups.

**Conclusion:** Results suggest that, among ODD youth, the influence of ADHD and anxiety may depend on the domain of functioning assessed. Indeed, for social competence, it may be that ODD youth with both ADHD and anxiety (but not anxiety alone) perceive their behavior similarly as their parents — therefore showing significantly less PIB than other comorbid groups. Yet for self-perceived hyperactivity, reports of ODD youth with comorbid ADHD may be the most discrepant from parent reports, and the presence of comorbid anxiety may have little influence on this effect. These results have important implications for interpreting child reports in clinical assessments.

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Theoretical study of the motivational utterances issued by the therapist in session

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**Introduction:** In this work we conduct a historical review of the concept of motivation that has been used, first, in Clinical and Health Psychology, and later in Applied Behavior Analysis. To conclude, a proposal for the classification of the therapist's motivating verbalizations during the clinical sessions will be presented.

**Method:** We reviewed the scientific literature to date on the concept of motivation from the Applied Behavior Analysis and from Clinical and Health Psychology in general. As for the review from the Applied Behaviour Analysis, it was conducted attending to the three major theoretical approaches in the field: Skinner, Kantor and Michael. The latter developed the concept of establishing operations, the basis on which our investigation began.

**Results:** We started from the therapist-client interaction and defined the motivational variables as contextual variables specifying contingencies and focusing on the consequences; that is, in the presence of these variables certain behavioral sequences take place or not, being these sequences previously learned by the person.

**Discussion:** We propose that it might be a significant advance in the understanding of how to enhance clinical change if we carefully study the effects of the therapist's in session-motivating verbalizations on the client's behavior.

**P061**

**Study of the “rules” emitted by the therapist in complete therapy cases**

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**Introduction:** We consider that the rules emitted during the therapeutic process have a fundamental role in the correspondence between what is said inside the session and what is done outside the session. However, there are a few studies about the rules emitted by the therapist and a few processes research in this field. The aim of this study was to analyze the rules emitted by the therapist along the therapeutic process in different cases.

**Methodology:** The methodology of this study was observational. The sample consisted of four complete therapeutic cases conducted by a behavioral therapist. A Therapist’ rules category system and the The Observer XT software instrument were used to code, register and analyze these recordings.

**Results:** The results were discussed in terms of the functional implication of the type of rules in the therapeutic process.

**Discussion:** The results will enable progress on the clarification of the factors or variables involved in the process of change in therapy.


**P062**

**What controlled client verbal behavior during the therapeutic interaction?**

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**Introduction:** With this work we pretend to move forward in the study of the interaction therapist-client in clinical session. We will present the categorization of therapist and client verbal behaviour along therapeutic process and how client verbalizations are controlled for therapist’s ones.

**Method:** Data were collected through observation and analysis of 95 video recorded clinical sessions belonging to 15 cases treated by 4 different behavioural therapists. The clients had various psychological problems, and were aged between 22 and 53 years. The Therapist’s Verbal Behaviour Coding System (a validated category system to codify therapists’ verbal behaviour in clinical settings) and The Observer XT software were utilized to register and code data.

**Results:** The results obtained show that verbal interaction between therapist and client could be explained like a functional relation; in this way, sequential analysis shows that pro-therapeutic client verbalizations are related with reinforcement function and no-therapeutic client verbalizations are related with punishment function.

**Conclusion:** The study of this interaction delivers an advance in the systematic study of the therapeutic relationship from a behavioural perspective, which will allow us to discover the learning mechanisms responsible for the observed change (changes observed) in clinical therapy.


**P063**

**Descriptive study of the motivational utterances issued by the therapist in session**


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**Introduction:** The aim of this study is to clarify what the therapists do in session to motivate the client from a behavioral perspective. Thus, it is focused on the analysis of the verbalizations of the therapist with a possible motivating function.

**Method:** This work is based on the proposal on establishing operations by Michael, as it is the one with a broader consensus among analysts of behavior. The identification of the motivational utterances in the therapist’s speech was based on the Coding System for the Therapist’s Verbal Behavior (SISC-CVT). Based on this classification, the motivating verbalizations were selected and a specific coding system for this kind of verbalizations was elaborated. To this end, seven clinical sessions from different cases treated by expert cognitive-behavioral therapists were observed; all the clinical sessions lasted for one hour approximately. The selection of recordings to observe was made attending to the different phases of the therapeutic process: assessment, explanation of functional analysis and treatment.

**Results:** The observational guide including the coding criteria helped us to classify the different motivating utterances issued by the therapist in session, which in turn will make it more feasible and easier to identify the verbalizations that are motivating the clinical change.

**Discussion:** The proposed classification will help us achieve our ultimate goal: understanding therapeutic change. In the long term this will contribute to a greater effectiveness in the clinical practice.

Analysis of the “rules” emitted by expert and non-expert therapists
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Introduction: Even when it exists an important number of research which emphasized the importance of the study of rules in the clinical field, just a few of them works study he rules emitted by the therapist, and even fewer do it along the therapeutic process. The aim of the study was to analyze if there are differences in the emission and type of rules more and less experienced therapist.

Methodology: 92 sessions recordings from 19 clinical cases conducted by 9 behavioral therapists were analyzed. A Therapist’ rules category system and The Observer XT software instrument were used to code, register and analyze these recordings.

Results: The results were discussed in terms of the implication of the experience of the therapist.

Discussion: Our findings contribute to clarify and understand the clinical phenomena. Moreover, the results point out interesting issues that could help to improve the training of a novel therapist for a more effective application.


Factor structure of the Spanish version of Alabama Parenting Questionnaire: Preliminary data from a sample of elementary school children
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Introduction: The aim of this study is to analyze the construct validity of the Spanish version of Alabama Parenting Questionnaire (APQ) for mothers and fathers of elementary school children, and compare it with the original version.

Method: A normal sample of 149 children from first to six grades of elementary schools was selected (48% girls) with a mean age of 9 years. The mothers and fathers separately filled out the APQ-42 items Spanish version based on Shelton, Frick, & Wooton (1996). The APQ-42 has 2 positive subscales, 3 negative subscales, and 1 control subscale. Data analysis was based on: (1) an item analysis, and (2) a confirmatory factor analysis (CFA).

Results: Similar to Clerkin et al. (2007), when an item was 10 or more missing values on the scales of both parents was eliminated (i.e. parents felt that the issue was not relevant to their child). We had to eliminate 7 of the 10 items removed also by Clerkin. Our APQ-35 showed low convergent validity: although the correlation between the negative parenting subscales of mothers and fathers was high (.82), in positive parenting was low (23). So, the CFA was conducted separately. Both mothers and fathers CFA showed a 3-factor solution, with a moderate proportion of explained variance (30%) but with high estimated reliability. They relatively agreed on two factors: HD (harsh discipline) and PP (positive parenting), and differed in one factor: ID (inconsistent discipline) for mothers, and IN (involvement) for fathers. From 35 items 19 saturated both mothers and fathers factor solutions.

Discussion: The results indicate that although the factor solutions are relatively similar to the original proposal, in elementary school it could be convenient to evaluate separately the parenting style of mothers and fathers, as suggested by our APQ-35 version. Or alternatively, it probably could suggest a reduced version of 19 items (valid for mothers and fathers) with greater reliability and construct validity.

Analysis of the relationship between parent and teacher behavior scales, and the Children Sustained Attention Task (CSAT) in a normal sample

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Introduction: The aim of this study is to analyze the relationship between typical behaviors of Attention-Deficit/Hyperactivity Disorder (ADHD) as measured by parent and teacher scales, and sustained attention as measured by the Children Sustained Attention Task (CSAT, Servera & Cardo, 2006) in a normal sample.

Method: A normal sample of 153 children in fifth grade of elementary schools was selected. The children were assessed individually with the CSAT, and then hits and errors scores were normalized. Outlier subjects were removed and the final sample was 107 children (49% girls) with a mean age of 11 years. CSAT is a computerized task based on a vigilance paradigm, and may thus be considered a measure of sustained attention complementary to but different to CPTs: subjects should respond only in the presence of a double-target (6-3, 30% of event rate). The task provides raw scores of hits, errors, and reaction time, and also indices based on signal detection theory: d’, C and A’. Parents and teachers completed the ADHD Rating Scale-IV (inattention –IN- and hyperactivity/impulsivity –HI- measures) and an ODD scale.

Results: Gender differences in the CSAT showed that children committed significantly more errors but had a better reaction time. There were no gender differences in the scales of parents and teachers. Hits and errors showed significant correlations in the expected direction with IN and HI parent and teachers measures (but not ODD). From index d’ were selected two groups of subjects: high (N = 26) and low (N = 27) attentional capacity. The t-test showed that the low capacity group had significantly higher scores on IN and HI (for both parents and teachers), but not ODD.

Discussion: The results show that CSAT measures are able to differentiate inattention and hyperactivity/impulsivity behaviors but not ODD in normal children. Therefore, the data would be relatively favorable for the use of the task in the detection of children with suspected ADHD.

Cognitive Aspects of Peer Pressure

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Peer influence is inevitable and important part of growing up, one’s identity development and forming behavioural habits. Peer relations become more important during the adolescence and there is an increasing need for an adolescent to do what his/her peers are demanding from him/her. Peer pressure can be defined as direct peer instigation, persuasion or threat for the manifestation of certain behaviour (McIntosh, MacDonald & McKeeganey, 2003). Berndt and Ladd (1989) define peer pressure as a group influence by offering desirable awards to those who conform to group norms and/or undesirable sanction to those who resist them. The aim of study was to examine relation between susceptibility to peer pressure and self-perception in urban adolescents in Croatia and to explain gender differences. The sample consisted of 940 participants, 7th and 8th grade primary school students and 1st, 2nd and 3rd grade secondary school students, 418 boys and 520 girls ages 12-18 (M=14.82).

2 Questionaire were applied: Adolescents’ Peer Pressure Scale (Lebedina Manzoni, Lotar, Ricijas, 2008) was specially constructed for this research, with 22 items grouped in 5 domains: Relations with peers, Adjustment of appearance, Relations with parents, Misconduct and School activities. Susan’s Harter Self – Perception Profile for Adolescents (1988), which contains nine subscales. Eight of them examine specific domains of self-perception and the last one examines global self-worth. The results shows connection between peer pressure and self perception – the greatest with domain of behaviour control, general self worth and physical appearance. According to amount of correlation it seems that behaviour control is key factor in susceptibility to peer pressure of adolescent regardless gender. This result shows the greatest role of cognitive factors and their influence on self control in many aspects of behaviour and well being. This submission is the most suitable for professionals who are interested in different aspects of behaviour in adolescence and their connection with cognition, with impact in treatment.

Differential effects of Expressive Writing on anxiety and sleep quality: The role of baseline anxiety, duration of writing and social interactions until follow-up

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Objectives: In Expressive Writing (EW) participants are asked to write about a highly distressing personal topic. The benefit of this brief task has been demonstrated for a wide range of health outcomes (Frattaroli, 2006). However, after more than 20 years of research, there remains a lack of clarity as to who might benefit from EW and how it works (Pennebaker & Chung, in press). This study investigates the influence of arousal during EW on anxiety and sleep, and differentiated between participants scoring high and low on anxiety. Furthermore, psychosocial processes until 5-week follow-up were investigated.

Methods: Part A) of the study used a between groups experimental design with 5-week follow-up to assess the impact of EW on anxiety and sleep. Individuals with sleep difficulties (20 to 60 years of age) were randomly assigned to one 25-minutes session of EW (N=29) or Descriptive Writing (N=9). Participants provided self-reports on arousal during writing and self-reports on anxiety, sleep and activity restriction at baseline and 5-week follow-up. Data was analysed for high/low anxiety groups and outcomes were correlated with arousal. In part B) participants followed up. A mixed method design was applied to gain insight into psychosocial processes started by EW.

Results: Part A) Arousal trajectories differed significantly between EW and DW groups, and changes in arousal were associated with cognitive and psychosocial processes after EW leading to improvement in sleep quality. Part B) High peak arousal followed by a decrease in arousal at recovery was related to large improvement in sleep quality. Participants asked to write about a highly distressing personal topic. The benefit of this brief task has been demonstrated for a wide range of health outcomes (Frattaroli, 2006). However, after more than 20 years of research, there remains a lack of clarity as to who might benefit from EW and how it works (Pennebaker & Chung, in press). This study investigated the influence of arousal during EW on anxiety and sleep, and differentiated between participants scoring high and low on anxiety. Furthermore, psychosocial processes until 5-week follow-up were investigated.

Conclusions: Results suggested that emotional engagement and sufficient subsequent relaxation are crucial for effects of EW. Cognitive and psychosocial factors taking place after EW, such as gaining new perspectives from talking to friends/family about the writing, seemed to influence outcomes at follow-up.

12-month effects of self-help CBT for insomnia

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Introduction: Insomnia is a highly prevalent problem. Treatment of choice is Cognitive Behavioral Therapy (CBT), but there is a lack of CBT-trained therapists. Self-help treatments for insomnia have therefore been developed and evaluated with positive results. But long-term evaluations of these results are lacking. Here we examined longer term effects (12 months) of a self-help treatment with and without therapist telephone support.

Methods: 133 participants suffering from insomnia and co-morbid problems were recruited via media to a self-help treatment study, and randomized into three groups: Bibliotherapy only (BT), Bibliotherapy with therapist support (BT/S), and a wait-list control group (WL). Those in the two treatment groups (n=88) were followed for a year after the end of treatment. Measures reported here were the Insomnia Severity Index (ISI), a measure of insomnia severity, and Sleep Quality from a one week sleep diary. The two treatment groups received the self-help book per mail, and the BT/S group also received a scheduled 15-minute telephone call each week during the 6-week treatment period.

Results: Both treatment groups improved significantly from pre - post treatment (improvements were 5.3 points and 9.9 points on the ISI for BT and BT/S respectively, compared to 1.1 points for WL), and improvements were maintained from pre-treatment to 12-month follow-up (6.8 and 10.0 points on the ISI for BT and BT/S respectively). Differences were statistically significant. The group receiving therapist support showed larger gains post treatment than the group that did not. This difference was maintained at 12-month follow-up.

Conclusion: Results from a self-help treatment for insomnia are well maintained at 12 month follow-up. Larger gains in the treatment group receiving telephone support indicate additional benefit from professional support.


Intervention Education plans (IEPs) and autistic spectrum disorders (ASD): A behavioral analysis

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In Quebec, the Law requires an IEP to be written for all handicapped children in regular or special education (MELS, 2004). The IEP is a collaboration process and is a document which includes a description of child’s strengths, weaknesses and includes measurable goals or objectives. The IEP represents an agreement for the intervention team based on the student’s needs, the cornerstone of his education program (Smith, 2000). Despite this obligation, few studies in Quebec have assessed these IEPs to monitor progress and behavior. This study evaluates the content and behavioral formulation of IEPs for children with ASD.

Method: The IEPs of 15 students (M age = 8.26 years, SD = 1.58) with ASD of 15 different elementary schools have been analyzed: strengths, needs, objectives, timeline, criteria and other specifications. Strengths, needs and objectives were classified by content: academic learning, communication, social behavior, affectivity and motor skills. The objectives are also classified according with if they were or not behaviorally formulated.

Results and discussion: On average, the IEPs contain 6.2 strengths, 5.8 needs and 3.5 items formulated as “objectives” by plan. Of the 53 items under “objectives”, 47 are written for students and 6 are for the caregivers. There are 11.6 means by IEP. Among the objectives for students, 49% are behaviorally described. The content analysis indicated that 40% target academic learning, 2% communication, 38% social behavior, 17% affectivity and 2% motor skills. Two IEPs have evaluation criteria. The discussion raises the implication of these results in monitoring student’s behavior and progress, the study limitations and suggestions.

The Association Between Family Relations, Depression, Self-Esteem and Sedative Use Among the Adolescents in the Region of Koper and Slovenia

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Abstract background: The family is the basic cell of our society, which attributes to a development of adolescent personality. We took part in the International research (ESPAD), with the object of finding the correlation between family relations and some psychosocial factors among the adolescents and to use the results for planning preventing measures.

Abstract methods: In 2007, 3,085 secondary school Slovenian adolescents participated in the international research and 1,125 adolescents from the region of Koper participated in the regional research. We chose and elaborated only those questions from the questionnaire, which are connected with the object of our research. The statistically significant differences between the observed events were evaluated with chi-square test.

Abstract results: The results showed the correlation between emotional trust and support of parents and the frequency of depression symptoms, low self-esteem and sedative use among the adolescents in the region of Koper and in Slovenia in general.

Abstract Conclusion: The parents and the children have to be included in specific preventive programs to acquire the knowledge and skills to improve family relations and locations in the society.


The predictive value of behavioral inhibition and attentional control on adolescent anxiety and depression

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The behavioral inhibition and behavioral activation system (BIS and BAS) are supposed to be independent biological systems that regulate human behavior. Of these, BIS represents the tendency to react to novelties by withdrawal or restraint and a proneness towards anxiety and has indeed been associated with the development of internalizing disorders. Another stable characteristic that has been associated with the development of anxiety disorders is attentional control (AC), or the ability to switch and retain attention. The combination of BIS and AC may be particularly salient in the development of anxiety and depression in adolescents. Previously, cross-sectional data (N=1811 young adolescents aged 12-15 years) showed a convincing relationship between BIS and AC on the one hand and levels of anxiety and depression on the other. In line with our hypothesis, we found that a combination of high BIS and low AC was associated with the highest levels of anxiety (Sportel, 2011). In the current poster the association of BIS and AC with anxiety and depression will be studied prospectively in the same sample two years later (N=1189). It is expected that anxiety and depressive symptoms two years later are not only predicted by anxiety and depression at the first assessment, but also by screening, BIS and AC and, additionally, the combination of BIS and AC. The current longitudinal design allows for Conclusion with regard to stable temperamental factors preceding anxiety and depression. Results may be of importance in the process of early identification of adolescents at risk for developing internalizing disorders.


Stigmatization and psychopathology in obese children and adolescents

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Introduction: Obesity is considered a visible stigma that does not adhere to current aesthetic norms. The current study seeks to define the importance, severity and type of stigmatization experienced by obese children and adolescents. In addition, the relationship between frequency and impact of stigmatization on body esteem and depression will be explored.

Method: Children and adolescents were recruited from a hospital during medical visits for obesity treatment. The sample was composed of 96 participants (62 females 33 males). Mean age was 13 ± 1.8 years (min = 8; max = 17). Participants completed four measures: clinical data, a questionnaire exploring the frequency with which they were exposed to 11 stigmatizing situations as well as their perceived impact, the Children’s Depression Inventory, and the Body Esteem Scale.

Results: Stigmatizing experiences the most often cited were: lack of clothing choice, negative attitudes and comments by other children, negative attitudes and comments by siblings, and marginalization in sports and play activities. Lack of clothing choice, negative attitudes and comments by other children, and stigmatization by adults were cited as having the most perceived negative impact for this sample. Finally, frequency of stigmatizing experiences and their perceived impact were negatively correlated to body satisfaction and positively correlated with depressive symptoms.

Conclusion: Stigmatization and its impact on overall well-being can be considered as enduring factors in the struggle against obesity and eating disordered behavior in children and adolescents. It appears essential to take into account stigmatization and its potential impact on both physical and psychological factors in treating obesity in children and adolescents.

“The role of media in predicting body-esteem among adolescent girls and boys”

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Introduction: Sociocultural influences (media, family, peers) are often presented as having a significant contribution in the development of body dissatisfaction in adolescents. Among these three types of influences, media appears to be the most powerful in terms of diffusing attitudes about ideal beauty standards. Thompson, van den Berg, Roehrig, Guarda & Heinberg (2004) created a questionnaire called, The “Sociocultural Attitudes Towards Appearance Questionnaire-3” (SATAQ-3) which measures the influence of the media on beliefs about one’s appearance. The SATAQ-3 measures four attitude dimensions: Internalization-General, Internalization-Athletic, Pressure, and Information. This study focuses on the relationships between body esteem and media sociocultural influences as a function of sex through the four dimensions developed in the SATAQ-3.

Method: The sample was comprised of 1089 adolescent females (n = 647) and males (n = 442) between the ages of 13 and 20 years (M = 16.52, SD = 1.27) recruited from public schools in the north of France. Adolescents completed three questionnaires: The SATAQ-3, The Body Esteem Scale (BES) evaluating overall body satisfaction and esteem, and a short socio-demographic questionnaire.

Results: For females, Internalization-General, BMI and Pressure were significant predictors of body esteem, whereas for males only Internalization-General and BMI were significant predictors of body esteem. Females obtained significantly higher scores than males on Internalization-General, Pressure, and Information. Males appear to be overall more satisfied with their bodies and obtain higher scores on Internalization-Athlete than females.

Conclusion: Cognitive behavioral therapy is rapidly becoming the treatment of choice in Anglo-Saxon eating disorder prevention programs aimed at improving adolescent and young adult body image as well as decreasing risk of developing eating disorders. The results provide insight into better detection of high risk groups as well as information in adapting prevention programs to specific concerns of males and females in France.


Treatment Outcome for Specific Phobias: The role of the father

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Objectives: This study focused on the role of the father in the treatment of a child’s phobia. Previous research has shown that parental psychopathology can negatively impact treatment for a child’s anxiety. Conflict and perceived control in a family has been shown to maintain a child’s anxiety levels. However, a majority of the research focused on maternal reports. The purpose of the current study was to compare parent psychopathology of both the mother and the father, and compare their perceptions of their family’s environment. It was hypothesized that both mother and father anxiety would moderate treatment outcome for the child. However, given the literature, it was hypothesized that mother’s depression would moderate a child’s outcome, but not father’s depression. In addition, it was hypothesized that conflict and control within the family would moderate treatment outcome, regardless of reporter.

Methods: The data analyzed for this study were collected as part of a larger study (n = 95), conducted to look at the effectiveness of one session phobia treatment compared to an education support condition. Children and their parents were administered the Anxiety Disorders Interview Schedule. Mothers and fathers completed the Symptom Checklist-90 and the Family Environment Scale. Data from both mothers and fathers were available from a subset of 31 families.

Results: For the 31 families, mother report of control significantly moderated treatment outcome (β = -1.386, p = .009). However, neither mother psychopathology nor any father variables, significantly moderated treatment. Interestingly, exploratory analyses conducted on all father data available from the larger study (n = 39) showed father reported control did significantly moderate treatment outcome (β = -.924, p = .018), suggesting that sample size was major limitation in the initial analyses.

Conclusion: While the sample size is small, this study is exploratory in nature and provides directions for future research. Implications for research as well as clinical implications will be discussed further.

Ollendick et al, Journal of Consulting and Clinical Psychology 2009; 77: 3
Factors influencing Quality of Life in young adolescent patients with childhood cancer


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**Objectives:** Advances in the treatment of childhood cancer have dramatically improved long-term survival rates. Although cure is the expected outcome, cancer continues to remain a constant threat, and young patients still experience it as a major crisis at the biological, psychosocial, and developmental level. An increasing number of studies are assessing QOL as an indicator of adjustment to the consequences of childhood cancer. While it appears that many patients experience good QOL, some are more vulnerable to maladjustment than others. It is therefore important to gain insight into the process of adjustment and to identify factors that predict better or worse QOL. The purpose of this study was to explore the factors that influence QOL in young adolescent patients with childhood cancer.

**Methods:** The participants in this study were 21 childhood cancer patients who were attending the pediatric outpatient clinics (7 males and 14 females, mean age at survey = 15.8±2.1 years, mean age at diagnosis = 8.8±4.1 years). Approximately 15 patients had leukemia and 4 patients had malignant lymphoma and 2 suffered from bone tumor. After parental consent was obtained, data were collected using the Pediatric Quality of Life Inventory (Peds-QL) and a semi-structured interview regarding the difficulties they faced in daily life. The quantitative data were analyzed using t-test and ANOVA, and the qualitative data were analyzed using content analysis, the chi-square test, and correspondence analysis.

**Results:** The patients’ mean scores on Peds-QL Physical and school functioning were significantly lower than those reported for healthy children (p < .05). Considering the factors that influence QOL, no differences were found with respect to sex, age at survey, age at diagnosis, and type of cancer. However, we found that patients who faced many difficulties such as physical, interpersonal and behavioral in daily life were significantly lower QOL scores than those who did not (p < .05).

**Conclusion:** This study showed that patients reported poorer QOL as compared to that reported by healthy people and that poorer QOL was influenced by the difficulties they faced in daily life; therefore, it is important to provide support to patients with regard to these difficulties.


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**Introduction:** The present study evaluated the efficacy of a school-based universal prevention program based on cognitive-behavioral therapy (CBT) for depressive symptoms in Japanese children.

**Methods:** Three hundred and ten community children (aged 10-12 years) were assigned to either a class-wide group CBT (n=150) or a no-treatment control condition (n=160). The prevention program involved nine 45-min sessions, which consisted of psychoeducation, social skills training, cognitive restructuring, and applied practice using skills taught in these sessions.

**Results:** At postintervention, CBT was superior to the no-treatment control condition on children’s self-report of depressive symptoms, cognitive error, social skill, and school functioning. Differences between CBT and control group were largest for children with high levels of depressive symptoms at baseline. Children’s age and gender did not moderate the intervention effects. Results of mediator analysis showed that cognitive error and social skills independently mediated treatment. At the 9-month follow-up, intervention effects on depressive symptoms and cognitive error were still maintained. For a high-risk subgroup, defined as having scored above a cut-off point of Children’s Depression Inventory, 53.8% of children in CBT and 45.0% of those in the no-treatment control group were no longer high-risk at postintervention. Similarly, 71.4% in CBT and 50.0% in the no-treatment group were not high-risk at the 9-month follow-up.

**Discussion:** The universal CBT prevention program was effective for reducing depression in Japanese children. Results also suggested the CBT could have effects on preventing new episodes of depression in low-risk children as well as improving depressive symptoms that high-risk children already have.
**P080**

**Metaperception among adolescents with social phobia and risk for psychosis**

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**Introduction:** Individuals with social phobia have been shown to display a cognitive bias towards interpreting ambiguous external social events related to self as negative, i.e. to make erroneous assumptions about how they are perceived by others. Those with very high degrees of social anxiety may resemble individuals with paranoid symptoms in that both may interpret other people’s behaviour as extremely critical or hostile towards them in situations in which they themselves feel vulnerable, for example when showing anxiety symptoms. So far few studies have examined such cognitive biases among adolescents with social phobia and among those with very high levels of social anxiety and psychosis-like symptoms associated with a high risk for psychosis. **Aim:** We describe a research project comparing a specific dimension of social cognition, metaperception (subject’s thinking about how they are seen by others), between (1) adolescents with social phobia, (2) adolescents with very high level of social anxiety and comorbid psychosis-like symptoms, and (3) controls.

**Method:** The methodology of the study and some preliminary data are described, and implications for psychotherapeutic interventions are discussed.

**Results:** A questionnaire assessing metaperception among adolescents is introduced. Data on its functioning across clinical groups of adolescents with social phobia, those with social phobia and associated at-risk for psychosis symptoms, and community controls is presented. Preliminary comparisons of metaperception across the two clinical groups and the control group are presented.

**Discussion:** Adolescence is a critical period for the emergence of social phobia, but also for more serious psychotic disorders. There is a considerable overlap of symptoms of social phobia and at-risk symptoms for emerging psychosis among adolescents referred for psychiatric treatment. Biases in metaperception may be important targets for psychotherapeutic intervention among these adolescents.


**P081**

**Dialectical Behavior Therapy for adolescents: Self-reported distress among the adolescents’ parents**

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**Objectives:** The relationship between adolescent suicidal behavior and family functioning is transactional1, suggesting that treatment should involve the individual and family. Dialectical Behavior Therapy adapted for adolescents (DBT-A) includes family to address their role in demonstrating gains and reducing dysfunctional behavior2. Given the transactional relationship, it is hypothesized that parents beginning a DBT program will report distress in comparison with non-clinical norms.

**Methods:** Parents and teens participate in 6 months of skills training; teens participate in individual therapy. Parents complete these questionnaires at pre-, mid- and post-treatment: Beck Depression Inventory (BDI-II), Beck Anxiety Inventory (BAI), Difficulties in Emotion Regulation Scale (DERS), Family Expressiveness Questionnaire (FEQ), Hope Scale. Nine parents (5 mothers, 4 fathers) from 6 families have completed baseline measures. It is anticipated that 6 families will complete mid-point measures by August.

**Results:** Mean BDI and BAI scores were within normal limits. Scores on the DERS and FEQ were analyzed by gender (as in the standardization samples) and compared to norms. Fathers reported that they are better able to remain in control of their behavior when experiencing negative emotions (p = .05), and more likely to acknowledge their emotions (p < .05) than men in the standardization sample. No significant differences were found for mothers on the DERS nor fathers on the FEQ (ps > .05). Mothers reported significantly more negative dominant communication on the FEQ than the standardization sample (p < .05). No significant differences were found on the Hope Scale (ps > .05). In August, data will have been gathered to run mediated regressions investigating improvement in parent functioning and change in adolescent behavior.

**Conclusion:** Results suggest that parents in the DBT-A program report similar distress and functioning as individuals in normative samples. While parents identify their youths as struggling, their self-report measures suggest they are coping well.

The Impact of Dialectical Behavior Therapy on Reasons for and Frequency of Non-Suicidal Self-Injury in Adolescents

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Introduction: Non-suicidal self-injury (NSSI), or deliberate harm to one's body without intent to die, is highly prevalent among individuals diagnosed with borderline personality disorder and correlates strongly with suicide attempts and completions. Individuals who engage in NSSI report that they most often do so to regulate negative affect. To our knowledge, no studies have investigated whether (1) self-reported reasons for engaging in NSSI change during treatment, or (2) improved emotion regulatory capacities predict reduced frequency of NSSI over treatment. Reducing NSSI is a major treatment target in Dialectical Behavior Therapy, and we propose to examine these questions in an adolescent DBT program (DBT-A).

Methods: DBT-A comprises weekly individual and group therapy and as-needed coaching calls. The 6-month program is offered to teens ages 14-18 endorsing serious emotion regulation difficulties (e.g., chronic suicidality, hospitalizations, NSSI events). Treatment focuses on decreasing destructive behaviors and improving emotion regulation skills. Participants complete pre- and post-treatment interviews assessing problem behaviors associated with emotion regulation difficulties and reasons for NSSI.

Results: We hypothesize (1) NSSI events will decrease from pre- to post-treatment; (2) greater increases in emotion regulation during treatment will predict fewer NSSI events at post-treatment; and (3) participants endorsing NSSI as a means of emotion regulation will exhibit the greatest decreases in NSSI events at post-treatment. Hypothesis 1 will be evaluated using repeated measures ANOVAs; preliminary analyses trend toward significance [F(1,9)=3.81, p=.083]. Regression analyses, with the Difficulties in Emotion Regulation Scale as a predictor variable, will test hypothesis 2. Descriptive statistics will examine changes in reasons for NSSI during treatment (hypothesis 3). We anticipate 22 adolescents will complete the program by August 2011 (17 have currently completed).

Discussion: Findings will be discussed in terms of whether individuals who endorse NSSI as an emotion regulation strategy respond differently to DBT than those who do not.


Effects of One-Session Treatment on Cognitions of Children with Specific Phobias

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Introduction: One-session treatment (OST) has been shown to be effective in the treatment of childhood specific phobias (Ollendick, Ost, Reuterskold, Costa, Cederlund, Sirbu, et al., 2009). In the initial study, OST was shown to have superior effects on phobia diagnostic severity, anxiety in a behavioral task, and treatment satisfaction as compared to an education support treatment (EST). The current study was designed to examine the effects of OST on children’s cognitions regarding physical threat.

Method: Sixty-nine children (40 males; mean age = 9.72) were assessed as part of a larger study regarding OST with specific phobias (see Ollendick et al., 2009). Children completed the Children’s Automatic Thoughts Scale (CATS) at pre- and post-treatment. Only the physical threat subscale was utilized for the current study.

Results: Repeated measures ANOVAs revealed significant time effects, F(1, 70) = 7.42, p<0.01, with the Time x Treatment interaction approaching significance, F(1, 70) = 3.276, p=0.08. Both treatment groups reported fewer physical threat cognitions following treatment. The OST group showed somewhat greater reduction from pre- to post-treatment as compared to the EST group.

Discussion: Results suggest that both OST and EST were successful in reducing children’s negative cognitions regarding physical threat. Children who received OST treatment showed marginally greater reductions in physical threat cognitions as compared to those in the EST condition. Results will be discussed with regard to cognitive-behavioral theories of specific phobia treatment.

Spanish version of the Desire to Institutionalize Scale in a sample of dementia caregivers

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Introduction: The decision to institutionalize a patient with dementia is complex and involves a number of factors that interact in the decision-making process.

Method: Face-to-face interviews were carried out with 242 caregivers of relatives with dementia. Caregiver’s preference for institutionalization was assessed with the Desire to Institutionalize Scale (DIS) from Phruchno et al (1990). It consists of seven dichotomous items about whether or not the caregiver had talked to family members or professionals about placement, gotten the name of a possible nursing home, called or visited a nursing home, taken the patient to visit an institution, or made an application for placement. The Spanish version of the test was constructed following the translation/back-translation method in addition to the guidelines by the International Test Commission. Concurrent validity will be determined through comparison of DIS measures and one item about thoughts about institutionalization during last week.

Results: The obtained Cronbach’s alpha score was 0.85. A principal components analysis of the items of the scale was carried out using varimax rotation. A single-factor solution with 7 items accounting for 53.68% of the variance. The KMO measure of sampling adequacy was 0.82, exceeding the recommended 0.6 and Barlett’s Test reached statistical significance. All items are positively scored. Caregivers’ thoughts about institutionalization of their relatives during last week were significant associated with the DIS scores.

Discussion: Reliability indexed by internal consistency of the Spanish version was appropriate. Factor analysis was successful as the theoretical domain was identified in the factor structure. An adequate concurrent validity of the scale was demonstrated. The scale will also allow the comparison between Spanish and English speaking samples.

Conclusion: The results of the present study support the use of the Spanish version of the Desire to Institutionalize Scale for assessing this construct in Spanish caregivers.

Positive affect change after mental imagery

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Introduction: Key preliminary findings in the domain of positive mental imagery show that imagining positive events appears superior to verbally processing the same events in producing positive emotion, and that field perspective imagery has a more powerful impact on promoting positive emotion than observer perspective imagery (Holmes, Coughtrey, & Connor, 2008). Promoting positive affect is of clinical relevance. For example, depression is characterized by an absence of positive affect. Further, depressed mood appears to be associated with a deficit in imagining positive, but not negative, events. A first study sought to replicate the results of Holmes et al. (2008). A second study concerns a conceptual replication.

Method: Study 1: First-year students (N = 78) listened to 100 positive events randomly allocated to one of three conditions: imagining them via a field or an observer perspective or verbally thinking about their meaning. Positive affect was measured before and after the task. Study 2: First-year students (N = 52) imagined 10 extended positive events either from a field or from an observer perspective. To enhance task adherence, a cover story and reminder instructions during the event descriptions were introduced. Positive affect was measured before and after the task.

Results: Study 1: Positive affect change was greater after imagery than verbal thinking. Contrary to predictions, there was no significant difference in affect change between the field and observer condition. Study 2: This study will be completed in June 2011. Results will be discussed.

Discussion: The results of study 1 offer support for a superior role of positive mental imagery in promoting positive affect compared to verbal thinking. To explain the non-replication of the effect of perspective on positive affect, we reflect on methodological and motivational explanations. A second study, using an adapted design, might lead to further insight in the manipulation of perspective.

Holmes et al, Emotion 2008; 8:6

Observer perspective in high worriers during mental time travel into the past and the future

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Objectives: Mental time travel is the ability to mentally project oneself backwards or forwards in time, to relive events in one’s personal past through autobiographical memories, or to prelive
Happiness captivates researchers, policy makers and citizens. Objectives: The aim of this study was to determine perceived correlates of general (in life) and current (within the last days or weeks) levels of happiness among Spanish adults with different socio-demographic characteristics and to establish possible differences between women and men. Methods: The study involved 600 people 18 to 65 years old, who voluntarily completed the Happiness Scale (Godoy-Izquierdo & Godoy, 2006). Results: Differences between women and men emerged regarding the perceived impact of several life conditions considered as sources of happiness. Interesting differences were also observed when actual impact of those sources was considered. Further, perceived correlates of happiness differed from actual ones (predictors) among both women and men. These findings are discussed from a feminist perspective. Conclusion: Our results highlight the convenience of studying happiness with the goal of increasing scientific knowledge as well as designing interventions aimed at enhancing it, particularly among women, considering both perceived and actual sources of happiness.

Possible events in one's personal future through future projections. Field perspective (recollecting the scene from one's original point of view) has been found to be more common than observer perspective (seeing oneself in the memory image) during retrieval of autobiographical memories (e.g., Nigro & Neisser, 1983). However, studies comparing past and future mental time travel find observer perspective to be more common in future projections compared to memories (e.g., Berntsen & Jacobsen, 2008). Elevated use of observer perspective during retrieval of autobiographical memories has been documented in various disorders, such as depression, social phobia and posttraumatic stress disorder, and has been found to be associated with trait rumination and trait avoidance (e.g., Williams & Moulds, 2007). As of yet, the use of observer perspective has not been documented in relation to trait worry.

Methods: In the current study, 46 university students (22 low worriers, 24 high worriers) constructed autobiographical memories and future projections assisted by cue words and rated them on perspective, as well as other characteristics. Results: High worriers experienced memories and future projections more from an observer perspective than did low worriers.

Conclusion: The results will be discussed in terms of cognitive avoidance as well as self-evaluation.

Berntsen & Jacobsen, Conscious Cogn 2008; 17:1093
Nigro & Neisser, Cogn Psychol 1983; 15:467
Williams & Moulds, Behav Res Ther 2007; 45:1141

P088

Social anxiety selectively has a disruptive effect on the cognitive ability of high-anxious individuals with low working memory capacity

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Objective: It is noted that social anxiety impedes some cognitive task performances (e.g., Hopko et al., 2001). The Processing Efficiency Theory (Eysenck & Calvo, 1992) posits that anxiety impairs cognitive performances that tap the working memory system (Baddeley & Hitch, 1974), particularly for the central executive (CE) and the phonological loop (PL). If so, high-socially anxious individuals with low working memory capacity (WMC) particularly have difficulty performing the task that depends heavily on the CE and the PL. This research investigates the hypothesis above mentioned using dual task paradigm.

Methods: Thirty-eight undergraduates were participated in the experiment. Participants were divided into 4 groups based on their scores of social anxiety scale (FNE; Watson & Friend, 1969) and WMC measure (Reading Span test; Dememann & Carpenter, 1980). The experimental task was composed of the Sternberg task and phonologically presented short-term memory task. The latter task was that single character of alphabet or single-digit number was randomly presented sequentially. Participants were instructed to memorize alphabets only and ignore digits. This task was supposed to involve the CE to resist the interference effect of digits. Both tasks were performed concurrently and the dependent variables were the rate of correct answer on the tasks.

Results: As predicted, the 2 (high or low social anxiety) x 2 (high or low working memory capacity) interaction was observed on the score of the Sternberg task. The multiple comparisons revealed that high socially anxious individuals with low WMC performed significantly worse than the other three groups. No other differences were observed on the Sternberg task. As for the other task, no differences were observed presumably because the rate of correct answer was over 85% among all four groups and ceiling effect was emerged.

Conclusion: As the results indicate, low WMC individuals are assumed to be selectively vulnerable to social anxiety's disruptive effect on cognitive performance. On the other hand, contrary to the processing efficiency theory, high WMC individuals are able to buffer the effect of anxiety. WMC is thought to reflect the ability control attention (e.g., Kane & Engle, 2000). Given this, attentional control ability is the possible source of avoiding the disruptive effect of anxiety.

Social anxiety and attentional disengagement from angry and fearful faces: effectiveness vs efficiency

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Objectives: According to the processing efficiency theory of Eysenck et al. (2007), negative effects of social anxiety are predicted to be significantly greater on processing efficiency than on performance effectiveness. Therefore we examined these effects in an attentional disengagement task.

Methods: Student scoring high (SP group, n=17) or low (NP group, n=16) on the Fear of Negative Evaluation scale had to classify a peripheral target letter (X or P), appearing 200 or 500 ms after a neutral, angry or fearful face was displayed. Efficiency of disengaging attention is measured by the reaction time used to answer to the letter whereas effectiveness is measured by the accuracy of the response.

Results: NP participants reaction times are significantly shorter at 500 ms condition compared to 200 ms condition for the angry (t(15)=2.420, p=.0287) and fearful faces (t(15)=2.675, p=.0173) unlike the reaction times for the SP group. These results show that social anxiety is linked with a specific tendency to dwell on threatening faces. Thus SP participants invest more resources to attain the given task contrary to NP participants. Likewise, the response accuracy is better at 500 ms compared to 200 ms only for the NP group, t(32)=1.267, p=.0943) and neutral faces (t(15)=1.801, p=.0919).

Conclusion: On the one hand, these findings provide support for Eysenck’s proposal, to the extent that social anxiety impairs the processing efficiency of both fearful and angry faces. On the other hand, social anxiety seems to have an effect on the effectiveness of the processing of angry faces only.

Eysenck et al, Emotion 2007; 7 : 336

Role of acute pain experiences in empathy and personal distress

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Introduction: Empathy is crucially related to individuals’ responses to others in pain.1 This random assignment experiment investigated how exposure to an acute pain stimulus affects self-reported feelings of empathy and personal distress and whether these responses are moderated by emotion regulation skills. Some research has shown the experience of pain and observations of others in pain activate similar brain structures. Accordingly, individuals in a high state of empathy report experiencing physical pain more intensely than those in a lower state of empathy.2 Conversely, the similarity of previous experiences has been shown to affect the intensity of feelings of empathy.3 We hypothesized that those participants assigned to the pain condition would report stronger feelings of empathy than those assigned to the control condition. We also hypothesized that empathy and personal distress would be moderated by emotion regulation skills.

Method: Adult females (n=30; Mage = 19.8) were randomly assigned to experience an acute pain stimulus, induced using a cold pressor task, or to a control group. Participants completed measures of emotion dysregulation and dispositional empathy. After watching a one-minute video of a character experiencing physical pain, all participants reported feelings of empathy and personal distress.

Results: Participants assigned to the pain condition reported significantly lower levels of personal distress (t=-2.684, p=.012). There were no significant differences in empathy between the conditions. There was a significant negative correlation between personal distress and the strategy subscale of emotion dysregulation (r=-.394, p < .05).

Discussion: The hypotheses were partially supported. It is suggested that attention processes moderated the relationship between pain experiences and personal distress. The strategy component of emotion regulation may be important in balancing empathy and personal distress.


Obsessive-compulsive, generalized anxiety tendencies and the illusion of control: An investigation of cognitive mechanisms

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Objectives: The current study investigated the inter-relations between obsessive-compulsive and general anxiety tendencies and the illusion of control, and introduced several concepts which could account for this association (i.e., intolerance of uncertainty, desire for control, rational and irrational beliefs related to uncertainty and control).

Methods: Participants (N = 69) were presented with a computerized task which involved controlling the presentation duration of a series of aversive or neutral stimuli, and they were asked to rate their level of perceived control at three different times during the task. The presentation duration of the stimuli was in fact pre-programmed, so the participants’ sense of control was entirely illusory.

Results: OCD tendencies were related to the illusion of control (r = .30, p = .045), but only in the aversive stimuli condition, and both OCD and GAD tendencies were positively associated with the illusion of control in the case of participants offering low and medium control estimations, and negatively related for those participants who offered high control estimations. Intolerance of uncertainty, desire for control and irrational uncertainty and control beliefs followed a similar pattern.

Conclusion: Theoretical implications regarding the tendency to
extract an illusory sense of control in the context of anxiety disorders as well as possible practical implications are further discussed.


P092

Relationship between cognitive sensitivity to depression, irrational beliefs and depressive symptoms

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Objective: Cognitive theories postulate that irrational beliefs have an important role in development of depression. Ellis also suggested that cognitive sensitivity to sadness is one of the main triggers that lead from normal sadness to depression. The aim of this study was to investigate the relationship between cognitive sensitivity to depression and general irrational beliefs in the prediction of depressive symptoms.

Method: The sample consists of 200 undergraduate students. They were administered: Becks Depression Inventory (BDI), Leiden Index of Depression Sensitivity (LEIDS), General Ability and Belief Scale (GABS).

Results: Our results indicate that both general irrational beliefs and index of depression sensitivity are related to depression. After partializing-out scores of index of depression sensitivity from general irrational beliefs, part of variance that predict scores on anxiety symptoms significantly decrease.

Conclusion: Our findings support the hypothesis that cognitive sensitivity to depression has an important role in cognitive modeling of depression.

P094

Relationship between cognitive sensitivity to depression and anxiety and five-factor model of personality

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Objective: It is well known that beliefs are part of the basic personality structure and that affective disorders are to some extent dependent on that structure. According to Beck’s and Ellis theory the belief system has the strongest influence in the development of our emotional reactions. Ellis also suggested that cognitive sensitivity to sadness and anxiety are one of main triggers that lead to depression and severe anxiety. The aim of this study was to investigate the relationship between cognitive sensitivity to depression and anxiety and basic personality dimensions The sample consists of 200 undergraduate students. They were administered: Leiden Index of Depression Sensitivity (LEIDS), Anxiety Sensitivity Index (ASI) and Neo PI-R (measuring basic personality dimensions).

Results: Our results indicate that both index of depression sensitivity and index of anxiety sensitivity are related to basic personality dimensions. Neuroticism is the most important predictor of both types of cognitive sensitivity.

Conclusion: Our findings support the hypothesis that basic personality dimensions can explain cognitive vulnerability to emotional symptoms and that concept of cognitive sensitivity to depression and anxiety is more trait than state.
Peer victimization and depressive symptoms in adolescence: An evaluation of cognitive moderators

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Introduction: Peer victimization is a potent stressor that increases risk of depression and that may be particularly harmful during adolescence, when depression rates begin to increase. However, although some individuals experience depression following peer victimization, not all adolescents who encounter such interpersonal stress experience depression. Thus, it is important to identify moderators that may serve as risk or protective factors for depression. The present study evaluated three potential cognitive moderators of depressive symptoms in adolescents: ruminate response style, overgeneral autobiographical memory, and negative self-referential encoding.

Method: Participants were a racially diverse sample of 96 adolescents (mean age 12.4 years) recruited from schools in a major metropolitan area. Participants completed an initial assessment including an evaluation of depressive symptoms (CDI), the Children’s Response Style Questionnaire (CRSQ) the Autobiographical Memory Task (AMT), and the Self-Referential Encoding Task (SRET). Six months later, participants completed the measure of depressive symptoms and a measure of peer victimization over the period since the initial assessment.

Results: On the CRSQ, higher levels of rumination and lower levels of problem-solving interacted with peer victimization (PV) to predict depressive symptoms (DS) at follow-up, controlling for initial DS. On the AMT, fewer specific memories interacted with PV to predict DS, whereas on the SRET, the number of negative self-referent words recalled interacted with PV to predict DS, each analysis controlling for initial DS. Simple slopes tests indicated that there was an effect of each cognitive vulnerability factor at high levels of PV, but not at low levels of PV.

Discussion: These results confirm the importance of evaluating cognitive vulnerabilities to depression during adolescence using both self-report and/or behavioral strategies, especially among adolescents who experience high levels of peer victimization. Future studies with greater power should evaluate the incremental ability of such vulnerabilities to predict depressive symptoms across stages of adolescence.


Vulnerabilities for depression and anxiety as predictors of assertiveness

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Assertiveness is a construct related to both depression and anxiety. The aim of this study is to test the relation between assertiveness, on the one side, and vulnerabilities for depression (sociotropy and autonomy) and for anxiety disorders (behavioral inhibition) on the other. We hypothesized that a unique contribution of these vulnerability factors in explanation of assertiveness can shed a light to the phenomenon of assertiveness and its development. Following instruments were used: Personal Style Inventory (Robins et al., 1994), for measuring vulnerabilities for depression, Retrospective Measure of Behavioural Inhibition (Parker & Gladstone, 2005) and for measuring assertiveness - A28 (Tovilovic, 2006). Data, collected from 200 participants aged 19 – 68, was analyzed using Hierarchical regression analysis. Results showed that the variance of the assertiveness could be significantly explained by vulnerability indicators (53,1 %). Sociotropy and autonomy accounted for 44,8 % of the variance, while behavioral inhibition added incrementally to the prediction, accounting for additional 8,2 % of the variance in assertiveness scores. Subdimensions of sociotropy, ‘Pleasing others’ and ‘Concern about what others think’, were most significant unique predictors of assertiveness, accounting for 8,9% and 6,2% of the unique variance in criterion variable, but a dimension of behavioral inhibition, ‘Fear of the unknown’ also accounted significantly to the prediction with 4,5% of the unique variance. The results support the theoretical background of assertiveness. The findings and their implications are discussed from the perspective of CBT. KEY WORDS: Sociotropy, autonomy, behavioral inhibition, assertiveness


A new assertiveness based therapy applied to OCD

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Some disorders of assertiveness could be explained by the relationship existing between a person and a group, along a dimension
Dysfunctional Cognitions in Obsessive Compulsive Disorder (OCD): Do they relate to therapy outcome?

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Objectives: Dysfunctional beliefs are the core element of the cognitive-behavioural model explaining the etiology and maintenance of obsessive-compulsive disorder (OCD). Following the model, our study aimed at two questions: Is the initial expression of dysfunctional cognitions associated with the post-treatment level of OC symptomatology? Is the decrease in dysfunctional cognitions related to the post-treatment level of OC symptomatology?

Method: In a longitudinal study N = 46 patients diagnosed with OCD completed questionnaires assessing OC symptomatology (OCI-R), depression (BDI), and dysfunctional beliefs (OBQ) before and after cognitive-behavioural treatment.

Results: Over the course of therapy obsessive-compulsive symptoms, depression and dysfunctional cognitions decrease. In contrast to dysfunctional beliefs, the initial scores in both distress measures predict post-treatment obsessive-compulsive scores. The more the dysfunctional cognitions decrease over the course of therapy, the lower are post-treatment OC symptoms.

Conclusion: The results provide empirical support for the cognitive-behavioral model of OCD.
P100

Misconceptions about Love and Partnership in Relation to Low Self-Esteem

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Presenting problems and case conceptualisation: A 22 year old girl was admitted to psychiatric hospital after the relationship with her partner ended. She was severely depressed and anxious. In the basic evaluation her low self esteem and her irrational beliefs about love and partnership were identified and chosen as a point of intervention. She believed she was unworthy of love, incapable and helpless without support from other people and had difficulties in adjusting to new situations and meeting new people. Otherwise she was functioning well; she had good relationships with her friends and family, was doing well at her studies and had a part time job. Goals and interventions: She was motivated for cognitive behavioural treatment and chose as goals of treatment to work on asserting herself and getting more independent in situations that she found difficult. The hierarchy of subjectively difficult situations was created and she was gradually exposing herself. She was taught assertiveness skills. At the same time cognitive restructuring of her basic assumptions was carried out and behavioural experiments were created to test and change her beliefs. Outcome: Her depression and anxiousness subsided in 20 sessions from sever to absent category on Becks’ depression and anxiety scales. She became more assertive and gained more self esteem and feels less incapable and helpless, but work on her basic assumptions of unworthiness of love and distorted views on relationships with men is still in progress. Here the major obstacles to change are deep feelings of shame and humiliation.

P101

Symptom provocation during Cognitive and Behavioral Therapy for Obsessive Compulsive Disorder: a neuroimaging study

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Introduction: Cognitive and Behavioral Therapy (CBT) is recognized as a valid tool to improve Obsessive Compulsive Disorder (OCD) symptoms. However, factors of resistance to CBT exist: e.g. some patients feel unable to resist the urge of performing their rituals, in particular OCD checkers patients. The orbitofrontal cortex (OFC)-striatal circuit plays an important role in the pathophysiology of OCD. Neuroimaging studies suggested that CBT might change its abnormal activity in OCD patients. Previous research compared patients’ neural activity before and after treatment but did not report any data during therapy.

Objectives: The major aim of this study was to facilitate CBT for OCD checkers. To this purpose, we developed a new psycho-pedagogic tool to be used during CBT sessions and assessed its clinical efficacy. We particularly study the correlates between clinical improvement and response to symptom provocation using functional Magnetic Resonance Imaging (fMRI).

Methods: Twenty-five OCD patients with checking compulsions followed 15 individual CBT sessions each with a trained psychologist. They were randomized into two groups: a “reference CBT” (CBT classically described in literature) and an “experimental CBT” (reference CBT + psychopedagogic tool) group. Experimental CBT sessions included a psycho-pedagogic tool designed as a matching-to-sample task with checking options. The patient had to decide whether two pictures presented sequentially were identical or different (choice phase). This choice was followed by a “checking phase” during which patients were given the opportunity to check (i.e. to see again the two stimuli) or to confirm their answer and to get the feedback regarding their response. This tool was used, first, as a support to help the patient better understand the checking process, and, second, as a virtual checking-prevention training. It was appended to a classical CBT.

We clinically assessed symptom severity with the Y-BOCS [1] at the four main stages of the therapies: before (M0), at mid-therapy (M1.5), at the end (M3) of therapy and six months later (M6). At each of these stages, patients also performed a symptom provocation task in fMRI. They had to indicate their level of anxiety from 0 (no anxiety) to 3 (maximal anxiety) watching three kinds of pictures: neutral photographs, group-specific checking-provoking photographs (selected and validated in a large OCD checkers patients sample) and individual-specific checking-provoking photographs (patient’s photographs of personal objects).

Results and Conclusion: Both CBT offer an important clinical improvement of OCD symptoms. At the end of both therapies, symptom severity decreased significantly (Y-BOCS scores decreasing from 24.5 to 13.14 with reference CBT and from 24.66 to 12.84 with experimental CBT). Anxiety ratings during the provocation task decrease during and after therapies. Patient’s anxiety was more important when they watch photographs made in their own environment. These stimuli seem to be particularly suited to investigate the clinical state of OCD checkers patients. fMRI data will be presented.


P102

Do the expectations and involvement of the relatives of Obsessive Compulsive Disorder patients influence the outcome of Cognitive and Behavioral Therapy?

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Introduction: Studies validated treatments for Obsessive Compulsive Disorder (OCD) including Cognitive and Behavioral Therapy (CBT), but we miss information about the way the
relatives can get involved in therapy and the impact which it can have on the treatment outcome.

**Objectives:** The aim of this study is to better understand the role of the relatives in the OCD patients' therapeutic treatment.

**Methodology:** 30 OCD patients followed 15 individual CBT sessions with a psychologist. Each could propose to so many relatives as he wants to participate to the research (20 were included). Symptom severity was assessed before end after therapy by a psychologist (Y-BOCS). Patients and their relatives' expectations in the efficiency of the CBT outcome was assessed before therapies: from 0 (help me) to 8 (aggravate me), end their impressions of improvement were collected after.

**Results:** Patients and their relatives expectation of therapies outcome were similar (1/8 and 1,18). After CBT, symptom severity decreased significantly for all, but patients' improvement is more important when their relatives are implicated in their care process (Y-BOCS reduction of symptoms 55,04% vs 38,57%). Patients self-evaluations are comparable to objectives measures and reflected a better outcome for patients with implicated relatives than patients without (amelioration of 57,58% vs 37,14%). Relatives OCD patients' consider 45,37% of improvement.

**Discussion and Conclusion:** The role of relatives is comparable to that of the co-therapists, their implication is maybe the reflection of a more stable personal environment and thus convenient in a faster care.

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**P103**

**Enhancing the motivation to exposure for a long time Obsessive Compulsive Disorder case**

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Obsessive-compulsive disorder (OCD) is a disease difficult to be treated and it was considered almost untreatable only thirty years ago. Evidence based studies recommend cognitive-behavioural therapy (CBT) to treat OCD, particularly the Exposure and ritual prevention procedures (EX/RP). These procedures are fundamental to treat OCD, but patients must have high motivation and zeal to use regularly these strategies. Actually, literature refers that dropout or low compliance cases are included into a range between 10% and 30% (Dettore and Melli, 2005) and some studies consider that at least 50% of OCD patients treated with EX/RP do not respond optimally, even when psychotherapy is combined with pharmacotherapy (Simpson et al., 2008). This work investigates the possibility of improving the treatment adherence and the therapy outcomes supporting the motivation of a OCD patient which did not respond to previous treatments. The patient was a female, 45 years old, with a OCD since 30 years, who had tried previous psychotherapy (CBT too) and pharmacotherapy without good outcomes. The Y-BOCS (Yale-Brown Obsessive Compulsive Scale) was given to the patient before and at the end of therapy. The Scale score range is 0-40 and the cut off score for OCD is 16; the patient score was 23 before the therapy, she had a lot of compulsions and had a very low autonomy. The patient was treated with CBT (with strategies supporting motivation) and pharmacotherapy; at the end of 32 therapy sessions the Y-BOCS score was 8 and the clinical improvement was significant. This work explains the treatment and describes which strategies supported continuously the patient motivation to EX/RP.

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**P104**

**Behaviour therapy and cognitive remediation: The impact of a multimodal intervention for preschool children with ADHD, ODD, and language delays**

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In preschool children, ADHD is often associated with oppositional defiant disorder (ODD) and language skill delays. This combination of difficulties significantly impacts children's adjustment (e.g., socialization problems) and compromises their learning and their integration into the school environment. These considerable negative consequences on children's functioning warrant the development of early intervention programs.

**Objectives:** Our research team designed an innovative multimodal intervention program that combines cognitive-behavioural therapy for the management of problem behaviours and cognitive remediation therapy designed to improve language skills. The results of a longitudinal study designed to demonstrate the effectiveness of this intervention program are presented here.

**Methods:** Twenty-five children aged 3 to 5 years with a double diagnosis of ADHD and ODD participated in the study. The participants also had language delays. They were randomly assigned to one of two groups: an experimental group that received the multimodal intervention program (18-week program; one group session and three home sessions per week) and a wait list group. Participants in both groups were evaluated at the beginning and at the end of the program.

**Results:** Repeated analyses of variance (2 groups X 2 measurement times) revealed a significant interaction effect (F(6.5)=6.523, p=0.015) on the verbal IQ measure. The children who participated in the intervention improved more than did those in the wait list group. Further analyses are being conducted to evaluate the effectiveness of the program in reducing problem behaviours.

**Conclusion:** The multimodal intervention program resulted in improvements in language in preschool aged children with severe adjustment problems. Future studies should be conducted to measure the impact of such a program on adjustment and to measure the maintenance of gains.

Emotion Regulation predicts Improvement of Depressive Symptoms: On the Relevance of Skills for Therapy Outcome

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Objectives: In Cognitive Behavioural Therapy disorder-specific interventions are complemented by transdiagnostical interventions, for example skills-trainings. Efficiency of skills-trainings has been shown for isolated skills, but studies including more than one skill are lacking. The aim of the present study is the combined assessment of various skills in order to analyze their influence on therapy outcome simultaneously.

Methods: For this purpose a structured interview ("Operationalized Skills Assessment Inventory", OFD) was used. It measures five skills (problem solving, social competence, stress management, relaxation ability, emotion regulation) and two self-related facets (self-efficacy, self-esteem). Additionally the extent of depressive symptoms was assessed. N = 124 inpatients were tested after admission and before discharge. The most frequent primary diagnosis of participants was affective disorder (68%).

Results: Multiple hierarchical regression analyses showed that the level of emotion regulation at the beginning of therapy was a significant predictor of depressive symptoms at the second time of measurement (β = -.23, p < .05). Moreover, emotion regulation provided an incremental contribution to the prediction of therapy outcome beyond symptom severity at pre-treatment (ΔR² = .12, p < .05). Analyses with the pre-post gain scores revealed that improvements of self-efficacy (β = -.19, p < .05) in particular and of self-esteem and problem solving (β = -.20 and β = -.14 respectively, p < .10) were associated with a reduction of depressive symptoms.

Conclusion: These results indicate that emotion regulation is an important factor influencing the severity of depressive symptoms. In combination with a targeted enhancement of self-efficacy new pathways seem to open up for the optimization of therapy outcome.

A Therapy for Schizophrenia’s Patients - Self-Awareness Therapy (SAT): Preliminary Results

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Objective: Autonoetic awareness enables to mentally relive personal events in memory to be aware of one’s own experiences across subjective time and so to have a feeling of individuality and self-direction. It is intimately associated with our awareness of ourselves as persons with a past and a future. Autonoetic awareness thereof contributes to construction of our identity by the recovery of past events, particularly specific events, and the imagination of future events. According to Danion’s theoretical model (2001), autonoetic awareness impairment is at the heart of schizophrenia. This deficit should depend on defective associations between separate aspects of the events during the recall and therefore, it is associated with a reduction in accessing specific information in autobiographical memory (AM). This impairment should explain identity perturbation, cognitive deficits, negative and positive symptomatology present in schizophrenia. Supporting this model, the present study evaluates the effect of a cognitive and behavioural intervention called Self-Awareness Therapy (SAT) on autonoetic awareness, AM and the capacity to imagine oneself in the future, in schizophrenia patients.

Method: Fifteen patients with schizophrenia participated to SAT and, 8 patients took part in the Integrative Program Therapy (IPT) of Brenner. Before and after therapy, patients were asked to complete questionnaires to evaluate the autonoetic awareness, AM, projection into the future as well as affective and symptomatology scales.

Results: For SAT, the participants reported more specific past and future events after than before the remediation therapy. Furthermore, patients reported significantly less depressive and anxiety symptoms as well as less negative symptoms after compared before the SAT. For IPT, no significant differences emerged.

Discussion: These results are in line with previous study (Blairy et al., 2008) and support the notion that, in schizophrenia the retrieving of past specific memories and projection into the future can be improved.


Functional MRI study of neuronal activation during the generation of ideas in patients with obsessive-compulsive disorder before and after cognitive-behavioral therapy

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Introduction: Some neuropsychological and neuroimaging studies in patients with Obsessive-Compulsive Disorder (OCD) have suggested abnormalities in the brain functions. Recent neuroimaging studies using functional magnetic resonance imaging (f-MRI) have reported those dysfunctions would be normalized following improvement of the symptoms after the effective treatment. Previous studies investigating the brain activities of OCD patients during Idea Fluency Task have identified the increased level of activation in the cingulate gyrus. The purpose of this study is to compare the neuronal activation of OCD patients during the generation of ideas before and after CBT interventions.

Methods: The subjects were 10 right-handed outpatients who had received a diagnosis of OCD based on DMS-IV. All subjects...
were evaluated with Y-BOCS, WAIS-III, WCST, MST, VFT, and IFT before and after CBT interventions. The brain activities were measured with f-MRI during Idea Fluency Task. During the f-MRI examination, the subjects were supine with earphones on their ears and their eyes were masked.

**Results:** The Y-BOCS total scores were significantly decreased after CBT interventions. The neuropsychological examinations revealed significant differences in the numbers of Persevere errors of Nelson (PEN) and total errors (TE) in WCST, and category fluency in VFT between pre- and post-treatment. Also, there were some tendencies of improving scores of category achieved (CA) in WCST, Letter Fluency in VFT, and IFT after the treatment. With the functional brain image by f-MRI, the brain activation in the cingulate gyrus significantly decreased after CBT interventions.

**Discussion:** The results of this study suggest that the frontal lobe functions would be improved, as well as, the brain activation would be normalized following improvement of the symptoms after CBT interventions.

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**P108**

**How do students learn psychotherapeutic skills?**

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The Anxiety Clinic at Aarhus University offers cognitive behavioral therapeutic treatment to children and adults with anxiety disorders. As a part of the Clinic, graduate students are offered psychotherapeutic training. The training program is one year in length, and the main part of the program consists of working with clients under the supervision of an experienced psychologist. Furthermore, the students read relevant literature and write an essay and a systematic case study on the background of their experiences. The educational ideal is that the students acquire therapeutic skills by creating their own experiences in a professionally structured environment (Lave & Wenger, 1991; Schön, 1983). In relation to the Anxiety Clinic, a small qualitative study has been conducted based on eight interviews with two groups of students working respectively with children and adults with anxiety disorders. The study analyzed the learning processes of psychology students learning psychotherapeutic skills. The two groups were interviewed four times. Each group was interviewed once before the students had any contact with the clients; both groups were interviewed twice during the work with clients; and finally, both groups were again interviewed when terminating work with clients. Part of the interview guide followed the processes of working as psychotherapists, focusing on expectations and motivation. Part of the interview guide focused on more consistent themes, such as significant learning experience, identity, learning through experience, and the role of supervision and theory. The preliminary results show that the students grew still more confident with the therapeutic role through the program. The students emphasized that the safe environment was important for their learning processes. In the beginning, they followed the manual slavishly; however, later in the process, they worked more independently, using the manual as a suggestion. Finally, the students emphasized learning from experienced therapists who were conducting real-life therapy.


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**P109**

**Psychotherapy in an outpatient setting in France: A Case Report on a joint treatment for depression**

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We report here our experience in taking care of a 38year old woman, who consulted first for her major depression with sensation seeking and alcohol consumption (dependency). She was hospitalised after suicidal thoughts and a number of other symptoms were identified as well as dimenions of her personnality. She had a good medical treatment compliance (antidepressant, hypnotic and anxyolytic drugs) and she ended up with some residual depression symptoms and a strong motivation to undertake a behavioral-cognitive therapy. She is still in treatment. Our patient had first given us a good anamnesis details for a thorough functional analysis. She described her major problems and handicaps in everyday life and especially in relationship seeking activities. She wrote about her personnal objectives and worked on these thereafter. Her evaluation was carried out by means of current scales and inventories applied in our practice (Beck Depression inventory, Hamilton Scale, Rathus Scale, MADRS, MAST, Questionnaire of Automatic Thoughts, Anxiety Inventory Y-A and Y-B). Systematic note-making was carried out following an agenda on a daily basis. The notes were then discussed in treatment. Our therapeutic approach had two axes: depression oriented and addiction-oriented. Compliance and strong motivation were achieved thanks to improvement in her social and family situation, with better social competence and self confidence. She achieved complete alcohol avoidance, but her other dependencies became her priority during our psychotherapy. We conclude that this dual treatment gave rise to an interesting therapeutic success: not only were the evaluation techniques complementary but also the enrichment from the two sets of therapeutic techniques. Besides, the role of the psychotherapy in the treatment led to some more investment in the patient’s point of view: the medical treatment then came to be seen and taken care of in a separate place and in a different time schedule.
Post traumatic symptoms of women during pregnancy and after childbirth. Evaluation and efficacy of a special treatment program based on Cognitive Behavioral therapy

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In the past decade it has been recognized that childbirth can be a trigger for the development of a post-traumatic stress disorder (PTSD). Most research have focused on the prevalence rate and identification of potential predictors for PTSD showing a rate of 1,5% to 30% depending on research methods and instruments employed. There is still a lack of intervention studies for testing proper diagnoses and counseling strategies for example by using Cognitive Behavioral Therapy (CBT). Predictors for the development of PTSD after childbirth are for example the following: presence of post-traumatic stress disorder during pregnancy; negative appraisal of past delivery; a disappointment with the birth; negative perception of care during labor; history of mental problems; low level of social support, self-efficacy, internal locus of control and trait anxiety (1). Mothers postpartum have shown PTSD symptoms like flashbacks and nightmares, numbness and dissociation, a great need to understand what happened during birth, anger, anxiety and depression and distance from the newborn (3). The aim of this study is to describe and evaluate the utility and efficacy of an interventional program for women based on Cognitive Behavioral Therapy. Data recorded during the treatment of 50 participants will be collected and evaluated in order to measure the efficacy of interventions strategies such as CBT: For example base line data collected in the beginning and end of the treatment program. Instruments used are the DASS instrument measuring symptoms of stress, anxiety and depression and the modified Perinatal Post-traumatic Stress Disorder Questionnaire (Modified PPQ). Also intervention strategies will be defined and recorded for each woman making the evaluation of treatments strategies reasonable. Statistical Package for Social Sciences (SPSS) will be used for analysing the data. Results will be presented and analysed with a referral to previous research evidence.


Topic: Depression

Ruminative thinking as a predictor of the quality of postpartum mother-infant bonding

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Background: Ruminative thinking has been identified as a vulnerability factor for the onset and maintenance of depression and anxiety (Nolen-Hoeksema et al., 2008). Furthermore there is evidence that depressed persons who are high in rumination report more difficulties in intimate relationships (Pearson et al., 2010). Yet, it is unclear, whether rumination is predictive of postpartum depressive and anxious symptoms as well as impairments in the mother-infant relationship. Possible associations were investigated in a short-term longitudinal study.

Method: We measured depressive and anxious symptoms as well as ruminative thinking in a sample of 66 women during pregnancy (T1) and three weeks after delivery (T2). Maternal bonding was assessed with two self-report measures at T2. A series of regression equations were conducted with the different facets of bonding, depressive and anxious mood as dependent variables.

Results: Controlling for age, prenatal depressive and anxious symptoms, ruminative thinking during pregnancy was a significant predictor of impairments in the mother-infant relationship. Furthermore, increased prenatal ruminative thinking was associated with an increase in postpartum anxiety symptoms. Yet, ruminative thinking was not predictive of postpartum depressive symptoms.

Conclusion: In line with previous studies showing the deteriorating effect of ruminative thinking on interpersonal relationships (Pearson et al., 2010), it was shown that ruminative thinking is associated with more difficulties and uncertainties in the mother-infant relationship. Contrary to our expectations, ruminative thinking during pregnancy was not associated with postpartum depression. Yet, an association between prenatal ruminative thinking and postpartum anxiety was found. Since the quality of the attachment bond may set the stage for depression in children and adolescents, further investigations are required.

Cognitive function in unipolar major depression: A comparison of clinically depressed, previously depressed and never depressed individuals

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Objectives: Cognitive impairments are often found in individuals with unipolar major depression. However, there appears to be a lack of consensus upon a conclusive cognitive profile characterizing depressed individuals.

Methods: Clinically depressed (n = 37), recovered previously depressed (n = 81) and never depressed controls (n = 50) underwent assessment of executive functions, working memory, attention, psychomotor speed and information processing.

Results: Clinically depressed subjects performed significantly worse than previously and never depressed subjects on a measure of working memory. Both clinically depressed and previously depressed subjects performed significantly worse than never depressed subjects on measures of processing speed. Recurrent depressed subjects performed similar to subjects with a single depressive episode. Small-sized significant negative correlations were found between measures of depression severity and primary attention and working memory, and at borderline significance for processing speed.

Conclusion: These findings indicate a mild and limited cognitive impairment in relatively young adults’ course of major depressive disorder characterized by a mild to moderate depression level. Impaired processing speed might represent an irreversible marker for recurrent depression.

Increased use of observer perspective in the retrieval of positive autobiographical memories in dysphoric students

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Introduction: It is widely recognized that autobiographical memories can be retrieved from different perspectives. Using the original perspective, called field perspective, we experience a past event through our own eyes. In an observer perspective we see ourselves in the situation from the outside. The present study investigates the relationship between perspective and depressive symptoms in a student sample.

Method: First-year students (N = 431) completed the Autobiographical Memory Test (AMT) and assessed the visual perspective accompanying each memory. Additionally, the Beck Depression Inventory (BDI-II) and the Responses to Positive Affect questionnaire (RPA) were administered.

Results: Results showed a small positive association between depressive symptoms and the use of an observer perspective for positive autobiographical memories but not for negative memories. Furthermore, comparing a subgroup of students with clinically significant symptom levels with non-dysphoric individuals, it was found that dysphoric students recall positive memories more from an observer perspective than negative memories, while this was not the case for the non-dysphoric students.

Discussion: A dampening response style to positive affect as well as differences between current and past selves are discussed as potential mechanisms underlying the link between depression and the use of an observer perspective when retrieving positive experiences.

The interplay between rumination and intrusions in the prediction of concurrent and prospective depression symptoms in two non-clinical samples

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Introduction: Depressed patients commonly experience intrusive memories (e.g., Patel et al., 2007). There is some evidence that ruminative responses to those intrusions are important for maintaining depression symptoms (e.g., Williams & Moulds, 2010). We conducted two studies to test three models concerning the interplay of rumination and intrusions in the prediction of depression symptoms: (i) Rumination about intrusions as a moderator for the relationship between intrusions and depression symptoms; (ii) rumination about intrusions as a mediator for the relationship between intrusions and depression symptoms; and (iii) intrusions as a mediator for the relationship between rumination about intrusions and depression symptoms.

Method: Level of rumination, intrusions, and depression of students (total n = 711) were measured by means of questionnaires. The first study was cross-sectional. In the second study, depression symptoms were also measured at 5-months follow-up.

Results: In the first study, we found evidence for the three models. In the second study, as for concurrent depression symptoms, we again found support for the two mediation models, but not for the moderation model. As for prospective depression symptoms, we found evidence for the moderation model, but not for the mediation models.

Discussion: The results show an inconsistent pattern, but do suggest that the relations between intrusions, rumination, and depression symptoms are complex, and that both moderation as well as mediation models may apply. Clearly, rumination and intrusions are mutually reinforcing one another. Rumination about intrusions indeed seems to play a role in the maintenance of depression symptoms. This might suggest that treatments for individuals struggling with or at risk for depression symptoms should not only focus on intrusions, but also on the way people deal with or cognitively respond to such intrusive memories.

Telephone cognitive-behavioral therapy for subthreshold depression and presenteeism in workplace: a randomized controlled trial

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Introduction: It is estimated that two-thirds of the societal cost of depression is incurred in the workplace as lost productive work time [1]. Minor depression or subthreshold depression, although less symptomatic than full major depression, is also associated with substantial functional impairment and, due to its greater prevalence, may be responsible for twice as many disability days in toto than major depression per se [2]. Cognitive-behavior therapy (CBT) has been shown to be effective in subthreshold depression [3] but there are pragmatic barriers for its wider dissemination in the workplace. In this randomized controlled trial, we aimed to examine effectiveness of telephone CBT for subthreshold depression and associated loss in work productivity in comparison with standard employee-assistance program (EAP).

Methods: Inclusion criteria were (1) full-time employees, (2) age between 20 and 57, (3) K6 score of 9 or more and BDI-II score of 10 or more at screening. Main exclusion criteria were (1) current treatment for a mental health problem, (2) current major depression as ascertained by CIDI, (3) bipolar disorder or substance dependence. The subjects providing written informed consent were randomized centrally to (1) eight sessions of telephone CBT for subthreshold depression and associated loss in work productivity in comparison with standard employee-assistance program (EAP).

Results & discussion: 3105 employees were screened, of whom 118 were eligible and provided informed consent. 58 were randomly assigned to telephone CBT and 60 to TAU. The primary outcomes will be opened in April 2011 and the results will be reported at the Conference.


Cognitive risk factors for postpartum depression

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Introduction: Postpartum depression (PPD) is not uncommon (prevalence of 13%) and may have serious consequences for the woman and her child. Identifying the cognitive mechanisms underlying PPD and their interrelationships may help developing (more) effective treatments. In a prospective study, we focus on four cognitive factors that were associated with major depressive disorder in previous research and might therefore be considered as potential risk factors for PPD: (i) rumination, i.e. repetitively thinking about your feelings and their possible causes, meanings, and consequences, (ii) intrusions, i.e. very specific memories or thoughts that come into your mind involuntarily, (iii) overgeneral memory (OGM), i.e. the tendency to retrieve autobiographical memories in a general rather than a specific way when asked to voluntarily retrieve a specific memory and (iv) cognitive inhibition (CI), i.e. the mental capacity to ignore interference of internal distracters like thoughts and memories. Because an independent series of studies demonstrated a causal relationship between rumination and OGM (e.g., Watkins & Teasdale, 2001) and between rumination and intrusions (e.g., Guastella & Moulds, 2007), we hypothesize that rumination is a common factor, underlying both intrusions and OGM. Moreover, we hypothesize that (a lack of) CI is responsible for the negative impact of rumination on intrusions and OGM.

Methods: During the third semester of pregnancy [T1], 50 women administered the autobiographical memory test (AMT, measurement of OGM) and a task measuring CI, and filled out some questionnaires regarding depression, rumination, and intrusions. At 12 [T2] and 24 weeks [T3] after delivery, participants fill out questionnaires on giving birth, (postpartum) depression, and intrusions regarding delivery. Expected results. All participants will be at T2 in July, which will allow us to discuss the first results at the congress. We expect to find significant correlations between the level of rumination, intrusions, OGM, CI and depression symptoms [T1]. We expect that the correlation between OGM and intrusions will disappear once controlled for rumination or CI. More importantly, we expect that women experiencing more rumination, more intrusions, more OGM and a poor CI [T1] will have a greater chance of developing PPD symptoms [T2].

State-dependent brain function alterations in major depression identified in relevant emotional systems

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Objectives: Major depressive disorder (MDD) is characterized by a dominant alteration of mood state that substantially interferes with the major aspects of brain functioning (APA, 2000). Neuroimaging studies have provided evidence for both brain functional and anatomical abnormalities in MDD patients within the brain systems relevant to mood regulation (Drevets, 2008; Mayberg, 1997, 2003; Phillips, 2003; Savitz, 2009). Although functional Magnetic Resonance Imaging has recently emerged as a useful technique to assess the brain’s functional organization during ongoing states (Fox, 2007), abnormalities in state-dependent “functional connectivity” have been only partially studied in depressed patients (Anand, 2005; Greicius, 2007). We aimed to characterize resting-state functional connectivity abnormalities in MDD patients within well-characterized emotional brain networks using an analysis guided from the patients’ anatomical alterations identified in the structural MRI.

Methods: A total of 27 patients and 27 healthy subjects matched for age, gender, and years of education were assessed. Anatomical alterations were identified using conventional voxel-based morphometry tools that served to identify the regions of interest for “seed-based” functional connectivity analyses.

Results: We found significant functional connectivity reduction in most networks related to MDD pathophysiology, congruently with a dominant hypo-functional brain state. Areas affected included the amygdala-hippocampal region, basal ganglia, insula-operculum region, dorsalmedial frontal cortex, default mode network and the orbitofrontal cortex. Functional connectivity alterations partly correlated with the overall clinical severity of the depressive episode assessed by means of the Hamilton-17 scale (total score). Relevantly, significant increase in functional connectivity was also observed between structural critical to MDD, which are part of the the basic mammalian threat-processing system, involving the subgenual anterior cingulate cortex, the hypothalamus and the amygdala.

Conclusion: As a novel approach, the anatomically-guided assessment of functional connectivity in MDD patients was useful to comprehensively identify relevant alterations compromising the intrinsic brain dynamic organization characterizing the depressed mood state.

Self-discrepancy affects Autobiographical Memory Specificity

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Objectives: Research using a cue word paradigm has consistently shown that depression is associated with difficulties in retrieving specific autobiographical memories, a phenomenon called overgeneral memory (OGM). In general, a distinction is made between two types of memories. A specific memory refers to an event that occurred at a particular time and place and lasted for a day or less (e.g. “When my grandmother and I went to a football match for the first time last Sunday”). In contrary, categorical memories summarize several similar events (e.g. “When we watch a football match on TV on Sunday”). This categorical or overgeneral autobiographical memory bias may represent a relatively stable marker of vulnerability to depressive episodes. Inspired by previous work stating that depressed feelings are related to a perceived discrepancy between attributes of the actual and the ideal self, the present study aimed to investigate the hypothesis that cues bringing discrepancies between the actual and ideal selves to the foreground might promote or facilitate the recall of overgeneral (instead of specific) autobiographical memories.

Method: In two studies, students provided autobiographical memories in response to 10 high discrepant and 10 low discrepant words (e.g. optimistic versus sportive), using a Minimal Instructions AMT. Participants also administered questionnaires on depressive symptoms in the past (MDQ) and present (BDI-II) and on rumination (RRS).

Results: As predicted, results in both studies showed an effect of cue word discrepancy on the specificity of autobiographical memories such that participants retrieved less specific and more overgeneral memories in response to high discrepant words as compared to low discrepant words.

Conclusion: The findings are discussed in terms of the Self-Memory System (SMS) of Conway & Pleydell-Pearce (2000) as a conceptual framework of autobiographical memory. Understanding the relationship between self-discrepancy and autobiographical memory may have significant treatment implications for depressed patients. Since OGM is found to be a vulnerability factor for depressive relapse, therapies focusing on prevention could incorporate the importance of self-discrepancy.

Attachment-related memory biases: The role of attachment representations and depression

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Introduction: Attachment theory states that attachment experiences are stored in a mental model, which has been shown to function as a cognitive schema. Although research shows that attachment schemas influence attentional processing, less is
known about the influence on memory processes. Following attachment theory, and similar to findings concerning depression-related memory biases, one can expect to find a more negative memory bias in insecurely compared to securely attached children. Therefore the current study examined whether children’s attachment representations are linked with a negative mother-related memory bias.

**Method:** Fifty general population children (aged 10–12) completed the Trust scale of the People In My Life Questionnaire, the Child Depression Inventory and an adapted version of the Self-Referent-Encoding-Task in which they had to decide whether a set of words was descriptive for the relationship with their mother instead of self-descriptive, followed by a recall task in which memory bias was computed as the difference between the proportion of positive versus the proportion of negative recalled mother-referent words.

**Results:** Both depression and trust in the availability of mother were related to memory bias, with higher depression and lower trust scores being linked with a more negative memory bias. However, the effect of depression disappeared when controlling for trust, although vice versa the effect of trust became even stronger when controlling for the effect of depression. Finally, a significant interaction effect was found, showing that the effect of trust on mother-related memory biases is more pronounced in low depressive than in high depressive children.

**Discussion:** These findings confirm the hypothesis that cognitive attachment schemas influence attachment-related memory biases. Furthermore, this study shows the importance of considering the influence of attachment in the development of depression and related cognitive phenomena, advocating a more pronounced focus on attachment relationships in existing prevention and treatment techniques.

**Expected Results:**
1) the incidence of PND in this research is the same compared to the data currently present in literature; 2) the depression indicators detected in the pre-delivery stage are forewarning of PND; 3) people with secure attachments in their early relationships are less depressed than others who had a more insecure attachment to their parents in childhood.

**Conclusion:** This study wants to underline the importance of helping mothers during pregnancy in order to allow them to elaborate their own negative experiences as children regarding attachment, determining the possibility to break up the dysfunctional cycle of transmission of insecure attachment in generations.


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**P121**

Inhibition of return for negative and neutral words in depression

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For many years, previous studies have supported that depressed people have attentional bias to negative stimuli. However, there are still two issues which need further research. First, time course of attentional bias is unclear. Although recent research reported that the attentional bias in depression was observed only when longer stimulus presentations were set, few studies investigates the time-course effect. Second, it is not clear whether depression influence the inhibition of return (IOR) in spatial cueing task. IOR refers to an effect which makes reaction times slower when attention is once disengaged from cued place. Whereas depressed participants showed lower effect of IOR only for negative stimuli in previous research because the stimuli hold attention, some recent studies showed different pattern of IOR observed among people with varied depression severity; for example, people who recovered from depression showed IOR on positive stimuli. Furthermore, in some recent anxiety studies, no effect of stimuli valence was observed. To address these issues, we used emotionally modified cueing paradigm (Posner, 1980) used in Koster et al. (2005), which is especially suitable for investigating IOR. Additionally, in order to research the time course of attentional orienting, varied presentation times were set (250ms, 500ms and 1500ms). The results showed that there was no interaction between the effects of emotional valence and depression while the IOR was dependent on the degree of depression. Regardless of presentation time and emotional valence, depressed participants wholly showed lower inhibition of
Attachment Style as a Predictor of Treatment Outcome in Behavioral Activation for Depressed Adolescents


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**Introduction:** Behavioral Activation (BA) is a promising psychosocial treatment for major depression in adults and adolescents. BA helps patients implement behavioral changes that increase positive environmental reinforcement and decrease avoidant coping strategies. Improving social support is often a major focus of treatment, and teens who respond to BA tend to report better post-treatment relationships with friends and family members. Because decreased social support is associated with depressive onset and relapse and healthy attachments are associated with psychological well-being, we hypothesize that baseline attachment style (i.e., the desire and ability to formulate secure relationships) may be related to therapeutic outcomes. Specifically, we hypothesize that individuals with more secure attachment styles will have lower depression scores at the end of treatment.

**Method:** Adolescents ages 14-17 with a primary diagnosis of major depression complete a battery of self-report measures at pre-treatment and then participate in 18 weeks of individual BA therapy. They are assessed again at post-treatment. To date, 18 adolescents (61% female, M age = 15.17 years) have entered treatment; we expect 24 participants will have completed treatment by 08/2011.

**Results:** Linear regression analyses will be conducted to determine whether baseline attachment (as measured by the Inventory of Parent and Peer Attachment) predicts end-of-treatment depression scores on the Children’s Depression Rating Scale. Repeated-measures ANOVAs will examine whether participants’ attachment scores change during treatment. Preliminary analyses indicate that higher baseline peer, but not parent, attachment predicts greater decreases in depressive symptoms at post-treatment (p < .01). Peer attachment scores did not increase significantly during therapy; however, scores trended towards a significant increase in parent attachment (p = .08).

**Discussion:** Findings will be discussed in terms of implications for personalized medicine and identification of depressed teens who are most likely to benefit from the BA treatment approach.

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**P123**

**Negative cognitive style in the achievement domain: Pathway to depression through peer victimization**

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**Introduction:** The hopelessness theory of depression postulates that individuals with a negative cognitive style are at particular risk of developing depression, and research has supported this hypothesis in adult and child samples. Additionally, peer victimization has been shown to confer risk for depression and may be particularly important during adolescence, when depression rates begin to increase dramatically. However, although preliminary evidence has suggested that negative attributions may moderate the peer victimization—depression relationship (Prinstein et al., 2005), the relationship between these risk factors has not been evaluated in the context of mediation. The present study prospectively evaluated the temporal relationship between negative cognitive style (NCS), peer victimization (PV), and depressive symptoms in early adolescents.

**Method:** Participants were a racially diverse sample of 92 adolescents (mean age 12.4 years) recruited from schools in a major metropolitan area. Participants completed an initial assessment including an evaluation of depressive symptoms (CDI) and cognitive style (Hankin & Abramson, 2002). Six months later, participants completed the CDI and a measure of peer victimization (Crick, 1999) over the period since the initial assessment.

**Results:** NCS and PV significantly predicted CDI scores at follow-up, controlling for initial CDI scores. PV fully mediated the relationship between NCS in the achievement domain and follow-up CDI scores, but did not mediate the relationship between composite NCS scores or other domain-specific NCS scores and CDI at follow-up. Additionally, achievement NCS partially mediated the relationship between PV and CDI scores at follow-up. PV did not moderate the relationship between composite or domain-specific negative cognitive styles and CDI at follow-up.

**Discussion:** Adolescents with NCS in the achievement domain may be at risk for depression as a result of PV experiences. Future research should further clarify whether NCS in the achievement domain confers particular risk for depression via generation of interpersonal stress through PV.

Depressive symptoms reduced through working memory training

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Introduction: Increasing evidence shows that a deficit in working memory could be the cause of biases in attention, memory and interpretation in depression (Joormann, 2010). This results in rumination and sustained negative mood, the core symptoms of depression. This lack of working memory ability could be solved with a working memory training. Recent research has shown that a working memory training leads to an improvement in executive processes (Klingberg, Forssberg, & Westerberg, 2002). Moreover, Klingberg et al. (2005) showed that such a training resulted in a significant reduction in the severity of ADHD symptoms in children suffering from this disorder. In the present study a working memory training was performed to reduce depressive symptoms in patients with a major depressive disorder.

Method: Sixty patients with a major depressive disorder completed a 4-week working memory training consisting of the AB-AC task, the running span task and the number-letter task during this double-blind randomized clinical trial study. Their scores were compared on the SCID-I Depression module, BDI-II, Hamilton Rating Scale, Rumination Response Scale, Autobiographical Memory Test, an emotional Sternberg task and Symmetry Span before and after training and with the control group (N = 60) who performed the working memory training without an increasing memory load. A mood induction was used on the post-test to measure mood reactivity.

Results: On the post-test the experimental group showed less depressive symptoms, rumination and memory specificity. Their working memory was improved. The mood induction resulted in a more positive result on the ambiguous sentences for the experimental group.

Discussion: These results indicate that working memory is a crucial element in the treatment of depression. This easy intervention could be developed in a new therapy when more positive results are found. More research has to be done to the possibilities of this training by dysphoric, bipolar and individuals in remission. Another useful possibility of this training by dysphoric, bipolar and individuals in remission. A mood induction was used on the post-test to measure mood reactivity.


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Incremental cost-effectiveness analysis of brief CBT, panic management intervention and pharmacotherapy for panic disorder in patients presenting to emergency rooms for non-cardiac chest pain

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Objectives: The objective of this study was to examine the relative cost-effectiveness ratios of empirically supported treatments for panic disorder versus the usual care, in patients presenting to an emergency room with a chief complaint of non-cardiac chest pain. Previous studies have demonstrated the effectiveness of cognitive-behavioral therapy (CBT) and pharmacotherapy for patients with panic disorder. Incremental cost-effectiveness analysis provides an additional source of information to guide clinical decision making.

Method: Sixty-nine patients (Mean age = 42 years old) presenting with non-cardiac chest pain and meeting the criteria for panic disorder were recruited from three emergency rooms in Quebec (Canada). Patients were randomly assigned to 4 conditions, receiving either 1) treatment-as-usual (n = 15); 2) brief CBT consisting of 7 hours of individual therapy (n = 19); 3) a 1 session CBT-based panic management intervention (2 hrs.) consisting of psychoeducation and self-help guide to take home (n = 24); or 4) a 6-month pharmacological intervention (40 mg of Paroxetine) (n = 11). The primary outcome variables were the intensity of symptoms on the Anxiety Disorder Interview Schedule for DSM-IV (ADIS-IV) and the total direct and indirect cost of the treatment. The assessment periods included pre-treatment, post-treatment, 3-month and 6-month follow-up.

Results: Results show significant clinical and statistical improvement in intensity of symptoms from baseline to post-treatment, 3-month and 6-month follow-up, with no significant differences between treatment conditions. Direct and indirect costs of treatment are CN$558.03 (SD = 207.13) for the brief CBT, CN$174.50 (SD = 3.32) for the 1 session CBT-based panic management intervention, and CN$510.41 (SD = 211.14) for the pharmacological intervention. The incremental cost-effectiveness ratios reveal that the single CBT session represents the most cost effective treatment method, followed by the pharmacological intervention and then the brief CBT.

Conclusion: The specific interventions were associated with clinical improvement compared to usual care. The 1 session CBT-based panic management intervention, with a good cost-effectiveness ratio, is a promising intervention for patients with panic disorder in the emergency room.
Differences between Men and Woman in their Perception of their Marital Problems at the beginning of Matital Therapy

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**Objectives:** The purpose of this study was to know if there are differences between men and women in their perceptions of their couple problems just before beginning marital therapy or not. In the case that differences appear, the second objective will be to study those differences so that we can decide what clinical techniques will be more effective during the treatment.

**Methodology:** We worked with 125 couples that seek for therapy. None of them have any type of psychological problem according to the DSM IV diagnostic criteria. We differentiated the couples by the years of the relationship, so we made 5 groups: A (from 0 to 4 years), B (from 5 to 9), C (from 10 to 14), D (from 15 to 19) and E (more than 20). A clinical behavioural therapist provided them with the questionnaire Premarital Inventory (complete version) created by R. Stuart. We evaluated the following areas: social, emotional interaction, mutual confidence, communication, the way of handling domestic work, free time, the way of making the decisions, managing the conflicts and critical issues, the education of kids, and, finally, the management of economical issues. Additionally, all of the couples went through a clinical standardized interview to evaluate their history, their present conflicts and the expectatives they had for the future of their relationships and the work in marital therapy. The statistic analysis consisted on the variance analysis ANOVAs.

**Results:** showed that men and women differed in their perception of their marital problems. Women showed higher level of insatisfaction. These differences were significant in the following areas: Women perceived more insatisfaction than men in the area of the time they spend together, the free time and communication area. Men showed significant differences in the sexual interaction.

**Conclusion:** There is a significant difference in the perceptions of men and women of their marital problems. It is clear the implication of this finding for the evaluation and treatment of marital problems.

**Gurman,a.s. (2009) "Clinical Handbook of Couple Therapy". N.Y. Guilford Press**

Verbal Processing in Down Syndrome

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**Introduction:** The objectives of this study were to examine verbal processing in Down syndrome and analyze if there is a specific verbal deficit in people with Down syndrome in comparison with people who have intellectual disability due unknown aetiologies. Several studies have showed people with Down syndrome have a poorer verbal processing in comparison with people who have intellectual disability due other aetiologies (Fidler, 2005).

**Method:** The sample was composed of 60 participants with moderate intellectual disability, all of them users of an occupational center dedicated to gardening. They were divided into two groups. The first group was composed by 30 users who presented a diagnosis of Down syndrome (regular 21 trisomy in their karyotype) and the second group was composed by 30 users without Down syndrome matched on age, sex and intellectual level. Each of the participants carried out the Peabody Pictures Vocabulary Test -PPVT- (Dunn, 1981), the Boston Naming Test – BNT- (Kaplan, Goodglass, & Weintraub, 1983), the Raven’s Coloured Progressive Matrices (Raven, Court & Raven, 1983) and the Wechsler Intelligence Scale for Children -WISC-IV-(Wechsler, 2003).

**Results:** The analysis revealed that there were significant between-group differences in receptive vocabulary (PPVT), verbal short-term memory (digit span) and in the Verbal Comprehension Index (VCI) but there were not significant between-group differences in naming (BNT) and nonverbal-IQ tasks (WISC-IV, Raven).

**Discussion:** These results highlight those adults with Down syndrome showed significantly poorer verbal short-term memory and receptive vocabulary skills but not in the naming task which are consistent with the results of other studies about the verbal processing and neuroimaging studies in people with Down syndrome.

**Fidler DJ. The Emerging Down Syndrome Behavioral Phenotype in Early Childhood: Implications for Practice. Infants & Young Children 2005; 18 (2): 86–103.**
Children’s fear reactions to the 2009 Swine Flu pandemic: The role of threat information as provided by parents

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The purpose of the present study was to investigate the contribution of threat information as provided by the parents to the development of children’s fear within the context of the 2009 Swine Flu pandemic. Normal school children aged 7 to 12 years (N = 223) and their parents completed questionnaires to measure fear of the Swine Flu and general fearfulness for medical affairs. Children and parents were also asked to indicate to what extent parents had provided children with threat-related information about this disease. Results indicated that children’s fear of the Swine Flu was significantly related to parents’ fear of this disease. Further, it was found that parent’s transmission of threat information was positively associated with children’s fear and that this link remained significant when controlling for other sources of information (i.e., media, friends, and school) or direct experience with the disease. Most importantly, results showed that threat information as provided by the parents played a role in the association between parents’ and children’s fear.

Askew et al, Clinical Psychology Review 2008; 28:1249
Bögels et al, Clinical Psychology Review 2006; 26:834
Field et al, in J.A. Hadwin & A. P. Fields (Eds.), Information processing biases and anxiety: A developmental perspective 2010; 253
Muris et al, Clinical Child and Family Psychology Review 2010; 13:129
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Rachman, Behaviour Research and Therapy 1977; 15:375

Temporal Ordering of Substance Use and Delinquency in Psychiatrically Hospitalized Adolescents

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Introduction: There is considerable evidence linking substance use and delinquency among adolescents. Understanding the onset and temporal ordering of these co-occurring problems is particularly important among younger adolescents with psychiatric problems, since these youth are at elevated risk for the development of delinquency and substance use. Thus, the goal of this study was to examine the longitudinal relationship between substance use and delinquency in a sample of psychiatrically hospitalized adolescents. We hypothesized that delinquent behavior and frequency of substance use would have reciprocal effects over the 18 month period following hospitalization. Consistent with prior studies, we expected that both delinquent behavior and frequency of substance use would demonstrate significant stability effects over time. We examined the longitudinal relationship for both alcohol and marijuana use.

Methods: To test the study hypotheses, a sample of 109 early adolescents, aged 11 to 14 years, was assessed at intake to a psychiatric hospital, 9 months post-treatment, and 18 months post-treatment. Symptoms of substance use, depression, and delinquency were assessed at these time points. Two cross lagged panel models were constructed: one with days of alcohol use as the dependent variable and a second with days of marijuana use as the dependent model.

Results and Discussion: Results of the analysis provided partial support for our primary hypothesis. The cross-lagged panel model for days of marijuana use found that deviant behavior predicted subsequent marijuana use, but marijuana use did not predict subsequent deviant behavior. Counter to our expectations, no predictive effects were found between alcohol use and deviant behavior over time. Results of our model suggested that alcohol use and deviant behavior were correlated at two of the three time points, but that the variables did not have a predictive relationship over time.
Trust in Availability of Mother and Children’s Interpretation of her Care-giving Behaviors in Middle Childhood

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Objective: Attachment theory assumes that children’s experiences during interactions with parents are stored into an Internal Working Model (IWM) that guides later attachment behavior. The finding that an IWM consists a secure base script, confirmed the assumed similarity between the IWM and the cognitive schema concept. This leads to the idea that attachment-related information processing biases will influence an individual’s attachment behavior. This study investigates (1) whether trust in availability of mother is related to a biased interpretation of the interaction with mother. Furthermore, (2) it investigates whether parenting behaviors are related to this interpretation bias, and (3) whether this association is mediated by trust in availability.

Method: Children (N=103) completed questionnaires; a new Interpretation Bias Task, People In My Live Questionnaire, Child Depression Inventory, Autonomy Support Scale, and Psychological Control Scale. The SPSS Macro provided by Preacher and Hayes was used with 500 resamples drawn with replacement from the original sample to derive the 99% confidence interval for the indirect effect. Depression was used as control variable in all mediation models tested.

Results: As hypothesised, the original significant effect of Psychological Control and Autonomy Support by mother on the Interpretation Bias score was reduced to non-significance adding Trust. The total indirect effects of Trust was estimated to lie respectively between .01 and .51 (p<0.01, 2-tailed) and between -.77 and -.01 (p<0.01, 2-tailed). The first model explained 13% of the variance in the Interpretation Bias score (p<0.01) and the second 12% of the variance (p<0.01).

Discussion: Results show that children who trust less in the availability of mother are more prone to interpret her behaviour in a threatening manner. Additionally, psychologically controlling and autonomy supportive parenting styles were indeed related to this interpretation bias as well. But in line with previous research on information biases these associations were completely mediated by trust in availability.

Relationships between Dysfunctional Beliefs about Physical Appearance and Body Dissatisfaction

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Objectives: The present study was to investigate the correlations between the subscales of appearance schemas (AS) and body checking cognitions (BCC), and the subtypes of body dissatisfaction.

Method: A questionnaire survey consisting of the scales of AS, BCC, dissatisfaction with one’s body size and the entire body, and anxiety about the entire body was conducted with 255 female undergraduate students in Japan.

Results: Pearson’s correlation coefficients were computed for AS and BCC with other measures to assess different types of body dissatisfaction. Results showed that the self-evaluative salience (SES) subscale of AS and the Safety Beliefs and Body Control subscales of BCC were significantly and positively correlated with dissatisfaction with the body size (r=.27, r=.41, r=.43, respectively; all p<.01). However, the motivational salience (MS) subscale of AS and the Reassurance subscale of BCC had no significant correlation with any type of body dissatisfaction. Further analysis was performed using multiple regression analysis with SES and the Safety Beliefs and Body Control (SBBC) as independent variables and the different types of body dissatisfaction as a dependent variable. Results showed that both SES and SBBC were significantly and positively associated with dissatisfaction with the entire body (β=.20, β=.17, respectively; all p<.01). However, only SBBC was significantly associated with dissatisfaction with the body size (β=.39, p<.01). Similarly, only SES had a significant correlation with anxiety about the entire body (β=.45, p<.01).

Discussion: The present study showed that the SES subscale of AS and the Safety Beliefs and Body Control subscales of BCC were associated with the different types of body dissatisfaction. The results suggested that it is important to deal with different kinds of beliefs about physical appearance depending on the content of body dissatisfaction.

P132

Explicit goals of patients with anorexia and bulimia nervosa

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Objectives: Patients with eating disorders tend to be ambivalent about initiating and maintaining psychotherapy, because weight gain often contradicts their other goals in life. Therefore, identifying and promoting personal goals might be of particular importance in the treatment of anorexia and bulimia nervosa patients. However, the relevance of individual goals for women with eating disorders is yet to be studied. The aim of this study was to examine explicit goals of female patients with eating disorders.

Methods: Psychotherapy inpatients with anorexia (n = 27) and bulimia nervosa (n = 20) as well as healthy females (n = 56) worked on an idiographic-oriented question concerning their goals in life. They were asked to express what they would like to reach by old age and list goals relating to the importance of various aspects of life. Striving Instrumentality Matrix as well as a short version of Incongruence Questionnaire were used to measure conflicts of goals.

Results: Patients with anorexia and bulimia nervosa pursued essentially identical goals with healthy participants and evaluated various aspects of life as equally important. Although eating disorder inpatients attributed a higher instrumentality to their goals than healthy females (p<.001), they displayed distinct deficits concerning the realisation of motivational goals (p<.001).

Conclusion: The promotion and realisation of goals in life deserves to be intensified in the treatment of eating disorder patients.

P133

Adaptation and validation of the Pros and Cons of Eating disorders scale (P-CED) in German women with eating disorders

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Background: Ambivalence towards change is a core aspect of eating disorders. The P-CED (Serpell et al., 2004; Gale et al., 2006) was developed to quantify ambivalence in women with Anorexia and Bulimia Nervosa. The P-CED is a decisional balance scale that consists of 14 subscales measuring eight perceived benefits (e.g. feeling safe) and six burdens (feeling guilty) of eating disorders. The aim of the present study was to validate an adapted German version of the P-CED.

Method: The psychometric properties (internal consistency, test-retest-reliability, sensitivity to change, convergent and discriminant validity) of the German P-CED were investigated in two samples of eating disordered women, n=55 inpatients and n=76 self-identified persons with eating disorders recruited via the Internet. The inpatients completed the P-CED and the Eating Disorder Examination-Questionnaire (EDE-Q) at admission. The participants recruited online, completed same measures at study onset and six to eight weeks later. In the meantime, 48 participants received an online delivered short intervention while the other 28 participants did not receive treatment.

Results: In both samples, Cronbach’s alpha indicated good internal consistencies for each of the subscales (mean α = .78). All correlations between the two measurement points eight weeks apart were significant (r = .49 to r = .87), indicating a good test-retest-reliability. There were significant changes on nearly all of the subscales after the online program. Correlational analysis showed moderate associations between the P-CED scales and the EDE-Q and the Body Mass Index. Results showed significant differences between anorectic and bulimic patients on most of the subscales, e.g. anorectic patients consider their disorder more strongly as a skill than do bulimic patients.

Conclusion: The German P-CED is a reliable and valid measure for patients’ perceived advantages and disadvantages of their eating disorder and thus can be considered a useful tool in further research and clinical practice.


P134

Representations of eating disorders in French adolescents and implications for prevention

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Introduction: Representations and beliefs about anorexia nervosa (AN) and bulimia nervosa (BN) provide insight as to how the general population, in particular adolescents, perceive and understand eating disorders. These beliefs can provide the basis for early screening and diagnosis through observations by friends and family. The current study explores the beliefs and representations of French adolescents concerning seriousness, prognosis, and associated treatment for AN and BN as well as typical sources of information used by adolescents to understand eating disorders.

Method: 942 adolescents participated in the study (59.1% female and 40.9% male) having been recruited from several middle and secondary schools in Northern France. Participant mean age was 16.4 years (SD = 1.2). An experimenter-designed questionnaire proposing both open- and close-ended questions was created to measure representations regarding AN and BN.

Results: A majority of adolescents considered both AN and BN as a type of illness. 57.2% believed AN to be ‘often serious’ and 42.9% believed BN to be ‘serious’. The majority also perceived AN and BN as difficult to ‘cure’. Treatments associated by the participants for AN and BN were (in descending order): psychologists or psychiatrists, hospitalization, nutrition/diet counseling, support (friends and family), medications, support group. 6.4% felt that those diagnosed with AN had no need of specific treatment, contrasted with 5.6% for BN. Television and magazines were cited as the most typical sources of information for AN and BN.

Conclusion: The different results provide potential insight for the development of eating disorder prevention programs aimed at adolescents. Beliefs and representations regarding AN and BN as well
as their relative seriousness can play a role in the manifestation of some eating disorders. The results emphasize as well the role the media appears to have in providing information regarding health.


**P135**

**Automatic approach tendencies towards food are predictive for the course of Anorexia Nervosa**

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**Objectives:** It has been proposed that loss of automatic motivational orientation towards food is of major importance in Anorexia Nervosa (AN) patients’ success in minimizing their caloric intake. In line with this, a recent study using a computerized Approach-Avoidance Task (AAT) showed that AN patients displayed weaker automatic approach tendencies toward high (or low) caloric food items than healthy controls (Veenstra & de Jong, 2010). To get more insight in the direction of this relationship, the present study used a longitudinal approach and tested whether the level of automatic approach tendencies has predictive value for the severity of AN symptoms at one year follow up. More specifically, we tested the prediction that the lower the automatic approach tendencies at baseline the more intense the symptoms of AN at follow up (as indexed by participants’ BMI).

**Methods:** To test this hypothesis, the Affective Simon Task-manikin version (AST-manikin) was administered to measure automatic approach tendencies towards high or low caloric food in young AN patients (n = 75). Patient’s BMI (as an objective index of underweight) was determined both during baseline and at one year follow up.

**Results:** In line with the hypothesis, preliminary results suggests that relatively weak approach tendencies at baseline were predictive of relatively poor treatment outcome: patients with weaker or absent approach tendencies at baseline showed a lower BMI at one year follow up. This relationship was independent of the patient’s BMI during baseline.

**Conclusion:** The findings support the view that reduced automatic approach tendencies may contribute to the maintenance of AN-symptoms and can at least partly explain why some patients benefit from their therapy and other patients do not improve. Moreover, the finding that relatively weak approach tendencies at baseline were associated with relatively intense symptom level following one year, suggests that it might be important to design interventions that directly enhance automatic approach tendencies. Accordingly an important next step for future research would be to focus on the possibility of retraining approach tendencies for food in AN patients to increase their automatic motivational orientation towards food.

Veenstra, & de Jong, Manuscript submitted for publication, 2010

**P136**

**Temporal attentional bias in restrained eaters**

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**Objectives:** Although so-called restrained eaters intend to limit their caloric intake, they frequently fail and indulge in exactly the foods they want to avoid. It has been proposed that restrained eaters are more attentive to food than healthy individuals. Selective attention for food could be related to an approach-related motivational state and elicit craving, which may subsequently be responsible for maintenance of a dysfunctional pattern of eating. So far, research in the context of attentional bias in restrained eaters has mainly focused on the spatial component of attention. However, attentional processes do also have a temporal dimension. Relevant stimuli may not only be readily detected, but may also remain longer in the centre of attention, or may more easily enter working memory and may processed preferably at the expense of current task performance. Both types of temporal attentional biases may enhance the processing of food cues, thereby lowering the threshold for craving and subsequent overeating. The present study was designed to examine whether such temporal attentional bias (AB) is indeed involved in unsuccessful dieting.

**Methods:** Three different types of Rapid Serial Visual Presentation Task (RSVP) were administered in 80 female first year psychology students who varied in their motivation to refrain from food as indexed by their scores on the Restraint Scale (RS). The RSVPs consisted of a large stream of pictures (118 msec/item) that contained one or two target pictures (blue framed food or neutral pictures). Following each stream participants had to identify the content of the target pictures and temporal AB was indexed by the pattern of errors/missed targets. There were 2 types of dual target RSVPs. To test whether identification of food would increase the attentional blink, in one type the T2 was always neutral whereas the T1 was food or neutral. In the second version T1 was always neutral whereas T2 was food or neutral, allowing to test whether food would survive the typical attentional blink. Finally, a single neutral target RSVP with food or a generally negative picture (reflecting medical trauma or violence) as distractor was used to test whether specifically for restrained eaters food would automatically attract attention thereby hampering subsequent target detection.

**Results:** The study just finished data acquisition. The prediction is that restrained eaters will show a prolonged attentional blink when food is T1, whereas a reduced attentional blink is expected when food is T2. We anticipate that in the single target RSVP people will generally show poor performance when the negative stimulus is presented as task-irrelevant distractor (“emotion-induced blindness”), whereas only restrained eaters will show a similar deterioration in task performance when food stimuli were presented as distractor.

**Conclusion:** If restrained eaters indeed are characterized by these types of temporal attentional biases for food cues, this may help explaining why restrained eaters often fail in their attempt to limit their food intake. Enhancing working memory capacity and/or attentional control might then be relevant topics for treatment and prevention.
Renewal after counterconditioning: Divergence between expectancy and liking
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Introduction: Previous research (Van Gucht et al., 2010) showed that a cue, initially paired with chocolate consumption, did not cease to elicit craving for chocolate after extinction (repeated presentation of the cue without chocolate consumption), but did so after counterconditioning (repeated pairing of the cue with consumption of a highly disliked liquid, Polysorbate 20). This effect persisted after one week. Counterconditioning moreover was more effective than extinction in disrupting reported expectancy to get to eat chocolate, and also appeared to be more effective in reducing actual cue-elicited chocolate consumption. Phenomena that thwart the endurance of extinction can similarly affect the effect of counterconditioning. Like extinction, counterconditioning involves second learned information, which does not necessarily destroy the information that was learned first. Therefore, we will investigate, whether counterconditioning is also sensitive to contextual control and thus renewal.

Method: We will work with our chocolate craving paradigm, in which the AAA-group receives acquisition, counterconditioning and test for renewal in the same context A, and the ABA-group receives counterconditioning in a different context B. We will also include a classic extinction-group, to evaluate whether renewal after counterconditioning is smaller than after extinction.

Results: Data indicate that a context switch after extinction/counterconditioning (ABA-groups) results in a return of the expectancy that was reduced both after extinction and after counterconditioning. However, acquired liking does not change through an extinction procedure but does so after counterconditioning, but remains intact even after a context switch.

Discussion: These results can provide useful suggestions for improving treatments in clinical practice so as to help reduce relapse rates, not only with regards to eating behaviour, but also regarding other forms of appetitive behaviours. Clinical implications will be discussed.
Van Gucht et al, Emotion 2010; 10: 688-95

Eating disorders, physical activity and obesity in women and men in Norway
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The association between eating disorders, physical activity and obesity among Norwegian men and women has received increasing interest during recent years. Eating disorders (ED) is commonly referred to among women. A modest number of studies have focused on ED in males. In our material, data for both genders will be presented. Objectives: The main aim of the present study was to study the relationship between eating disorders, physical activity and obesity among Norwegian men and women in the general male population in Norway.

Methods: In the present study, a total of 11000 postal questionnaires were sent out at 3 different time points; 1991 (women 18-60), 2004 (women 18-65), and 2005 (men 18-65 years) in Norway. The total response rates were 74.9%, 45.8%, and 41%, correspondingly.

Results/Conclusion: Preliminary analyses suggest less increase in the prevalence of eating disorders among women between 1991 and 2004 than expected. More men than expected with symptoms of ED. Detailed prevalence numbers for the different eating disorders according to DSM-IV, age cohort analyses, as well as analyses on the relationships between eating disorders, physical activity, and obesity will be presented in September.

Age differences in eating disorder risk factors in 9- to 13-year-old children
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Objective: Studies indicate that disturbed eating behaviour and other factors associated with increased risk for eating disorders occur in very young age. The aim of the present study was to investigate age differences in eating disorder risk factors in 9- to 13-year-old children.

Methods: Altogether 359 children (210 girls and 158 boys with mean age 11.1) from grade 3 to 7 volunteered to participate. Children were asked to fulfill the questionnaire of 27 items assessing psychological factors as well as eating habits associated with eating disorders.

Results: The prevalence of body dissatisfaction, attempts to regulate body weight either by dieting, starvation or change of eating habits increased with age among girls. Attempts to regulate body weight was associated with pubertal status in girls. Although there were no significant age differences in perceived social pressure to be thin, it was in further investigation found that older girls perceived more pressure to be thin from the media as compared to younger girls. Perceived social pressure to be thin was associated with low self-esteem and higher BMI in both gender, however in girls also with pubertal status and in boys with teasing about appearance.

Conclusion: These results refer to the importance of planning prevention programmes for eating disorders already for children in prepubertal age to prevent the worsening of symptoms associated with eating disorders.
Marital support, psychological distress and disability in older couples

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Introduction: Little is known about the influence of marital perceived support (MPS) on psychological distress and disability and inversely among older couples. Disability is often defined as difficulties in ability to perform activities of daily living (ADL) needed for self care, instrumental activities of daily living (IADL) and as problems of basic mobility. Depression seems to be an important risk factor of disability and vice versa. Results from different studies are not consistent: some show that depression is a predictor of disability for both men and women, whereas others reveal that disability has an important effect on depressive symptoms. Furthermore, results among different studies of the influence of marital perceived support on incidence of disability are even less consistent. Some research has shown that marital support protects against developing disability in older men and women. To increase our knowledge of the subject, this presentation focuses on the longitudinal association (over an 18-month period) between psychological distress, marital perceived support and disability among a representative sample of 394 couples aged 65 years and over and living in Quebec (Trudel et al. 2010). The following questionnaires were used: Marital Perceived Support (perceived positive and negative marital support), the Psychiatric Symptoms Index (psychological distress) and a questionnaire measuring disability and physical health. An exploratory longitudinal design was used to test the two hypotheses. First, marital perceived support and psychological distress at time 1 as independent variables predict disability level as a dependent variable for both sexes 18 months later. Second, marital perceived support and disability level at time 1 as independent variables predict psychological distress as a dependent variable.

Statistical strategies: Multiple hierarchical regressions were used. Results confirm the first and second hypothesis for both sexes after control for relevant demographic variables.

Discussion and Conclusion: This research indicates the importance of preparing couples to a better marital life after retirement.


Nonagenarian longitudinal study of Active Aging. Programs development contribution to improve quality of life and well-being in the elderly

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Objective: The objective of this study was to analyze, within three years longitudinal study (90+ project), the main determinants of active nonagenarian ageing to design intervention programs.

Method: A sample of 188 independent individuals older than 90 years (mean age= 92.9, 67 men and 121 women) living in “the community” (N=76) or in residences (N=112). They were assessed through the European Survey on Aging Protocol (ESAP) by collecting anthropometric, health and life styles, bio-behavioral, and psychological and social data. 6-14 months after the baseline, 104 individuals were re-assessed (42 men and 62 women). Mean age = 93,3 (91-103). Active Ageing classifying criteria was as follow: satisfied or very satisfies with life, have a good o very good perception of health, functional capacities preserved and MMSE ≥36.

Results: Regression analysis was carried out to predict which factor, evaluated on the baseline, explained the one year later subjects active ageing. Hearing capacity, associative learning and productive activity, were the active ageing nonagenarian strongest determinants.

Conclusion: Physical, cognitive and productive factors predict active aging in the very old individuals. The programs to promoting the active aging must emphasize the need to improve the active participation of elderly in productive activities such as grandsons care, charity, daily tasks, cognitive stimulation programs have been applied for years with proven results.
Feasibility and Effectiveness of Psychosocial Resilience Training for Older Adults: A Pilot Study

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Introduction: Despite many studies on the characteristics associated with resilience, there is little research on interventions to promote resilience in older adults. The aims of this study were a) to gather preliminary information regarding the feasibility of implementing a group psychosocial resilience training program in a community center for older people and b) to assess if program would potentially promote well-being of older adults.

Method: The program is based primarily on results from research in the areas of psychological well-being, psychological resilience, emotion, positive psychology (Seligman and Csikszentmihalyi, 2000) and successful aging (Lachman, Rosnik & Röcke, 2009). The program targets six protective factors identified from empirical evidence: Strengths, Positive emotions, Cognitive flexibility, Sense of purpose and life meaning, Social support and Active coping. Resilience enhancement strategies reflect core mindfulness and cognitive-behavioral therapy. The orientation program is experiential and sessions involve psychoeducation, discussion, experiential exercises, and home assignments. Eighty participants older than 65 years completed 9 × 1.5 h group sessions over 9 weeks. Participants were divided into the experimental and waiting list groups. Baseline and post-intervention assessment included self-reports and objective measures.

Results: At this time the implementation of the program is in progress nearing completion. Referring to a subsample of 16 persons can report some preliminary data. Data were analyzed using standardized mean differences and paired t-tests. There was a significant improvement between baseline and post intervention scores on measures of emotional regulation (p < 0.01), positive emotions (p < 0.1), life satisfaction (p < 0.01) and resilience (p < 0.05). Participants rated the program and materials as highly satisfactory.

Discussion: These preliminary results indicate that it is a feasible and effective program to increase community resilience and wellbeing of older people through cognitive-behavioral strategies and mindfulness.


Acceptance and Suppression as emotion regulation strategies: influence on explicit and implicit anxiety

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Introduction: Different strategies in emotion regulation influence the development, intensity, duration and expression of emotions. To date, few studies examined the relationship between different emotion regulation strategies and psychological disorders. Even though research yielded controversial results, the suppression of emotion seems to be related to negative affect, low levels of social adaptation as well as decreased well-being (Gross & John, 2003). The acceptance of emotion on the other hand was successfully implemented in acceptance based behavioural treatment interventions (Hayes, Strosahl, & Wilson, 1999). The goal of the current study is to evaluate the influence of acceptance and suppression as emotion regulation styles on explicit and implicit levels of anxiety during a stressful situation.

Method: 60 high versus low anxious students were instructed to use an accepting versus suppressing emotion regulation style during an anxiety inducing situation (giving a video-taped speech). Measurements were explicit (State Trait Anxiety Inventory, Affective Style Questionnaire) as well as implicit (Affect Misattribution Procedure).

Results: Preliminary results indicate that the suppression of emotions leads to higher explicit as well as implicit levels of anxiety after a mood induction. Further results regarding the explicit and implicit measures will be presented.

Discussion: Results support prior studies and indicate that a given emotion regulation strategy influences the level of anxiety in stressful situations. The current study is the first to evaluate not only explicit but also implicit levels of anxiety in participants in relation to emotion regulation strategies. Further studies are needed to replicate the current results in clinical populations in order to increase the understanding of the interactions between maladaptive emotion regulation strategies and psychological disorders.

Cognitive Bias Modification: Learned Production Rule or Priming?

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Objectives: To examine whether Cognitive Bias Modification (CBM) using a scenario-based interpretation-training paradigm is a variant of priming or underpinned by the learning of production rules. The experiment tested whether brief (15 scenarios) versus extended (80 scenarios) training created a difference in the efficacy of CBM. Successful evaluative priming requires only minimal exposure to priming material (Ferguson, Bargh & Nayak, 2005). In contrast successful learning of a production rule requires repetitive and systematic exposure to previous examples of that rule, with greater exposure increasing the strength of learning (Grey & Mathews, 2000).

Methods: Participants were presented with either 15 or 80 valenced training scenarios. To assess whether modification to interpretation bias occurred, participants disambiguated novel test scenarios that were designed to be socially ambiguous.

Results: The training procedures were successful. Participants exposed to positive training scenarios disambiguated novel test scenarios as positive more so than those participants exposed to negative CBM training. Importantly the length of CBM training (15 versus 80 scenarios) did not further qualify the modification to interpretation style.

Conclusion: CBM employing 15 training scenarios was as equally successful as CBM employing 80 training scenarios. This outcome is inconsistent with a learned production rule hypothesis. The results show that learning, or the induction of an interpretation bias does not increase as the level of exposure to the valenced rule increases. Priming, on the other hand, which does not involve learning but rather the activation of already learnt knowledge can be equally successful with minimal compared to protracted exposure of priming material. Thus the results showing comparable CBM effects across brief and extended training procedures support the notion of a priming rather than learning mechanism underpinning interpretative CBM.


Predictive Validity of Automatic Self-Associations for the Onset of Anxiety Disorders

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Objectives: Negative self-cognitions are assumed to play an important role in the onset of anxiety disorders. Current dual process models emphasize the relevance of differentiating between more automatic and more deliberate self-cognitions in this respect. Therefore, this study was designed to test the prognostic value of both deliberate and automatic self-anxious associations as a generic vulnerability factor for the onset of anxiety disorders between baseline and 2-year follow-up. To test the disorder-specificity of negative self-associations we also measured self-depressed associations.

Method: Self-report measures of depressive symptoms, anxiety symptoms, neuroticism, and fearful avoidance were included as covariates. Healthy controls (n = 593), depressed individuals (n = 238), and individuals remitted from an anxiety disorder (n = 448) were tested as part of “The Netherlands Study of Depression and Anxiety” (NESDA).

Results: Deliberate self-anxious associations predicted the onset of anxiety disorders in all groups. Automatic self-anxious associations only showed predictive validity in individuals remitted from an anxiety disorder or in currently depressed individuals. Although deliberate self-depressed associations were related to the onset of anxiety disorders as well, automatic self-depressed associations were not. In the (remitted) patient groups only deliberate self-anxious associations showed independent predicting value for the onset of anxiety disorders together with self-reported fearful avoidance behavior. In the healthy controls, only a composite index of negative emotionality (comprising of depressive/anxiety symptoms and neuroticism) showed independent predictive validity.

Conclusion: This study provides the first evidence that automatic and deliberate self-anxious associations have predictive value for the future onset of anxiety disorders.

White Bear Against Experiential Avoidance: Factors of Negative Thinking on the Scrambled Sentences Test (SST)

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Objectives: Thought suppression (TS) is a frequently applied mental control strategy aimed at removing unwanted thoughts from consciousness. Experiential avoidance (EA) is similar, but more general construct which refers to the tendency not to remain in contact with negative private experiences. Both strategies have malignant effects on mental health if used continuously and rigidly. The aim of this study is to compare the effects of TS and EA tendencies on production of depressive cognitive content. The effects of dysphoric affect and cognitive load, factors known to undermine mental control, are also observed.

Methods: 46 students were assessed using the White Bear Suppression Inventory (WBSI); Wegner & Zanakos, (1994); the State Depression Scale (SD; Novovic et al 2010); the Action and Acceptance Questionnaire (AAQ; Hayes et al., 2004); and computerized version of the SST in randomized load and non-load conditions. Groups with high and low dysphoric affect were formed (median split on SD).

Results: GLM was performed to determine the effects of load as a within-subjects factor, and High/Low SD groups as a between-subjects factor, on production of depressive content on SST. WBSI, AAQ, and time were covariates. Among all independents, AAQ was the only significant predictor of depressive sentence
construction, independently of load condition. Interaction effects suggested that the load condition undermined significantly control over depressive ruminations in thought suppressors and currently dysphoric subjects.

**Conclusion:** Our results suggest that EA is a more pathological and less successful strategy of mental control because it is related to intrusive ruminations even in conditions in which cognitive resources are not exhausted. On the other hand, TS tendencies can guarantee freedom from depressive rumination at least when effortful processing is not significantly compromised. One implication is that AAQ, compared to WBSI, can be used as a more sensitive measure of vulnerability to depression.


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**P147**

**Is There a Link Between an Unstable Identity and Autobiographical Memory Deficits in Schizophrenia?**

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Previous literature suggests that schizophrenia is characterized by a disturbed, fragmented and/or poorly elaborated personal identity (e.g., Danion et al., 2005; De-Bonis, De Boeck, Lida-Pulik, & Feline A, 1995). Schizophrenia is also associated with a reduction of specific autobiographical memories (AM), that is, an impairment of the capacities to recall specific personal life events. This impairment is consistent with a disturbed personal identity (Riutort et al., 2003). We hypothesized that, compared to healthy subjects, schizophrenia patients have an unstable self-knowledge which is related to (1) deficits in AM and (2) anxious and depressive symptoms. Twenty seven schizophrenia patients and 27 normal subjects completed (1) a personality test (LABEL) specially designed to evaluate the stability of identity over time (2) a validated French version of the AMT (participants were asked to retrieve specific personal events in response to ten cue words) (3) the BDI and the STAI-YB to assess levels of depressive and anxious symptomatology, respectively. The analyses revealed that schizophrenia patients showed a more unstable identity (t(52)= 2.23, p=.03), reported less specific memories (t(50)= 2.16, p=.035), and more depressive symptoms (t(52) = 2.87, p=.005) than healthy subjects. However, contrary to expected, the analyses did not revealed any significant correlation between the score of identity’s stability and the number of reported specific memories neither the scores of the affective symptomatology.

The importance of the cognitive deficits as intermediate variable between an unstable identity and AM deficit is discussed.


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**P148**

**Evaluative conditioned disgust is resistance to extinction**

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**Introduction:** A growing body of literature has implicated disgust in the development of specific anxiety disorders, like spider phobia, blood-injection-injury, and contamination-based OCD. The underlying process seems to be evaluative learning (see Teachman & Woody, 2000; Hermans et al., 2002). Studies suggest that evaluative conditioned disgust may be resistant to extinction, but these mainly relied on self-report measures. The current study investigated whether evaluative conditioned disgust is resistant to extinction, using self-report and indirect measures of conditioning.

**Method:** Forty students underwent a differential conditioning task. In an acquisition phase, one picture of a neutral face (Conditioned Stimulus; CS+) was paired with a disgusting picture (unconditioned stimulus; US), while another picture of a neutral face (CS-) was paired with a neutral picture. Half of the participants then underwent an extinction phase, in which the CSs were presented again, followed by a blank screen, while the other half performed a filler task. CS pleasantness was rated before acquisition and after extinction. Expectation of the disgusting image was rated during both phases. Finally, all participants performed an Affective Priming (AP) task in which positive and negative words were categorized. The CSs served as primes.

**Results:** All participants successfully learned the association between the CS+ and US, and the extinction group also unlearned the association. Irrespective of whether participants did or did not complete the extinction phase, both groups showed a decline in CS+ pleasantness and an incline in CS- pleasantness. Crucially, in both conditions, categorization speed for negative words was lower when primed with CS+ than when primed with CS-.

**Discussion:** The findings corroborated earlier studies that mainly relied on self-report data and showed that learned disgust is resistance to extinction.
Understanding catastrophizing from a problem solving perspective

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Introduction: This prospective study aimed to explore pain catastrophizing from a problem solving perspective. In recent years, researchers have suggested that spinal pain patients who catastrophize tend to view the pain as a primary medical issue and struggle to find a medical solution, even if there is no such Eccleston & Crombez, 2007. In other words, a possible link between problem framing, catastrophizing, and problem solving behavior has been put forward. The current study investigated whether data supported this link. Furthermore, two possible models of mediation were explored. The first model was in line with the “Misdirected problem solving model” (Eccleston & Crombez, 2007) and second model was in line with the “Fear-anxiety-avoidance model” (Asmundson, Norton, & Vlaeyen, 2004).

Method: A prospective design was used. 173 people with spinal pain filled out questionnaires twice; catastrophizing and problem framing were assessed at the first occasion and problem solving behavior was assessed seven months later. The data was summarized and inspected through descriptive and correlational statistics. Next, two different approaches of mediation analyses were used to explore whether the data supported any of the proposed models of mediation.

Results: The results confirmed the link between problem solving, catastrophizing, and problem solving behavior. Moreover, both approaches of mediation analyses supported the model where catastrophizing was proposed as a mediator of the relation between biomedical problem framing and medically oriented problem solving behavior.

Discussion: The results verified the concepts included in the “Misdirected problem solving model”, but the direction of the relations were rather in line with the “Fear-anxiety-avoidance model”. These findings denote that pain catastrophizing might be viewed from a problem solving perspective, which has implications theoretically as well as clinically.


Writing about life goals: Effects on mood, rumination and the cortisol awakening response

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Background: Writing about future life goals has been shown to be associated with an increase in subjective well-being as well fewer physical symptoms (King, 2001). Writing about goals may be beneficial because it can help to bring greater clarity to one’s priorities and may thus help to reduce goal conflicts. Moreover, knowledge about one’s own goals is attributed with a central importance in terms of overcoming ruminative thinking (Martin & Tesser, 1996). Therefore, this study examined whether writing about life goals not only impacts upon participants’ mood, but is also associated with a decrease in ruminating. Additionally it was examined to what extent writing about life goals impacts the cortisol awakening response (CAR) - a neuroendocrine indicator of individual stress reactivity.

Method: 78 participants were randomly assigned to write for 20 minutes on three consecutive days either about personal life goals or a control topic. Mood was assessed immediately before and after each individual writing session. The CAR, rumination and life satisfaction were assessed at study intake and after three days of writing.

Results: Writing about personal life goals was associated with an increase in current positive mood as well as a decrease in ruminative thinking and physiological stress reactivity, compared to the writing control condition. Writing about life goals did not impact participants’ life satisfaction. Overall, the effects found are of a rather modest size.

Conclusion: Results indicate that writing about life goals can be a helpful aid in decreasing stress reactivity and increasing positive affectivity. Yet, the questions remain open as to how long-lasting the reported effects are.


A relationship between perceived self-efficacy and health-related quality of life in breast cancer patients

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Introduction: Cancer patients frequently experience multiple and co-occurring problems due to their illness and therapies. Many studies have shown that a sense of helplessness or lack of control may have profoundly negative effects on behavior, mood and physiology. Only few studies have suggested the contribution of specific psychological factors during cancer therapy. We have
focused on self-efficacy, which is a judgment of action required to deal with a prospective situation, as an important factor when considering psychological distress in breast cancer patients.

**Methods:** A total of 144 women participated in this study. All patients that were referred to a medical oncologist were asked to complete five questionnaires (GSES HADS, EORTC QLQ-C30, BR23, and KKS) at baseline, three month, and six month follow up. GSES score were divided into two groups with a median cut off point (11). Then, we performed one-way ANOVA to determine the GSES scores as independent variables for possible predictors of psychological distress and low HRQOL.

**Results:** Our response rate was 99 percent (143/144 patients). The ANOVA results showed a statistically significant difference in low role functioning, cognitive functioning, emotional functioning, social functioning, future perspective and high fatigue score, which were low GSES scores when compared to the high GSES scores ($p<0.01$). Patients who had a low perceived self-efficacy were found to have a low HRQOL compared to those with a high perceived self-efficacy.

**Discussion:** In conclusion, out results suggest that patients with a low trait self-efficacy are at risk of a low HRQOL, and self-efficacy could be used to screen and identify patients at the highest risk of experiencing psychological distress during cancer therapy.

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### Prevalence of psychiatric disorders among patients recently diagnosed with breast cancer at Landspitali University Hospital

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**Objective:** The objective of this research is to give epidemiological information about the frequency of psychiatric disorders and distress in breast cancer patients receiving treatment at Landspitali-University Hospital.

**Method:** Participants were 31 women recently diagnosed with breast cancer, age <75 (mean age 53), who underwent lumpectomy and the response rate was 73.5%. Psychological variables were assessed using The Hospital Anxiety and Depression Scale (HADS), The General Health Questionnaire (GHQ), The Impact of Event Scale (IES) and The Composite International Diagnostic Interview (CIDI) at 0-2 and 6-8 weeks after diagnosis of breast cancer.

**Results:** There was a significant difference of mean anxiety score on the HADS (Z=−3.035, p<0.01), which reduced on re-administration 6-8 weeks later. There was a significant elevation in IES full score during the same period (Z=−2.521, p<0.05). The Invasion of thoughts subscale on IES measured significantly higher 6-8 weeks following diagnosis. Results of the CIDI showed that 20% of participants fulfilled ICD-10 diagnostic criteria for a psychiatric disorder over the previous month, namely persistent somatoform pain disorder, specific phobia, general anxiety, other anxiety disorders and tobacco dependence syndrome. The lifetime prevalence of psychiatric disorders was 24%. The most common diagnosis were dependence syndrome - tobacco (48%), 16% phobia, 16% other anxiety disorders, 12% mood disorders, 12% somatoform disorder, 4% eating disorder and 4% dependence syndrome - alcohol.

**Conclusion:** The number of participants receiving psychiatric diagnosis suggests that there is a need for regular screening for distress and psychological assessment and the GHQ, HADS and IES seem to fulfill those criteria. The results of the CIDI indicate that psychiatric disorders are more common among this group than in the general population.

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### The relationship between type 2 diabetes mellitus and major depressive disorder in the elderly in Iceland: an epidemiological, population-based study. From the Age, Gene/ Environment Susceptibility “C Reykjavik Study (AGES “C Reykjavik)

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**Objectives:** ’C To examine the relationship between major depressive disorder (MDD) and type 2 diabetes (T2DM) in the elderly population in Iceland.

**Methods:** ’C The Icelandic Heart Association (IHA) initiated the Reykjavik Study in 1967, a large, population-based study (N = 30,795) which has been followed since. A randomized sample (n = 5,764) was examined from this cohort in the AGES-Reykjavik Study between 2002 and 2006. After exclusion based on criteria for the present study, 4,605 remained for analyses: 42.7% males with mean age of 76.3 years. The Geriatric Depression Scale (GDS) was used to screen for MDD, the Mini-International Neuropsychiatric Interview (M.I.N.I.) for diagnoses. Previously diagnosed T2DM was assessed with self-report, new diagnoses were confirmed with measures of fasting serum glucose (7 mmol/l). Results ’C 214 subjects received a diagnosis of MDD (4.6%) and 143 had a new diagnosis of T2DM (3.1%). 390 subjects had a previous diagnosis of T2DM (8.5%), 221 with 0-10 years of duration and 169 with more than 11 years. 36 were receiving insulin treatment (0.8%). There was a statistically significant association between MDD and T2DM (OR = 1.71: 95% C.I. 1.18 ¨C 2.49). Further analyses revealed that depression was significantly associated with previous diagnosis of T2DM (OR = 1.89: 95% C.I. 1.25 ¨C 2.86) and less with new diagnosis (OR = 1.22: 95% C.I. 0.56 ¨C 2.66). The association was stronger with longer duration of T2DM (OR = 2.17: 95% C.I. 1.22 ¨C 3.85). Association
The Effects of Pain-Related Thought Processing on Psychological Variables in Rheumatologic Care
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Objectives: Studies continually show that the effects of chronic pain on psychological adjustment are mostly dependent on how it is appraised. This was tested in the present study.

Methods: Participants consisted of 192 arthritis patients in outpatient care (mean age = 51.5 ± 12.4 years, 95 women) who rated different aspects of their pain with the Multidimensional Pain Inventory (MPI) and Pain Anxiety Symptoms Scale (PASS). Psychological adjustment was assessed with the Hospital Anxiety and Depression Scale (HADS).

Results: Bivariate- and multiple regression analyses revealed that cognitive evaluations of pain were significantly better at predicting depressive and anxious symptomatology than severity and physical pathology of pain. More specifically, depressed and anxious participants reported significantly greater pain interference (t(103) = -3.71, p < 0.001), fear of pain (t(137) = -6.55, p < 0.001) and distress relationship is highly influenced by interpretive processes related to pain. It is suggested that medical patients can be screened for psychological distress with the MPI and PASS and be taught to cope with pain by other means than medication.

Conclusion: Results provide tentative evidence that the pain-distress relationship is highly influenced by interpretive processes related to pain.

Can mindfulness be cultivated in patients with chronic and severe mental health problems? - Benefits of an 8-week Mindfulness Meditation Group Therapy Programme

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Introduction: Mindfulness Based Stress Reduction (MBSR) and Mindfulness Based Cognitive Therapy (MBCT) have been shown to improve well-being and reduce stress in people with various mental health and physical health problems. MBCT is recommended as treatment for relapse prevention in recurrent depression.

Objectives: We aimed to ascertain if a programme of Mindfulness Meditation Group Therapy for patients with chronic and severe mental health problems in a secondary care mental health service increased the cultivation of mindfulness and whether this led to reduction in patients’ perceived stress.

Methods: A group mindfulness meditation programme was offered to patients with chronic mental health problems from an outpatient secondary care mental health service. The patients for this study were referred to the group programme by psychologists in the service. None of the patients had received prior MBSR or MBCT. 16 patients were invited to participate. They formed two groups with eight patients in each. The group mindfulness meditation intervention programme was adapted from MBSR (1). The programme for each group lasted eight weeks and consisted of weekly sessions, each lasting 2 hours. This was followed 3 months later by a 2 hour session (the booster session). Participants completed a baseline assessment of measures of mindfulness and perception of stress with the use of Mindful Attention Awareness Scale (MAAS) and the Perceived Stress Scale (PSS), respectively (2, 3). MAAS and PSS were again completed by the participants at mid-point through their group therapy, as well as after they had completed their 8-week session and also at 3
Mindfulness based cognitive therapy, maintenance antidepressant medication and its combination in the prevention of relapse in recurrent depression: trial design

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Objectives: Mindfulness-Based Cognitive Therapy (MBCT) is a recently developed psychological intervention that appears to be promising in terms of preventing relapse or recurrence in patients with recurrent depression (1,2). The aim of the present study is to assess the clinical and cost-effectiveness of the combination of Mindfulness-Based Cognitive Therapy (MBCT) and maintenance antidepressant medication (m-ADM) as compared to either of these treatments alone, in reducing the risk of relapse and recurrence in patients with recurrent depression.

Methods: Intended study population consists of 400 adult patients with major depressive disorder (MDD) who experienced at least three depressive episodes and are currently either in full or partial remission. Patients have been treated with a therapeutic dose of antidepressant medication over the last 6 months. Study design. Two multi-center randomized controlled trials, the first trial comparing MBCT plus m-ADM to m-ADM on its own (intended N=120) and the second trial comparing MBCT plus m-ADM to MBCT on its own (intended N=280). Randomization will be stratified on patients’ symptomatic status at baseline assessment (asymptomatic versus partially symptomatic). There will be follow-up measurements at 3-month intervals for 15 months. Primary outcome measures are depressive relapse or recurrence and incremental cost-effectiveness ratio. Secondary outcome measures are time to, duration and severity of relapse or recurrence and quality of life.

Results: Preliminary results on patients’ preference for MBCT or m-ADM will be presented.

Conclusion: The influence of patient preference on the design of the trial will be discussed.


Mindfulness-based cognitive therapy for the treatment of multiple chemical sensitivities: A randomized controlled pilot study

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Objectives: Multiple chemical sensitivities (MCS) is a medically unexplained and socially disabling condition characterized by negative health effects in multiple organ systems attributed to exposure to common airborne chemicals. Presently there is no evidence-based treatment. The objectives of the study were to assess the feasibility of an 8-week mindfulness-based cognitive therapy program (MBCT) for adults with MCS and to evaluate possible effects on psychological distress and illness perceptions.

Methods: The study design was a randomized controlled clinical trial. The protocol is registered at Clinical-Trials.gov (ID H-C-2007-0088). Thirty-nine adults with MCS were randomized to an MBCT program or treatment as usual. The MBCT program comprised 8 weekly sessions of 2½ hours. Measures of psychological distress and illness perceptions were assessed at baseline, 4-week, 8-week and at 3-month follow-up.

Results: Forty-three adults were screened for eligibility and 39 were included. Mean age of the participants was 51.9 years, 35 (94.6%) were female and 21 (56.8%) were unemployed. Two withdrew before start of the intervention and number of dropouts were significantly larger in the MBCT group (n=8/17) as compared to the control group (n=3/20, p=0.014). Average class attendance in the mindfulness group was 6.2. The lower completion rate in the mindfulness group was largely because of issues concerning the indoor environment. No significant differences in effect measures were found between the groups, probably due to a lack of power. However, those who completed the MBCT programme generally reported benefiting in terms of improved coping strategies and better sleep quality.

Conclusion: In order for a group based MBCT program to be feasible for MCS, we recommend careful considerations of the environment in order for it to be tolerable for this vulnerable
patient group. This concerns especially the indoor environment in terms of sufficient ventilation and the formulation of a scent policy, but also that a possibility to perform some of the mindfulness training outdoors is provided.


P159

Training the Attention Networks of Children with ADHD through Mindfulness Meditation

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Introduction: Meditation and ADHD (Attention Deficit Hyperactivity Disorder) seem to share an underlying neurocognitive mechanism. Both rely on the regulation of the catecholamines norepinephrine and dopamine. While ADHD is characterized by problems of inattention, meditation enhances attention. Attention can be divided into two subsystems: Alerting, Orienting and Executive Control (Posner & Peterson, 1990). In ADHD a dysfunction of the alerting and inhibition control networks has been reported. Based on these observations it is theorised that meditation might have a positive effect on ADHD. Mindfulness training is an easy comprehensive meditation training, which makes it a good candidate for therapy.

Method: Mindfulness group therapy for children with ADHD and their parents is provided in 8 weekly sessions of 90 minutes at an academic outpatient treatment centre. The Ant (Attention Network Task) separately measures the efficiency of the 3 subsystems of attention. The task is conducted at ≥ 6 weeks prior to the training (wait list), directly before the training (pretest), directly after completion of the training (posttest), and 8 weeks post treatment (follow-up). The reaction times and the variance of reaction times are analysed using an Analysis of Covariance. Success at meditation is measured by heart rate variability and social skills (p=0.008) and reduction in problem behaviors (p=0.013). No differences in the pre-post comparison of the CG were found; nor between groups, either on pre or post results.

Results: Significant results will indicate an improvement in the alerting network and the executive control network as these are the two networks that are impaired in ADHD.

Discussion: We expect to find an improvement in the alerting network through Mindfulness Meditation Training the Alerting and Inhibition Control Networks of Children with ADHD. Mindfulness training is an easy comprehensive meditation approach that makes it a good candidate for therapy.


P160

What changes in mothers perceptions of the behaviors of preschoolers with ADHD and/or ODD symptoms after a 14 week Parental Intervention

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Introduction: The incidence of disruptive behavior disorders in children is growing and there is evidence that the younger a child is at the time of intervention, the more positive the behavioral effects on the adjustment at home and at school (2). Early intervention can counteract risk factors and strengthen protective factors, helping to prevent a deviant developmental trajectory. In this context parental education might be an effective way of addressing early problems. The main objective of this study is to evaluate the efficacy of the Incredible Years Basic Parent Training Program (IY) in a sample of Portuguese preschoolers with ADHD and/or ODD symptoms (1).

Method: Forty-nine participants between 3-6 years of age were selected from community and clinical contexts scoring above the borderline or clinical cut-off points on the ADHD/ODD inclusion measures of our study. Families were randomly allocated to either an IY intervention group (IG; n=27) or a waiting-list control group (CG; n=22). Parents perceptions of their children’s social skills and problem behaviours were assessed with the Preschool and Kindergarten Behavior Scales-2 (PKBS-2, Merrell, 2002). Measures were administered in both groups at baseline and 6 months later. Intervention: IY was delivered in groups of 9-12 parents, through 14 weekly sessions by experienced group leaders. Pre-post results were compared using Nonparametric Tests (Wilcoxon, Mann-Whitney).

Results: Regarding the IG, results from the pre-post comparison indicate: i) significant increase in the level of parent-reported social skills (p=0.008) and reduction in problem behaviors (p=0.013). No differences in the pre-post comparison of the CG were found; nor between groups, either on pre or post results.

Discussion: Results must be carefully interpreted taking into account the small sample size. However, they suggest that in the short run intervention was associated with more positive outcomes for children, as reported by mothers after IY, suggesting that this could be an effective intervention for preschoolers with ADHD and/or ODD symptoms. Future studies must include: larger randomized samples; different informants; and extension of the follow up to a broader period of time.
How cognitions mediate the perception and experience of specific parental stress and general external stress

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Introduction: Developmental psychology emphasizes the influence of context on parent-child interactions, yet research on parental stress has heretofore only focused on child and parent personality characteristics, along with those situations specifically related to the family context. Although many studies have examined the impact of overall stress and daily hassles on different psychological variables, few have examined the relationship between stress experience outside of the family context and parental stress perceptions. Perception of stress has been shown to be highly related to cognitive beliefs. The object of this study is to examine the relationship between parental stressors, external stressors, and the role that irrational and rational cognitions may play in this.

Method: This currently ongoing study evaluates French Mothers (current n = 30) of children between the ages of 2 and 5, all living with the child’s father, who were asked to respond to two questionnaires: 1) The Parental Stress Index (PSI, Albidin, 1985) and 2) a comprehensive measure of stress (The Chapelle-Callahan Stress Profile, CCSP, measuring physiological and psychological manifestations of stress along with daily hassles and stress-related cognitions).

Results: Data will be analyzed to examine the concordance between stress experiences within and without of the family context. Cognitions will be analyzed as a function of stress experience and how they may mediate the perception of stress.

Discussion and Conclusion: The results are expected to provide more detailed understanding of stress experiences for parents. In addition to fully evaluating the different types of stress that parents typically experience, it is hoped that a better understanding of how parents perceive and process their stress experience not only through the analysis of correlated cognitions, but also through the specific perception they have of their stress.

Associations between Pain Conditions and Borderline Personality Disorder Symptoms: Findings from the National Comorbidity Survey Replication

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Introduction: There has been a longstanding interest in the potential role of personality disorders in chronic pain. Consistent with this interest, several studies have found elevated rates of personality disorders amongst those seeking treatment for chronic pain. Despite this clinical interest in pain and personality disorder, there is a paucity of research on this topic using samples representative of the general population. This study involved secondary analyses of data from the National Comorbidity Survey Replication (N = 5617) to investigate associations between chronic pain conditions (viz., arthritis, spinal pain, severe headache and other chronic pain) and borderline personality disorder (BPD) symptoms.

Method: Health conditions were assessed using self-reports. Arthritis was assessed on a lifetime basis. More detailed information regarding the other conditions was used to create subgroups regarding each of them. These subgroups included those with a lifetime absence of the condition, those with a remitted condition, and those with the condition during the past year. Axis I disorders were assessed with the Composite International Diagnostic Interview. BPD symptoms were assessed with the International Personality Disorder Examination Screening Questionnaire.

Results: Those with arthritis reported significantly higher levels of BPD symptoms than those without arthritis. For each of the other conditions, those with no history of the condition had the lowest level of BPD symptoms and those with the condition in the past year had the highest levels. The remitted condition subgroups reported BPD symptoms that were significantly higher than the lifetime absence of the condition subgroup and significantly lower than the past-year history subgroup. Multiple regression analyses indicated that these differences remained significant after adjusting for sociodemographic variables and past-year Axis I disorders.

Discussion: These findings are the first to show positive associations between several chronic pain conditions and BPD symptoms in a sample representative of the general population. There are several possible explanations for the significant differences in BPD symptoms between those with a remitted-condition and those with past-year condition. Longitudinal research is required to investigate processes responsible for these findings.
**Objectives:** Anxiety and mood disorders are highly prevalent and pose a huge burden on patients. Their offspring is at increased risk for developing these disorders as well. The primary objective of the current study is to investigate whether a brief (10+2 sessions) preventive intervention is more effective in preventing the onset of depression or anxiety disorder in an ultra high risk sample of children than care as usual (minimal information) over a follow-up period of 2 years. A second goal is to examine whether this intervention meets current standards for cost-effectiveness. A third goal is to explore the role of a number of factors that may potentially mediate or moderate the effect of the intervention.

**Methods:** High risk offspring (8—18 years; N=204) of depressed and anxious patients are selected for participation in the prevention trial. These children report sub-threshold symptoms or meet two of three criteria of the High Risk Index (HRI: female gender, both parents affected, suicidal behaviour of parent). All parents receive care as usual for their disorder. The preventive training has 10 individual behavioural therapy sessions for the child and 2 parent sessions. The intervention focusses on developing self esteem and enhancing resilience and therefore emphasizes positive strengths, behavioural activation and exposure and reinforcement of the families social network.

**Conclusion:** The present study will produce a Dutch preventive behavioural therapy program, with knowledge about using cognitive behavioural therapy in prevention and insight in cost effectiveness. Furthermore, the study will throw some light on which children will and will not benefit from a preventive intervention.

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**Help-seeking in dating violence: Prevalence and effect of a prevention program**

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**Objectives:** Youths involved in violent dating relationships usually react passively (i.e., doing nothing), and those seeking help commonly choose informal resources (e.g., talking to friends) instead of formal services (calling police/hotline; Watson et al., 2001). Consequently, prevention efforts should address this issue. Considering this, in Study 1 we examined the adolescents’ responses to physical aggression by a current or ex-dating partner. In Study 2, we evaluated the effect of an eight-session dating violence prevention program on adolescents’ help-seeking behaviour in a real and a hypothetical situation.

**Methods:** The sample in Study 1 was composed of 7,196 Spanish youths (ages 14-26). A 1,058 participants’ subsample that reported having been involved in at least one episode of physical violence were used for analyses. In Study 2, 104 Spanish high school students were assessed one week before and after program implementation. For the hypothetical situation the entire sample participated, while for the real situation only the students who have been involved in at least one episode of physical violence (n=23) were used. Data analyses included percentages, chi-squared tests and ANOVAs.

**Results:** The most prevalent response was “doing nothing” (41.3%), followed by informal help-seeking (four categories being the highest 31.1%), break up (9.2%), aggressive behaviour (2.9%) and formal help-seeking (less than 1%). With one exception, no significant differences were found based on sex. Regarding Study 2, in general, the use of formal helping sources and breaking up increased after the intervention, while the use of informal resources tended to remain the same. Nevertheless, differences were no significant.

**Conclusion:** Results are coherent with previous research suggesting that most adolescents do not seek help for dating violence or use informal resources. The dating violence prevention program shows promise to improve adolescents help-seeking skills, although further research with a bigger sample is needed. Implications will be discussed.
Topic: Primary care

P165

Effects of early centre-based care experience on social development and comprehension of emotions in children

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Introduction: Studies over the past four decades suggested that centre-based care may be associated with different aspects of social behaviour in the preschool years, sometimes with higher social competence (NICHD, 1997; Love et al, 2003), but following some studies, with more externalizing behaviour and less compliance (Pluess & Belsky, 2009; McCartney et al, 2010).

Objectives: This study investigated the associations of centre based care and of the age of entering this care with several aspects of social behaviour, the security of attachment and the comprehension of emotions, in the preschool years.

Methods: Participants were 339 children (165 females and 174 males), ranging in age from 4 to 6 years (mean=4.91 sd=.674). Children were assessed with the Test of Emotion Comprehension (Pons & Harris, 2000) and with the Separation Anxiety Test (SAT, Klagsbrun & Bowlby, 1976). Their social behaviour were rated by teachers in the preschool years with the Social Competence and Behaviour Evaluation (SCBE scale, LaFreniere & Dumas, 1995).

Results: Controlling for sex, age and SES, we found children with centre care experience (N=101) showed more social competence but also more externalising behaviour / low-compliance. No association was found between the SAT variables and centre based care. For the whole sample the comprehension of emotion was associated with security of attachment and social competence. We found a low negative association between entering centre care before 12 months and the total TEC score (beta=.16, p=.07, and with two TEC subtest, emotional regulation and mixed emotions (t-ratio= 2.54, p=.01).

Conclusion: Both social competence and externalizing behaviour were associated with centre care experience. Lower emotion comprehension might be associated with early entering centre care, that is with less parental care during the early infancy.


Topic: Psychosis – schizophrenia

P166

A randomized controlled study of two years of cognitive-behavioral strategies in recent onset schizophrenia, 14 years follow up.

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Introduction: Long term effects of specialized early intervention in Schizophrenia are unclear and recent researches on 5-year outcome have shown low effects. The aim of this study is to compare the long term effects of integrated treatment (IT) and standard treatment (ST) on recent onset schizophrenia.

Materials and methods: This is a follow up 14 to 18 years after inclusion on a randomized controlled study of two years of integrated psychosocial treatment compared with standard treatment in recent onset schizophrenia. In the years 1992 to 1997 fifty young patients were included, 30 were randomized to two years of integrated psychosocial treatment and 20 to standard treatment. Interventions: IT: In addition to ST, IT patients received cognitive–behavioural family communication and problem solving skills training, individual cognitive-behavioural strategies for residual symptoms and disability, structured family psychoeducation and intensive crisis management provided at home.

Days as inpatients through 14 years

Results: Using independent-samples t-test, there was no significant difference in number of inpatient days (mean: IT 404 vs ST 480), (SD: IT 637 vs ST 6408), p = 0.7, or in number of admissions (mean: IT 5.0 vs ST 7.3) (SD: IT 8.7 vs ST 9.3), p= 0.4 during the 14 years after inclusion in the study.

Discussion: The results suggest that integrated treatment on recent onset schizophrenia does not have a long term effects on number of inpatient days or admissions. (see figure 1 and 2) The findings of this long term study over 14 years are in line with studies on 5 years outcome who have found that time-limited early specialized intervention for schizophrenia does not improve outcome over time. The size of the sample in this study was small and the results should be interpreted with caution. More research is needed.

Biased Interpretations in Paranoid Psychosis
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Objectives: Biases in information processing are of aetiological significance and involve the selective processing of pathology-congruent information. Such biases selectively prioritise the processing of information that can confirm a pathological belief and thereby play a direct role in maintaining an associated psychopathology. Recent research in the non-clinical population has established an evidence base for a paranoid interpretation bias. However little work has investigated the interpretation biases associated with paranoid psychosis. This poster will present experimental data on the naturally occurring pathology-congruent interpretation biases in paranoid psychosis and identify their level of content specificity.

Methods: Three groups (current diagnosis of schizophrenia with and without significant symptoms of paranoia and healthy controls) completed 4 measures of interpretation, all of which presented ambiguous information that could be interpreted in either a paranoid or a non-paranoid direction (e.g. across the room, two girls begin to whisper... they are talking about you/their tutor). Two versions of the ‘jumping to conclusions’ task were also included as the most sensitive measures of biased reasoning associated with paranoia and persecutory delusions.

Results: Data will be presented to demonstrate the extent to which a paranoid interpretation bias differed between groups and the extent to which this bias was independent of a general negatively valenced interpretation bias. This will be assessed by calculating an index of interpretation bias for each task and correlating these with trait measures of paranoia and psychosis. Group differences in sensitivity to emotional facial expressions and biased reasoning will also be presented.

Conclusion: These data will contribute to our understanding of the biased cognition that is targeted in cognitive behavioural therapy for psychosis and help elucidate the mechanisms that might underpin its success. Interpretation is an underlying cognitive process that, when biased in a paranoid direction, can contribute to maintaining a psychotic state.

Associations between facial emotion recognition, cognition and alexithymia in patients with schizophrenia using a virtual reality task
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Introduction: It is commonly known that emotion recognition is impaired in schizophrenia patients. Furthermore, cognitive deficits and symptomatology have been associated with this impairment; but there are other patient characteristics that have not been much explored, such us alexithymia. Most studies working with these variables do so with photographic material, but recently Dick et al. (2010) have done it with virtual faces. Similarly our research group have designed and validated a virtual reality task, to assess and subsequently train schizophrenia patients. The aim of the present study is to evaluate the impaired recognition of facial affect in patients who suffer schizophrenia and its association with cognitive deficit and their inability to express feelings.

Methods: Thirty clinically stabilized outpatients with a well-established diagnosis of Schizophrenia or Schizoaffective disorder of the Mental Health Center of Igualada (Catalonia) have been recruited. They will attend two assessment sessions: firstly, cognition test (CPT and SCIP) and the alexithymia scale (TAS-20) are administered; in the second session they respond to the Virtual Reality Facial Emotion Recognition task.

Results: Emotion identification will be explored in order to clarify which emotions are more difficult to identify. It is hypothesized that patients with high alexithymia will perform worse than others with middle-low punctuation in this variable. Finally, correlation between emotion recognition per cent of the correct responses and cognitive deficits (attention, working memory, verbal learning and processing speed) will be computed.

Discussion: This is an early stage of the application of a Virtual Reality Integrated program for a Social Skills Training for patients with Schizophrenia based on Kopelowicz et al. (2006). If the relationship between errors in the evaluation of emotional expressions and alexithymia and cognitive deficits is determined, we will be able to better train the accuracy of emotion recognition in these patients. Furthermore, we report new data to support the virtual reality as a valid tool for the study, assessment and treatment of schizophrenia.

Dyck et al, Psych Res 2010 (in press)
Kopelowicz et al, Schiz Bull 2006; 32 : S12
Social competence in early psychosis: searching for an effective and complete assessment

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Introduction: Even if literature outlines the importance of social competence in the recovery process of psychotic patients, only in the last few years this topic has been thoroughly investigated in the field of early psychosis.

Objective: The aim of this observational study is to point out and evaluate from different perspectives the characteristics of social competence in young people during illness’s early phases (First Episode Psychosis or Ultra High Risk). Subjects: 35 patients, aged 17-30, part of five multimodal Early Intervention programs held in three Mental Health Departments of the Lombardia Region (Milano, Sesto San Giovanni, Vimercate), and attending a weekly social competence training.

Method: our investigation is focused mainly on analyzing the consistency between the assessment through standardized instruments and the evaluation made separately by patients and their therapists using an interpersonal skills scheme, built ad hoc. Three instruments were used: the Gambrill Assertion Inventory as a measure of assertiveness; the PSI Problem Solving Inventory as a measure of problem solving; and the qualitative evaluation scheme on self-efficacy in the verbal, non-verbal and cognitive skills, filled in both by patients and their psychotherapists.

Results and Conclusion: The analysis of the study results has only partially confirmed the existence of a concordance in the patient/therapist evaluations. However, the comparison between different assessment channels seems to be a fundamental tool for an individualized intervention based not just on patient’s problems detected by clinicians, but also on self-perceived difficulties and resources.
A Sequential Intervention of Cognitive Behavioral Therapy and Well-Being Therapy in Cyclothymic Disorder

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Introduction: Despite the fact that subthreshold bipolar disorders are common and clinically significant, there is lack of controlled studies of psychological treatment of cyclothymic disorder (Merikangas et al., 2007). The aim of this investigation was to examine the benefits of the sequential combination of cognitive behavioral therapy (CBT) and Well-being therapy (WBT) (Fava, 1999) compared to clinical management (CM) in this clinical population.

Methods: Sixty-two patients with DSM cyclothymic disorder were randomly assigned to CBT/WBT (n=31) or CM (n=31). Both CBT/WBT and CM consisted of ten 45-min sessions. CM involved a review of patient clinical status together with providing support and advice according to structured protocol. An independent blind evaluator assessed patients before treatment, after therapy, and at 1- and 2-years follow-ups. Outcomes measures included total scores of the change version of the Clinical Interview for Depression (CID) and the Mania scale (MAS).

Results: Except for levels of affective disorder which were significantly higher in CBT/WBT group, sociodemographic variables, duration of illness, presence of DSM comorbidity and current use of benzodiazepines were similar between groups. Analysis of variance for repeated measures showed significant changes in the CID total and MAS scores in both groups. A significant time by group interaction was found with better results after the sequential combination of CBT/WBT compared to CM at post treatment and at 1- and 2- year follow ups. Most of the patients in the CBT/WBT group no longer met the DSM-IV criteria for cyclothymic disorder at 2 year follow-up, unlike most of the patients in the CM group. They were also significantly less likely to present after treatment DSM comorbidity, particularly anxiety, compared to CM group.

Discussion: A sequential combination of CBT and WBT, which addresses both polarities of mood swings and comorbid anxiety, was found to yield significant and persistent benefits in cyclothymic disorder.

Merikangas et al, Arch Gen Psychiatry 2007; 64 : 543.

Cognitive behavioral treatment of derealization disorder: a case study

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Presenting problem: Panic disorder (PD) has been hypothesized to be a heterogeneous entity with different clinical subgroups. The most consistent subtypes of panic disorder, based on the referred main threatening symptoms, are cardiac, respiratory, vestibular and depersonalization-derealization subtypes. All of them not only differ in many clinical and epidemiological characteristics, but also in the response to the treatment (1). Recent research supports the conception that depersonalization may be considered a distinctive and more severe subcategory (2). Some authors currently refer to derealization and depersonalization as independent constructs (3), other do not consider adequate to separate derealization from depersonalization. At the moment there are only a few reports that conceive derealization as an isolated entity.

Case conceptualisation and intervention: We present the case of a thirty-one year old male, who experienced an important change in his perception of the external world, describing it as strange or unreal. He felt like his environment became lacking in spontaneity, colouring and depth, this derealization episode occurred at least once a day. He didn’t meet criteria for any Axis I disorder assessed by Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I). We have programmed a total of thirteen sessions, which establishment of goals, psicoeducation, interoceptive exposure with therapist, which consisted on staring at a white wall in a badly-lighted room, and also performing a cognitive restructuring of the registered negative cognitions during the induced derealization episodes. We also have made a final feedback session, and then one of relapse prevention. Finally, we programmed three sessions at one, three and six months follow-up.

Outcome: Preliminary results at the seventh session show a significant symptom remission showed by the differences between pretreatment and post-treatment direct measures on Bandelow’s Panic and AgoraphobiaScale (Pretreatment:23, Posttreatment:12), mean of Panic Diary measures (Pretreatment: Number of episodes:13/week, Subjective Units of Discomfort: 8 SUDs, Time duration:15 min ; Post-treatment: Number of episodes:4/week, Subjective Units of Discomfort:4 SUDs, Time duration: 5 min), Beck Depression Inventory(Pretreatment: 21, Post-treatment:9), GAF(Pretreatment: 41-50;Posttreatment:61-70).

Review and Evaluation: These results show that interoceptive exposure tecniques and cognitive restructuring might be successful on the treatment of an unusual anxiety disorder as derealization disorder.

Skills deficits indicate the number of diagnoses (“comorbidity”)

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Introduction: Transdiagnostic interventions have become an important part of psychotherapy especially due to the high comorbidity of mental disorders. They include interventions to decrease specific skills deficits (e.g. emotion regulation deficit). Particularly in case of clinical multidiscipline they complement disorder-specific treatments. However, there is a lack of comparative examinations of various skills for different psychopathology. The aim of this study is a comparison of several skills regarding different primary diagnosis (anxiety vs. affective vs. somatoform disorder) and comorbidity (monodiagnosis vs. multidiscipline).

Method: Participants were evaluated with the “operationalized assessment of skills interview” (OFD). This interview allows the simultaneous assessment of five skills (problem solving, social competence, stress management, emotion regulation, relaxation ability) and two self-related factors (self-efficacy, self-esteem). Clinical diagnoses were made according to DSM-IV using SCID-Interviews. The interviews were conducted to N = 302 in- and out-patients at the beginning of psychotherapy.

Results: Multivariate analyses indicated no significant differences between the three different primary diagnoses. Beside this the results confirm negative correlations between skills and number of comorbid diagnoses (-.055 < r > -.280). Multivariate analysis identified significant differences in skills levels between patients with monodiagnosis and those with various diagnoses (Λ = .923, F (7,276) = 2.85, p < .01 partial η2 = .067). Patients with two or more diagnoses (comorbidity) showed greater skill deficits than patients with only one diagnosis. Furthermore there were marginal significant differences in skills levels between in- and outpatients (Λ = .915, F (7,277) = 3.66, p = .001, partial η2 = .085).

Discussion: The assumption of skills as transdiagnostic can be affirmed in this study for different skills deficits. Rather it can be considered that in case of clinical multidiscipline skill deficits increasingly come to the fore and require a concerted treatment.

Psychosocial rehabilitation treatment of schizophrenia with high negative symptomatology

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Presenting problem: The psychopathology and associated disabilities experienced by persons with schizophrenia have only partially responded to conventional pharmacological. Literature reports that presence of negative symptomatology is associated with pharmacological resistance, poor prognosis and an increased chronicity with a worse overall adaptation and adherence to treatment. Therefore, these patients are very vulnerable to suffer from stigmatization and social rejection. The remarkable levels of suffering and isolation these patients live have forced to change the traditional frameworks of intervention. Most authors consider the appropriateness of an intervention through multimodal rehabilitation programs that improve all dysfunctional areas.

Case conceptualization and Intervention: - 37-year-old patient with 17 years of schizophrenia enters in October 2010 into a psychosocial rehabilitation program. - Assessment: When admitted, the patient had the following scores: PANSS-P: percentile 65, PANSS-N: percentile 90, PANSS-PG: percentile 65, GAF scale: 30. Also, a comprehensive neuropsychological battery (WAIS-IV , RAVLT, TMT A/B, World Oral Fluency and WCST) was done showing a significant reduction in prefrontal functioning (specifically mental rigidity and executive functioning disorder). - Treatment: Weekly participation in cognitive rehabilitation, in addition with skill training and psychoeducative groups focused on self-help, disease awareness and relapse prevention, and workshops aimed at improving basic and instrumental skills. The psychosocial rehabilitation program also includes individual psychotherapy and family interventions (i.e., psychoeducation and behavioral therapy).

Results: At the time of writing the abstract, the patient continues in the rehabilitation program. In a retest in PANSS after 5 months, the percentile in PANSS-P score 30 points less, 5 points less in PANSS-N and 15 points less in PANSS-PG. 20 points more at GAF scale retest. Finally, a neuropsychological retest will be done after 9 months expecting a slight improvement in cognitive functioning.

Conclusion: The case studied shows the effectiveness of a psychosocial rehabilitation program in reducing psychopathology and improving functionality in a patient with schizophrenia. Results corroborate the findings in other empirical studies that advocate the benefits of multimodal treatment compared to treatments based on only one aspect of the disorder or drug treatment only.

Shortness of breath, anxiety and depression in COPD patients who enter pulmonary rehabilitation

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Background: Anxiety and depression are common symptoms in COPD patients (pt) and it is estimated that 20 to 40% of pt referred to pulmonary rehabilitation (PR) experience those symptoms. Shortness of breath (SOB) is their major complaint, and as SOB is not only explained by physiological factors it needs to be better defined and clarified.

Methods: The aim of the study was to evaluate the effect of six weeks inpatient PR on SOB and psychological distress (PD) and evaluate the correlation of PD and experienced SOB. At admission to PR 140 COPD pt underwent spirometry to assess disease severity. Exercise capacity was evaluated by a six-minute walking test (6-MWT) at admission and discharge. Then and one year after discharge SOB was measured by the Shortness of Breath Questionnaire (SOBQ) and anxiety and depression by the Hospital Anxiety and Depression scale (HAD). Pt were divided into two groups based on whether or not they experienced PD (anxiety and/or depression scores ≥8). Results 53 of 140 pt (38%) had PD. No difference was found between the groups in age (67.3 ± 8.8), FEV1 (62.6 ± 25.1%), BMI (29.1 ± 6.2 kg/m2) or gender (female 63%) but pt with PD walked shorter distance and experienced more SOB. The relative number of pt with PD decreased during PR (37 of 130 or 28%) but increased one year later (46 of 103 or 45%). Multiple regression analysis showed that the 6-MWT and anxiety scores were the best predictors for SOB, explaining 35%.

Discussion: COPD pt with PD experienced more SOB and had less exercise capacity than pt with no PD. PR did not reduce the frequency of Pt with PD permanently. It seems therefore necessary to put more emphasis on psychological treatment in our PR program.

Troosters, et al; Am J Respir Crit Care Med 2005; 172

Can Internet-based CBT prevent depressive relapse in outpatients?

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Introduction: One previous study has found that Internet-based CBT can prevent relapse in major depressive disorder (MDD) in a self-recruited sample recruited via advertising (1). The aim of the current study is to investigate if Internet-based CBT can reduce relapses in MDD compared to a control group, when administered to patients within primary and psychiatric outpatient clinics.

Method: To maximize external validity outpatients in primary and psychiatric care in a Swedish public health care region will be recruited. Adult patients suffering from partially remitted MDD after some form of treatment can be included and will be randomised to either receiving 10 weeks of Internet-based CBT, especially designed for relapse prevention, or to a control condition. For adequate statistical power in the study 134 participants will be required and diagnostic interviews will be conducted before inclusion, as well as every month during the two-year study period to detect relapses. The primary outcome is relapse in MDD and the relapse rates in the two groups will be compared using survival analysis. Self-report of depressive symptoms will be completed by patients in both groups every month, resulting in individual feedback. Secondary outcomes are symptom levels as well as clinical and patient factors predicting a preventive effect from the intervention. The guided Internet based CBT intervention consists of modules covering topics such as behavioural activation, cognitive restructuring, mindfulness, physical activity and how to handle anxiety. A tailored selection of modules is made by an experienced clinician for each patient on the basis of individual symptoms. A personal therapist guides the patient through the modules using encrypted e-mails for all communication. Preliminary data will be presented.

The effect of family cohesion and child self esteem on a parent-child interaction task in a sample of youth with Oppositional Defiant Disorder

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It has been shown that family cohesion positively affects children’s self-esteem (Cooper & Holman, 1983). However, positive family cohesion does not always result in high self-esteem for all children. In such circumstances, the question remains as to whether a cohesive family environment can still be beneficial despite a child’s lower self-esteem. The present study examines the impact of family cohesion and child self esteem on performance in an experimental parent-child problem-solving task. It was predicted that positive family cohesion and high self-esteem would increase performance on the interaction task when performance reports were obtained from the parents. This study examined 106 children ages 8 to 14 who were participating in a National Institute of Mental Health funded research project exploring the treatment of Oppositional Defiant Disorder. Families completed an interaction task in which they were given seven minutes to solve a problem the family had encountered in the past week. Each participant then completed the Problem Solving Discussion: Rating Scale and rated the interaction individually on a series of items (e.g., How satisfied are you with this discussion?, How much did you agree on a solution?). Hierarchical regressions showed that family cohesion, as reported on the Family Environment Scale, and self esteem, as reported on the Behavior Assessment System for Children, individually predicted better performance on the problem-solving task, t = 2.77, p < .05 and t = .61, p < .05, respectively. The interaction between family cohesion and self-esteem was also significant, F(3,103) = 8.15. Examination of the interaction effect suggested that family cohesion boosted performance on the task when self-esteem was low. However, when self-esteem was high, family cohesion has less of an impact on task performance. The implication of these findings for the treatment of youth with ODD will be explored.

Cooper et al, Journal of Marriage and Family 1983; 45:1

Perceived body esteem, competence and depression in Icelandic adolescents

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Objective: The objective of this study was first to investigate the psychometric properties of the Icelandic version of the BESAA (Body Esteem Scale for Adolescents and Adults) and the incremental validity of body esteem in the prediction of depression in addition to other aspects of self-esteem.

Method: Participants were 316 pupils 12-14 years old in four primary schools, two from the Reykjavik area and two from smaller towns in Northern Iceland. Three self-report scales were administered: CDI (Children Depression Inventory), BESAA and PCSC (Perceived Competence Scale for Children).

Results: The psychometric properties of the BESAA were satisfactory. Perceived competence strongly predicted symptoms of depression, 56.1% and body esteem added significantly to the prediction, 5.2%. Of the three BESAA subscales, BE-appearance was the only significant predictor. Two-way analysis of variance were conducted on the BESAA subscale scores with age and gender as the independent variables. For BE-appearance there was a main effect of gender (F(1,308) = 13.847, p < 0.001) with girls scoring lower than boys. There was also a main effect of age with older children scoring lower than younger ones (F(2,308) = 5.546, p = 0.004). There was a main effect for gender for BE-weight (F(1,307) = 9.713, p = 0.002) where girls scored lower than boys and a main effect for age where older children scored lower than younger ones (F(2,307) = 4.706, p < 0.01). The main effect of gender for BE-weight (F(1,307) = 9.713, p = 0.002) where girls scored lower than boys and a main effect for age where older children scored lower than younger ones (F(2,307) = 4.706, p < 0.01).

Conclusion: As expected, Body esteem was found to be quite strongly related to perceived competence. The relationships varied, however, somewhat depending on different aspects of both body esteem and perceived competence. The results imply that in the prevention of depression in adolescents, more attention should be focused on body esteem than previously has been done.

Keywords: Adolescents, Depression, Body esteem.

(I)rrational beliefs and coping strategies as predictors of mental health

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Introduction: Rational Emotive Behavioral Therapy is well established therapy practice in a large family of CBT. However, some of REBT theoretical assumptions have received insufficient empirical support. Main aim of this study was to explore the relationship between irrational and rational beliefs, and coping strategies on the one hand, and indicators of mental health on the other.

Method and Design: Non-clinical sample of 133 undergraduates in University of Novi Sad completed in a counterbalanced order: PN-LES (Positive and Negative Life Events Scale; Popov, 2010), IRU (Irrational and Rational Beliefs Scale; Tovilovic & Popov, 2009), CSI (Coping Strategies Indicator, Amirkhan, 1990) as predictors and VS (Vitality Scale, Bostic et al, 2000), 4DSQ (Distress scale; Terluin et al, 2004), and SWLS (Short Well-being Life Scale, Diener et al, 1985) as criterion variables.

Results: Hierarchical regression analysis was performed to test whether irrational (IB’s) and rational beliefs (RB’s), as well as coping strategies would predict mental health indicators when negative life events were controlled for. Irrational beliefs proved to be significant predictors of both well-being (Beta = -.22; p< .05; sr= -.16) and distress (Beta = .30; p< .05; sr=. .24). On the other hand, problem solving coping strategy was positively related to well-being (Beta = .20; p< .05; sr= .19), but not to distress. Finally, avoidant coping strategy positively predicted distress (Beta = .21; p< .05; sr=. .18). Rational beliefs didn’t predict any of mental health indicators in the sample.

Conclusion and Implications: Results partially supported Ellis’ REBT theory. These findings extended the previous research on irrational beliefs, saying that IB’s play significant role in developing dysfunctional mood states and reactions. Rational beliefs didn’t seem to act as protective factors in stressful life events. Practical implications of these findings are further elaborated in the context of REBT techniques.


The enhancing effect of post-learning noise stress on memory of words

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Many preceding studies have showed that post-learning stress enhanced memory. However, there is a conflict with whether the effect of acute stress depends on valence. Some studies reported post-learning acute stress enhanced memory of neutral stimuli, on the other hands, there were studies examined post-learning stress enhanced recall of emotional stimuli, but didn’t influenced on neutral ones. In this study, we investigated the enhancing effect of post-learning stress using neutral, positive, and negative two-compound kanji words as memory stimuli. For improvement of previous studies, we put filler words each in back ward and forward of target to prevent serial position effect. Thirty-five undergraduate students, who were divided into stress and control group, were instructed to perform a learning task constructed by positive words, negative words, and neutral words followed by a immediate recall test. All three valence words were low arousal, and there were no differences in frequency in use, easy of learning and imagery. Participants in the stress group were subsequently subjected a 5- min white noise as an acute stress, while participants in the control group were not stressed. After a 10- min filler task, a delayed free recall test was administered. In the analysis of the recall memory, an ANOVA demonstrated that there were a main effect with regard to Group, but no main effect to Valence and interaction. We found enhancement of recall score in stress group than control group. Post-learning enhanced recall performance, but it didn’t depend on words valence. However, it is unclear that whether the result suggests post-learning stress enhance both neutral and emotional memory, or because there are no differences in arousal.
Acquired Capability for Suicide: Associations with past suicide attempts, impulsivity and experiences of painful and provocative events

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Background: The interpersonal-psychological theory of suicidal behaviour (Joiner, 2005) proposes that suicidal desire alone does not lead to death by suicide. Parallel, individuals must acquire the capability to enact lethal self-injury through exposure and habituation to the fear and pain involved in self-injury. According to the theory, the most direct route to acquiring the capability for suicide is by engaging in suicide attempts. In addition, the experience of fear-inducing, painful and provocative life events may increase the ability to take one’s life (e.g. childhood maltreatment, physical fights). Dissociative tendencies and rejection of one’s bodily appearance might also foster acquired capability for suicide. Therefore, we investigated associations between previous suicide attempts, painful and provocative experiences, impulsivity, dissociative tendencies, body image and the acquired capability for lethal self-injury.

Method: We measured depressive symptoms, suicidal ideation, impulsivity, dissociative tendencies, body image, painful and provocative experiences as well as acquired capability in 191 young adults (144 female) of whom 22 individuals had at least once attempted suicide. Acquired capability for suicide was the dependent variable in a set of regression equations.

Results: Capability scores were higher in men than in women. Individuals with past suicide attempts reported higher levels of capability than individuals with no history of suicide attempts. Controlling for age and gender, depressive symptoms, suicidal ideation and the experience of painful and provocative events were significantly associated with acquired capability, whereas dissociative tendencies and body image were not. The association between impulsivity and acquired capability was mediated by experiences of painful and provocative events.

Conclusion: As in a previous study (Van Orden et al., 2008), the experience of painful and provocative events—as well as previous suicide attempts—were significantly associated with the capability to enact lethal self-injury. Experiences of provocative and painful events and impulsivity seem to foster the acquired capability. Dissociative tendencies and a negative body image did not contribute to the lack of fear and pain necessary for serious self-harm. Though prospective studies on the development of acquired capability have to be awaited, the results suggest to explicitly target the experience of painful and provocative events in the risk assessment of suicidal behaviour.

**Topic: Training and Supervision**

**P183**

**How to deal with alcohol problems with the elderly?**

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Old people are uniquely more vulnerable to alcohol abuse problems due to the many changes of aging processes. There are various factors involved such as aging, alcohol, medication, social and cultural dimensions. Against presumptions interventions and treatments for older persons with alcohol problems and addictions can be effective.

**Method:** Alcohol and addiction with the elderly 5 credit supplementary course during 9/2010 – 3/2011 for social and health care workers (N=13) formulated the key principles for the treatment. The main themes of the course were: aging, agency and vulnerability; addiction and medication; the assessment instruments of addictions; empowermetative and preventive home visit; memory problems and dementia; grief and depression, and age-specific good practices. The impact of the course to the participants’ clinical work and their development of knowing were systematically evaluated four times by web-based self-assessment instrument made by the author.

**Results:** The key principles show that dealing with alcohol problem with the elderly is based on cognitive – behavioural theories and takes the use of motivational interviewing on the perspective of health promotion. The main goal is not abstinence but harm-reduction. The client is helped to find her/his own forgotten resources by enabling here and now problem solving. Participants report positive changes of the therapeutic process with the elderly and significant others. The most important factors seem to be supportive and non-confrontational continuous daily care that is linked to every day occupations in the client’s natural environment.

**Conclusion:** Further research is needed to develop good and feasible practices to deal with addiction and alcohol problems with the elderly. The challenge remains to explain how supplementary education explains positive change in clinical work.

Key words: cognitive-behavioural theories, alcohol use, psychosocial age-specific approach, supplementary education.

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**Topic: Trauma**

**P184**

**Developmentally Adapted Cognitive Processing Therapy for Adolescents**

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**Presenting Problem:** Although childhood sexual abuse (CSA) is known to have severe psychopathological consequences such as posttraumatic stress disorder, evidence-based psychotherapeutic interventions for adolescents beyond the age of 14 are lacking. We adapted Cognitive Processing Therapy (CPT; Resick, Monson & Chard, 2008) to provide a treatment tailored to the particular needs of youths suffering from CSA-related PTSD.

Developmentally Adapted Cognitive Processing Therapy for Adolescents (D-CPT) is an intensive 3-phase-treatment comprising 25 individual sessions within 3 months. This poster aims to illustrate the efficacy of D-CPT by reporting three case studies.

**Case Conceptualization and Intervention:** K., L. and I. are three adolescent girls aged 17-19 who were all suffering from PTSD after CSA. D-CPT was applied to each of the girls. The treatment was organized into three phases: since CSA is often associated with emotion regulation difficulties, training in emotion and behavior management techniques as used within DBT-PTSD (Steil et al., 2010) built phase 1 of the therapy. Phase 2 included Cognitive Processing Therapy (Resick et al., 2008) administered in high intensity to compensate difficulties in treatment motivation. Since adolescent patients are at high risk to drop out of school or secondary education or to start relationships with abusive partners, phase 3 focused on developmental tasks such as career choice and romantic relationships.

**Outcome:** Treatment effects were assessed using clinical interviews and questionnaires for PTSD, depression and dissociation at the beginning of treatment and to treatment termination. Preliminary results indicate that D-CPT led to reductions in symptoms. Review and Evaluation: Results of these case examples suggest that D-CPT is effective in the treatment of post-traumatic stress disorder in sexually abused adolescents.

Characteristics of sexual violence presenting at a Rape Trauma Service: Comparison between male and female attendees

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Objectives: Sexual violence against adult men has received scarce attention in the scientific literature. The aim of this study was to compare characteristics of sexual violence against male and female attendees to an emergency Rape Trauma Service.

Methods: All medical records on visits to the service since opening in March 1993 through 2007 were reviewed. Characteristics of assaults and victims were compared with descriptive statistics.

Results: Of 1566 visits, male visits were 55, or 3.4%. The mean age was 29.3 years (median 25.0) for men and 24.3 years (median 20.0) for women. Approximately three of every four victims of both genders had experienced rape or genital touch. Of those assaults, 72% of assaults against men involved a stranger perpetrator, and 28% involved a friend/acquaintance, compared with 47% and 43% respectively of assaults against women. A higher proportion of male victims were mentally or physically disabled or 20% compared to 6% among women. Half of the men utilized the offered follow-up visit(s) compared to 62% of the women; where a higher proportion of men compared to women reported suicidal ideation or attempts.

Conclusion: Even though women represent 96.6% of the attendees for sexual violence, male victimization occurs with distinct characteristics. The importance of solid follow-up support is highlighted by the risk of adverse psychological consequences for female and male victims.

Centrality of adverse events in autobiographical memory and obsessive-compulsive symptoms

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Introduction: Recent data indicate an association between trauma exposure and obsessive-compulsive symptoms (OCS). Despite a modest effect size, this association has consistently been shown in OCS patients (Cromer et al., 2007), posttraumatic stress disorder patients (Tuerk et al., 2009) and non clinical individuals (Ceschi et al., 2011). In accordance with a diathesis-stress model of OCS, we expect this relationship to be modulated by appraisal of autobiographical event, and more specifically by how central the adverse events are to a person’s identity and life story.

Method: The current study explore this modulation effect in a community sample of 232 adults (Mean age=37.42 years; SD=13.04, gender ratio=50:50). Respondents self-reported: (a) lifetime exposure to traumatic events (SESS; Hearn et al. 2010) and childhood abuse and maltreatment (CTQ; Bernstein et al., 1998); (b) OCS severity (OCI-R; Foa et al., 2002); and (c) degree of centrality of the events to their identity (CES; Bernstein & Rubin, 2006).

Results: The analysis confirms that exposure to adverse events is a risk factor of OCS. In accordance with a diathesis-stress model of OCS, exposure to adverse life events predicts OCS severity particularly for individuals for whom the memory of the adverse events form a reference point for their identity and for the attribution of meaning to other experiences in their personal’s life, namely those presenting an elevated CES score.

Discussion: The findings will be discussed in relation to previous work on individual differences in appraisal for emotion vulnerability.

Virtual reality (VR) distraction may modify cognitions related to pain

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Introduction: The effectiveness of VR distraction has been widely described to reduce and control both experimental and clinical pain. In controlled and experimental studies increase in the threshold and tolerance (2, 3), decrease in pain intensity and time thinking about pain have been found (3). In the clinical area, it stands out as an adjuvant in acute medical interventions (physical therapy with burn patients, dental treatment, lumbar puncture, etc) proving to be a potent non-pharmacological adjuvant analgesic (1). However, there are no studies that have raised the effect of VR distraction on cognitive variables in individuals experiencing pain. The aim of this study is to explore the effect of VR distraction on cognitive variables in an experimental pain task.

Method Subjects: 37 healthy (33 women, 4 men) between 20 and 40 years (mean =23.7 and SD =4.2 ). All signed informed consent. Procedure: Pain was induced with Cold Pressor Test. The Study consisted of a session (45 minutes). Each participant underwent two consecutive immersions, one with RV distraction and the other one with a black screen. The order of the immersions was counterbalanced. RV intervention: participants were asked to play with the “Surreal World”, a RV product developed under the distraction paradigm.

Design: Repeated measures.

Measures: The effect of VR distraction was evaluated using objective measures of pain (threshold, tolerance, intensity and time estimation) and cognitive measures (self-efficacy and catastrophic thinking).

Results: RV distraction not only helped increase the threshold and tolerance, further was useful in reducing the intensity of pain experienced, allowing the subjects to underestimate the time of immersion. Related to cognitive variables, it was found that with VR distraction the subjects had higher self-efficacy, less rumination and lower levels of hopelessness to pain. Discussion RV Distraction can enhance the effectiveness of cognitive strategies. The findings are discussed in relation to literature on coping in pain.

Conclusion: This pilot study aims at contributing to online intervention programs by analyzing the effect that a “fake patient’s” behavior may have on the participants’ online behavior.


Using Modeling in Online Therapy: Influence of a “fake patient” on the participants’ behavior

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Online therapy allows patients to follow the therapy from anywhere and to have their own schedule while it promotes interaction with other participants and with the program itself. Up to date, most therapies rely on instructional learning in order to promote a shift in the patients’ behavior. However there is a growing amount of research focusing on the convenience of including instrumental learning as a key variable (Andersson, 2009).

Obesity is considered a serious health problem among developed countries because of its relationship with several chronic illnesses such as type 2 diabetes or cardiovascular diseases (WHO, 2010). With the objective of offering a prevention program for obesity related diseases, an online weight control therapy program was developed that included multiple strategies to change the patients’ behavior -modeling and instrumental and instructional learning- in order to improve intervention.

Objectives: The aim of this study is to analyze whether the patients’ behavior may be influenced through modeling. To this end, we introduced a model patient -“fake patient” - in the program.

Methods: Twelve adults with no clinical problems who wanted to control their weight participated in the program. There were 2 cognitive-behavioral therapists in charge of the group who played the role of the model patient.

Results: Forum messages were categorized following Hwang et al. (2010). We compared the percentage of posted messages before and after the intervention of the “fake patient”, being the former 29.3% and the latter 70.7% (z = -4.072, p < .001).

Significant correlations between the “fake patient’s” and the participants’ messages emerged (see Figure).

Conclusion: This pilot study aims at contributing to online intervention programs by analyzing the effect that a “fake patient’s” behavior may have on the participants’ online behavior. The results show that the forum was mostly used to share experiences and that there is a significant influence of the “fake patient” on the participants’ online behavior. More studies are needed that explore whether using multiple strategies to change the patients’ behavior, such as instrumental learning and modeling, improves the intervention.


Tailored Internet-Administered Treatment of Panic Symptoms – A Randomised Controlled Trial

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Introduction: The first aim of this study was to test tailored Internet-administered treatment that involves tailoring the treatment according to the patient’s unique characteristics and comorbidities for individuals with reoccurring panic attacks. The second aim was to examine if different age groups (18-30 year olds and 31-45 year olds) respond equally to tailored Internet-administered treatment.

Method: A total of 57 participants were included after a semi-structured diagnostic interview and randomized to an 8 week treatment program or to a control group. Treatment consisted of a number of individually-prescribed modules in conjunction with online therapist guidance.

Results: Significant results were found for all dependent measures immediately following treatment. Mean between-group effect size on the primary outcome measure Panic Disorder Severity Scale (PDSS) was d 1.39 at post-treatment and the mean within group effect size was d 1.25 at post-treatment and d 0.92 at 6 months follow-up. The collection of follow-up data 1 year after treatment is in progress. There was no effect of age groups or any interaction between age groups and treatment.

Conclusion: The tentative conclusion drawn from these results is that tailoring the Internet-based therapy can be a feasible approach in the treatment of panic symptoms and comorbid anxiety and depressive symptoms.

Virtual Stop Smoking: exposure through virtual reality for smoking cessation

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Introduction: Multicomponent behavioral interventions are first choice treatments for smoking cessation. However, the high rates of relapse call for new strategies within this kind of programs. Cue-exposure techniques consist of controlled and repeated exposure to stimuli associated with substance use, in order to reduce craving associated with these situations. Recent studies have shown that exposure through virtual reality (VR) seems to be a more efficient strategy to present cues than other procedures. The main objective of this research is to determine the effectiveness of a multicomponent treatment for smoking cessation that includes a VR cue-exposure technique.

Method: This research was carried out in 3 phases. Phase 1:

Selection of situations that would be recreated as virtual environments. One hundred fifty-four smokers answered a questionnaire rating their craving level in 12 different situations (distal cues) and describing specific stimulus (proximal cues) that could precipitate tobacco use. Phase 2: Development and validation of virtual environments. We assessed the ability of 8 virtual environments to produce craving in 46 smokers. Phase 3: Development of the Virtual Stop Smoking program (VR cue-exposure technique + multicomponent behavioral treatment).

Results: According to phase 1 results, seven virtual environments with distal and proximal smoking cues and one control virtual environment were developed. Phase 2 outcomes confirmed the ability of the 7 virtual environments to produce craving in smokers. Finally, we added the VR cue-exposure technique into a smoking cessation program. As a part of an ongoing clinical trial, participants received 30 minutes of individual VR exposure before each of the six group-sessions.

Discussion: Virtual environments appear to be an effective method to simulate conditions associated with tobacco use in order to trigger craving that can be reduced using controlled exposure. Pending the clinical trial outcomes, VR may contribute to improve smoking cessation treatments.

Efficacy of an Internet-based treatment for pathological and problem gambling

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Objectives: Pathological gambling is a public health issue, involving serious consequences for gamblers, their family and the society at large. Even if effective psychological treatments are available (Gooding & Tarrier, 2009), most gamblers do not seek help for their problems, because of shame, denial, cost or unavailability of treatment (Evans & Delfabbro, 2005). An Internet-based treatment, easily accessible, available at any time of the day, implicating less stigma and involving a lower cost, could be a useful way to treat gamblers who normally wouldn’t undertake a therapy.

Methods: We developed an internet-based treatment for excessive gambling in French. Internet-based treatment includes 8 cognitive-behavioural steps dealing with motivation and goal setting, high risk situations, problem-solving, financial and time management, self-observation, concept of chance, erroneous thoughts and relapse prevention. Patients were evaluated twice (at baseline and at week 11) for pathological gambling diagnosis, self-reported gambling behaviour, consequences of gambling, and depressive symptomatology.

Results: Results of a pilot study including 10 patients indicate a significant change between pre- and post-evaluations concerning gambling symptoms, consequences of gambling, and feeling of control on gambling behaviours.
Conclusion: Outcomes suggest that an Internet-based treatment may be helpful in treating pathological and problem gambling. However, more data are still needed to confirm these preliminary results.


P192

Internet-Administered Treatment of Social Anxiety Disorder: Cognitive Behavioural Therapy vs. Computerized Attention Training – A Pilot RCT

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Objectives: Cognitive behavior therapy delivered via the internet with therapist support (iCBT), has been evaluated in several randomized controlled trials. Internet-based computerized attention training is a treatment approach without therapist contact, aimed to learn patients to direct their attention away from socially threatening cues. Both treatments have yielded promising results. The aim of this study was to compare both treatments.

Method: A total of 26 persons diagnosed with SAD were randomized to one of the two conditions: iCBT or attention training. A cross-over design was used, switching to the other treatment after completing the first. SAD symptoms were measured at pre, post and after cross-over treatment. Following measures were used: Liebowitz Social Anxiety Scale (LSAS), Social Phobia Scale (SPS), Social Interaction Anxiety Scale (SIAS) and Social Phobia Screening Questionnaire (SPSQ).

Results: A significant multivariate interaction effect was found in favor of the iCBT group, with small to medium between-group effect sizes (Cohen’s d) at post treatment (d = .25 to d = .77). Participants improved further after the second treatment, but due to small sample size effects were not statistically significant. Within-group effect sizes between post and cross-over yielded d = .13 to d = .32 by the attention training, and d = .67 to d = 1.16 for the iCBT group.

Conclusion: iCBT with therapist support and internet-based computerized attention training seems to be effective treatments of SAD. Treatment effects were observed following both approaches, but the results are in favor of iCBT. This is the first direct preliminary comparison of the two recently developed psychological treatment approaches for SAD.
Personality and Adjustment Disorder

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Introduction: Adjustment disorder (AD) is a common condition found in all cultures and age groups. The presence of a causal stresster is essential before a diagnosis of AD can be made. In primary care, there is a high frequency of this mental disorder which prevalence ranges from 11% to 18% (1). This disorder can be in comorbidity with other mental disorders, especially with personality disorders. The objective of this study is to describe the outpatients characteristics of personality in this disorder.

Method: To analyze the characteristics of personality with the Revised NEO Personality Inventory (Neo-PI-R) in a sample of 30 subjects with AD diagnosis in accordance with DSM-IV-TR criteria.

Results: Among the Big five personality factors analysed by the questionnaire - Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A) and Conscientiousness (C) - in our sample, in regard to the overall Spanish population, stands out both the predominance of the N factor and the little presence of the C factor. The subscales of the factor N with higher scores are Depression and Vulnerability. The subscales of the factor C with lower scores are Need of Achievement and Self-discipline.

Discussion: As expected, personality played a significant role in coping. According to the results of previous studies, subjects with high scores on N, compared to those low scores on N, have a propensity for experiencing negative emotions (2) and have problems coping in constructive ways. Subjects with high scores on C are effective copers who adapt to the demands of the situation and respond in appropriate ways (3). The results obtained support both hypotheses. Adjustment disorder has been poorly covered in literature, despite being one of the most found diagnoses in primary care. It is important to make further researches to determine if there is a predisposition for the disorder and which factors determine the result between the individual and the stressor.


Examining the impact of a brief cognitive-behavioral intervention on anxiety sensitivity: Preliminary findings


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Objectives: Anxiety sensitivity (AS) is the fear of anxiety and anxiety-related sensations, based on the belief that such sensations will lead to harmful somatic, psychological, or social consequences. Elevated levels of AS have been considered as a cognitive risk factor for the development and maintenance of various forms of psychopathology, particularly anxiety disorders. As some research suggest that AS mostly arises from a variety of learning experiences that result in acquisition of beliefs about potentially aversive effects of anxiety symptoms, targeting AS may be critical for the prevention and treatment of many psychological disorders. The aim of our study, which is in progress, is to examine the effectiveness of a brief cognitive-behavioral intervention designed to reduce AS and to prospectively evaluate the effects of this intervention on the incidence of various psychological problems during a 12-month follow-up period. The findings of a preliminary research, as part of this broader study, will be presented.

Methods: A total of 45 high AS subjects were assigned to one of 3 experimental conditions: a brief cognitive-behavioral intervention aimed at decreasing AS, an education on health control condition, and no-treatment control condition. Each intervention was delivered via computer and was completed in a single session of approximately 45 minutes. Several self-report (Anxiety Sensitivity Index, State-Trait Anxiety Inventory, Self-Assessment Manikin, Clinical Outcomes in Routine Evaluation – Outcome Measure) as well as behavioral measures were administered both at pre- and posttreatment. At posttreatment, a semistructured interview on participants’ experiences and reflections about intervention was also conducted.

Results and Conclusion: We compared the results within and between groups and conducted a qualitative analysis of experiences of participants. Our preliminary findings are promising, indicating the effectiveness of a brief cognitive-behavioral intervention in the reduction of AS. The practical implications of these findings will be discussed.

Differing weight trajectories for children and parents after receiving a four-month family-based behavioural treatment

Gunnarsdottir, Thrudur¹; Njardvik, U.; Craighead, L.W.; Olafsdottir, A.S.; Bjarnason, R.

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Background: Weight loss maintenance presents a significant challenge for adults receiving behaviour-based treatments for obesity. Weight loss maintenance remains a challenge for many children as well as two-years post treatment. Weight and height was measured and body-mass-index (BMI) and child body-mass-index standard-deviation-scores (BMI-SDS) were calculated.

Results: At the beginning of treatment the participating children were in the age range of 7.5-13.4 with a mean BMI-SDS of 3.09 (sd=0.49). Parents were in the age range of 31-51 with a mean BMI of 31.91 (sd=4.75). On average, parent BMI and child BMI-SDS was significantly increased during treatment (p<0.001). However, one year after cessation of treatment the parents had on average significantly increased their BMIs from post treatment (p=0.001) while on average the children had maintained their BMI-SDS since treatment cessation (p=0.337). Children moreover maintained their BMI-SDS from the one-year follow-up until followed up again at two-years post treatment (p=0.201).

Conclusion: Child weight loss seems to be easier to maintain than adult weight loss. A number of reasons contribute; physiological, psychological, behavioural and social. Considering the likelihood of an obese child becoming an obese adult and the difficulty observed in treatment maintenance among adults specifically, treatment of childhood obesity is an important factor in preventing adult obesity and its associated risks to physical and psychosocial health.

Self-reported teasing and social rejection and psychological adjustment in a clinical sample of obese children: Stability over time and opportunities for intervention

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¹University of Iceland, Iceland; ²Emory University, United States; ³Landspitali University Hospital, Iceland

Background: Obese children are potential targets of stigmatization and stereotyping by peers, educators, and even parents. Teasing and social rejection is more common among this subgroup of children than among their normal weight peers and has been associated with worse psychological adjustment in cross-sectional studies. Aims: To explore the longitudinal associations between child self-reports of teasing and social rejection, symptoms of depression and anxiety and measured body-mass-index standard-deviation scores (BMI-SDS) among obese children in a clinical sample.

Materials and Methods: Eighty-four children started family-based behavioural treatment for childhood obesity at an outpatient unit at the Children's Medical Centre in Iceland. Sixty-one children completed 18 weeks of treatment and were followed for two years post treatment. Child self-reports of teasing and social rejection, symptoms of depression (Child Depression Inventory) and symptoms of anxiety (Multidimensional Anxiety Scale for Children) and child BMI-SDS were measured before starting treatment and two years post treatment.

Results: At the beginning of treatment the participating children were in the age range of 7.5-13.4 with a mean BMI-SDS of 3.09 (sd=0.49). At treatment initiation self-reported teasing and social rejection was associated with symptoms of depression (r=0.452, p<0.01) and anxiety (r=0.529, p<0.01) but not with child BMI-SDS (p>0.05). At the two-year follow-up the same cross-sectional pattern was found and children who reported experiencing more teasing and social rejection, more symptoms of depression and anxiety before starting treatment were also the ones who were more likely to report experiencing more teasing and social rejection and more symptoms of depression and anxiety two years after treatment ended. Changes over time in endorsed teasing and social rejection, symptoms of depression and anxiety were all highly intercorrelated (p<0.01). Changes in BMI-SDS did however not correlate with changes in teasing and social rejection, changes in symptoms of depression or changes in symptoms of anxiety. Further analyses of these results are pending and will be presented at the conference.

Conclusion: Teasing and social rejection and psychological adjustment among obese children both seem to have high stability over time. To prevent from long-term adverse effects of teasing and social rejection and psychological maladjustment among obese children early intervention should be explored as an adjunct to family-based behavioural treatment for childhood obesity.
Effectiveness of a stress management program for Greek caregivers of patients attending a Dementia Day Care Center

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Objectives: A considerable amount of literature confirms the beneficial effects of non pharmacological therapies for the dementia sufferers as well as for their caregivers. Cognitive behaviourial group therapy programmes have a promising role and contribute to the reduction of caregivers’ stress and strain in everyday life. Caregivers experiencing feelings of frustration and guilt, are at an increased risk of depression. They also have physical illnesses (hypertension, gastrointestinal disorders, arthritis) and increased mortality. Disturbances in the sympathetic nervous system may mediate these conditions. Stress management interventions based on cognitive behavioral theory and therapy give positive outcomes among caregivers. The present study aims to evaluate the effectiveness of a stress management program based on cognitive behavioural therapy in caregivers of patients with dementia.

Methods: Caregivers of demented patients participated for 6 months in a stress management program. The program was conducted on a fortnight basis at the Dementia Day Care Center of Athens Association of Alzheimer’s Disease. Subjects received training in cognitive behaviour model, psychoeducation on anxiety and stress, relaxation, assertiveness skills, anger management, breathing retraining, problem - solving skills. Stress and anxiety inventories (BAI, BDI, Cohen PSS, COPE) were administered pre and post - intervention. The statistical package for the social science (SPSS, version 13) was used to analyze data collected.

Results: Comparison of stress and anxiety inventories, pre and post – intervention was made.

Conclusion: Stress management program based on Cognitive Behaviour Theory appears to be beneficial for caregivers of dementia patients in this study. Carers’ organisations and/ or Dementia Day Care Centres could use this type of intervention in designing support programs for caregivers.
Authors Index
<table>
<thead>
<tr>
<th>NAME</th>
<th>ABSTRACT NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abe, H</td>
<td>P170</td>
</tr>
<tr>
<td>Abramson, L</td>
<td>P038, P095, P123</td>
</tr>
<tr>
<td>Acerbi, C</td>
<td>P169</td>
</tr>
<tr>
<td>Achenbich, S</td>
<td>S32-5</td>
</tr>
<tr>
<td>Aggestein, P</td>
<td>P055</td>
</tr>
<tr>
<td>Ajay, G</td>
<td>PA16-3</td>
</tr>
<tr>
<td>Akkermann, K</td>
<td>P139</td>
</tr>
<tr>
<td>Alden, L</td>
<td>PA20-3</td>
</tr>
<tr>
<td>Algard, L</td>
<td>PA19-3</td>
</tr>
<tr>
<td>Al-Khudhairi, N</td>
<td>S71-4</td>
</tr>
<tr>
<td>Alley, L</td>
<td>P039, P095, P123</td>
</tr>
<tr>
<td>Almedros, C</td>
<td>P049, P050, P051, P164</td>
</tr>
<tr>
<td>Alonso, M</td>
<td>P026</td>
</tr>
<tr>
<td>Alonso, P</td>
<td>P018</td>
</tr>
<tr>
<td>Altenstein, D</td>
<td>S15-2</td>
</tr>
<tr>
<td>Amato, L</td>
<td>P169</td>
</tr>
<tr>
<td>Ambo, E</td>
<td>PA131, PA21-1</td>
</tr>
<tr>
<td>Andersoz, A</td>
<td>S20-1, S30-2</td>
</tr>
<tr>
<td>Andersson, G</td>
<td>P189, P192, P06-6, P06-4, PA29-5, P02-2, S03-3, S31-2, S32-2, S32-3, S57-4, S69-1, S69-2, S69-3, S01-2, S03-4, S03-5, S04-1, S04-2, S04-3, S05-2, S11-3, S11-4</td>
</tr>
<tr>
<td>Arents, E</td>
<td>S03-4</td>
</tr>
<tr>
<td>Arjunda, R</td>
<td>IW-19, P156</td>
</tr>
<tr>
<td>Arna Hauksdóttir, A</td>
<td>S62-3</td>
</tr>
<tr>
<td>Arnarnson, E</td>
<td>PA152, PA153, PA154, PA178, PA21-4, S07-2, S07-3, S19-1</td>
</tr>
<tr>
<td>Arritz, A</td>
<td>K-04, PW-01, S01-1, S01-2, S10-2, S13-3</td>
</tr>
<tr>
<td>Artega, A</td>
<td>P030, P004</td>
</tr>
<tr>
<td>Arts, W</td>
<td>P001</td>
</tr>
<tr>
<td>Aschwanden, E</td>
<td>S09-4</td>
</tr>
<tr>
<td>Askew, C</td>
<td>PA09-4, PA20-4</td>
</tr>
<tr>
<td>Aspelund, T</td>
<td>P153</td>
</tr>
<tr>
<td>Aune, T</td>
<td>S21-4</td>
</tr>
<tr>
<td>Austin, K</td>
<td>P057, S71-1</td>
</tr>
<tr>
<td>Azeveda, A</td>
<td>P160</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NAME</th>
<th>ABSTRACT NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basfield, C</td>
<td>PA13-4</td>
</tr>
<tr>
<td>Baslin, M</td>
<td>S46-4</td>
</tr>
<tr>
<td>Becker, C</td>
<td>S63-1</td>
</tr>
<tr>
<td>Becker, E</td>
<td>PA25-1, S24-1, S24-4, S50-3, S67-4, S78-3, S79-1, S79-3</td>
</tr>
<tr>
<td>Becker, S</td>
<td>PA129</td>
</tr>
<tr>
<td>Beckers, T</td>
<td>P137, PA09-3, S51-3</td>
</tr>
<tr>
<td>Beehman, A</td>
<td>S15-1</td>
</tr>
<tr>
<td>Beishe, D</td>
<td>S63-1</td>
</tr>
<tr>
<td>Bel, M</td>
<td>P040</td>
</tr>
<tr>
<td>Bellanger, C</td>
<td>P106</td>
</tr>
<tr>
<td>Benecke, E</td>
<td>S070</td>
</tr>
<tr>
<td>Benneweek Evertsz, F</td>
<td>S52-4</td>
</tr>
<tr>
<td>Bernhardsdottir, J</td>
<td>PA15-3, PA16-2</td>
</tr>
<tr>
<td>Berntsen, D</td>
<td>PA086</td>
</tr>
<tr>
<td>Bidwell, L</td>
<td>S72-1</td>
</tr>
<tr>
<td>Bieda-Peyton, J</td>
<td>S42-1</td>
</tr>
<tr>
<td>Bijnott, P</td>
<td>S05-3, S66-1</td>
</tr>
<tr>
<td>Birgisson, E</td>
<td>P154</td>
</tr>
<tr>
<td>Birken, B</td>
<td>S59-4</td>
</tr>
<tr>
<td>Biro, Mikolé, B</td>
<td>P179</td>
</tr>
<tr>
<td>Biree, E</td>
<td>PA11-3</td>
</tr>
<tr>
<td>Bizzozero, A</td>
<td>PA26-4</td>
</tr>
<tr>
<td>Bjaastad, J</td>
<td>S70-2, S70-4</td>
</tr>
<tr>
<td>Bjarnadottir, S</td>
<td>S62-4</td>
</tr>
<tr>
<td>Bjarnason, R</td>
<td>P196, P197</td>
</tr>
<tr>
<td>Bjoergvinsson, T</td>
<td>S42-1, S42-3, S42-7</td>
</tr>
<tr>
<td>Bjornsson, A</td>
<td>IW-09, P033, S72-1</td>
</tr>
<tr>
<td>Black, C</td>
<td>P039, P123</td>
</tr>
<tr>
<td>Black, I</td>
<td>PA24-4</td>
</tr>
<tr>
<td>Blackwell, S</td>
<td>S67-1</td>
</tr>
<tr>
<td>Blair-West, S</td>
<td>S47-1</td>
</tr>
<tr>
<td>Blairy, S</td>
<td>PA106, P147</td>
</tr>
<tr>
<td>Blake, E</td>
<td>S29-1</td>
</tr>
<tr>
<td>Bless, J</td>
<td>PA29-3</td>
</tr>
<tr>
<td>Blom, K</td>
<td>PA19-1, P071, P19-3</td>
</tr>
<tr>
<td>Blom, M</td>
<td>P157</td>
</tr>
<tr>
<td>Blöndhald, M</td>
<td>PA02-5</td>
</tr>
<tr>
<td>Blöndal, M</td>
<td>S04-1, S62-2, S62-4</td>
</tr>
<tr>
<td>Blumenthal, J</td>
<td>S53-1</td>
</tr>
<tr>
<td>Bocci, A</td>
<td>PA09-3, P095, P123</td>
</tr>
<tr>
<td>Bockting, C</td>
<td>IW-14, S08-1, S08-4, S15-3</td>
</tr>
<tr>
<td>Bodo, J</td>
<td>PA06-2</td>
</tr>
<tr>
<td>Boddoo, L</td>
<td>P192</td>
</tr>
<tr>
<td>Bocking, B</td>
<td>S28-1, S28-4</td>
</tr>
<tr>
<td>Bocquart, C</td>
<td>PA06-2, PA09-1, PA19-2, PA24-4, S72-2</td>
</tr>
<tr>
<td>Bohn, A</td>
<td>S05-1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NAME</th>
<th>ABSTRACT NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bohus, M</td>
<td>PA07-4</td>
</tr>
<tr>
<td>Bolt, O</td>
<td>PA20-1</td>
</tr>
<tr>
<td>Bondolfi, G</td>
<td>P191, S09-3</td>
</tr>
<tr>
<td>Bora, C</td>
<td>PA12-2, PA29-2, S22-2, S22-5</td>
</tr>
<tr>
<td>Borge, F</td>
<td>S28-2</td>
</tr>
<tr>
<td>Borrego, R, R</td>
<td>P040</td>
</tr>
<tr>
<td>Bosmans, G</td>
<td>P119, P130, S26-1, S26-2, S26-3</td>
</tr>
<tr>
<td>Bottesi, G</td>
<td>P048</td>
</tr>
<tr>
<td>Boulanger, M</td>
<td>P106, P147</td>
</tr>
<tr>
<td>Bouman, T</td>
<td>IW-13, P029</td>
</tr>
<tr>
<td>Bouvard, M</td>
<td>P027</td>
</tr>
<tr>
<td>Bowen, S</td>
<td>S78-4</td>
</tr>
<tr>
<td>Boyer, R</td>
<td>P140</td>
</tr>
<tr>
<td>Boz, F</td>
<td>P048</td>
</tr>
<tr>
<td>Bozovic, G</td>
<td>P092, P093, P094</td>
</tr>
<tr>
<td>Bradley, B</td>
<td>PA25-2</td>
</tr>
<tr>
<td>Brady, K, M</td>
<td>S65-2</td>
</tr>
<tr>
<td>Brea, C</td>
<td>PA119, PA12, PA29-1, S02-1, S02-2, S03-3, S03-4, S03-5, S03-6, S08-3, S08-4</td>
</tr>
<tr>
<td>Brest, K</td>
<td>P132, P133</td>
</tr>
<tr>
<td>Brandsma, R</td>
<td>S46-3</td>
</tr>
<tr>
<td>Brauer, M</td>
<td>S21-2</td>
</tr>
<tr>
<td>Brdaric, D</td>
<td>P012</td>
</tr>
<tr>
<td>Brechman-Toussaint, M</td>
<td>S36-1</td>
</tr>
<tr>
<td>Brett, C</td>
<td>S27-1</td>
</tr>
<tr>
<td>Brewerton, T</td>
<td>IW-07</td>
</tr>
<tr>
<td>Brewin, C</td>
<td>S41-5</td>
</tr>
<tr>
<td>Breyer, T</td>
<td>S73-1</td>
</tr>
<tr>
<td>Britt, H</td>
<td>S12-1</td>
</tr>
<tr>
<td>Bromley, A</td>
<td>S59-4</td>
</tr>
<tr>
<td>Brosse, A</td>
<td>S72-1</td>
</tr>
<tr>
<td>Bruns, B</td>
<td>S16-1</td>
</tr>
<tr>
<td>Bruyneel, L</td>
<td>S14-2</td>
</tr>
<tr>
<td>Bryant, R</td>
<td>S01-5, S68-2, S68-2, S68-4, S75-4</td>
</tr>
<tr>
<td>Bucarelli, B</td>
<td>P027</td>
</tr>
<tr>
<td>Buchholz, A</td>
<td>S03-3</td>
</tr>
<tr>
<td>Buell, M</td>
<td>S66-3</td>
</tr>
<tr>
<td>Bulbena, A</td>
<td>PA025, P194</td>
</tr>
<tr>
<td>Bulbena Vilarasa, A</td>
<td>P172</td>
</tr>
<tr>
<td>Bulli, F</td>
<td>PA14-1</td>
</tr>
<tr>
<td>Burg, J</td>
<td>S09-2, S73-2</td>
</tr>
<tr>
<td>Busch, M</td>
<td>PA24-2</td>
</tr>
<tr>
<td>Byrne, P</td>
<td>S12-2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NAME</th>
<th>ABSTRACT NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabas, P</td>
<td>PA06-3</td>
</tr>
<tr>
<td>CABAS-HOYOS, K</td>
<td>P187</td>
</tr>
<tr>
<td>Cabrera, J</td>
<td>PA142, PA13-3</td>
</tr>
<tr>
<td>Caffier, D</td>
<td>S39-3</td>
</tr>
<tr>
<td>Calero-Elder, A</td>
<td>P063, P064, PA26-2</td>
</tr>
<tr>
<td>Callahan, S</td>
<td>P034, P076, P134, P161, PA28-3</td>
</tr>
<tr>
<td>Callinan, S</td>
<td>S20-1</td>
</tr>
<tr>
<td>Canavera, K</td>
<td>S47-5, S77-4</td>
</tr>
<tr>
<td>Canevioso, M</td>
<td>PA12-3</td>
</tr>
<tr>
<td>Cao, L</td>
<td>S05-2</td>
</tr>
<tr>
<td>Caprin, C</td>
<td>P165</td>
</tr>
<tr>
<td>Cardo, E</td>
<td>P055, P065, P066</td>
</tr>
<tr>
<td>Cardoner, N</td>
<td>P026</td>
</tr>
<tr>
<td>Care, G</td>
<td>P027</td>
</tr>
<tr>
<td>Carriere, J</td>
<td>S72-1</td>
</tr>
<tr>
<td>Carnier, J</td>
<td>S25-2</td>
</tr>
<tr>
<td>Carbring, P</td>
<td>P176, P189, P192, PA06-2, PA29-1, S02-1, S02-2, S03-3, S31-2, S57-4, S69-2, S80-4</td>
</tr>
<tr>
<td>NAME</td>
<td>ABSTRACT NO</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>Carlin, J</td>
<td>PA15-1</td>
</tr>
<tr>
<td>Carmelley, K</td>
<td>S26-4</td>
</tr>
<tr>
<td>Carrarezi, C</td>
<td>PA14-1</td>
</tr>
<tr>
<td>Carrasco, C</td>
<td>P034</td>
</tr>
<tr>
<td>Carratà, F</td>
<td>PA06-3</td>
</tr>
<tr>
<td>Carrobies, J</td>
<td>P049, P050, P051</td>
</tr>
<tr>
<td>Carter, N</td>
<td>S56-1, S56-2</td>
</tr>
<tr>
<td>Carvalja Molina, F</td>
<td>P127</td>
</tr>
<tr>
<td>Cassel, G</td>
<td>S20-3, S37-1, S37-2</td>
</tr>
<tr>
<td>Casey, L</td>
<td>PA03-3</td>
</tr>
<tr>
<td>Castellanos-Ryan, N</td>
<td>PA15-1</td>
</tr>
<tr>
<td>Cavanagh, K</td>
<td>S25-4, S26-4, S38-2</td>
</tr>
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<td>Ceschi, G</td>
<td>P186</td>
</tr>
<tr>
<td>Chapelle, F</td>
<td>PA28-3, P034, P161</td>
</tr>
<tr>
<td>Charla, A</td>
<td>P198</td>
</tr>
<tr>
<td>Chatsrand, C</td>
<td>P104</td>
</tr>
<tr>
<td>Chere, S</td>
<td>S07-3</td>
</tr>
<tr>
<td>Chiu, C</td>
<td>PA27-2</td>
</tr>
<tr>
<td>Chung, B</td>
<td>S39-3</td>
</tr>
<tr>
<td>Cilli, S</td>
<td>S41-2, S76-2</td>
</tr>
<tr>
<td>Cima, M</td>
<td>S39-5</td>
</tr>
<tr>
<td>Cisler, J</td>
<td>S30-1</td>
</tr>
<tr>
<td>Claes, I</td>
<td>PA27-3, S05-3, S05-4, S78-5</td>
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<td>Clair, A</td>
<td>P101, P102</td>
</tr>
<tr>
<td>Clarici, A</td>
<td>P120</td>
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<td>Clark, D</td>
<td>K-01, PA20-1, PW-02, S11-3, S28-1, S28-2, S84-1, S72-2</td>
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<tr>
<td>Clark, L</td>
<td>PA22-2</td>
</tr>
<tr>
<td>Clifasef, S</td>
<td>S78-4</td>
</tr>
<tr>
<td>Clum, G</td>
<td>P021, P030</td>
</tr>
<tr>
<td>Coatsworth, J</td>
<td>S40-2</td>
</tr>
<tr>
<td>Coelho, J</td>
<td>S51-4</td>
</tr>
<tr>
<td>Coffey, C</td>
<td>S71-1</td>
</tr>
<tr>
<td>Coletas, J</td>
<td>P194</td>
</tr>
<tr>
<td>Collins, L</td>
<td>PA16-1</td>
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<tr>
<td>Colombo, P</td>
<td>PA26-4</td>
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<tr>
<td>Comer, C</td>
<td>P021</td>
</tr>
<tr>
<td>Conesa, C</td>
<td>P040</td>
</tr>
<tr>
<td>Conrod, P</td>
<td>P006, S71-2, S71-4</td>
</tr>
<tr>
<td>Constantinoiu, M</td>
<td>S42-5</td>
</tr>
<tr>
<td>Coode-Bate, T</td>
<td>S01-3</td>
</tr>
<tr>
<td>Cooley, J</td>
<td>PA02, P122, S30-3</td>
</tr>
<tr>
<td>Corominas, A</td>
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</tr>
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<td>Corsale, B</td>
<td>PA26-4</td>
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<tr>
<td>Corrigan, R</td>
<td>P025, P194</td>
</tr>
<tr>
<td>Cortizo Vidal, R</td>
<td>P172</td>
</tr>
<tr>
<td>Costa, I</td>
<td>S49-1</td>
</tr>
<tr>
<td>Coughtrey, A</td>
<td>S76-3</td>
</tr>
<tr>
<td>Cousijn, I</td>
<td>P008, S24-2</td>
</tr>
<tr>
<td>Cowart, M</td>
<td>P083, P177</td>
</tr>
<tr>
<td>Cox, K</td>
<td>P162</td>
</tr>
<tr>
<td>Coyle, D</td>
<td>PA06-6</td>
</tr>
<tr>
<td>Craeynest, M</td>
<td>S18-3</td>
</tr>
<tr>
<td>Craighhead, L</td>
<td>P196, P197</td>
</tr>
<tr>
<td>Craighead, W</td>
<td>PA09, P122, S07-2, S07-3, S30-1, S30-2, S30-3, S72-1</td>
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<tr>
<td>Crane, C</td>
<td>S18-2, S46-2</td>
</tr>
<tr>
<td>Cristea, I</td>
<td>PA02-2, PA20-2, PA24-1</td>
</tr>
<tr>
<td>Crosby, R</td>
<td>S05-2</td>
</tr>
<tr>
<td>Cruz Garcia, M</td>
<td>P155</td>
</tr>
<tr>
<td>Csink, E</td>
<td>PA15-1</td>
</tr>
<tr>
<td>Cuypers, P</td>
<td>PW-04, S08-4, S31-1, S31-3</td>
</tr>
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<td>Cummings, C</td>
<td>PA12-4</td>
</tr>
<tr>
<td>Cunha, M</td>
<td>P019, P052, PA12-1, PA30-1</td>
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<td>Curry, J</td>
<td>PW-05</td>
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<td>D</td>
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<td>Dalgüest, T</td>
<td>K-09, PA11-2, PW-06</td>
</tr>
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<td>Dalgüest, P</td>
<td>PA16-4</td>
</tr>
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<td>Dar, R</td>
<td>S60-3</td>
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<tr>
<td>Dargis-Damphousse, L</td>
<td>P140</td>
</tr>
<tr>
<td>Dash, S</td>
<td>S25-1</td>
</tr>
<tr>
<td>Davey, G</td>
<td>S25-1, S25-5</td>
</tr>
<tr>
<td>David, D</td>
<td>PA01, PA20-2, PA24-1</td>
</tr>
<tr>
<td>Davidsdóttir, S</td>
<td>S42-3, S72-3</td>
</tr>
<tr>
<td>Day, F</td>
<td>S27-4</td>
</tr>
<tr>
<td>de Bont, P</td>
<td>S44-1, S44-3</td>
</tr>
<tr>
<td>de Cuyper, K</td>
<td>S78-5</td>
</tr>
<tr>
<td>de Haan, E</td>
<td>S35-2, S35-4, S35-5, S35-2</td>
</tr>
<tr>
<td>de Houwer, J</td>
<td>PA09-1, PA09-2</td>
</tr>
<tr>
<td>de Hullu, E</td>
<td>PA041, P074, S21-1, S21-2, S67-2</td>
</tr>
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<td>de Jong, P</td>
<td>PA009, P041, P074, P135, P136, P145, S21-1, S21-2, S22-1, S22-2, S22-3, S22-4, S25-2, S35-0, S50-1, S50-2, S50-4, S67-2, S78-1, S78-2, S79-4, S79-5</td>
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<td>de Jongh, A</td>
<td>S44-1</td>
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<td>de Lussigny, E</td>
<td>S14-1, S14-2, S14-3, S14-4, S14-5</td>
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<td>De Raedt, R</td>
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<td>de Roos, C</td>
<td>S36-4, S64-1</td>
</tr>
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<td>De Vlaming, I</td>
<td>PA01</td>
</tr>
<tr>
<td>de Zwaan, M</td>
<td>S05-2, S05-3, S05-4</td>
</tr>
<tr>
<td>Dear, B</td>
<td>PA06-5</td>
</tr>
<tr>
<td>Debeer, E</td>
<td>PA047, P113, S18-3</td>
</tr>
<tr>
<td>Deborah, S</td>
<td>S29-2</td>
</tr>
<tr>
<td>Deckersbach, T</td>
<td>IW-18, S12-1, S12-4, S73-5</td>
</tr>
<tr>
<td>Decoene, N</td>
<td>S26-2</td>
</tr>
<tr>
<td>Decel-Rudin, A</td>
<td>S57-1</td>
</tr>
<tr>
<td>Deeprat, C</td>
<td>S01-3, S41-4</td>
</tr>
<tr>
<td>Degenhardt, L</td>
<td>S71-1</td>
</tr>
<tr>
<td>Degerman, N</td>
<td>S02-2</td>
</tr>
<tr>
<td>Dek, E</td>
<td>S25-3, S60-1, S60-2</td>
</tr>
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<td>Deremey, I</td>
<td>S14-1, S14-5</td>
</tr>
<tr>
<td>Derakhshani, N</td>
<td>S14-5</td>
</tr>
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<td>S52-2</td>
</tr>
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<td>PA10</td>
</tr>
<tr>
<td>Dethier, M</td>
<td>P147</td>
</tr>
<tr>
<td>Dewulf, D</td>
<td>S46-4</td>
</tr>
<tr>
<td>Di Berardino, A</td>
<td>PA26-4, PA16-4</td>
</tr>
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<td>Diaz, B</td>
<td>P025, P194</td>
</tr>
<tr>
<td>Diaz de Aldana, J</td>
<td>PA049</td>
</tr>
<tr>
<td>Diaz Mugica, B</td>
<td>PA172</td>
</tr>
<tr>
<td>Dickson, J</td>
<td>S23-1, S23-3, S79-2</td>
</tr>
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<td>P033</td>
</tr>
<tr>
<td>Dijk, C</td>
<td>S50-2</td>
</tr>
<tr>
<td>Dimmitt Champion, J</td>
<td>PA16-1, PA16-2</td>
</tr>
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<td>Dinis, A</td>
<td>S49-4</td>
</tr>
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<td>PA11-2</td>
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<td>Dobson, K</td>
<td>S29-1</td>
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<td>S34-1, S36-3, S36-4</td>
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<td>Domis, G</td>
<td>S39-1, S39-3</td>
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**E**

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<th>NAME</th>
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<td>S29-1, S29-2, S29-3, S29-4</td>
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<td>PA046, PA25-4, S49-3</td>
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<td>S25-4</td>
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<td>S18-2, S74-3</td>
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<td>P119, S26-1</td>
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<td>S40-2</td>
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**F**

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<td>Farrell, J</td>
<td>S10-1, S10-3</td>
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**EABCT 2011**
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<th>NAME</th>
<th>ABSTRACT NO</th>
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<td>P169</td>
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<td>Fattahi, K</td>
<td>S80-4</td>
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<td>Fava, G</td>
<td>P171</td>
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<td>Fehlinger, T</td>
<td>P105, P173</td>
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<tr>
<td>Fennell, M.</td>
<td>P084, S63-2</td>
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<tr>
<td>Fernández, V</td>
<td>P164</td>
</tr>
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<td>Fernández-González, L</td>
<td>P164</td>
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<td>Fernández-Alcaraz, C</td>
<td>P127</td>
</tr>
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<td>Fernández-Montalvo, J</td>
<td>P003, P014, P193</td>
</tr>
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<td>Ferreira, C</td>
<td>P046, PA25-4, S49-3</td>
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<td>Ferrer-Garcia, M</td>
<td>P190</td>
</tr>
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<td>Festen, H</td>
<td>S33-3</td>
</tr>
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<td>Field, A</td>
<td>S45-4</td>
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<td>Field, M</td>
<td>S59-2</td>
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<td>Filipcek, M.</td>
<td>PA23-2</td>
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<td>Fink, P</td>
<td>S32-3</td>
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<td>Finnbogadottir, H</td>
<td>P086</td>
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<tr>
<td>Finnodottir, T</td>
<td>S62-1</td>
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<td>Finset, A</td>
<td>PA05-3</td>
</tr>
<tr>
<td>Fjermestad, K</td>
<td>S70-1, S70-2</td>
</tr>
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<td>S55-3</td>
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<td>Flink, I</td>
<td>P149</td>
</tr>
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<td>Forsmark, H</td>
<td>P031</td>
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<td>Ford, T</td>
<td>S40-4</td>
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<td>Forntmann, T</td>
<td>P053</td>
</tr>
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<td>Fors, M</td>
<td>P025</td>
</tr>
<tr>
<td>Fors, E</td>
<td>PA05-3</td>
</tr>
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<td>Forsberg, L</td>
<td>PA24-4, S02-3</td>
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<td>Fradin, J</td>
<td>P097</td>
</tr>
<tr>
<td>Fraire, M</td>
<td>P077, S77-3</td>
</tr>
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<td>Franck, E</td>
<td>P116</td>
</tr>
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<td>Freeman, D</td>
<td>S27-4</td>
</tr>
<tr>
<td>Fresco, A</td>
<td>P169</td>
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<td>Fretwell, H</td>
<td>IW-21, S10-1</td>
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<td>Freyberger, H</td>
<td>S50-1</td>
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<td>Froján-Parga, M</td>
<td>P060, P061, P062</td>
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<tr>
<td>Frostholt, L</td>
<td>S32-3</td>
</tr>
<tr>
<td>Fullana, M</td>
<td>P026</td>
</tr>
<tr>
<td>Furmarkt, T</td>
<td>P192, S57-4</td>
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<td>Furukawa, T</td>
<td>P115</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>NAME</th>
<th>ABSTRACT NO</th>
</tr>
</thead>
<tbody>
<tr>
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<td>S32-4</td>
</tr>
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<td>Gentili, C</td>
<td>PA20-2</td>
</tr>
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<td>Georgiou, D</td>
<td>S42-4</td>
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<td>Geraets, E</td>
<td>P035, P124, S48-3</td>
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<td>Gere, M</td>
<td>PA04-3, PA12-4</td>
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<td>Gerlach, A</td>
<td>PA13-4, S05-1</td>
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<td>Ghesquiere, I</td>
<td>P038</td>
</tr>
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<td>Ghisi, M</td>
<td>P048</td>
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<td>Gjedde, B</td>
<td>S25-3, S60-1, S60-2</td>
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<td>S54-2, S54-3, S54-4, S54-1</td>
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<td>Gilbi, P</td>
<td>S54-3, S54-4</td>
</tr>
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<td>P014</td>
</tr>
<tr>
<td>Giomi, F.</td>
<td>S74-1</td>
</tr>
<tr>
<td>Giroux, S</td>
<td>P104</td>
</tr>
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<td>Glisodottir, A</td>
<td>P185</td>
</tr>
<tr>
<td>Gjekstad, B</td>
<td>S59-4</td>
</tr>
<tr>
<td>Gjikka, S</td>
<td>S20-4</td>
</tr>
<tr>
<td>Gladwin, T.</td>
<td>S79-1</td>
</tr>
<tr>
<td>Glashouwer, K</td>
<td>P145, S78-2</td>
</tr>
<tr>
<td>Glimblewski, J</td>
<td>PA05-1, PA05-2</td>
</tr>
<tr>
<td>Godoy, J</td>
<td>P087</td>
</tr>
<tr>
<td>Godoy-Izquierdo, D</td>
<td>P087</td>
</tr>
<tr>
<td>Goelkev, E</td>
<td>S74-4</td>
</tr>
<tr>
<td>Gold, E</td>
<td>S40-3</td>
</tr>
<tr>
<td>Goodwin, G</td>
<td>S41-4</td>
</tr>
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<td>Goosen, A.</td>
<td>S81-1</td>
</tr>
<tr>
<td>Goossens, L</td>
<td>P119</td>
</tr>
<tr>
<td>Goubert, L.</td>
<td>S14-4</td>
</tr>
<tr>
<td>Goudriaan, A</td>
<td>P008, S24-2</td>
</tr>
<tr>
<td>Goujon, D</td>
<td>P109</td>
</tr>
<tr>
<td>Goupil, G</td>
<td>P072</td>
</tr>
<tr>
<td>Gouveia, J.</td>
<td>IW-17</td>
</tr>
<tr>
<td>Grafa, J</td>
<td>P164</td>
</tr>
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<td>Grandi, S</td>
<td>P171</td>
</tr>
<tr>
<td>Grant, J.</td>
<td>P033</td>
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<td>Graser, J</td>
<td>S14-3</td>
</tr>
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<td>Grasse, R</td>
<td>P143</td>
</tr>
<tr>
<td>Greve, A</td>
<td>P166</td>
</tr>
<tr>
<td>Greenberg, M</td>
<td>S40-2</td>
</tr>
<tr>
<td>Gregorio, S</td>
<td>S04-4</td>
</tr>
<tr>
<td>Gregorio, S</td>
<td>PA25-3</td>
</tr>
<tr>
<td>Gregmigni, P</td>
<td>PA14-1</td>
</tr>
<tr>
<td>Grieco, S</td>
<td>PA26-4</td>
</tr>
<tr>
<td>Griffith, J.</td>
<td>S74-3</td>
</tr>
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<td>Grigiani, S.</td>
<td>P169</td>
</tr>
<tr>
<td>Grigore, A.</td>
<td>P058</td>
</tr>
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<td>Grillenberger, M</td>
<td>P150</td>
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<td>Grimsdottir, G.</td>
<td>PA15-3</td>
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<td>Gol, M.</td>
<td>S37-3</td>
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<td>Grinemeney, D</td>
<td>P212-2</td>
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<tr>
<td>Gropalis, M.</td>
<td>P032</td>
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<td>Grosse Holthorst, M</td>
<td>S15-2</td>
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<td>Grothaus, L</td>
<td>P115</td>
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<td>Grow, J</td>
<td>S78-4</td>
</tr>
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<td>Guay, M</td>
<td>P104</td>
</tr>
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<td>Guazzelli, M</td>
<td>PA20-2</td>
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<td>Gude, T</td>
<td>PA30-2</td>
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<td>Guðjónsdóttir, M</td>
<td>P175</td>
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<td>Gudmundsdottir, B</td>
<td>P185, S04-1, S04-3, S62-1, S62-2, S62-4</td>
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<td>Gudmundsdottir, R.</td>
<td>S04-4</td>
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<td>Gudmundsdottir, A.</td>
<td>P153</td>
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</table>

<table>
<thead>
<tr>
<th>NAME</th>
<th>ABSTRACT NO</th>
</tr>
</thead>
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<tr>
<td>Guðmundsdóttir, A</td>
<td>P153</td>
</tr>
<tr>
<td>Guidi, J</td>
<td>P171</td>
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<td>Gunnarsdottir, T</td>
<td>PA02-1, P196, P197</td>
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<td>Gunnarsdottir, E</td>
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<td>Gunnarsdottir, P</td>
<td>PA15-3</td>
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<tr>
<td>Gustafsson, T</td>
<td>S80-4</td>
</tr>
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<td>Gutierrez, B</td>
<td>P174</td>
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<tr>
<td>Gutierrez - Martinez, O</td>
<td>P187</td>
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<tr>
<td>Gutierrez-Maldonado, J</td>
<td>P168, P187, P190, PA06-3</td>
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<table>
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<tr>
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<th>ABSTRACT NO</th>
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<td>Habermeyer, E</td>
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<td>Hackmann, A</td>
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<td>IW-01, K-05</td>
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<td>Hagenaa, A</td>
<td>S01-4, S24-5</td>
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<td>Halland, A</td>
<td>PA01-1</td>
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<td>Hales, S</td>
<td>S41-4</td>
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<td>Hallidorsson, T</td>
<td>PA17-3, P197, S77-1</td>
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<td>Hallidórnsson, Á</td>
<td>P154</td>
</tr>
<tr>
<td>Halvorsen, M</td>
<td>P112</td>
</tr>
<tr>
<td>Ham, van, N</td>
<td>PA26-1</td>
</tr>
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<td>Hamiel, D</td>
<td>PA11-5</td>
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<td>Hamlat, E</td>
<td>P123</td>
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<td>Ham, A</td>
<td>PA17-3, S01-3</td>
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<td>Hanne Krage Carlsen, H</td>
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<td>Hannesdottir, D</td>
<td>S33-2</td>
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<td>Hannig, W</td>
<td>S08-4</td>
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<tr>
<td>Hanssdóttir, I</td>
<td>S19-1</td>
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<tr>
<td>Haringaas, R</td>
<td>S01-1, S13-5</td>
</tr>
<tr>
<td>Harris, T</td>
<td>P153</td>
</tr>
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<td>Hartman, C</td>
<td>S35-2, S35-3</td>
</tr>
<tr>
<td>Hartmann, T.</td>
<td>S06-3</td>
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<tr>
<td>Hassanen, L</td>
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<tr>
<td>Haug, T</td>
<td>S57-1, S57-2</td>
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<tr>
<td>Hauge, C.</td>
<td>P158</td>
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<td>Haugland, B.</td>
<td>S70-1, S70-2, S70-3, S70-4</td>
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<td>PA22-1, S07-1, S08-2, S09-4, S15-4</td>
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<td>P111</td>
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<td>S57-1, S57-2, S57-4, S70-2, S70-3</td>
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<td>Hayes, A</td>
<td>S15-2</td>
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<tr>
<td>Hazuki Koizumi, H</td>
<td>P107</td>
</tr>
<tr>
<td>Hearn, M</td>
<td>P186</td>
</tr>
<tr>
<td>Hebermehl, L</td>
<td>P182</td>
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<td>Hedley, L</td>
<td>PA17-2</td>
</tr>
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<td>Hedman, E</td>
<td>S32-2, S69-3</td>
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<tr>
<td>Heekeren, H</td>
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<td>S59-2</td>
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<td>P152</td>
</tr>
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<td>Helfrich, L</td>
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</tr>
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<td>Helgadottir, F</td>
<td>S69-4</td>
</tr>
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<td>PA24-2</td>
</tr>
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<td>S40-1</td>
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<td>Helma, F</td>
<td>P163</td>
</tr>
<tr>
<td>Hembree, E</td>
<td>S58-2</td>
</tr>
<tr>
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<td>ABSTRACT NO</td>
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<td>P123</td>
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<td>Moncad, H</td>
<td>S56-1</td>
</tr>
<tr>
<td>Moroz Rivas, M</td>
<td>P126</td>
</tr>
<tr>
<td>Montalto, M</td>
<td>P188</td>
</tr>
<tr>
<td>Montorio, I</td>
<td>P142, PA13-3</td>
</tr>
<tr>
<td>Montoro, A</td>
<td>P188</td>
</tr>
<tr>
<td>Morgan, J</td>
<td>PA20-4</td>
</tr>
<tr>
<td>Morgièv, M</td>
<td>P101, P102</td>
</tr>
<tr>
<td>Mori, S</td>
<td>PA14-1</td>
</tr>
<tr>
<td>Morina, N</td>
<td>PA11-4, S68-1</td>
</tr>
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<td>P078</td>
</tr>
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<td>Moritz, S</td>
<td>S27-3</td>
</tr>
<tr>
<td>Mørken, G</td>
<td>P166</td>
</tr>
<tr>
<td>Morse, E</td>
<td>S18-1</td>
</tr>
<tr>
<td>Mörthberg, E</td>
<td>PA20-5, S28-1</td>
</tr>
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<td>PA16-2</td>
</tr>
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<td>Moulds, M</td>
<td>S01-2</td>
</tr>
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<td>Mousally, J</td>
<td>P186</td>
</tr>
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<td>Muehlenkamp, J</td>
<td>S66-1</td>
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<td>Mueller, A</td>
<td>SO5-2, SO5-3, SO5-4</td>
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<td>Mulders, S</td>
<td>S51-1, S51-2, S54-2</td>
</tr>
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<td>P111</td>
</tr>
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<td>Müller, J</td>
<td>S68-1</td>
</tr>
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<td>Muñoz-Rivas, M</td>
<td>P049, P050, P051, P164</td>
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<td>S50-1, S50-2</td>
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<td>Muris, P</td>
<td>P128, PA04-2, S34-3, S45-2, S45-4</td>
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<td>S55-1, S55-2, S55-3, S55-4</td>
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<td>Muto, K</td>
<td>P151</td>
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<td>Mychkaylo, M</td>
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<tr>
<td>Myers-Orozco, L</td>
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<td>P042</td>
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<td>P151</td>
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<td>P129</td>
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<td>P041, P074, P163, S21-1, S21-2, S35-2, S35-3</td>
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<td>N Diaye, K</td>
<td>P102</td>
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<td>Nedate, K</td>
<td>P131, P170, PA21-1</td>
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<td>Nederkoorn, C</td>
<td>PA25-2, S51-2</td>
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<td>P085, P113, PA27-3</td>
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<td>S25-2</td>
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<td>P013</td>
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<td>S34-2</td>
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<td>SO1-2</td>
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<td>Newton, N</td>
<td>P006, S71-2, S71-3, S71-4</td>
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<td>Nielsen, K</td>
<td>P108</td>
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<td>PA02-4</td>
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<td>Niemi, P</td>
<td>P080</td>
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<td>Nierenberg, A</td>
<td>S12-1, S12-4</td>
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<td>Nishiguchi, Y</td>
<td>P121</td>
</tr>
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<td>Nix, R</td>
<td>S40-2</td>
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<td>Njardvik, U</td>
<td>P196, P197</td>
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<td>P084, S63-2</td>
</tr>
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<td>Nolen, W</td>
<td>P157</td>
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<td>Noordhof, T</td>
<td>PA07-3</td>
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<td>S57-4</td>
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<td>Nordgreen, T</td>
<td>S57-1, S57-2</td>
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<td>Nordhus, I</td>
<td>S59-4</td>
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<td>Novovik, Z</td>
<td>P022, P096, P146</td>
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**O**

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<td>Oddisson, A</td>
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<td>Oeding, K</td>
<td>S70-3, S70-4</td>
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<td>Oei, T</td>
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<td>PA26-3</td>
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<td>P078</td>
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<td>Okedalen, T</td>
<td>S28-3, S58-1, S58-4</td>
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<td>P196</td>
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<td>P057, P077, P083, P177, S45-3, S45-7, S57-3, S7-4</td>
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<td>Ollendick, T</td>
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<td>O'Mahen, H</td>
<td>S40-4</td>
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<td>On behalf of Staying-Well team</td>
<td>S46-2</td>
</tr>
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<td>Omel, J</td>
<td>P157</td>
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<td>S11-1</td>
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<td>Ouy, N</td>
<td>S03-3</td>
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<td>Ozawa, M</td>
<td>P078</td>
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**P**

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<th>NAME</th>
<th>ABSTRACT NO</th>
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<td>P139</td>
</tr>
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<td>Pamui, N</td>
<td>P169</td>
</tr>
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<td>Pagdin, R</td>
<td>S56-4</td>
</tr>
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<td>S41-3</td>
</tr>
<tr>
<td>Paglia, C</td>
<td>P169</td>
</tr>
<tr>
<td>Pallesen, S</td>
<td>S59-4</td>
</tr>
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<td>Palmi, L</td>
<td>S38-1</td>
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<td>Panayiotou, G</td>
<td>S42-2, S42-4</td>
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<td>S27-4</td>
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<tr>
<td>Papadopoulos, I</td>
<td>S27-4</td>
</tr>
<tr>
<td>Pardo-Cebrián, R</td>
<td>P061, P063, P064</td>
</tr>
<tr>
<td>Pariante, C</td>
<td>S27-4</td>
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<td>Parikainen, L</td>
<td>S53-1, S53-2, S53-4</td>
</tr>
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<td>S38-1</td>
</tr>
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<td>Patat, M</td>
<td>S07-1</td>
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**Q**

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<td>S25-2</td>
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**R**

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<td>P033</td>
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<td>Standage, H.</td>
<td>P144</td>
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<td>P039, P095, P123, S12-1, S12-4</td>
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<td>Stangier, U.</td>
<td>P014, P143, PA22-3, PA24-4, S08-2, S72-2</td>
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<td>Stapsinski, L.</td>
<td>S20-2</td>
</tr>
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<td>P091</td>
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<td>P154</td>
</tr>
<tr>
<td>Steinhof, M.</td>
<td>PA13-4</td>
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<td>PA17-3</td>
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<td>Stenel, N.</td>
<td>P105, P173</td>
</tr>
<tr>
<td>Stewar, S.</td>
<td>S39-4</td>
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<td>S12-1</td>
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<td>Stols, T.</td>
<td>S24-5</td>
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<td>Stopa, L.</td>
<td>S41-2, S76-2</td>
</tr>
<tr>
<td>Stopani, E.</td>
<td>PA14-1</td>
</tr>
<tr>
<td>Stopsack, M.</td>
<td>S03-4</td>
</tr>
<tr>
<td>Storm, M.</td>
<td>PA19-3</td>
</tr>
<tr>
<td>Stormyren, S.</td>
<td>S61-2</td>
</tr>
<tr>
<td>Streigler, K.</td>
<td>P132, P133</td>
</tr>
<tr>
<td>Strohle, G.</td>
<td>S09-5</td>
</tr>
<tr>
<td>Stubhaug, B.</td>
<td>S57-3</td>
</tr>
<tr>
<td>Stumpenhorst, M.</td>
<td>P105, P173</td>
</tr>
<tr>
<td>Subic, J.</td>
<td>P096</td>
</tr>
<tr>
<td>Suchan, B.</td>
<td>PA21-2</td>
</tr>
<tr>
<td>Sucić Vukovic, M.</td>
<td>P073</td>
</tr>
<tr>
<td>Suga, T.</td>
<td>P131, PA21-1</td>
</tr>
<tr>
<td>Sundet, K.</td>
<td>P112</td>
</tr>
<tr>
<td>Surawy, C.</td>
<td>S55-1, S55-4</td>
</tr>
<tr>
<td>Suzuki, S.</td>
<td>S078</td>
</tr>
<tr>
<td>Svanoe, K.</td>
<td>PA17-2</td>
</tr>
<tr>
<td>Swift, W.</td>
<td>S71-2</td>
</tr>
<tr>
<td>Sylvia, L.</td>
<td>JW-18, S12-1, S12-4</td>
</tr>
<tr>
<td>Szentagotai, G.</td>
<td>PA02-2, PA23-1</td>
</tr>
<tr>
<td>Szentagotai Tatar, A.</td>
<td>PA24-1</td>
</tr>
<tr>
<td>T</td>
<td></td>
</tr>
<tr>
<td>Tahiri, M.</td>
<td>P140</td>
</tr>
<tr>
<td>Takei, Y.</td>
<td>P078</td>
</tr>
<tr>
<td>Tang, N.</td>
<td>S56-1, S56-2</td>
</tr>
<tr>
<td>Tanno, Y.</td>
<td>P024, P088, P121, P180</td>
</tr>
<tr>
<td>Tarnowski, T.</td>
<td>S08-4</td>
</tr>
<tr>
<td>Taskiran, K.</td>
<td>PA09-4</td>
</tr>
<tr>
<td>Tausch, K.</td>
<td>S80-2, S80-3</td>
</tr>
<tr>
<td>Teglen, R.</td>
<td>PA15-1</td>
</tr>
<tr>
<td>Teeson, M.</td>
<td>PA06-5</td>
</tr>
<tr>
<td>Teesman, T.</td>
<td>P111, P150, P181, P182</td>
</tr>
<tr>
<td>Telecki, T.</td>
<td>P096</td>
</tr>
<tr>
<td>Ter Kuile, M.</td>
<td>S22-1, S22-3, S22-4</td>
</tr>
<tr>
<td>Thase, M.</td>
<td>PA22-2</td>
</tr>
<tr>
<td>Thastum, M.</td>
<td>PA04-1, P015, P023, P031, P108</td>
</tr>
<tr>
<td>Thissen, M.</td>
<td>S36-1</td>
</tr>
<tr>
<td>Thomassen, L.</td>
<td>S06-2</td>
</tr>
<tr>
<td>Thöne-Otto, A.</td>
<td>S63-3</td>
</tr>
<tr>
<td>Thordardottir, E.</td>
<td>S04-1, S04-3, S62-1, S62-2</td>
</tr>
<tr>
<td>Thorisdottir, A.</td>
<td>P185</td>
</tr>
<tr>
<td>Thorisdottir, P.</td>
<td>P036</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NAME</th>
<th>ABSTRACT NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van Hemel-Ruiter, M.</td>
<td>P009, S79-4</td>
</tr>
<tr>
<td>Van Kirk, N.</td>
<td>P021, P030, S47-4</td>
</tr>
<tr>
<td>Van Lankveld, J.</td>
<td>S22-1, S22-3, S22-4</td>
</tr>
<tr>
<td>van Minnen, A.</td>
<td>S44-1, S44-5</td>
</tr>
<tr>
<td>van Oostrom, J.</td>
<td>S74-2</td>
</tr>
<tr>
<td>Van Oppen, P.</td>
<td>P157, S15-1</td>
</tr>
<tr>
<td>van Overveld, M.</td>
<td>S22-4</td>
</tr>
<tr>
<td>van Randenborgh, A.</td>
<td>S23-2</td>
</tr>
<tr>
<td>van Rijswijk, G.</td>
<td>S08-5</td>
</tr>
<tr>
<td>van Rood, Y.</td>
<td>S52-1, S64-1, S64-3</td>
</tr>
<tr>
<td>Van Schaik, D.</td>
<td>P157, S15-1</td>
</tr>
<tr>
<td>van Straten, A.</td>
<td>S51-3</td>
</tr>
<tr>
<td>van Widenfelt, B.</td>
<td>S35-1</td>
</tr>
<tr>
<td>Van Zalk, N.</td>
<td>PA04-4, PA20-5</td>
</tr>
<tr>
<td>vanNabran, K.</td>
<td>P085</td>
</tr>
<tr>
<td>Vanderhasset, M.</td>
<td>S14-4</td>
</tr>
<tr>
<td>Vandervliet, E.</td>
<td>PA130, S26-3</td>
</tr>
<tr>
<td>Vanelli, A.</td>
<td>PA20-2</td>
</tr>
<tr>
<td>Vanhuelen, M.</td>
<td>P017</td>
</tr>
<tr>
<td>Vansteelandt, K.</td>
<td>PA21-5</td>
</tr>
<tr>
<td>Vansteenenwegen, D.</td>
<td>S51-3</td>
</tr>
<tr>
<td>Vargas-de la Cruz, I.</td>
<td>P061, P064, PA26-2</td>
</tr>
<tr>
<td>Varin, D.</td>
<td>P165</td>
</tr>
<tr>
<td>Vaudroz, C.</td>
<td>S29-4</td>
</tr>
<tr>
<td>Veale, D.</td>
<td>S41-3</td>
</tr>
<tr>
<td>Venckenstedt, R.</td>
<td>S27-3</td>
</tr>
<tr>
<td>Veld-Kjelsøe, E.</td>
<td>P138</td>
</tr>
<tr>
<td>Veld-Kjelsøe, E.</td>
<td>PA29-3, S59-2</td>
</tr>
<tr>
<td>Veenstra, E.</td>
<td>P135</td>
</tr>
<tr>
<td>Veltman, D.</td>
<td>S35-5</td>
</tr>
<tr>
<td>Vergara, C.</td>
<td>PA24-2</td>
</tr>
<tr>
<td>Verhoeven, J.</td>
<td>S74-2</td>
</tr>
<tr>
<td>Vermeerse, A.</td>
<td>P159</td>
</tr>
<tr>
<td>Viborg, G.</td>
<td>PA18-4</td>
</tr>
<tr>
<td>Vidal-Ríos, P.</td>
<td>P025, P172, P174, P194</td>
</tr>
<tr>
<td>Vård, S.</td>
<td>S42-3, S72-3</td>
</tr>
<tr>
<td>Vikingsson, A.</td>
<td>P154</td>
</tr>
<tr>
<td>Vilhjalmsdóttir, H.</td>
<td>PA16-2</td>
</tr>
<tr>
<td>Vilhab, M.</td>
<td>PA12-4</td>
</tr>
<tr>
<td>Vilhab, M.</td>
<td>PA04-3</td>
</tr>
<tr>
<td>Villeneuve, L.</td>
<td>P140</td>
</tr>
<tr>
<td>Visser, A.</td>
<td>S74-4</td>
</tr>
<tr>
<td>Vitteng, J.</td>
<td>PA22-2</td>
</tr>
<tr>
<td>Vitzthum, F.</td>
<td>S27-3</td>
</tr>
<tr>
<td>Vitavocha, P.</td>
<td>PA24-4</td>
</tr>
<tr>
<td>Vlaming, H.</td>
<td>S16-2</td>
</tr>
<tr>
<td>Vocks, S.</td>
<td>P132, P133, PA21-2, PA21-3</td>
</tr>
<tr>
<td>Vogel, P.</td>
<td>PA10-1</td>
</tr>
<tr>
<td>Vogl, U.</td>
<td>S71-2, S71-3</td>
</tr>
<tr>
<td>Vogt, S.</td>
<td>S05-1</td>
</tr>
<tr>
<td>Vohs, K.</td>
<td>S39-1</td>
</tr>
<tr>
<td>van Brachel, R.</td>
<td>P133, P181</td>
</tr>
<tr>
<td>Voorwind, V.</td>
<td>S51-1</td>
</tr>
<tr>
<td>Vreeke, L.</td>
<td>PA04-2</td>
</tr>
<tr>
<td>Vriend, N.</td>
<td>P016, PA13-5</td>
</tr>
<tr>
<td>Vrijen, J.</td>
<td>S50-3, S74-2</td>
</tr>
<tr>
<td>Vukosavljevic-Gvozden, T.</td>
<td>PA27-1, PA27-4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NAME</th>
<th>ABSTRACT NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wahli, K.</td>
<td>P098</td>
</tr>
<tr>
<td>Wahl, M.</td>
<td>S07-1</td>
</tr>
<tr>
<td>Wahlström, J.</td>
<td>PA18-3</td>
</tr>
<tr>
<td>NAME</td>
<td>ABSTRACT NO</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Walker, S</td>
<td>PA13-2</td>
</tr>
<tr>
<td>Wallach, H</td>
<td>PA06-1</td>
</tr>
<tr>
<td>Wampold, B</td>
<td>S28-2</td>
</tr>
<tr>
<td>Wang, C</td>
<td>P112</td>
</tr>
<tr>
<td>Wannamaker, S</td>
<td>P124</td>
</tr>
<tr>
<td>Ward, T</td>
<td>S27-1</td>
</tr>
<tr>
<td>Warmerdam, E</td>
<td>S38-4</td>
</tr>
<tr>
<td>Warner, J</td>
<td>P162</td>
</tr>
<tr>
<td>Waterlo, K</td>
<td>P112</td>
</tr>
<tr>
<td>Wattar, U</td>
<td>PA16-4</td>
</tr>
<tr>
<td>Weatherley, D</td>
<td>S72-1</td>
</tr>
<tr>
<td>Weber, B</td>
<td>S09-3</td>
</tr>
<tr>
<td>Weck, F</td>
<td>PA22-1</td>
</tr>
<tr>
<td>Weijmar-Schultz, W</td>
<td>S22-5</td>
</tr>
<tr>
<td>Weise, C</td>
<td>S32-1, S80-1, S80-2, S80-3</td>
</tr>
<tr>
<td>Wells, A</td>
<td>S20-1, S20-4</td>
</tr>
<tr>
<td>Wergeland, G</td>
<td>S70-1, S70-2, S70-3, S70-4</td>
</tr>
<tr>
<td>Werheid, K</td>
<td>S63-3</td>
</tr>
<tr>
<td>Werthmann, J</td>
<td>PA25-2, S64-2</td>
</tr>
<tr>
<td>Wessel, J</td>
<td>P114, P116</td>
</tr>
<tr>
<td>Westenberg, P</td>
<td>S35-1</td>
</tr>
<tr>
<td>Weting, J</td>
<td>S50-3</td>
</tr>
<tr>
<td>Wheatley, J</td>
<td>S41-5</td>
</tr>
<tr>
<td>Wiers, R</td>
<td>P008, S24-2, S45-1, S78-3, S79-1, S79-3, S79-4</td>
</tr>
<tr>
<td>Wiersma, J</td>
<td>S15-1</td>
</tr>
<tr>
<td>Wigers, S</td>
<td>PA05-3</td>
</tr>
<tr>
<td>Wild, J</td>
<td>S76-4</td>
</tr>
<tr>
<td>Wilhelm, F</td>
<td>S66-3</td>
</tr>
<tr>
<td>Willem, L</td>
<td>S66-1</td>
</tr>
<tr>
<td>Williams, J</td>
<td>S18-2, S18-3, S46-2, S55-1, S55-2, S55-3, S55-4</td>
</tr>
<tr>
<td>Williams, M</td>
<td>S46-1</td>
</tr>
<tr>
<td>Willutzki, U</td>
<td>P150, P181</td>
</tr>
<tr>
<td>Wilz, G</td>
<td>PA26-1, S13-2, S63-4</td>
</tr>
<tr>
<td>Wingenfeld, K</td>
<td>S03-2</td>
</tr>
<tr>
<td>Winkel, P</td>
<td>P158</td>
</tr>
<tr>
<td>Witthoef, M</td>
<td>PA13-1</td>
</tr>
<tr>
<td>Witthoft, M</td>
<td>PA032, PA13-4</td>
</tr>
<tr>
<td>Wittmann, L</td>
<td>S68-1</td>
</tr>
<tr>
<td>Wolf, O</td>
<td>P150, S03-2</td>
</tr>
<tr>
<td>Wolff, J</td>
<td>P129</td>
</tr>
<tr>
<td>Wogast, M</td>
<td>PA18-4</td>
</tr>
<tr>
<td>Wolmer, L</td>
<td>PA11-5</td>
</tr>
<tr>
<td>Wolters, L</td>
<td>S35-2, S35-4, S35-5</td>
</tr>
<tr>
<td>Wong, V</td>
<td>S56-3</td>
</tr>
<tr>
<td>Woodward, T</td>
<td>S27-3</td>
</tr>
<tr>
<td>Woody, S</td>
<td>PA14-3</td>
</tr>
<tr>
<td>Working Group S3 Guidelines</td>
<td>PA10-2</td>
</tr>
<tr>
<td>Woud, M</td>
<td>S67-4, S79-3</td>
</tr>
<tr>
<td>Wustrich, V</td>
<td>S34-2</td>
</tr>
<tr>
<td>Wysmans, M</td>
<td>S74-4</td>
</tr>
</tbody>
</table>