

PROCEEDINGS
of
Rome Workshop on Experimental Psychopathology
Rome, March 20th – 21st 2015



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Rome Workshop on Experimental Psychopathology 2015



PROCEEDINGS

Rome, March 20th – 21st 2015

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PROCEEDINGS OF THE ROME WORKSHOP ON EXPERIMENTAL PSYCHOPATHOLOGY 2015

Rome, March 20th - 21st 2015

Venue of the workshop
AUDITORIUM VIA RIETI, Via Rieti 13, 00198, Rome, Italy

Scientific Committee

Carlo Buonanno (Scuola di Psicoterapia Cognitiva, Rome, Italy)

Alessandro Couyoumdjian (Sapienza University of Rome, Rome, Italy)

Andrea Gragnani (Scuola di Psicoterapia Cognitiva, Rome, Italy)

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Nicola Petrocchi (Sapienza University of Rome, Italy; Compassionate Mind Foundation-Italy)

Roberta Trincas (Scuola di Psicoterapia Cognitiva, Rome, Italy)

Preface

Beginning in the 1960s, contemporary Experimental Psychopathology (EP) is primarily devoted to laboratory research on the cognitive, affective, and motivational bases of mental disease by using behavioural, as well as psychophysiological and neurobiological paradigms. Therefore, EP aims at understanding what causes and maintains psychological distress by integrating knowledge and research methods from different domains. Guided by the assumption that mental diseases can be explained by the same processes that regulate normal behaviours, such a discipline aims to be a bridge between basic and applied research, providing useful knowledge to make clinical assessments and treatments more effective and scientifically-based.

The Workshop is the second international meeting completely focused on Experimental Psychopathology, and it differs from larger congresses in so far as there is a relatively small number of speakers without concurrent talks. In addition to the individual talks, a poster session for students, post-docs, and young researchers to present their work was included.

The ultimate goal of the Workshop is to promote the scientific debate on EP, and the development of international networks among clinical and basic researchers.

It is dedicated to the presentation and discussion of empirical studies relevant to experimental psychopathology. Therefore, studies using an experimental approach to describe and understand the cognitive, affective, and motivational mechanisms underlying specific mental diseases or transdiagnostic processes (attentional bias, memory bias, perseverative cognition, etc.) were considered. Experimental studies aimed at explaining change processes in specific psychotherapy or therapeutic techniques, as well as correlational designs, meta-analyses, epidemiological and single-case studies were also accepted. Studies of interest can focus on patients with specific diagnoses, non-clinical human populations, human analogue populations, or nonhuman animals. Moreover, while the Workshop's focus is primarily on the mental processes associated with psychopathology, contributions studying the biological substrates of psychopathology were also included. In the traditional spirit of experimental psychopathology, studies on non-clinical populations that make a contribution to understanding the aetiology of psychopathology were principally considered.

WORKSHOP PROGRAM

| Friday, March 20th 2015 | Saturday, March 21st 2015 |
|---|---|
| 8.00-8.40 Registration | |
| 8.40-10.40 Oral Session | 9.15-10.50 Students Oral Session |
| 10.40-11.00 Coffee break | 10.50-11.20 Coffee break |
| 11.00-12.00 Oral Session | 11.20-12.00 Students Oral Session |
| 12.00-12.50 <i>Invited Lecture</i> Richard McNally | 12.00-12.50 <i>Invited Lecture</i> Richard Bentall |
| 12.50-14.20 Lunch time | 12.50-14.20 Lunch time |
| 14.20-16.40 Oral Session | 14.20-16.00 Oral Session |
| 16.40-17.30 Break & Poster Session | 16.00-16.30 Coffee break |
| 17.30-18.20 <i>Invited Lecture</i> Marcel van den Hout | 16.30-17.20 <i>Invited Lecture</i> Nira Liberman |
| 20.30 Social Dinner | |

FRIDAY, MARCH 20th

Registration

8.00 - 8.40

Oral session

8.40 - 10.40

Chair: *Alessandro Couyoumdjian*

A Manual for Experimental Psychopathology: Developing Valid Psychological Models of Psychopathology using Healthy Individuals

Graham Davey; University of Sussex, UK

Searching for specificity in cognitive vulnerability to depression: Unique and common facets in cognitive risk to depression

Igor Marchetti; Ghent University, Belgium

The effects of depression and activity levels on perceived control

Rachel Msetfi; University of Limerick, Ireland

Organization of cognitive schemas in patients with paranoid delusions

Ljiljana Mihic, University of Novi Sad, Serbia

Seeking Proxies for Internal States in OCD: Some Clinical Consequences

Reuven Dar, University of Tel Aviv, Israele

Narcissism and performance under threat

Barbara Nevicka, University of Amsterdam, The Netherlands

Coffee break

10.40 - 11.00

Oral session

11.00 - 12.00

Chair: *Mauro Giacomantonio*

Posterior and prefrontal contributions to the development of post-traumatic stress disorder: An fMRI study of symptom provocation in acute stress disorder

Gudrum Sartory, University of Wuppertal, Germany

Generalization of contextual anxiety: the role of glucose and the hippocampus
Laura Luyten, Psychology of Learning and Experimental Psychopathology, KU Leuven, Belgium

FRIDAY, MARCH 20th

Preliminary data from a TMS study on the role of prefrontal cortex in the attentional bias for threat

Laura Sagliano, Department of Psychology, Second University of Naples, Italy

Invited lecture

12.00 - 12.50

Experimental and network analyses of PTSD and complicated grief

Richard J. McNally, Harvard University, USA

Lunch time

12.50 - 14.20

Oral session

14.20 - 16.40

Chair: *Elena Bilotta*

You Should Take the Big Picture into Account! A Systematic Review and Meta-analysis of the Effects of Attention Bias Modification for Social Anxiety.

Heeren Alexandre, Université Catholique de Louvain, Louvain-la-Neuve, Belgium

Pre-exposure enhances generalization of contextual fear.

Dieuwke Sevenster, University of Leuven, Belgium

Make up your mind about food - the influence of current motivational state on attention processing of food cues.

Jessica Werthmann, Institute of Psychiatry, Psychology and Neuroscience, King's College London, UK

Emotion regulation strategies on risky decision making.

Cinzia Giorgetta, CNR - ISTC Trento, Italy

Cognitive and autonomic responses to anxiety in high and low anxious individuals.

Frances Meeten, King's College London, UK

FRIDAY, MARCH 20th

Break & Poster session

16.40 - 17.30

- 1) Improving the Generalization of Extinction by Allocating Attention to Category-Relevant Stimulus Features in Spider-Anxious Students. *Sara Scheveneels, Centre for the Psychology of Learning and Experimental Psychopathology, University of Leuven, Belgium.*
 - 2) Cognitive Predictors of Violent Incidents in a Forensic Psychiatric Sample. *Suzanne Brugman, Maastricht University, The Netherlands.*
 - 3) Auditory selective attention in adolescents with major depression: evidence from an event-related potential study. *Ellen Greimel, Department of Child and Adolescent Psychiatry and Psychotherapy, University Hospital Munich, Germany.*
 - 4) Absence of evidence or evidence of absence: ABM dot-probe training does not change attentional patterns to positive and negative faces in dysphoric participants. *Almudena Duque, Complutense University, Madrid, Spain.*
 - 5) The effect of body image perception on evaluation of emotionally coloured words in Muslim girls wearing and not wearing hijab. *Marija Tiosavljević, State University of Novi Pazar, Serbia.*
 - 6) Between Rumination and Counterfactual Thinking: the role of alternative scenarios on maintaining negative affect. *Francesco Carone, School of Cognitive Psychotherapy, Verona, Italy.*
 - 7) If you look at me teeth you'll get wrong: A behavioral and eye-tracking validation of the effect of covering teeth in emotional faces. *Ivan Blanco, Complutense University of Madrid, Spain.*
 - 8) Managing obsessive thoughts during brief exposure: An experimental study comparing mindfulness-based strategies and distraction in obsessive-compulsive disorder. *Wahl Karina, University of Freiburg, Germany.*
 - 9) Inhibition Deficit in OCD Patients. *Reinhard Pietrowsky, University of Dusseldorf, Germany.*
 - 10) Can classical conditioning change implicit self esteem and paranoid tendencies? New evidence from a process intervention. *Regina Espinosa, Complutense University of Madrid, Spain.*
 - 11) Duration of illness and social cognition in schizophrenia. Early treatment is better! *Laura Bernabei, Sapienza University of Rome, Italy.*
 - 12) Rebound effect in suppression of negative autobiographical memories: Instruction-dependent or not? *Ivana Novakov, Department of Psychology, University of Novi Sad, Serbia.*
 - 13) Moral judgement and altruistic/deontological guilt: a pilot study. *Simone Migliore, University Campus Bio-Medico of Rome, Italy.*
 - 14) Do scales which start with "When I'm sad", actually make me sad? *Radomir Belopavlović, Faculty of Philosophy, University of Novi Sad, Serbia.*
 - 15) Beliefs about emotions and their link to emotion-regulation processes. *Roberta Trincas, School of Cognitive Psychotherapy, Rome, Italy.*
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FRIDAY, MARCH 20th

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- 16) Negative emotion, body image e anti-fat bias in young men. *Raffaella Cerisoli, Second University of Naples, Italy.*
- 17) Can dispositional mindfulness promote aggressive behavior? *Mauro Giacomantonio, Sapienza University of Rome, Italy.*
- 18) Cognitive changes in pathological gamblers: the role of attentional bias in treatment. *Maria Ciccareli, Second University of Naples, Italy.*
- 19) The painful side of body size. *Rocco L. Ciminno, Sapienza University of Rome, Italy.*
- 20) The Dissociative Dimension in Psychopathology: Generalised and Specific Role of Dissociative Symptoms. *Maurizio Brasini, School of Cognitive Psychotherapy, Rome, Italy.*
- 21) Exploring Schemas, Modes and Coping styles in Obsessive-Compulsive Disorder. *Barbara Basile, School of Cognitive Psychotherapy, Rome, Italy*
- 22) Searching for mechanisms and triggers of burnout. The role of emotional intelligence and metacognitive awareness in nursing education. *Simone Cheli, School of Human Health Sciences, University of Florence, Italy.*
- 23) Alexithymia: contextual effects of experiential avoidance and negative emotional feedback. *Elena Bilotta, School of Cognitive Psychotherapy, Rome, Italy.*
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Invited Lecture

17.30-18.20

Network theory and the experimental psychopathology of OCD

Marcel van den Hout, University of Utrecht, The Netherlands

Social Dinner

20.30

SATURDAY, MARCH 21st

Students Oral session

9.15 - 10.50

Chair: *Katia Tenore*

An Updated Meta-Analysis of Classical Fear Conditioning in the Anxiety Disorders.

Duits Puck, Utrecht University, the Netherlands

Senior: *Graham Davey*

The effect of abstract 'why' thoughts on working memory.

Jens Van Lier, University of Leuven, Belgium

Senior: *Alessandro Couyoumdjian*

Of Raining and Pouring: The Influence of Sad Mood on Implicit Self-Esteem.

Lonneke van Tuijl, University of Groningen, the Netherlands

Senior: *Reuven Dar*

Reward and punishment sensitivity and alcohol use: The moderating role of executive control.

Nienke C. Jonker, University of Groningen, the Netherlands

Senior: *Reuven Dar*

Soul pain: the influence of persistent grief on sensory processing and perception of nociceptive stimuli.

Katharina Koch, Sapienza University of Rome, Italy

Senior: *Richard J. McNally*

Perception of control under cognitive load: Implications for the depressive realism effect.

Halim A. Cavus, University of Limerick, Ireland

Senior: *Ernst Koster*

The effects of rumination on executive function: an experimental study.

Jelena Sokic, Faculty of philosophy, University of Novi Sad, Serbia

Senior: *Ernst Koster*

A traumatic experience in the lab: OTO as an alternative for the simple fear conditioning procedure.

Kim Haesen, Centre for Learning Psychology and Experimental Psychopathology, KU Leuven, Belgium

Senior: *Richard J. McNally*

Coffee break

10.50 - 11.20

SATURDAY, MARCH 21st

Students Oral session

11.20 - 12.00

Chair: *Katia Tenore*

Afraid of anger: Biased unconscious processing of angry facial expression in social anxiety.

Nikola Samac, University of Novi Sad, Faculty of Philosophy, Department of Psychology, Serbia

Senior: *Marcel van den Hout*

Temporal attentional bias in (un)succesful dieting.

Renate Neimeijer, University of Groningen, the Netherlands

Senior: *Graham Davey*

Compassion at the mirror: mirror exposure increases the efficacy of a self-compassion intervention in enhancing soothing positive affect.

Nicola Petrocchi, Sapienza University of Rome, Italy

Senior: *Marcel van den Hout*

Rumination in childhood: The role of parenting style, autonomic functioning, and trait dispositions.

Blu Cioffi, Department of Psychology, Sapienza University of Rome, Italy.

Senior: *Graham Davey*

Invited lecture

12.00 - 12.50

From social risk factors to psychotic symptoms

Richard Bentall, University of Liverpool, United Kingdom

Lunch time

12.50 - 14.20

Oral session

14.20 - 16.00

Chair: *Maurizio Brasini*

A Focused Attention Intervention for Preventing the Recovery of Initial Learning.

Holly Miller; University of Leuven, Belgium

SATURDAY, MARCH 21st

Exploring mechanisms of change in schema therapy for chronic depression.

Fritz Renner, Department of Clinical Psychological Science, Maastricht University, the Netherlands

Conceptualizing, quantifying, & modifying biases of emotional attention as dynamic processes in time.

Amit Bernstein, University of Haifa, Israel

Training cognitive control in relation to depressive symptoms.

Ernst Koster, Ghent University, Belgium

Study protocol for a randomised controlled trial of a cognitive-behavioural prevention programme for the children of parents with depression: the PRODO trial.

Kornelija Starman, Ludwig Maximilian University of Munich, Germany

Coffee Break

16.00 - 16.30

Invited lecture

16.30 - 17.20

Transcending psychological distance: a Construal Level Theory perspective

Nira Liberman, Tel Aviv University, Israel

LECTURE

FRIDAY, MARCH 20th

12.00 - 12.50

RICHARD J. McNALLY

Experimental and network analyses of PTSD and complicated grief

Harvard University, USA

Contact: rjm@wjh.harvard.edu

Complicated grief (CG) is a syndrome marked by persistent, intense symptoms of grief following the death of a loved one. Our research group has been studying CG by applying both the methods of experimental psychopathology and network analysis. The aim of both approaches is to elucidate factors impeding recovery from bereavement. Subjects in the two laboratory studies were adults recruited from the community who had experienced bereavement and who met (or did not meet) clinical criteria for CG. The first study identified specific deficits in the ability of CG subjects to envision a future without their spouses, thereby suggesting a cognitive basis for those with CG feeling stuck and unable to move forward in life. The second study comprised two emotionally challenging tasks: watching film clips that were of sad, frightening, amusing, or neutral valence, and performing the Trier speech test. Preliminary analyses of psychophysiological data did not reveal greater emotional reactivity (e.g., heart rate, blood pressure, self-report) on the part of CG subjects, but this group had lower respiratory sinus arrhythmia (RSA) and hypo-reactive RSA, potentially suggestive of numbing. Subjects for our network analysis study were from a large, longitudinal public data set of older adults, many of who had experienced bereavement. Our analysis provided clues to the causal network of symptoms constitutive of CG, and its relation to depression. Finally, I will present network analyses of PTSD symptoms in earthquake survivors, including a novel Bayesian approach involving directed acyclic graphs that permit causal inference.

LECTURE

FRIDAY, MARCH 20th

17.20 - 18.10

MARCEL VAN DEN HOUT

Network theory and the experimental psychopathology of OCD

University of Utrecht, The Netherlands

Contact: m.vandenhout@uu.nl

Disorders are typically seen as the causes of their symptoms. This makes sense in many fields of medicine, but not in psychiatry where symptoms *constitute* disorders: the notion

that mental disorders cause symptoms is a tautology. Biological psychiatry tries to circumvent this logical fallacy by trying to identify pathophysiological parameters that are specific to given disorders. Unfortunately, research has not resulted in biological markers that reliably discriminate patients who suffer from a disorder from those that do not. A different approach is to regard psychiatric symptoms not as 'output' from underlying, yet to be identified (pathophysiological) dysregulation, but to consider symptoms as "input" that causally contributes to other symptoms. Fresh insights, mathematical methods and empirical data come from network analyses. These network approaches, treating "symptoms as input" converge with work in Cognitive Behavior Therapy and in Experimental Psychopathology. This convergence is illustrated with experimental work on Obsessive Compulsive Disorder. It is argued that data and concepts from network theory provide a sound conceptual rationale for treating symptoms as input and that network theory, Cognitive Behavior Therapy and Experimental Psychopathology are intellectual allies that reinforce each other.

LECTURE

SATURDAY, MARCH 21st

12.10 - 13.00

RICHARD BENTALL

From social risk factors to psychotic symptoms

University of Liverpool, United Kingdom

Contact: Richard.Bentall@liverpool.ac.uk

Recent approaches to psychosis have emphasised genetic determinants based on the misunderstanding that high heritability indices indicate that the lion's share of causation must go to genes. In fact, genetic research at the molecular level has failed to find genes of major effect and has revealed that the the genetic risk for mental illness is massively polygenic and diagnostically non-specific. In contrast, recent research, often supported by meta-analyses, has shown large associations between a variety of social risk factors and psychosis including: poverty, social inequality, exposure to urban environments, belonging to an ethnic minority, inadequate communication style in parents, mistreatment and other types of trauma in childhood and victimisation in adulthood. Many of these effects seem strongest when exposure occurs in childhood, but there is evidence that a childhood adversity followed by adult adversity is particularly toxic. Some studies have used genetically-informed designs to control for genetic confounding. Our research has found associations between specific kinds of social adversity and specific types of symptoms. For example, childhood sexual abuse is a particular risk factor for hallucinations and disruption of early attachment relationships is a particular risk factor for paranoid symptoms. These associations point to symptom-specific pathways by which adversity impacts on

developmental trajectories. They also point to the importance of developing a discipline of public mental health.

LECTURE

SATURDAY, MARCH 21st

16.40 - 17.30

NIRA LIBERMAN

Transcending psychological distance: a Construal Level Theory perspective

Tel Aviv University, Israel

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Extensive evidence shows that depression and anxiety disorders place a large burden on individuals and are an important challenge for mental health providers. Cognitive factors play a crucial role in the etiology and maintenance of these disorders which has given rise to the successful development of cognitive therapy. Experimental psychopathology research has been successful in elucidating the information-processing factors that influence the etiology and maintenance of affective disorders. However, at the same time in trying to understand the causal role of information processing bias has paid remarkably little attention to individual variability in the presence and nature of information processing bias. I will argue that this is a crucial problem both at the theoretical level as well as at the level of clinical translation of this research. I will discuss new ways to introduce individual variability into theories and clinical applications on information processing bias.

ORAL PRESENTATIONS
FRIDAY, MARCH 20th

8.40 - 10.40

Chair: *Alessandro Couyoumdjian*

8.40 - A Manual for Experimental Psychopathology: Developing Valid Psychological Models of Psychopathology using Healthy Individuals.

DAVEY G.

University of Sussex, UK

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There is no manual for doing experimental psychopathology research, so how do we know when the psychological models we develop on healthy individuals have genuine relevance to clinical populations? In order to have a full understanding of any mental health problem, we need to integrate evidence from neuroscience, genetics, and psychology, yet how we develop psychological models of mental health problems has tended to be undervalued against the other two major approaches. I will argue that one reason why experimental psychopathology tends to be undervalued is because there is often no consensus about how it should be conducted - we need a 'manual' that will guide researchers through the various steps needed to validate their psychological models, and enable them to develop logical programmes of research that begin with the development of psychological models using healthy individuals and ends with the validation of those models against the characteristics of clinical populations. In this paper I will describe some potential steps through which relevant experimental psychopathology research should progress, and illustrate these with some examples of existing research.

9.00 - Searching for specificity in cognitive vulnerability to depression: Unique and common facets in cognitive risk to depression.

MARCHETTI I., LOEYS T., ALLOY L.B., KOSTER E.H.W.

Ghent University, Belgium

Contact: igor.marchetti@ugent.be

Depression is the leading cause of disability worldwide, and is a major contributor to the global burden of disease. In reaction to this worrisome situation, clinical psychology has identified three major mechanisms to account for risk for depression, such as (i) dysfunctional attitudes, (ii) hopelessness, and (iii) depressive rumination. Although these factors have been proven to reliably predict depression, very little effort has been made to highlight their specific and common facets in accounting for depressive symptoms. To bridge this gap, in our first study we administered 3 self-report questionnaires to measure

cognitive risks for depression (e.g., Dysfunctional Attitudes Scale, Beck Hopelessness Scale, and Ruminative Response Scale) along with a scale for depressive symptoms (i.e., Beck Depression Inventory 2nd Edition). The analysis revealed that unique contribution of hopelessness was the most powerful predictor for depressive symptoms, followed by the joint contribution of these three factors. In the second study, we replicated and extended this pattern of results, by administering an additional measure to gather information not only about depression, but also stress and anxiety (i.e., Depression Anxiety Stress Scale - 21 items [DASS-21]). The analysis revealed that the leading role of hopelessness is independent from the questionnaire adopted to measure depression (i.e., convergent validity) and that its influence is not weakened by stress and anxiety levels (i.e., divergent validity and specificity). Our studies show that hopelessness plays a major and specific role in accounting for depression compared to dysfunctional attitudes and rumination.

9.20 - The effects of depression and activity levels on perceived control.

MSETFI R., BYROM N., MURPHY R.

University of Limerick, Ireland

Contact: rachel.msetfi@ul.ie

Depression symptoms including loss of interest, energy and motivation may influence the extent to which people 'do' behaviors and the behavioral contingencies they experience. Thus findings of depressive realism and healthy optimism in perceived control may be behaviorally mediated effects. However, most studies, which have examined depression effects on contingency judgments, involve tightly controlled behavior rates. Therefore, the overall goal of these experiments is to map the effects of behavior rates on experienced contingencies and contingency judgments. Two experiments were carried out in which mildly depressed and non-depressed participants were exposed to a series of free-operant instrumental contingencies. Participants had no control but outcomes occurred with a low or high probability and behavior levels were either constrained (N1 = 73) or unconstrained (N2 = 74). Overall, levels of behavior were high and people who were mildly depressed produced levels of behavior that were as high as or higher than people without signs of depression. Findings showed that high levels of behavior decreased people's experiences of the context in which events occurred and eliminated sensitivity to outcome levels leading to control enhancing judgments. For non-depressed participants, the highest levels of behavior occurred in conditions with the lowest levels of outcomes. The same effect was not evident in mildly depressed participants. Conclusions are that behavior and context provide two important pathways to perceived control. Situations that constrain people's ability to respond freely can prevent people with signs of depression from taking control of a situation that would otherwise be uncontrollable.

9.40 - Organization of cognitive schemas in patients with paranoid delusions.

MIHIC L., NOVOVIĆ Z., BOŠKOVIĆ T., TOVILOVIĆ S.

University of Novi Sad, Serbia

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There are mixed findings regarding depressive self-schemas in patients with paranoid delusions (PPD). However, majority of the studies examined the products of self-schemas rather than their organizational properties such as interconnectedness of self-attributes. Providing similarities between depressive self-schemas and PPD schemas, we expected the following: cognitive organization for positive content in PPD would be less interconnected, while organization of negative self-referent material would be more densely organized compared to nonpsychiatric controls (NPC). Additionally, we hypothesized that the interpersonal self-schemas would be more relevant to persecutory beliefs than achievement self-schemas. PPD (N = 26, females = 65%) and NPC (N = 51, females = 88%) completed a computerized task in which they rated adjectives on self-descriptiveness and valence using a grid. Each adjective had its x and y coordinate point, which were used to calculate the average interstimulus distance. Distances were analyzed using a 2 (PPD/NPC) X 2 (positive/negative) X 2 (sociotropic/autonomic) split-plot ANCOVA (depression and age as covariates). PPD had a similar pattern of interconnectedness among positive and negative self-attributes as NPC. However, they had less integrated positive interpersonal content. Unlike depressive cognitive organization and similar to the normal, PPD have more consolidated positive and less integrated negative self-attributes. However, PPD seem to have less integrated positive interpersonal content compared to NPC. Such an organization might underlie a more difficult access to positive interpersonal self-attributes and inability to generate an overall, positive interpersonal self-view. A potential role of unconsolidated interpersonal self-schema in self-esteem fluctuations in PPD is suggested.

10.00 - Seeking Proxies for Internal States in OCD: Some Clinical Consequences.

DAR R.

University of Tel Aviv, Israele

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Recently, we have proposed a general model to account for obsessive-compulsive (OC) doubt and ensuing rituals, which we termed Seeking Proxies for Internal States (SPIS). We suggested that OC individuals are generally uncertain about their internal states, including what they feel, know, believe, and prefer. According to the SPIS model, OC doubt is not limited to concerns such as cleanliness, morality, or safety but can be relevant to any internal state, be it cognitive (e.g., perception, memory, comprehension), affective (e.g., attraction, specific emotions) or bodily (e.g., muscle tension, proprioception). Moreover, the SPIS model postulates that OC doubts are related to actual attenuation of internal states, so that OC individuals not only feel uncertain in regard to their internal states but

also have reduced access to these states. Therefore, when they must answer questions in regard to their internal states, OC individuals must seek and rely on proxies for these internal states. In this presentation, I will use clinical examples to illustrate the SPIS model, focusing on consequences of reduced access to internal states in OCD. I will show that the types of proxies clients use include not only rules, procedures and rituals but also tests and simulations that are designed to provide answer to doubts that clients with OCD have about themselves. Such tests are often used in an attempt to answer important personal questions (e.g., am I sexually attracted to children?) but as I will illustrate, they are bound to only perpetuate doubt and increase reliance on proxies.

10.20 - Narcissism and performance under threat .

NEVICKA B., BAAS M., TEN VELDEN F.

University of Amsterdam, The Netherlands

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Narcissistic individuals have overly positive self-views and a tendency to overestimate their abilities across different domains, such as intelligence, leadership aptitude and physical attractiveness. As a result they have been found to be sensitive to any external information that does not coincide with their high self-views (ego threat), such as negative feedback, rejection, and general criticism. Prior research has consistently found that, in terms of interpersonal behavioral strategies, narcissistic individuals react to ego-threats with hostility and aggression. Here, we challenged this one sided view of narcissists' response to threat, and proposed that narcissistic individuals are also able to counter threats more constructively by increased performance. In four studies ego-threat was manipulated as either negative feedback or as feedback informing participants they were average rather than unique (threat to uniqueness) and participants were asked to engage in several performance tasks. Findings across all four studies consistently showed that following ego threats, higher narcissism was associated with a greater willingness to perform tasks that enabled demonstration of abilities, and also with enhanced performance on creativity and anagram tasks. Interestingly, these effects seemed to be driven by the maladaptive (e.g. exploitativeness, exhibitionism and entitlement) rather than the adaptive (e.g. authority, self-sufficiency) component of narcissism. These findings demonstrate a more positive side to how narcissistic individuals deal with threats to their overly inflated image.

ORAL PRESENTATIONS

FRIDAY, MARCH 20th

11.00 - 12.00

Chair: *Mauro Giacomantonio*

11.00 - Posterior and prefrontal contributions to the development of post-traumatic stress disorder: An fMRI study of symptom provocation in acute stress disorder.

SARTORY G., CUIK, J.C., KNUPPERTZ, H., SCHÜRHOFT B., SEITZ R.J.

University of Wuppertal, Germany

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Acute stress disorder (ASD) has been found to be predictive of the development of posttraumatic stress disorder (PTSD). In response to symptom provocation, the exposure to trauma-related pictures, ASD patients showed increased activation of the medial posterior areas of precuneus and posterior cingulate cortex as well as of superior prefrontal cortex. The current study aimed at investigating which activated areas are predictive of the development of PTSD. Nineteen ASD patients took part in an fMRI procedure during which they were shown personalized trauma-related and neutral pictures within four weeks of the traumatic event. They were assessed for severity of PTSD four weeks later. Activation contrasts between trauma-related and neutral pictures were correlated with subsequent PTSD symptom severity. Increased activation in, among others, right medial precuneus, left retrosplenial cortex, precentral (BA 6) and right superior temporal gyrus as well as decreased activation in dorsolateral (BA46), superior prefrontal (BA 9) and left fusiform gyrus were related to subsequently increased PTSD severity. The results are broadly in line with neural areas related to etiological models of PTSD namely, multisensory associative learning recruiting posterior regions on the one hand and failure to reappraise maladaptive cognitions, thought to involve dorsolateral prefrontal areas, on the other.

11.20 - Generalization of contextual anxiety: the role of glucose and the hippocampus.

LUYTEN L., SCHROYENS N., NUYTS S., LUYCK K., BECKERS T.

Psychology of Learning and Experimental Psychopathology, KU Leuven, Belgium

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Fear generalization is a core characteristic of anxiety disorders. Most researchers focus on stimulus generalization, which is particularly relevant to phobias (e.g. fear of the dog that bit you, generalizes to all dogs resulting in dog phobia). We hypothesize that contextual generalization, i.e. generalization of anxiety related to complex conditioned stimuli in an unpredictable setting, may be at least as important for the development and maintenance of (other) anxiety disorders, such as posttraumatic stress disorder (PTSD), and that it may

have partially different neural correlates in comparison with stimulus generalization. Given the hippocampal involvement in human and rodent context conditioning, as well as in several anxiety disorders (including PTSD), we mainly focus on the role of the hippocampus in contextual generalization.

In a series of rat experiments, we optimized a behavioral paradigm to investigate contextual generalization. Here, we will discuss the effects of glucose administration. It has been repeatedly demonstrated that glucose can alter behavior and/or performance in later tests. Moreover, recent human research has shown that glucose ingestion immediately after acquisition results in superior specificity in the retention of contextual anxiety, but not cued fear. The authors proposed a hippocampus-mediated mechanism of action. Interestingly, their findings also suggest that glucose consumption after trauma might be a valuable and easy-to-use addition to existing therapies. Using rat experiments, we aimed to gain more insight into the role of the hippocampus and glucose in (the generalization of) contextual anxiety.

11.40 - Preliminary data from a TMS study on the role of prefrontal cortex in the attentional bias for threat.

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A network of interconnected brain structures (including amygdala and prefrontal cortex) has been proposed as the neural basis of the attentional biases for threat (ABTs; Cisler and Koster, 2010). Recently, Leyman et al. (2009) demonstrated that a single session of high-frequency repetitive Transcranial Magnetic Stimulation (TMS) over the right dorsolateral prefrontal cortex (DLPFC) impaired the ability to inhibit negative information. In line with these findings, Vanderhasselt et al. (2011) demonstrated that TMS over right DLPFC induced attentional bias for threat and that this effect was larger in participants with higher state anxiety scores. However, previous TMS studies on ABTs only employed offline stimulation protocols that do not allow exploring involvement of DLPFC in early threat elaboration.

In the present study, we applied an online TMS protocol to investigate the role of left and right DLPFC in ABTs in non-clinical anxious individuals. In three experimental sessions (right TMS, left TMS, Sham stimulation), young healthy volunteers (n= 18) received single-pulse TMS while they were engaged in an exogenous cueing attentional task. Single-pulse TMS was delivered 100 ms or 200 ms after stimulus onset, allowing to investigate the effect of the DLPFC stimulation at very early stages of threat elaboration.

Results showed that high anxious individuals manifested a disengagement bias only when they received TMS over the left DLPFC 100 ms after stimulus onset.

Such results demonstrated that the left DLPFC plays a crucial role in early stages of threat processing, inducing a difficulty to divert attention away from threatening stimuli (disengagement bias).

ORAL PRESENTATIONS
FRIDAY, MARCH 20th

14.20 - 16.20

Chair: *Elena Bilotta*

14.20 - You Should Take the Big Picture into Account! A Systematic Review and Meta-analysis of the Effects of Attention Bias Modification for Social Anxiety.

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Research on attention bias modification (ABM) for social anxiety disorder (SAD) is inconclusive, with some studies finding clear positive effects and other studies finding no significant benefit relative to control training procedures. In this meta-analysis, we assessed the efficacy of ABM for SAD on symptoms, reactivity to speech challenge, attentional bias (AB) toward threat, and secondary symptoms at posttraining as well as at 4-month follow-up. A systematic search in bibliographical databases resulted in 15 randomized studies (involving a total of 1043 individuals) comparing ABM to a control training procedure. Data were extracted independently by two raters. The Q statistic was used to assess homogeneity across trials. All analyses were conducted using intent-to-treat data. ABM produced a small but significant reduction in SAD symptoms ($g = 0.27$), reactivity to speech challenge ($g = 0.46$), and AB ($g = 0.30$). These effects were moderated by characteristics of the ABM procedure, the design of the study, and trait anxiety at baseline. However, effects on secondary symptoms ($g = 0.09$) and SAD symptoms at 4-month follow-up ($g = 0.09$) were nonsignificant. Although there was no indication for significant publication bias, the quality of the studies was substandard and wedged the effect sizes. From a clinical point of view, the present findings imply that ABM is not yet ready for wide-scale dissemination as a treatment for SAD in routine care. Theoretical implications for the integration of AB in the conceptualization of SAD are discussed.

14.40 - Pre-exposure enhances generalization of contextual fear.

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Fear generalization is considered a core mechanism in the development of pathological fear. Previous neutral experiences have been shown to affect subsequent fear generalization. The degree of similarity between the pre-exposure and conditioning

context is thought to determine the amount of generalization to that context on later testing. In a human fear conditioning paradigm we tested the effect of pre-exposure to a context that is similar to the conditioning context (context A), the conditioning context itself (context B) or a completely different context (context C) on fear generalization. Subjects were exposed to one of the three contexts on day 1. One day later conditioning to context B took place. On the third testing day responding to the conditioning context and generalization to both the similar (context A) and the different context (context C) was tested. We observed that when subjects were pre-exposed to the context that was similar to the conditioning context generalization of threat expectancy to both the similar and the different contexts was enhanced. Pre-exposure to the conditioning context or a completely different context did not result in increased generalization. Differences in neutral experiences previous to conditioning can have major consequences for generalization. Possible underlying mechanisms include the phenomena of pattern completion and pattern separation. During pre-exposure a contextual representation is formed. If the conditioning context is sufficiently similar to the pre-exposure context pattern completion mechanisms will ensure retrieval of the pre-exposure context representation, resulting in an increase of generalization. In contrast, when the contexts differ sufficiently, the conditioning context will be encoded as a separate representation (pattern separation), thereby decreasing later generalization.

15.00 - Make up your mind about food - the influence of current motivational state on attention processing of food cues.

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Recently, vast empirical interest emerged on the role of a food-related attention bias for overeating and restrained eating behaviour. However, studies on individual differences (e.g. restrained eating) and attention bias for food have resulted in diverse findings. We tested experimentally if current motivational states, such as a “mindset”, rather than trait-like differences in eating behaviour, influence attention bias for food. Current mindset was manipulated experimentally by inducing either a “health” or a “palatability” mindset. Attention bias for food was measured by eye-tracking and response latencies (RL) during a visual probe task with high-calorie food and non-food pictures. Restrained eating was assessed. Participants in the “palatability” condition had significantly stronger attention bias towards food pictures, as specified by RL bias. Simple slope testing revealed that the mindset determined the nature of attention bias for food in restrained eaters, while there were no differences between restrained and unrestrained eaters within each condition. Our study suggests that a mindset focus on “health” versus “palatability”, thus the current motivation for food, biases food-related attention, at least in individuals who are

concerned about food intake, i.e. restrained eaters. This finding is important as it offers an explanation for the diversity of previous findings on attention bias for food. Our results imply that it is inaccurate to study between-group differences on trait-like variables when trying to understand the role of an attention bias for food for eating behaviour and that it is necessary to account for current motivational state.

15.20 - Emotion regulation strategies on risky decision making.

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The role of emotion regulation on decision-making has greatly expanded in the last decade, clearly showing that humans can regulate their emotions and consequently their choices. Emotion regulation is the process that affects the intensity, duration and quality of emotions. It can imply, for example, reinterpreting the meaning of the stimulus as less negative or more positive (reappraisal), or taking mental distance from the situation (distancing). Previous studies investigated only separately the role of such cognitive strategies on risky behaviors, and, to our knowledge, no one investigated their effects on subsequent choices or recorded the skin conductance signal during outcome observation either. Therefore, in the present study, 23 participants played a risky gamble task, by choosing between a safer and a riskier option. They played 96 trials, divided into three equal blocks, respectively represented by the use of reappraisal, distancing or look strategies, to be applied on each obtained outcome. Results showed that these cognitive strategies differently affect risky behavior: distancing leads to quicker choices and to a riskier behavior and this even increases after gains, as compared to reappraisal and look strategies. Physiological arousal is enhanced when applying the reappraisal and distancing strategies, showing the success of their application, but also that their implementation is costly. Distancing seems to be costly also in terms of decisional behavior. These findings provide insights on the specific role of the different regulatory strategies, and therefore they have interesting implications for psychotherapy, as suggesting which strategy should be increased or prevented.

15.40 - Cognitive and autonomic responses to anxiety in high and low anxious individuals.

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Excessive, uncontrollable worry and difficulty concentrating are hallmarks of generalized anxiety disorder (GAD) that result in distress and disruption of daily life. To further understand the relationship between cognitions and physiology in perseverative cognition,

this study examined the cognitive and physiological profiles of individuals who met a DSM-IV diagnosis for GAD as compared to healthy controls during performance of three low demand tracking tasks. Questionnaire measures and behavioral measures were collected alongside heart rate variability data (HRV) and magnetic resonance imaging from 19 participants with GAD and 21 healthy controls, matched for age (29.3 (8.3) years) and gender. The two groups had significantly different baseline profiles on trait anxiety, depression, and rumination scales, and on HRV and structural imaging data. During the tracking task we examined measures of worry, distraction from external cues, and task focus before and after an anxious mood induction. Mixed ANOVAs (pre/post mood induction measures x high/low anxiety group) showed a main effect of induction on worry, focus, and distraction where worry increased, and distraction and focus decreased after the anxiety induction. There were no interaction or group effects. The HRV data showed a group main effect (the high anxious group had significantly lower HRV both pre and post induction as compared to the control group), but no induction effect or interaction effects. Overall, our results shed more light on the relationship between anxiety and perseverative thinking in high as compared to low anxious individuals.

STUDENTS ORAL PRESENTATIONS
SATURDAY, MARCH 21st

9.15 - 10.50

Chair: *Katia Tenore*

9.15 - An Updated Meta-Analysis of Classical Fear Conditioning in the Anxiety Disorders.

PUCK D., CATH D.C., LISSEK S., HOX J.J., HAMM A.O., ENGELHARD I.M., VAN DEN HOUT M.A., BAAS J.M.P.

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The aim of the current study was twofold: (1) to systematically examine differences in fear conditioning between anxiety patients and healthy controls using meta-analytic methods, and (2) to examine the extent to which study characteristics may account for the variability in findings across studies. Thirty-five patient-control studies (published between 1920 and 2013) were obtained through Pubmed and Psychinfo, as well as from a previous meta-analysis on fear conditioning. Results demonstrated robustly increased fear responses to the CS- in anxiety patients compared to controls during acquisition. This effect may represent an impaired ability to inhibit fear when a CS- is presented and/or may signify a tendency of anxiety disordered patients to generalize fear responses more easily to other previously neutral stimuli. During extinction, enhanced fear responses to the CS+ were found in patients compared to controls, indicating delayed and/or reduced extinction of fear in anxiety patients.

9.28 - The effect of abstract ‘why’ thoughts on working memory.

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Rumination and worry have been found to reduce working memory. However, the dimension of abstractness/concreteness of processing style (‘Why’ vs. ‘How’) has not been taken into account in these earlier studies. Also, in most studies the induction typically precedes the working memory assessment. In this experiment we have used a dual-task paradigm to examine the influence of processing style on working memory. Participants (N=80) were asked to think back of a negative event that occurred in the past two weeks. They were then asked to answer abstract or concrete questions (to induce an abstract or concrete processing mode about the negative event). Before the questions appeared, participants first saw a 5x5 pattern that showed five randomly

located dots and had to remember the location of these dots. Following responding to the abstract or concrete question for 30 seconds, they were asked to put the dots in the correct place in an empty grid. Analyses showed that abstract thoughts in interaction with depression symptoms have a lesser burden on working memory compared to concrete thoughts. In a dual-task paradigm where participants have to remember the dot pattern while processing in an abstract or concrete mode, we found that abstract thoughts (vs. concrete thoughts) were not using up more working memory for individuals with more depressive complaints. One reason might be that these abstract thoughts about negative events in people with higher depressive symptoms have been automated and thus consume less capacity, in line with expert performance through extended practice.

9.41 - Of Raining and Pouring: The Influence of Sad Mood on Implicit Self-Esteem.

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Low self-esteem is a prominent feature in many psychological disorders. Based on dual-processing models, literature distinguishes between the reflective explicit self-esteem (ESE) and the automatic, relatively uncontrollable implicit self-esteem (ISE). Previous research has found that both ESE and ISE predict symptoms of depression, although the findings concerning ISE are less consistent. Given that mood states influence the way we interpret and perceive our surroundings, it is unclear what influence a sad mood may have on ISE. If ISE is influenced by mood state, sad mood may not only highlight a period when one is most vulnerable for developing depressive symptoms due to a congruent effect on cognition and the increased accessibility of negative self-associations, but variations in mood state may account in part for previous mixed findings. In the present study, one group of participants completed the measure of ISE before ($n = 45$) and one group ($n = 48$) completed the measure of ISE following a sad-mood induction. Participants who carried out the implicit task before the mood induction repeated this assessment following the sad-mood induction to provide the opportunity of examining the influence of test-retest effects on the ISE measure. Data analyses are currently in progress. Findings of this study might help explain why some previous studies failed to find a relationship between ISE and symptoms of depression. Further, if sad mood does influence ISE in a mood-congruent manner, the effects of interventions to improve ISE will have to be robust against changes in mood.

9.53 - Reward and punishment sensitivity and alcohol use: The moderating role of executive control.

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Reward sensitivity and to a lesser extent punishment sensitivity have been found to explain individual differences in alcohol use. Furthermore, many studies showed that addictive behaviors are characterized by impaired self-regulatory processes, and that individual differences related to alcohol use are moderated by executive control. During the conference I will present the first study that explores the potential moderating role of executive control in the relation between reward and punishment sensitivity and alcohol use. Participants were 76 university students, selected on earlier given information about their alcohol use. Half of the participants indicated to drink little alcohol and half indicated to drink substantial amounts of alcohol. As expected, correlational analyses showed a positive relationship between reward sensitivity and alcohol use and a negative relation between punishment sensitivity and alcohol use. Regression analysis confirmed that reward sensitivity was a significant independent predictor of alcohol use. Executive control moderated the relation between punishment sensitivity and alcohol use, but not the relation between reward sensitivity and alcohol use. Only in individuals with weak executive control punishment sensitivity and alcohol use were negatively related. The results suggest that for individuals with weak executive control, punishment sensitivity might be a protective factor working against substantial alcohol use.

10.06 - Soul pain: the influence of persistent grief on sensory processing and perception of nociceptive stimuli.

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Psychological pain is an aversive feeling, just as intense and real as physical pain, but still undervalued in clinical settings and society. Past research has found evidence for similarities between psychological and physical pain in their subjective perception and overlapping brain activity. Yet there is no general consensus on whether these findings can be interpreted as specific marker of pain rather than salience or contextual relevance of the aversive state. Despite the uncertainty on the genuine overlap between the two constructs and their neural circuits, its severe impact on human well-being is clear, as it is part of the symptomatology of many psychological conditions (e.g. depression or complicated grief). Here, using electroencephalography (EEG) and psychophysiological measures, we studied the influence of high levels of psychological pain on the processing

and perception of nociceptive stimuli. We measured laser-evoked potentials in a sub-clinical population of individuals suffering of persistent grief and a healthy control group. We further assessed neurophysiological characteristics in both groups. Results point out differences in pain processing between the groups, with sub-clinical patients showing more salience to nociceptive stimuli than healthy individuals. We further found evidence for neurophysiological differences between the groups. Our results support the notion that psychological pain can affect the perception and processing of physical pain and thus an interaction between the two is taking place. Our findings further add to the current knowledge of the complex state of grief, with important implications on the still not fully recognized clinical disorder of complicated grief.

10.19 - Perception of control under cognitive load: Implications for the depressive realism effect.

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People with depression tend to report lower levels of perceived control over the events in contingency tasks with no control compared to non-depressed: a phenomenon known as the depressive realism effect. Many theories attempted to explain this effect, with recent explanations focusing on processing of relevant contextual information. We hypothesize that overloaded working memory (WM) capacity might reduce perceived control by straining the available capacity for contextual processing. In two experiments, we tested for the effects of an overloaded WM capacity on judgments of control. We hypothesized that WM load would impair contextual processing, and result in decreased levels of perceived control in zero (Experiment 1), and positive contingency conditions (Experiment 2). We manipulated WM load during a contingency learning task using a dual task procedure in two conditions: No load and High load. In both conditions, participants were asked how much control they perceived over Action-Outcome contingencies. Findings indicated that WM load during the contingency learning task reduced perceived control when compared to the No load condition in zero contingency (Experiment 1). The findings from Experiment 2 generally replicated the findings of Experiment 1, and indicated that this effect was not due to increased task difficulty. An overloaded WM capacity might lead to impaired context processing, which eventually might result in decreased levels of perceived control in depression. Our findings emphasize the role of available contextual processing capacity in perception of control.

10.32 - The effects of rumination on executive function: an experimental study.

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Evidence suggests that ruminators exhibit impaired central executive performance. However, it is unclear whether ruminative thinking is associated with an inability to switch attention away from old to new information or with an inability to effectively inhibit the processing of previously relevant information. In three experiments, using different rumination induction instructions, measures of executive functions and rumination, we examined the impact of rumination (both state and trait) on executive performance in nonclinical, student samples. In Experiment 1 (E1), we examined whether ruminative tendencies drive the executive deficits. In Experiments 2 and 3, we manipulated additionally, the state rumination prior to executive task completion. The results showed that both trait (E1, 2, and 3) and state rumination (E2 and 3) did not affect participants' ability to activate a new task set or to inhibit previous task set. Although the groups did not yield significant differences, regardless of significant increase of negative mood after the rumination induction task, results indicated that the ruminators had slightly slower RTs on the inhibition task in E2, but somewhat greater switch costs and less accuracy on the switching task in E3. Our results might suggest that the aspects of executive function involved in task switching and task inhibition are not fundamentally impaired in ruminators. However, it is possible that the use of nonclinical samples led to these results. Our participants may be less influenced by the rumination induction and/or better at stopping ruminative thought than are depressed or depression-prone individuals. Further implications are discussed.

10.58 - A traumatic experience in the lab: OTO as an alternative for the simple fear conditioning procedure.

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A traumatic experience is often a single event that takes place in a complex situation. However, fear conditioning experiments typically involve multiple presentations of a simple stimulus followed by an aversive outcome. We argue that a one trial overshadowing (OTO) paradigm models traumatic events more closely. In this procedure a compound of stimuli is presented to the participant only once, followed by an aversive outcome. Results of two experiments show that responding to a stimulus that was trained in compound is lower than responding to a stimulus conditioned on its own. This one-trial-overshadowing-effect emerged in shock-expectancy ratings, skin conductance, and startle responses. Additionally, in the first experiment, SCR to the overshadowed stimulus negatively correlated to state-anxiety, the more conditioned fear they showed to the overshadowed

stimulus. This paradigm is especially interesting for examining selective fear conditioning, which prevents fear from spreading to a broad range of (redundant) stimuli. Clinical anxiety is often characterized by a lack of response specificity, resulting in generalized fear. An impairment in selective conditioning during a traumatic event, might be a vulnerability factor to develop this generalized, pathological anxiety.

STUDENTS ORAL PRESENTATIONS

SATURDAY, MARCH 21st

11.20 - 12.10

Chair: *Katia Tenore*

11.20 - Afraid of anger: Biased unconscious processing of angry facial expression in social anxiety.

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A number of studies have shown that individuals with social anxiety (SA) tend to direct their attention faster toward angry faces and to observe them longer than neutral or happy faces. We revisited this finding using binocular rivalry paradigm while, unlike previous research, controlling for eye preference (EP). This measure is suggestive of top down control of the early attentional processes, possibly even driven by SA. Thirty-one psychology students were divided into high (HSA) and low (LSA) socially anxious groups based on their SA scores. Paired binocular rivalry images (56) of angry, fearful, and neutral facial expression were presented to the two eyes in different colors (green and red, counterbalanced), for 20 s. Participants pressed and held the assigned key when and while they saw a particular color of the stimulus, indirectly informing us which facial expression is being observed. We measured (1) how long participants observed a particular face, (2) the first perceived face, and (3) how many times they switched the attention. EP influenced the rate of attentional switch. Moreover, HSA group tended to observe angry faces longer when they observed them with the preferred eye. Finally, HSA individuals manifested a bias toward angry faces, but unlike clinical SA population not toward fearful faces. SA probably drives early processing of angry facial expression, while fearful expressions are presumably processed at higher levels. HSA also accelerates the processing of the threatening information perceived with the preferred eye, leading to an adequate and faster reaction to a threat.

11.23 - Temporal attentional bias in (un)succesful dieting.

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Both Anorexia patients and restrained eaters try to limit their food intake. However, restrained eaters often fail and indulge in exactly those foods that they want to avoid, while anorexia patients succeed. A possible explanation is a difference in temporal attentional bias for food cues. It could be that for restrained eaters food stimuli are processed relatively efficiently and require less attentional resources to enter awareness. Once a food stimulus has captured attention, it may be preferentially processed. Anorexia patients however may be very successful in redirecting their attention after a salient cue. Two studies with A Rapid Serial Visual Presentation task were carried out. Study 1 in restrained and unrestrained eaters and study 2 in Anorexia patients and healthy controls. In study 1, results indicated that 1) independent of restrained status, food targets elicited more elaborate processing, which was reflected in the associated temporal attention costs. 2) Specifically, in restrained eaters, identification of food cues interfered with the correct identification of a preceding target. 3) specifically in restrained eaters, presentation of task-irrelevant food stimuli interfered with task performance. Preliminary results of study 2 suggest that specifically in Anorexia patients task-irrelevant food stimuli did not hamper current task performance. In restrained eaters, food cues get prioritized access to limited cognitive resources, even if this processing priority interferes with their current goals. Anorexia patients are however successful in redirecting their attention. This difference might help explain the differences between both groups.

11.35 - Compassion at the mirror: mirror exposure increases the efficacy of a self-compassion intervention in enhancing soothing positive affect.

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The aim of this study was to test whether a brief exposure to a mirror could increase the effect of a self-compassion intervention in reducing self-criticism and increasing positive affect. Healthy participants (N = 86, 46 females and 40 males) were first instructed to generate four phrases that they would use to soothe and encourage their best friend in an upsetting situation. They were then asked to describe a recent episode where they criticized themselves and then randomly assigned to one of three experimental conditions where they had to: (a) repeat the 4 phrases to themselves while looking at the mirror (n = 30), (b) repeat the 4 phrases to themselves without the mirror (n= 28); (c) looking at themselves in the mirror without repeating the phrases (n = 28). Before and after the intervention, affect ratings were obtained, along with state measures of self-reassurance,

self-hate, and self-criticism. The electrocardiogram was continuously recorded to derive heart rate (HR) and variability (HRV) measures. Participants in the “phrases at the mirror”, reported significantly higher levels of HRV, contentment, lovability, and serenity compared to participants in the “phrases-only” condition. Participants in the “phrases at the mirror” condition scored higher than participants in the “mirror only” condition only on HRV and contentment. Results suggest that the mirror enhances the efficacy of this self-compassion intervention specifically increasing the level of the emotions of the “soothing system” connected to the activation of the parasympathetic nervous system.

11.47 - Rumination in childhood: The role of parenting style, autonomic functioning, and trait dispositions.

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Although rumination has been broadly investigated in adults, revealing its role as a vulnerability factor for psychopathology and somatic symptoms, less is known about its developmental antecedents. Also, the majority of studies conducted in children are correlational, precluding causal inferences. In this study, we combined parental style assessment with rumination induction and concomitant physiological assessment in children to shed light into the multiple factors involved in the origin of rumination. Based on previous observational findings, we hypothesized that state and trait rumination in children would be particularly predicted by parents’ emotional separateness and poor communication, in combination with children’s resting low vagal tone, an index of poor emotion regulation (polyvagal theory). Moreover, we expected more maladaptive consequences (i.e., lower mood, and higher arousal and distractibility) in children prone to a ruminative coping style. Twenty-four children, aged 7-12 years and equally distributed by gender, were asked to describe their tendency to ruminate about prototypic situations (at school, with friends, at home) depicted in a series of ad-hoc developed vignettes while the ECG was continuously recorded to derive heart rate (HR) and variability (HRV). After the state rumination assessment and induction, children performed a low demanding task with thought and mood probes. Parental style and children’s dispositional tendencies were assessed by self-report questionnaires. Data analyses are currently in progress. Findings might help our understanding of the developmental origins of rumination by the use of an experimental paradigm and both subjective and objective measures of ruminative tendencies in children.

ORAL PRESENTATIONS
SATURDAY, MARCH 21st

14.30 - 16.10

Chair: *Maurizio Brasini*

14.30 - Exploring mechanisms of change in schema therapy for chronic depression.

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The underlying mechanisms of symptom change in schema therapy (ST) for chronic major depressive disorder (cMDD) have not been studied. Two potential key mechanisms underlying symptom change in ST are changes in schemas and the therapeutic alliance. One challenge in studying mechanisms of change is demonstrating that putative mechanisms precede change in symptoms. Method: To disentangle the temporal relations between change in schemas (proxied by negative idiosyncratic core-beliefs), the therapeutic alliance and change in depressive symptoms we drew data from a single-case series of ST for cMDD. Patients with cMDD (N=20) received on average 78 repeated weekly assessments over a course of up to 65 individual sessions ST. Focusing on repeated assessments within-individuals, we tested whether change in core-beliefs and therapeutic alliance precedes, follows from or occurs concurrently with change in depressive symptoms. Weighted correlation coefficients and mixed regression were used to test each model. Results: In general, change in core-beliefs was not temporarily but concurrently related to changes in symptoms. Change in symptoms was not temporarily related to overall alliance ratings. Repeated goal and task agreement ratings (specific aspects of alliance) of the same session, completed on separate days, were at least in part predicted by concurrent changes in symptoms. Conclusion: Contrary to what would be expected based on theory, our findings suggest that change in core-beliefs does not precede change in symptoms. Instead, change in these variables occurs concurrently. Moreover, alliance ratings seem to be at least in part coloured by changes in current mood state.

14.50 - Conceptualizing, quantifying, & modifying biases of emotional attention as dynamic processes in time.

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In contrast to decades of research conceptualizing and quantifying biases of emotional attention (BEA) as a static trait, recent works suggests that BEA may be better conceptualized and quantified as a *dynamic process in time* (Zvielli, Bernstein, & Koster,

2014, *Clinical Psychological Science*). Accordingly, we will present emerging findings from a series of studies that quantify BEA by means of a novel bias-process-signal computational procedure (Zvielli, Bernstein, & Koster, 2014). These studies show that: (1) Multiple forms of BEA are expressed in fluctuating, phasic bursts, towards *and/or* away from motivationally-relevant stimuli over time. (2) Key measurable features of the temporal dynamics of BEA include, mean levels of attention, the amplitude of phasic bursts or “peaks” of attention, and the degree of temporal variability of attention - towards *and* away from motivationally-relevant stimuli in time. (3) Whereas traditional aggregated mean bias scores demonstrate poor reliability (e.g., $r_{\text{spearman-brown prophecy corrected}} = .11$), temporal dynamic features of BEA demonstrate significantly improved psychometrics (e.g., $r_{\text{spearman-brown prophecy corrected}} = .47$ to $.87$). (4) Quantifying BEA as a dynamic process in time may also help illuminate relations between BEA and multiple forms of psychopathology, cross-sectionally and prospectively. Finally, we will highlight one clinical translation of these findings for the development of novel Cognitive Bias Modification methods - Attention Feedback Awareness and Control Training (A-FACT; Bernstein & Zvielli, 2014, *Behaviour Research & Therapy*). We will conclude by highlighting possible next steps for the study of BEA as a dynamic process in time.

15.10 - Training cognitive control in relation to depressive symptoms.

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There is a strong interest in cognitive control training as a new intervention for depressive symptoms. Provided the cognitive and neuropsychological impairments observed in depression, cognitive control training may be a promising tool in remediating attentional and memory problems to subsequently improve mood. We first consider the state-of-the-art research on working memory impairments in relation to different stages of depression (at-risk, sub-clinical, clinical and remitted). Then we will review studies from our lab where the effects of cognitive control training was examined on key emotion regulation strategies (e.g., rumination and reappraisal) that are implicated in depression.

15.50 - Study protocol for a randomised controlled trial of a cognitive-behavioural prevention programme for the children of parents with depression: the PRODO trial.

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Depression is one of the most common psychiatric illnesses worldwide, but is

nevertheless preventable. Since the children of parents who have depression are at greatest risk of developing depression themselves, prevention programmes for this population are a major public health priority. Here we report the study protocol of a randomised controlled trial (Clinical Trials NCT02115880) of a group-based psychological intervention for families with i) at least one parent who suffers (or has suffered) from depression and ii) at least one child who has no current or previous psychiatric diagnosis. Eligible families will be randomly allocated to receive either a German adaptation of the 12-session cognitive-behavioural Raising Healthy Children intervention (Gesund und glücklich aufwachsen; N = 50), or no intervention (usual care; N=50). The primary outcome (child diagnosis of an episode of depression) will be assessed at 15-month follow-up. The secondary outcomes (child psychopathological symptoms) will be assessed immediately following completion of the intervention (6-months), as well as at 9- and 15-month follow-up. The study is still in the recruitment phase, but we hypothesise that children in the intervention condition, compared with those who do not receive the intervention, will show fewer symptoms of psychopathology, and be less likely to meet diagnostic criteria for a depressive episode, at follow-up. Despite their elevated risk of developing depression, there is little formal support available for the children of parents with depression. This study provides an important step in the development of more effective depression prevention measures, which are needed if the personal, social and economic burden of depression is to be reduced.

POSTER

1. Improving the Generalization of Extinction by Allocating Attention to Category-Relevant Stimulus Features in Spider-Anxious Students.

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Return of Fear (RoF) is not uncommon after exposure treatment. One pathway to RoF is that the effects of the exposure treatment do not generalize to stimuli other than the one(s) used in treatment. In this treatment-analogue study we aim to investigate whether the generalization of extinction to other stimuli can be improved by allocating attention during extinction towards features or characteristics that the extinction stimulus has in common with other stimuli of the feared category. During extinction, spider-anxious participants are repeatedly exposed to pictures of a spider. In a between-subjects design, processing of the spider is manipulated by questions that focus on the unique features of the spider or on category-relevant features that the specific spider has in common with other spiders. In a test phase, participants are presented with spiders that were not presented in the extinction phase. Verbal fear, disgust and valence ratings are included and skin conductance and facial electromyographic (EMG) activity at the levator labii site are recorded as psychophysiological indications of fear and disgust. Participants are asked to complete a behavioral approach test before extinction and after the test phase. For exploratory purposes, a Navon letter task is included to examine whether individual differences in the spontaneous tendency to process stimuli globally or locally are associated with RoF. This study is currently running. Results will be presented at the meeting. A recent pilot study in which fear was conditioned in the lab in healthy participants revealed results in the expected direction.

2. Cognitive Predictors of Violent Incidents in a Forensic Psychiatric Sample.

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One of the main tasks of staff members in forensic psychiatric settings is predicting future violent behavior of patients. Current risk taxation instruments rely heavily on static factors, while dynamic risk factors have promising predictive value. However,

research on dynamic risk factors is limited. This study aimed to test whether cognitive factors had predictive value in estimating the risk of in-clinic violent incidents in a forensic psychiatric sample (N = 71). A set of six cognitive tasks was administered and aggressive incidents were registered within one year after data collection of the cognitive factors. Two versions of the Emotional Stroop (aggression-related and threat-related) were used to measure an attentional bias for aggressive or threat-related stimuli. A Signal Detection Task was used to measure attentional vigilance for and difficulty to disengage from angry faces. The Graded Emotional Recognition Task measured difficulty to recognize emotional faces. An IAT was included to measure the implicit affective association with violence. Response inhibition was examined with an Affective Go/NoGo. A stronger attentional bias towards both aggressive and threat-related stimuli (measured with the Emotional Stroop) predicted a higher level of violent in-clinic incidents. Also, difficulty to recognize sad faces on the Graded Emotional Recognition Task was predictive for the number and severity of incidents. Findings indicate that an attentional bias and decreased recognition of sadness are valuable predictors of violent incidents in forensic patients.

3. Auditory selective attention in adolescents with major depression: evidence from an event-related potential study.

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Major depression (MD) is associated with deficits in selective attention. Previous event-related potentials (ERPs) studies in adults with MD have identified abnormalities in the neurophysiological correlates of auditory selective attention. However, it is unknown whether these findings can be generalized to adolescents suffering from MD. Thus, the aim of the present ERP study was to explore the neural mechanisms of auditory selective attention in adolescents with MD. 24 female and male adolescents with MD and 21 typically developing control subjects were included in the study. ERPs were collected during a standard two-tone auditory oddball paradigm. On the behavioral level, no group differences emerged. On the neural level, adolescents with MD showed a marginal longer N100 latency to target and non-target tones. Moreover, the MD group showed a prolonged P200 latency to targets. Across both groups, a longer P200 latency was related to a decreased tendency of disinhibited behavior as assessed by a questionnaire. The study points to abnormalities in the neurophysiological bases of selective attention in adolescents suffering from MD at early stages of auditory information processing. The absence of group differences in later ERP components reflecting voluntary attention stand in contrast to results previously reported in adults with MD. The results of the present study might suggest that adolescents with MD possess mechanisms to compensate for deficits in the early stages of selective

attention.

4. Absence of evidence or evidence of absence: ABM dot-probe training does not change attentional patterns to positive and negative faces in dysphoric participants.

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Over the last few years, Attentional Bias Training (ABT) have been implemented to promote better emotional regulation through attentional deployment training. Our study, in a sample of dysphoric participants (N=31) was designed to test the effectiveness of a dot-probe task training towards positive self-referent words to change attention patterns in a different task to the one used in the training procedure. Thus, a well-validated eye-tracking attentional paradigm was used before and after the ABT. The training consisted of four 13-minute sessions of dot-probe trials (N= 1152 total trials). Our hypothesis was that ABT would change the patterns of fixations to positive stimuli (i.e., happy faces) and negative ones (i.e., sad faces). We also hypothesized that ABT would reduce dysphoric symptoms and increase positive affect. Results showed that the ABT produced no significant changes on attentional performance measures (i.e., orienting and maintenance components) either to happy or sad faces. Also, the ABT did not significantly change depressive symptoms, global rumination, positive and negative affect. We discuss these results in the context of the inconsistent findings of the literature on ABT in depression and also discuss some methodological implications of the use of cognitive bias modification procedures in mood disorders.

5. The effect of body image perception on evaluation of emotionally coloured words in Muslim girls wearing and not wearing hijab.

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Through the media, women receive information on what kind of look is desired and accepted in their socio-cultural environment. A growing number of studies approach this problem from the perspective of cognitive experimental psychology. The main goal of this research was to examine the effect of body image perception on evaluation of emotionally colored words. The sample consisted of 60 female students divided into experimental and control group. Sorting criteria was a way of dressing, with the experimental group consisted of respondents who wear traditional Muslim clothing, hijab, while the control group participants (also Muslim) were uncovered. In order to determine the effects of the quasi-experimental procedure, affective priming paradigm was applied. In the current study two factors with two levels were included:

PHOTOGRAPHY (slender and obese female figures) and WORD (positive and negative). Apart from the quasi-experimental procedure, a general questionnaire and Body Satisfaction Questionnaire (BSQ) were applied. The results showed a statistically significant interaction PHOTOGRAPHY x WORD, but no significant effects of emotional valence of prime, or targets. The uncovered respondents significantly faster assessed the type of word after photographs of slim figures. The results can be considered as an indicator of positive implicit attitudes of uncovered students towards this kind of visual material (slim figures), i.e. indicate acceptance and positive attitude towards media messages that promote thin body shape as the ideal of beauty and attractiveness.

6. Between Rumination and Counterfactual Thinking: the role of alternative scenarios on maintaining negative affect.

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Counterfactual thinking (CFT) (“What if...”) has been associated to both problem solving abilities and negative affects related to life events (e.g. depressive rumination, PTSD). Most of the variables used to classify CFT (i.e. upward/downward; subtractive/additive) lack in understanding the negative effect it could have on one’s distress. We suggest that other factors, such as frequency and discomfort related to contrast effect, could affect the relationship between CFT and psychopathological distress. 84 healthy subjects with a life event closer than six months have been recruited. Ruminative style has been evaluated with RRS, depressive symptoms with BDI-II and coping style through COPE. Moreover all the subjects filled a questionnaire developed to evaluate the abovementioned variables (i.e. frequency of CFT, contrast effect’s dysfunction and discomfort due to CFT), the specific coping enacted and the emotional impact of the event. We performed a multivariate regression analysis to evaluate which cognitive variable predicted the emotional improvement and the related coping thereof. We obtained two main factors named ruminative and proactive factor. The first was negatively related to emotional improvement and predicted a negative coping (search of support and distraction); the second factor, instead, predicted a more adaptive coping focused on behavioural activation, acceptance and irony. Furthermore the ruminative factor mediated the negative relationship between ruminative style at RRS and emotional improvement. Our data suggest that exists a specific facet of rumination, more related to CFT, that focus mainly on possible alternative scenarios rather than on symptoms of one’s distress.

7. If you look at me teeth you'll get wrong: A behavioral and eye-tracking validation of the effect of covering teeth in emotional faces.

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Emotional faces are very often used in psychopathological research. Although faces convey specific information on the content of the emotion (e.g., happiness), they may also differ in the salience of certain features (e.g., display of teeth) which may affect attentional processes in a way not controlled by researchers. The aim of this presentation was to analyze the role of visibility of teeth in processing happy faces. The first study (N=101) was designed to evaluate prototypicality and intensity of happy faces under two conditions: covered teeth (CT) vs uncovered teeth (UT), using an anchor point method. Against our hypothesis, the results showed that CT faces were judged as more prototypical and more intense than UT ones. These results suggest that teeth salience could draw attention to the mouth area interfering with the analysis of other areas which have shown to be relevant in the processing of emotional faces (i.e., eyes and forehead). To test this possibility, we conducted a second study (N=40) using eye-tracking methodology and a free viewing task. It consisted of the presentation of 36 pairs of competing CT and UT happy faces controlling for the luminance of each stimulus pair. Our hypothesis, according to the results of Study 1, is that the gaze pattern for UT faces will show an orientation bias towards the mouth area and less maintenance of attention on the eyes/forehead area. We discuss the implications of these results for research on emotions in psychology and psychopathology and also provide some cues on some inconsistent findings in the literature of engagement/disengagement of different emotional faces in emotional disorders.

8. Managing obsessive thoughts during brief exposure: An experimental study comparing mindfulness-based strategies and distraction in obsessive-compulsive disorder.

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In mindful meditation, negative thoughts such as obsessive thoughts are observed simply as mental events that come and go, rather than as accurate reflections of reality. This experimental study tested the efficacy of a mindfulness-based instruction compared to distraction during brief exposure to obsessive thoughts in obsessive-compulsive patients. Thirty patients diagnosed with obsessive-compulsive disorder (OCD) were asked to listen to their own obsessive thoughts through headphones during three time phases: at baseline, during an experimental condition and during a return to baseline. During the

experimental condition, they were instructed to deal with their obsessive thoughts using either a mindfulness-based strategy or a distraction strategy (random allocation). Results showed that a mindfulness-based strategy reduced anxiety and urge to neutralize from first to second baseline, whereas a distraction strategy did not. Data offer initial evidence that using mindfulness-based metaphors during brief exposure with obsessive thoughts may be a useful alternative to distraction.

9. Inhibition Deficit in OCD Patients.

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Patients with obsessive-compulsive disorders (OCD) suffer from intrusive thoughts, which are assumed to be due to diminished inhibitory processes. The spatial cueing task indicates that a deficit in the inhibition of return (IOR) can be used as a marker for inhibitory deficits. The present study served to replicate previous findings with this task in OCD patients and, additionally, to control for the effects of the probability of valid cues. A supplementary experiment with phobic patients served to test the specificity of these effects. The task was performed in two versions: with equal and with unequal probability of valid and invalid cues. No IOR was observed in the task with unequal probability of valid and invalid cues. An IOR did occur in the task with equal probability, but it was not generally diminished in OCD patients, but depended on the visual hemifield of the stimulus. IOR in patients with specific phobias was not affected. The results do not support the notion of generally diminished inhibitory process in OCD patients, but only lateralized effects. They further indicate that a reliable IOR is only visible in a spatial cueing task with equal probability of valid and invalid cues.

10. Can classical conditioning change implicit self esteem and paranoid tendencies?

New evidence from a process intervention.

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Cognitive models and research have identified self-esteem as an important underpinning of paranoid thinking. It has recently been argued that low implicit self-esteem may be as important as low explicit self-esteem, however it is rarely a target in treatment. Applying basic learning principles (e.g. classical conditioning) to target implicit self-esteem could have potential benefit to decrease paranoia. This experimental study employed a Classical Conditioning paradigm to 1) target implicit self-esteem and 2) examine subsequent symptom amelioration in non-clinical individuals with high levels of paranoid thinking. 99 non-clinical individuals were studied using the Experience Sampling

Methodology. Psymate devices were used to administer a structured self-assessment diary assessing variations in self-esteem, paranoid thinking and other subclinical psychotic symptoms up to ten times a day on 6 consecutive days. Participants with high level of paranoia (n= 33) and with low level of paranoia (n=63) were randomized into two conditions; experimental condition and control condition (repeatedly pairing self-relevant information with smiling, angry or neutral faces). After two days using Psymate device, participants received either the experimental (i.e. pairing self-relevant information with smiling faces) or control condition (i.e. pairing self-relevant information with randomized emotional faces). Our results showed that participants with high levels of paranoia and who were trained under experimental condition showed significant higher levels of implicit SE and lower psychotic symptoms intensity than participants who were trained under control condition. However, we found no effect specifically for paranoia. This study demonstrated that level of self esteem could be increased using a Classical Conditioning intervention in participants with paranoia tendencies.

11. Duration of illness and social cognition in schizophrenia. Early treatment is better!

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Schizophrenia is associated with impairments in emotion perception and management. These social cognition ability deficits may be related to an acute psychopathologic condition. The purpose of the present study was to elucidate the effects of symptomatology and the role of duration of illness on social cognition in schizophrenic patients in different phases of illness. Thirty individuals, aged 20-60 years ($M = 35.83$ $DS = 9.90$) were enrolled in the study: 10 SCZ outpatients treated in a community setting, 10 SCZ inpatients treated in a unit for emergency psychiatry, and 10 healthy controls. All participants were examined with Brief Psychiatric Rating Scale (BPRS) - only SCZ patients - and Mayer Salovey Caruso Emotional Intelligence (MSCEIT). Our results indicated that SCZ patients in acute and in stability phase, have similar social cognition profiles (significantly worse than healthy participants). Some domains showed impairment, in particular in the subtest "Management of Emotion" and "Strategic Area". Regression analyses revealed that, in SCZ patients, the impairment in social cognition could be related to duration of illness. The gravity of psychopathology has not showed a relation with deficits in social cognition. Specific social cognition remediation training could be used in the early stages of the disease to improve emotion perception and emotion management in SCZ and to reduce the impairment in these ability of social cognition.

**12. Rebound effect in suppression of negative autobiographical memories:
Instruction-dependent or not?**

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In Wegner's thought-suppression paradigm, subjects are instructed not to think of a white bear for a period of time. Then, they are asked to "try to think of a white bear" and indicate whenever the thought comes to their minds ("forced expression instruction"). Following suppression, subjects tend to report more frequently the white bear thoughts. This subsequent intrusion i.e. rebound effect (RE) provides a laboratory model of several mental disorders. Some authors replicated RE with autobiographical material, using a more liberal expression instruction ("you might think of the target thought, but you don't have to"). However, in a similar study conducted by us, RE was not obtained, suggesting that RE may be instruction-dependent. Hence, the aim of this study was to examine this hypothesis. 72 undergraduates (females = 79.2%, Mage = 19.6) were divided into groups based on the type of instruction (liberal/traditional) and order of condition (initial suppression/initial expression). A 2x2x2 repeated measures ANCOVA examined the frequency of thoughts about a negative autobiographical event. Vividness of memories, valence, and provoked stress were covariates. RE was replicated only under the traditional instruction. In this experiment, the "white bear" paradigm was tested in an externally more valid setting, using self-relevant materials and contrasting two types of instructions for thought expression. Our results showed that RE may be instruction-dependent, suggesting that we still have to learn what really happens during suppression experiments. Implications regarding the nature of intrusions characteristics of a number of mental disorders will be discussed.

13. Moral judgement and altruistic/deontological guilt: a pilot study.

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People often make complicated decisions to help or to punish perfect strangers. To harm someone or broken some moral imperative is usually linked to feeling guilt; several researches suggested the existence of two different kinds of guilt: altruistic and deontological. Our study aimed to investigate the decision-making processes in moral judgment under different conditions of guilt: Standard (without any influence), Altruistic (the decision has made while physically close to the potential victims) and Deontological (the decision has made while flanked by an 'authority'). Each condition had two kind of dilemmas: non moral (NM, where the protagonist's choice does not cause any harm or victims) and moral (M, where the decision does harm other people). We found a higher

number of utilitarian responses when individuals had to respond to M, with respect to NM dilemmas. Looking at different conditions, we observed that this effect was evident in both Standard and Altruistic condition, while in Deontological condition no differences were observed. Reading time was higher for M dilemmas compared to NM ones, particularly under Altruistic condition: in the Deontological one reduced reading times were observed. No significant differences in response time emerged. This findings suggested that be physically close to potential victims or be flanked by an 'authority' differentially influence the decision-making processes in moral judgment, inducing more utilitarian answers in the first scenario, and faster decisions (reading time) when observed by an authority.

14. Do scales which start with “When I’m sad”, actually make me sad?

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A popular instrument for measuring cognitive reactivity, a degree to which sad mood can reactivate negative thoughts, is the Leiden Index of Depression Sensitivity - Revised (LEIDS-R). The mood induction method incorporated into the instrument is a scenario imagining task, endorsed by many studies. However, this measure also incorporates conditional wording - “When I’m sad then I...” instead of the usual item formulation. The aim of this study is to examine the potential independent contribution of conditional wording on the increase in negative affect. 160 (approx.) students of the University of Novi Sad will, prior to the experimental phase, complete the Serbian adaptation of the PANAS, Sadness subscale of PANAS-X, depression symptoms measure (DASS-21), as well as the history of depression questionnaire via the Internet. In the experimental phase, participants will be divided into four groups depending on the presence or absence of the mood induction procedure, and the presence or absence of conditional item wording of the LEIDS-R scale. After completion of the LEIDS-R scale, the participants will fill out once again the same affective measures which were administered in the pre - experimental phase. We expect that conditional wording would have a significant independent contribution to the increase in negative affect. In effect, results could provide support for the use of conditional wording in studies which focus on the relation between cognition and emotions, making the mood induction procedure more time efficient and simpler.

15. Beliefs about emotions and their link to emotion-regulation processes.

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Despite strong support for the effects of emotion regulation strategies (ERS) for maintenance of psychopathology, little is known about mechanisms involved in the use of maladaptive ERS, as people beliefs about their emotions. Coherently with the idea that the beliefs about the primary emotional experience may generate a problematic reaction and

exacerbate negative emotions (secondary emotional responses), we hypothesized that negative beliefs about emotion may be associated with difficulties in emotion regulation and the use of maladaptive ERS. In this correlational study we tested the relationship between beliefs about emotion (measured by BAEQ and ACS), the difficulties in emotion regulation (DERS scale) and ERS (reappraisal, suppression, acceptance, rumination, avoidant coping, experiential avoidance) in a non clinical sample (309 participants). Results showed that the beliefs that emotions are uncontrollable, irrational and damaging are correlated with: difficulties in emotion regulation (e.g. the tendency to have a negative secondary reaction, a lack of emotional clarity, difficulties in engaging in goal directed behaviours); the use of maladaptive ERS; an avoidant coping style. Moreover, the fear of depressed mood and anxiety was associated with rumination and emotional avoidance, whereas emotion suppression was mainly associated with fear of anger and positive affect. Mediation analysis showed that experiential avoidance has a role in the association between beliefs about emotion and rumination and avoidant style (i.e. suppression, emotional avoidance, and substance use). These findings suggest that beliefs about emotions may play an important role in the understanding of emotion dysregulation.

16. Negative emotion, body image e anti-fat bias in young men.

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Previous studies have shown that in modern Western societies men would like to have a more muscular body. This study examined body image and its psychological traits, emotions and implicit anti-fat bias in 80 men (age $M=22,5$; $ds=3,45$; divided into two groups: 40 who exercise regularly and 40 who don't.) After having heard a story (inducing shame, guilt, disgust or a control neutral story), they answered a test on body image and an Implicit Association Test to find implicit negative idea about overweight people. Subjects further fulfilled paper-and-pencil instruments assessing alexithymia, features of eating disorders, self-esteem, body dissatisfaction and body metaperception. At the end they were weighed. Results showed that negative emotions affect the perception of the body; in fact, all participants show a disperse perception, independently from group. Shame seems to be the emotion inducing a greater distortion of body image, according to the literature on the relation between shame and eating disorder. Furthermore, anti-fat bias is higher in participants that don't exercise regularly, at least in men. Otherwise for men, even if we found some links between the constructions of body dissatisfaction, body metaperception and eating disorder, like in women, we didn't found any correlation with self-esteem and alexithymia. These findings suggest the importance of focusing on negative emotions reduction and a contemporary promotion of a positive relationship with proper body.

17. Can dispositional mindfulness promote aggressive behavior?

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In the present research we examine whether and in which direction mindfulness affects, in the short term, the emotion-behavior link. Previous research from our lab showed that, in the domain of risk-taking, mindfulness amplifies the behavioral consequences of emotions, because of its awareness and acceptance components,. More specifically, it was found that high levels of anger (both measured and manipulated) were positively associated to risk-taking tendencies, but only when accompanied by high mindfulness. Although that was a solid pattern, results are apparently inconsistent with research showing that mindfulness mitigates the influence of emotions. Thus we conducted another study in which a different behavior, generally negatively correlated with mindfulness, was considered, that is interpersonal aggression. Consistently with previous research, fearful individuals were more aggressive (i.e., administered more intense sound blasts to an alleged counterpart) in the competitive reaction time task, but only when highly mindful. Theoretical and practical implications of present findings will be discussed.

18. Cognitive changes in pathological gamblers: the role of attentional bias in treatment.

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Several studies have demonstrated that irrational beliefs, impulsivity and emotional dis-regulation are related to problem gambling. A promising avenue for understanding the developing/maintaining factors for gambling problems might be the analysis of attentional biases (facilitation/avoidance or disengagement) for gambling-related cues. In this study we investigated the relationship among these factors in pathological gamblers in treatment (PGT) or not (PG). Participants were 40 males, 20 PGT and 20 PG. They were administered a computerized version of a detecting attentional biases task (Posner Task), the South Oaks Gambling Screen (SOGS), the Gambling Related Cognitions Scale (GRCS), the Barratt Impulsiveness Scale (BIS-11), the Gambling Craving Scale (GACS), and the Difficulties in Emotion Regulation Scale (DERS). We expect that that impulsivity, emotional dis-regulation and cognitive distortions are related to gambling problems, at least in PG. Furthermore, we expect an increased emotional competence in PGT, due to a decrease of both impulsivity and cognitive distortions. As regards attentional processes, we predict a facilitation/disengagement bias in pathological

gamblers (PGT) and an increasing avoidance bias in PG. This pattern of results, if confirmed, would suggest that attentional bias and irrational beliefs play distinct roles in gambling behaviour.

19. The painful side of body size.

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Anorexia Nervosa (AN) represents a complex psychiatric condition associated with extreme dissatisfaction with the size and shape of body or some body parts. Body Representation disturbances are also present. Another overlooked aspect is the increase of pain threshold, that no study fully explained. Some studies investigated the relation between body representations and pain in healthy subjects through visual illusions of body size, but up to now, no study has investigated this point in AN patients, in which the alteration of body size is founding part of the disease. The aim of this study was to investigate the role of body representation, as indexed by body size estimation, on pain perception in AN patients. Thermal pain thresholds were measured in three experimental groups, i.e., AN patients, healthy subjects with Normal body mass index (BMI) and healthy subjects with Low BMI, stimulating three body parts, i.e., hand, belly/abdomen and thigh. Any participant was also requested to fill a self-administered questionnaires (BUT, EDI-2, SCL90). We compared thermal pain perception of the three body parts in all three groups. We also analyzed the relation between the perceptive measures and questionnaires. AN group showed the highest pain threshold. Further, this pain sensitivity reduction was recorded for the belly and thigh, but not for the hand. Significant correlations between pain threshold and questionnaires data were also founded. From this work two main results emerged: 1) the influence of the mental body representation on pain perception and, 2) the specificity of this effect for body part, so we could defined it body-part specific.

20. The Dissociative Dimension in Psychopathology: Generalised and Specific Role of Dissociative Symptoms.

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The interest in dissociation as a key factor in psychopathology has constantly grown during the last two decades. On one hand, much empirical evidence supports the linkage between traumatic experiences and dissociation, showing that a specific set of disorders

exist in which dissociation is the most relevant feature. On the other hand, stemming from this same evidence, some authors have come to hypothesize that “a dissociative dimension, which dominates some clinical pictures (dissociative disorders, PTSD and borderline disorder), may also surface in practically all clinical mental disorders, representing an index of gravity and of negative therapeutic outcome”. In this pilot study, a sample of 35 outpatients were administered a set of diagnostic tools for the general psychological symptom severity (SCL-90), the relevance of multi-axial clinical dimensions (MCMI-III), the dissociative symptoms (DES-II and SDQ-20), and the alexithymia (TAS-20). Results are presented in the light of the hypothesis of an etiopathogenetic dissociative dimension, according to which both specific and generalised effects of the dissociative symptoms can be identified.

21. Exploring Schemas, Modes and Coping styles in Obsessive-Compulsive Disorder.

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Schema Therapy (ST) is an approach integrating cognitive-behavior therapy (CBT), with gestalt and object relations approaches. It expands on conventional CBT by placing more emphasis on affective experiences, therapeutic relationship and early life experiences. Unmet emotional core needs in childhood play a role in the development of Early Maladaptive Schemas (EMSs), who are maintained by dysfunctional coping strategies, and reveal themselves through specific modes. *Ad hoc* ST conceptualizations for specific psychological conditions, mainly focusing on personality disorders, have been suggested in the last decade. The aim of this study was to explore EMSs, modes and coping styles in non-clinical subjects with severe Obsessive-Compulsive Disorder (OCD) symptoms. Fifty-one subjects with high OCD (assessed through the Obsessive Compulsive Inventory-R) and 59 healthy controls were recruited. EMSs, modes and coping styles were measured. Additional indexes of depression and eating disorders were also collected. Descriptive, between-group and correlation analyses were performed. Specific EMSs (i.e., mistrust/abuse, vulnerability to harm and high standards), modes (i.e., demanding parent) and coping styles (i.e., intra-psychic avoidance) were identified in the OCD group, with precise peculiarities for OCD characteristics (i.e., washing, checking and obsessions). Further, OCD symptoms severity was positively associated with specific EMSs and dysfunctional modes. Subjects with high OCD characteristics show specific EMSs, dysfunctional modes and coping styles. Our results confirm previous findings investigating EMSs and modes in OCD populations. This was the first study investigating schemas and modes, together with coping strategies, within OC symptoms, also considering specific OCD features.

22. Alexithymia: contextual effects of experiential avoidance and negative emotional feedback.

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Alexithymia refers to difficulties in identifying and describing feelings, together with a tendency to use an externally oriented cognitive style. Studies showed a high correlation of alexithymia with negative affect and with a wide range of maladaptive regulation or coping strategies, such as avoidance coping strategies. In a previous correlational study, we tested the relationship among alexithymia, negative affect and avoidance coping strategies in two different non clinical populations, showing a negative interaction between negative affect and avoidance on alexithymia. In the present study we tried to replicate those results running an experiment. Our main hypothesis was an interaction between negative affect and avoidance coping strategies in predicting alexithymia levels. We developed a manipulation for approach vs avoidance and we measured psychological distress/negative affect through the cyber ball game (ostracism vs. inclusion). The dependent variable (alexithymia) was measured using the emotional stroop test. Data showed that the highest levels of alexithymia were obtained in the approach/ostracism condition and in the avoidance/inclusion one. Moreover, a stronger effect of avoidance manipulation in the ostracism vs. inclusion conditions was showed: in particular, the differences between ostracism and inclusion on alexithymia were higher in the avoidance condition than in the inclusion one. Possible interpretations of the results and their theoretical implications are discussed.

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