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Autobiographical memory is at the heart of what defines an individual as a person with obligations, roles and commitments in a given society. It enables us to draw lessons from the past and plan our personal future. It is therefore crucial for a sense of identity, continuity and direction in life. Most psychiatric disorders, such as depression, Posttraumatic Stress Disorder, phobia, borderline personality disorder, and schizophrenia, are associated with some disturbances of autobiographical memory. Research on its basic mechanisms and development therefore has the potentials of significantly increasing our knowledge of such diseases.

In clinical psychology there is a strong tradition for investigating changes in autobiographical memory as a function of psychopathology. Central aims have been to understand the mechanisms underlying autobiographical memory disturbances in different clinical populations and to develop appropriate evidence-based treatments for autobiographical memory deficits and psychopathology. Memory psychologists, on the other hand, have typically investigated autobiographical memory during healthy cognition with the goal of understanding the basic structures and processes in autobiographical remembering more broadly. As with clinical psychologists, they too seek to understand the mechanisms underlying autobiographical memory disturbances in psychopathology.

The goal of this conference is to facilitate scientific exchange in the rapidly growing research area of autobiographical memory and psychopathology. We are very pleased that we are able to bring together excellent researchers with different backgrounds but with a shared interest in reaching a deeper understanding of autobiographical memory when viewed in a clinical perspective. We hope this meeting will stimulate thought-provoking and engaging discussions and inspire new lines of excellent research in the future. With this we wish you all a very warm welcome.

Thank you for coming to Aarhus!
The organizing committee
Dorthe Berntsen
Hildur Finnbogadottir
Maja O’Connor
Dorthe Kirkegaard Thomsen
Lynn A. Watson
Jette Odgaard Villemoes
The conference program consists of ten keynote presentations and two poster sessions. Each keynote presentation reviews and discusses findings in a particular area of autobiographical memory research in a clinical perspective. The keynote talks are grouped in four symposia, each representing a key area in the field. A 60 minute time slot is scheduled for each keynote presentation, including 15-20 minutes for discussion. Keynote presenters are kindly asked to leave time for discussion.

The poster sessions

Poster sessions are scheduled after lunch Monday and Tuesday in Vandrehallen. There will be coffee and tea available during the poster sessions. Each poster session is scheduled for 1.5 hours to allow plenty of time to discuss the posters with the presenters. Poster presenters are expected to be present at their poster during the scheduled session. The posters can be displayed from morning to evening during the day of their session. For presenters: Please note that the max size of your poster is: *height 120 cm *and *width: 150 cm*. 
# CLINICAL PERSPECTIVES ON AUTOBIOGRAPHICAL MEMORY

## Monday 11th June

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### Symposium I: Overgeneral autobiographical memories and their mechanisms

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### Symposium II: Treatment implications of autobiographical memory research

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## Tuesday 12th June

### Symposium III: Trauma and autobiographical memory

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### Lunch and poster session II

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### Symposium IV: Intrusive and involuntary autobiographical memories

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KEYNOTE PRESENTATIONS

J. Mark G. Williams  
University of Oxford (UK)

Autobiographical Memory and Emotional Disorders: When planning strategies backfire

When attempting to retrieve personal memories, emotionally disturbed patients often differ from controls in that they retrieve summaries of events rather than an individual event. The talk will review recent evidence that helps address the origins, mechanisms and consequences of this memory deficit.

In research on origins and consequences, it has been shown that overgeneral memory is associated with a history of trauma under some circumstances; that it moderates the effect of mood on problem-solving in suicidal patients, moderates the effect of life-stress on the risk of depression, and delays recovery from episodes of affective disorders, thus exposing patients to more affective disturbance over their lifetime.

At the level of mechanism, it appears to be associated with attentional capture by self-relevant concerns and rumination on these concerns. Functional Avoidance and reduced Executive function - the CaR-FA-X model (Psychol Bull, 2007). Common to all these processes is the use of Test-Operate-Test-Exit problem-solving strategies - that work well for external problems – in an attempt to alleviate low mood or memory intrusions, but which actually exacerbate rather than alleviate the mood.

This paper will review the implications of these data both for theories of autobiographical memory, and for clinical work with patients, where it has been found that mindfulness-based cognitive therapy decreases over-generality.

Ed Watkins  
Mood Disorders Centre, University of Exeter (UK)

Overgeneral memories and their mechanisms: the relationship with rumination

There is now a growing body of evidence linking overgeneral autobiographical memory with ruminative thought. This keynote will review theoretical models (e.g., CaR-FA-X model, Williams et al. 2007; processing mode theory Watkins & Teasdale, 2001; Watkins, 2008, Watkins, 2011), and the experimental evidence relevant to the relationship between rumination and overgeneral autobiographical memory. The talk will consider evidence that manipulating ruminative thinking influences the extent of overgeneral autobiographical memory (Watkins & Teasdale, 2001, 2004; Barnard et al., 2006; Raes et al., 2008) but also evidence that manipulating the tendency to make overgeneral or abstract representations including memories may influence rumination (e.g., Watkins et al., 2008, 2009). It is proposed that there is a reciprocal relationship between rumination and recall of overgeneral memories, reflecting a common process of abstract processing. Theoretical and clinical implications are considered including the value of targeting abstract thinking and increasing specific memories to reduce rumination.

Dirk Hermans  
University of Leuven (BE)

Memory specificity and affect regulation

There exist variations in the extent to which individuals report specific autobiographical memories when cued to do so. It is well-known that particularly depression and trauma-related disorders are associated with reduced memory specificity. But, also outside these clinical groups there are clear differences among individuals. Evidence suggests that these variations might be meaningfully related to differences in affect regulation. In some, an overgeneral memory style might represent a way of avoiding confrontation with emotionally painful memories. Memory truncation is then used as a passive avoidance strategy. We will present data from correlational and experimental studies that show that (a) reduced memory specificity is related to trauma histories, and particularly avoidance of trauma memories, (b) that reduced memory specificity is related to a more general tendency to avoid the negative things in life, (c) that the relationship between memory specificity and avoidance is particularly activated in a threatening context, (d) that reduced specificity is indeed related to lowered stress when confronted with negative experiences, and (e) that memory specificity can be brought under operant control. We will discuss these data against the background of a new functional-developmental model of memory specificity as a way to regulate affect.
Intrusive re-experiencing in posttraumatic stress disorder: Memory processes and their implications for therapy

Intrusive re-experiencing of aspects of the trauma is a core symptom of posttraumatic stress disorder. The reduction of these unwanted and distressing memories is one of the primary goals in treatment. The presentation will first give an overview of characteristics of re-experiencing and discuss to what extent these fit within the framework of autobiographical memories. The presentation will then turn to memory processes that are thought to explain the features of re-experiencing. Ehlers & Clark (2000) suggested that core features of re-experiencing can be explained by a combination of three memory processes (1) associative learning, (2) enhanced priming and (3) poor memory elaboration and integration with other relevant information. Several theories highlight the role of perceptual encoding. Evidence for each of these processes will be reviewed, and will be linked with other findings on autobiographical memory in PTSD, for example, overgeneral memory and perceptions of a fundamentally changed self. Treatment procedures used in Cognitive Therapy for PTSD (Ehlers et al., 2005) that build on the research findings will be described, in particular stimulus discrimination training, updating trauma memories and reclaiming your life assignments.

Anke Ehlers
King’s College, London (UK)

Mental imagery: from flashbacks to flash-forwards

We experience mental imagery when we see in our mind’s eye, hear with our mind’s ear, and so on. Imagery has fascinating properties allowing us to remember or to make creative leaps. However, intrusive, affect-laden images cause distress across a range of psychological disorders. In this talk I hope to illustrate how better understanding mental imagery is interesting in terms of theory, and also for therapy innovation.

(1) Mental imagery and emotion. It has long been assumed that mental imagery has a special relationship with emotion. However, while affect-laden images are striking to clinicians, experimental work has been lacking. We will discuss research in support of the hypothesis that compared to verbal processing, mental imagery has a more powerful impact on emotion.

(2) Flashbacks. In comparison to studying memory that is deliberately recalled we know relatively little about involuntary, intrusive memories and images. Distressing intrusive images – “flashbacks” to a past trauma are the hallmark of post-traumatic stress disorder (PTSD). Visuospatial cognitive tasks – including the computer game Tetris - appear to protect against analogue flashback development.

(3) Flash-forwards. Intrusive mental imagery can also occur of the future, such as “flashforwards” to suicidal acts or manic pursuits in bipolar disorder. But can we harness the properties of deliberately simulating positive future events in imagery to improve emotional processing? People with depression can find it more difficult to deliberately generate positive imagery about the future. Experimental work using a cognitive bias modification framework to generate more positive imagery will be discussed.

Overall, research in experimental psychopathology can inform our understanding of the mechanisms underlying psychological disorders. It can suggest avenues for treatment innovation, though such innovations may look little like traditional therapies. In this context, mental imagery, rather than just verbal thoughts, warrants further exploration.

Emily A. Holmes
University of Oxford (UK)
I proceed by claiming that autobiographical memories for trauma and other trauma sequelae can be understood in terms of standard mechanisms of affect, cognition, and development applied to extreme events: events that are negative, emotionally intense, often unexpected and difficult to understand, and disruptive of normal development. For affect, I claim that availability increases with emotional intensity, especially for central aspects of the event, and that decreases in memory at high levels of intensity occur only in very specific instances such as those that cause an animal to freeze or go into shock. For cognition, I claim that highly intense, negative events that violate expectations have increased availability because they are better encoded and more often rehearsed. For development, I claim that the entire developmental trajectory is needed to predict reactions to events, making prior traumas often more important than the trauma being remembered and assessed for sequelae. These claims can be viewed as sophisticated null hypotheses. The goal is to see how far we can get before counter evidence requires modifications to them and our understanding of memory for and sequelae of trauma.

Richard J. McNally
Harvard University (USA)

Difficulties Remembering the Past and Envisioning the Future in People with Complicated Grief and Trauma histories

In my presentation, I will summarize our research group’s studies on autobiographical memory functioning in war veterans with and without posttraumatic stress disorder (PTSD), adults reporting childhood sexual abuse (CSA) histories, and bereaved adults with and without complicated grief. Key findings include overgeneral memory problems in war veterans with PTSD, especially in those trapped in their former identity as soldiers and marines, and an absence of this problem among adults reporting sexual abuse histories, except for those who believe they harbor repressed memories of abuse. Adults who have lost a spouse and suffer from complicated grief also exhibit difficulty retrieving specific autobiographical memories in response to cue words, but only for episodes not involving their dead spouse. Similarly, they experience difficulty envisioning counterfactual future scenarios that do not involve their dead spouse, but they do not experience difficulty envisioning future scenarios that would have involved their spouses if the latter were still alive. Difficulty imagining a future without one’s spouse, and the ease of imagining a (counterfactual) future with one’s (dead) spouse may provide the cognitive basis for the symptoms of hopelessness and yearning for the lost loved one.

David C. Rubin
Duke University (USA)

Trauma and Autobiographical Memory: A View from Cognitive Psychology

Richard Bryant
University of New South Wales (AUS)

Trauma and Autobiographical Memory

There is convincing evidence that posttraumatic disorders are characterised by impairments in autobiographical memory, including PTSD and complicated grief. There is also convincing biological evidence that trauma memories are fuelled by heightened arousal. To date, there is little attempt to merge the research of autobiographical memories, trauma memories, and emotional memories. This paper will review the studies of trauma-related autobiographical memories in the context of growing research on the biological and cognitive factors that influence how people remember aversive experiences. It will review recent studies from divergent paradigms that attempt to bring together different models to understand the complexity of autobiographical memory disturbances in traumatic stress disorders, with particular emphasis on the role of intrusive and distressing autobiographical memories.
Intrusive Memories in Clinical Disorders

There is increasing evidence that intrusive memories of negative events are a transdiagnostic feature of a range of psychopathologies; most obviously PTSD. Depressed individuals also experience intrusive memories, and there are similarities in the frequency, nature, and cognitive strategies employed to manage intrusive memories in depression and PTSD. In this talk, I will discuss the role of intrusive memories across disorders, with an emphasis on depression. Specifically, I will describe experiments carried out by our group that have borrowed paradigms and methodologies from the PTSD literature to examine intrusive memories in non-clinical (i.e., high dysphoric) and clinical (currently and formerly depressed) samples. Our findings demonstrate the role of intrusive memories in depression and highlight the importance of memory characteristics, as well as the cognitive avoidance strategies that depressed individuals adopt in response to intrusions, in contributing to depression persistence. More recently we have begun to experimentally test the efficacy of targeting key variables linked to the maintenance of intrusive memories (e.g., problematic appraisals). Our overarching goals are to increase the effectiveness of cognitive treatments for depression by developing therapeutic strategies that directly target intrusive memories, and to arrive at a much needed empirically-supported theoretical account of intrusive memories in depressive disorders.

Michelle Moulds
University of New South Wales (AUS)

Involuntary autobiographical memories in everyday life and in clinical disorders

Involuntary autobiographical memories are a basic mode of remembering that is at least as common in daily life as is voluntary goal-directed remembering. Both involuntary and voluntary memories are enhanced by emotion at the time of encoding and follow the same pattern of forgetting. Involuntary and voluntary remembering operate on the same episodic memory system and therefore are affected in similar ways by many aspects of emotional disorders. Thus, people with PTSD or depression have more negative involuntary memories – but they also have more negative voluntary memories.

In disorders involving reduced executive control (or reduced working memory capacity) and for memory measures that are sensitive to executive control (such as memory specificity) voluntary remembering will be hurt whereas the involuntary memory will be less influenced, because it takes place with less executive control. This differential effect is observed in recent work on involuntary memories in depressed individuals, as well as in normal aging.

Many of the characteristics of intrusive involuntary memories in clinical disorders can be explained in terms of the mechanisms that normally govern involuntary memories, when these mechanisms are applied to extreme situations (i.e., a traumatic event). For example, in everyday life involuntary remembering comes with more mood impact and physical reaction than does voluntary remembering, presumably due to reduced antecedent emotion regulation. This may lead to flashback experiences after highly stressful events as observed in PTSD.

Dorthe Berntsen
Center On Autobiographical Memory Research, Aarhus University (DEN)
OVERVIEW OF POSTER SESSIONS

Poster Session I
Monday 11th June
13.30 - 15.00

Overgeneral autobiographical memories and their mechanisms

101 Flexible use of overgeneral autobiographical memory as an avoidant coping strategy in nonclinical individuals. Debeer, Raes, Williams & Hermans

102 Autobiographical memory and social problem solving: Are there other important dimensions to consider beyond specificity? Dennis & Dritschel

103 The Relation between Autobiographical Memory, Future Thinking, and Clinical Symptoms in Older Adults. Brown, Bruno, Davis, Rodriguez, Bainbridge, Blumenthal, Hernandez, Kapucu, Addis, Harris, Marmor & Pomara

104 The relation between schemas and autobiographical memory specificity and valence in Major Depressive Disorder patients. Claudio & Garcia Aurelio

105 The link between overgeneralization and autobiographical memory in depression. Vanbrabant, Hermans & Raes

106 Overgeneralized autobiographical memory in patients with chronic pain. Sqveland, Brennen & Hauff

107 Generalization of Conditioned Responding: Effects of Autobiographical Memory Specificity. Lenaert, Schruers, Vervliet, & Hermans

Treatment implications and general clinical perspectives

108 Autobiographical memory deficit in breast cancer patients: is it related to the psychopathology? Bergouignan, Lefranc, Chupin, Morel, Spano & Fossati

109 Deficits in Executive Functioning in Young Adults with Depression and Dysphoria. Schapero & Dritschel

110 The relation between Autobiographical Memories and Dysfunctional Attitudes in Depression. Claudio

111 Early Maladaptive Schemas: A comparison between bipolar disorder and major depressive disorder. Kahr Nilsson & Halvorsen

112 Hallucinatory experiences of the lost partner in the elderly bereaved are common and are associated with Posttraumatic Stress Symptoms (PTSS), depression and complicated grief. Moskowitz, Spindler, Nelis, Slegers, Holmes & Raes

113 Centrality of the loss event in relation to long term complicated grief reactions. O’Connor & Berntsen

Trauma and autobiographical memories

114 Enhancing Perceived Self-Efficacy in Posttraumatic Stress Disorder through Recalling Autobiographical Memories of Success. Brown, Josceline, Marmor & Bryant

115 Cultural life scripts, personal life stories, and depression in a Mexican adult population. Scherman & Berntsen

116 Post-Traumatic Stress Disorder Symptoms Predict Event Encoding and Memory. Eisenberg, Sargent, & Zacks

117 Examining Measures of Coherence: Life Narratives of Adults With and Without Post-traumatic Stress Disorder. Dettler, Ogle, Dowell, Graesser & Rubin

Intrusive and involuntary autobiographical memories

118 Real-Life Involuntary and Voluntary Memories are not that Different: A Comparison of Naturalistic Involuntary and Voluntary Memories in a Diary Study. Rasmussen, Johanesssen & Berntsen

119 Susceptibility to Involuntary Autobiographical Memories of a Positive Film. Clark, Mackay & Holmes

120 Depressed mood mediates the relationship between rumination and intrusions. Smets, Luyckx, Wessel & Raes

121 Voluntary and involuntary Autobiographical Memories: the relation with Early Maladaptive Schemas. Attachment Styles and Interpersonal Relationships. Balola, Claudio, Raimundo & Vieira

122 Using smart phones as electronic diaries in memory studies. Laughland, Xia, Tabb & Kvavilashvili

123 Small children’s involuntary memories. Kinga, Dahl, Berntsen & Krejgaard

Autobiographical memory, processing-style and goals

124 The Role of Processing Mode in Positive Autobiographical Memory Recall. Werner-Seidler & Moulds

125 This seems really far away (when it failed), but that feels very close (when I succeeded). Demiray & Freund

126 Comparative thinking in observer perspective memories. Nelis, Siegers, Holmes & Raes

127 Mental maps as part of the autobiographical memory. Jorgensen

Functions and narratives – memories across the lifespan

128 Adaptive and maladaptive functions of autobiographical memory. Harris, Rasmussen & Berntsen

129 Remember/forget and life story relevance are predicted by different event characteristics. Results from a 3 year follow-up on a 5 month diary study. Kriekgaard Thomsen, Jensen, Holm, Hammershøj Olesen, Schrieber & Tannesvang

130 The Age Distribution of Autobiographical Memories in Older Adults with Depression. Koppel & Berntsen

131 Eye tracking as means for studying the encoding process in a deferred imitation task. Sonne, Kinga & Krejgaard

132 Changes in positive and negative autobiographical memories as a function of low mood. Watson & Berntsen
Involuntary future projections are as frequent as involuntary auto
Abstract repetitive thought leads to more generalization: A new
- Positive and negative memories in Danish soldiers – before, during,
Developing Preventative Strategies to Reduce Intrusive Imagery
Personality Correlates of Specificity, Meaning-Making, and Affect
The Prevalence and Differential Impact of Traumas Encountered
Cohesion of Trauma Memory and Life Story Are Unrelated to PTSD
Autobiographical Memory and Episodic Future Thinking: The Role
Adults' earliest memories as a function of age, gender, and edu
A Longitudinal Examination of Overgeneral Memory and Psychop
202 Abstract repetitive thought leads to more generalization: A new
203 Extended autobiographical memories and brooding scores are as
associated with clinical symptoms in schizophrenic patients. Ricarte,
204 Validation of the CaRFAX model in older adults using structural
equation modelling. Latorre-Postiga, Ros-Segura, Ricarte-Trives, Aguilar-Córcoles, Nieto-López & Serrano-Selva
205 Cognitive and emotional change and specific autobiographical
memories development in children from 3 to 6 years old: a longi-
tudinal study. Nieto, Ricarte, Ros, Latorre & Aguilar
206 Autobiographical memory specificity and social problem solving in
females with subclinical eating psychopathology. Ridout, Ma-
thsu & Willis
207 Personality Correlates of Specificity, Meaning-Making, and Affect
in Self-Defining Memories. Blagov, Singer, Oost & McKay
208 Autobiographical Memory and Episodic Future Thinking: The Role of Cue Imageability and Executive Function. Rasmussen & Berntsen

Treatment implications and general clinical perspectives
209 Effortful Control mediates between Borderline Symptoms and
Vantage Perspective during Autobiographical Memory Retrieval. Van den Broeck, Reza, Claes, Pieters & Raes
210 Pilot study of a potential computerised cognitive training interven-
tion to improve cognitive ability deficits in depression. Schapero
& Dritschel
211 Specificity of in-session autobiographical memories told by clients
with bulimia nervosa. Relation to client attachment and therapy
type. Daniel, Lunn & Poulsen
212 The Use of Training in Self-Compassion to Reduce the Distress
Associated with Intrusive Memories in Depression. Hunter & Dritschel
213 Anxious memories in anxiety disorder outpatients: The impact of
cognitive behavioral therapy on perceived centrality of event and
psychological trauma. O'Toole, Watson, Rosenberg & Berntsen

Trauma and autobiographical memories
214 Event Centrality as a Double-Edged Sword: Event Centrality, PTSD, and Posttraumatic Growth. Boals & Schuettler
215 Cohesion of Trauma Memory and Life Story Are Unrelated to PTSD
Symptoms. Fitzgerald, Wright, Broadbridge & Soucie
216 Influence of Autobiographical Memories on Cultural Differences
in Self-Identity and Implications for Post-trauma Psychological
Adjustment. Engelbrecht
217 The Prevalence and Differential Impact of Traumas Encountered
Across the Lifespan: Findings from an Older Adult Sample. Ogle,
Rubin, Berntsen & Siegler
218 Shame autobiographical memory: An integrative model for the
relations among autobiographical and traumatic shame memory
properties, shame feelings and psychopathology. Matos & Pinto-
Gouveia
219 Positive and negative memories in Danish soldiers – before, during,
and after deployment. Johannessen, Bohn, Staugaard & Berntsen

Intrusive and involuntary autobiographical memories
220 Developing Preventative Strategies to Reduce Intrusive Imagery
Following Trauma. James, Deeprose, Coode-Bate, Kilford & Holmes
221 The Influence of Negative Mood and Content Specificity in Volun-
tary and Involuntary Mental Time Travel. García Aurelio, Paraiso
Vicente, Power & Claudio
222 Psychology X-files: The mystery of unconscious thought and intrusion
development. Krans
223 Involuntary and Voluntary Memory for Neutral and Emotional Scenes. Staugaard, Berntsen & Gehrt
224 Involuntary future projections are as frequent as involuntary auto-
bioinitical memories, but are more positively biased. Finnbogadottir & Berntsen

Autobiographical memory, processing-style and goals
225 Does abstract recall of a happy memory have consequences for
memory characteristics in depression? Hetherington & Moulds
226 The relationship between cognitive response styles, the construction
of life stories, and psychological distress. Lee & Salmon
227 Self-esteem and the retrieval of positive autobiographical memories. Janssen & Demiray

Functions and narratives – memories across the lifespan
228 Life Narratives over the lifespan and their correlation with well-
being. Constantinescu, Käber & Habermas
229 Characteristics of autobiographical memories underlying life-story
narration in depression. Smith & Dritschel
230 Adults' earliest memories as a function of age, gender, and edu-
cation: Women and people with higher education have earlier
childhood memories. Kingo, Berntsen & Kriegaard
231 Warm-up questions on early childhood memories affect the re-
ported age of earliest memories in late adolescents. Kingo, Bohn
& Kriegaard
232 It's all in the detail: Intentional forgetting of autobiographical me-
memories using the autobiographical think/no think task. Noreen & MacLeod
Overgeneral autobiographical memories and their mechanisms I

101 Flexible use of overgeneral autobiographical memory as an avoidant coping strategy in nonclinical individuals
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According to the functional avoidance account, overgeneral autobiographical memory (OGM) can be considered a cognitive avoidance strategy: People learn to abort the hierarchical retrieval process at the stage of overgeneral memories to avoid the reactivation of negative emotions, associated with the retrieval of specific negative experiences. In our view, the most important difference between nonclinical and clinical samples may not be use of OGM per se, but the flexibility of its use. While some healthy individuals may use OGM flexibly, to avoid certain negative memories, patients suffering from emotional disorders may apply this strategy inflexibly to the whole autobiographical memory base. In two experiments, we found evidence for flexible use of OGM in nonclinical samples by demonstrating that the induction of an avoidant coping state activates OGM in high avoidant individuals. In the poster, the method and results of the two experiments will be presented and discussed in detail.

102 Autobiographical memory and social problem solving: Are there other important dimensions to consider beyond specificity?
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Although autobiographical memory (ABM) and social problem solving (SPS) deficits have been frequently linked in depression, limited research has examined memories automatically retrieved during SPS. The purpose of this study was threefold: 1) to explore characteristics of ABMs automatically retrieved during SPS; 2) to explore the relationship between SPS performance and how automatically or purposely participants rated retrieving their memories; 3) to examine the relationship between SPS performance and the recent occurrence of intrusive memories. Although the dysphoric and control groups included did not differ in ABM characteristics, controls rated their memory retrieval as more automatic compared to dysphoric participants. Additionally, a more automatic retrieval of memories related to superior SPS, indicating that mode of retrieval may impact the relationship between ABM and SPS. Finally, higher ratings of intrusiveness and avoidance related to poorer SPS in dysphoria, suggesting functional avoidance of intrusive memories directly relates to SPS.
The Relation between Autobiographical Memory, Future Thinking, and Clinical Symptoms in Older Adults

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The neuroanatomical structures and cognitive processes involved in recalling one’s past overlap considerably with one’s ability to imagine the future self. For example, as cognitive and neural functioning declines, older adults exhibit parallel deficits in generating personal past and future events. Moreover, studies in clinical populations have shown that autobiographical specificity underlies emotion functioning. Bridging these lines of research, we examined how cognitively intact older adults recalled or imagined personal events in response to positive and negative cues, and whether responses were associated with clinical symptoms. In general, older adults generated past and future narratives with few episodic details. Although clinical studies tend to find episodic specificity to be associated with well-being, these findings show that episodic details for past negative cues were associated with anxiety, but episodic details for negative future events were associated with depression. Convergence with cognitive models of psychopathology and clinical implications are discussed.

The relation between schemas and autobiographical memory specificity and valence in Major Depressive Disorder patients

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The importance of autobiographical memories, specifically of their content and specificity for the maintenance and treatment of Major Depression has been thoroughly demonstrated in recent years. The objective of this study was to analyse whether there was a relation between the type of autobiographical memory remembered (categorical, extended and specific), the valence of such a memory and the individual’s dominant type of schemas. To execute this analysis, an Autobiographical Memory Task and Young’s Schema Questionnaire were applied to a group composed of Major Depressive Disorder patients (n=42) and the respective control group (n=42). The intricacies and relevance of the relations between the different variables are explained in light of the recent literature on depression, autobiographical memory and mental time travel.
105 The link between overgeneralization and autobiographical memory in depression.

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Generalization refers to the assumption that the outcome of one experience applies to the same experience in the future or to even slightly similar experiences (Lefebvre, 1981). When overgeneralizing a person fails to make important discriminations and therefore arrives at incorrect conclusions and draws inappropriate lessons from experiences (Epstein, 1992). This is an important cognitive error in depression. Intuitively this concept is related to overgeneral memory. However, until now there are no experimental studies which investigate this important relationship. We will present a correlational study where we investigate the association between the Autobiographical Memory Test (AMT; Williams & Broadbent, 1986; Dutch version by de Decker et al., 2003), the negative overgeneralization scale of the Attitude Toward Self-test (ATS; Carver, 1998) and a self-created performance based measure of overgeneralization. This last measure and the results will be discussed.

106 Overgeneralized autobiographical memory in patients with chronic pain

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It is well-established that patients with chronic pain have reduced executive capacity, and that this in turn is associated with reduced specificity in autobiographical memory, though autobiographical memory has been little studied in patients with chronic pain. Autobiographical memory specificity (measured by the Autobiographical Memory Test), psychiatric diagnosis, life events, pain localization, duration and severity, and pain related disability is investigated in a group of patients attending a pain clinic. The patients are interviewed with a semi structured interview at the beginning of treatment and information is collected at six months follow up by self-report questionnaire. It is hypothesized that overgeneralized autobiographical memory is related to childhood onset of pain and severity of pain and pain related disability and that changes in self-reported pain are related to changes in autobiographical memory. The project is currently in the data collection phase and a preliminary analysis will be presented.

107 Generalization of Conditioned Responding: Effects of Autobiographical Memory Specificity

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Generalization of acquired responses appears to be a crucial, yet underinvestigated process in emotional disorders. Generalization occurs when a conditioned response is elicited by a stimulus different from the original conditioned stimulus. In the present study, generalization is approached from a memory perspective. It is hypothesized that generalization of conditioned responding is associated with autobiographical memory specificity. Higher levels of generalization are predicted for people who are characterized by limited memory specificity. A first proof of principle study showed that memory specificity was significantly associated with the extent of generalization in a human contingency learning procedure. Participants low in autobiographical memory specificity exhibited significantly stronger conditioned responses to generalization stimuli as compared to participants high in autobiographical memory specificity. At this meeting, data of a human fear conditioning study will be presented. Again, higher levels of (fear) generalization are predicted for people who are characterized by limited memory specificity.
Autobiographical memory deficit in breast cancer patients: is it related to the psychopathology?
Loretxu Bergouignan, Jean Pierre Lefranc, Marie Chupin, Nastassja Morel, Jean Philippe Spano, Philippe Fossati

The aim of our study was to assess the neuro-cognitive impact of “breast cancer experience” resilient to stress-related psychopathology. 1) We studied 16 remitted breast cancer patients with no current/past depression/PTSD and 21 matched controls, 2) We assessed episodic autobiographical memory, 3) We measured their full and posterior hippocampi volumes, and 4) We looked at the regression analysis of episodic autobiographical memory with the group and the posterior hippocampus volume as predictors. “Breast cancer experience” was associated to a deficit in episodic autobiographical memory, and a reduction in hippocampus volume, similar to posterior hippocampal reduction observed in depression and PTSD. Both Posterior hippocampus volume and the group were predictors of memory deficits. Both groups had significantly more access to positive than negative memories which differs from depression or PTSD patients’ lack of positive bias. Cumulative stress may thus affect autobiographical memory without being related to psychopathology per se.

Deficits in Executive Functioning in Young Adults with Depression and Dysphoria
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Executive functioning (EF) has been argued to unpin the autobiographical memory specificity (AMS) deficits arising from depression yet there have been few systematic examinations. Dalgleish et al. 2007’s paper was one of the few to examine the interaction between EF and AMS and suggested that inhibition was the primary underlying subprocess. This paper did not directly examine the suggested subprocesses. The current study used more refined measures of inhibition to resolve this issue (retrieval-induced forgetting, directed forgetting, Eriksen-Flanker) along with commonly used measures of EF to examine the relation between EF and AMS in young people experiencing low mood. The 92 participants consisted of 31 with depression, 31 with dysphoria and 30 healthy controls. The results primarily support the previous findings that performance on verbal fluency and low mood is related to AMS. Of the EF measures included in the battery, only the Eriksen-Flanker measure significantly related to depression.

The relation between Autobiographical Memories and Dysfunctional Attitudes in Depression.
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The objective of the present study is to evaluate the relation between autobiographical memories in depressed and non depressed individuals and their scores in the three dimensions of the Dysfunctional Attitude Scale. The instruments used were Beck’s Depression Inventory, the State Trait Anxiety Inventory, DAS and an Autobiographical Memory Task. They were applied to 57 individuals with major depression, 28 individuals with panic and 66 individuals with no previous history of psychopathology.

We evaluate the relation between the results obtained in the three dimensions of the DAS Questionnaire (Dependency, Self-Control and Achievement) and the type of autobiographical memories recalled (categorical, extended, specific). A relation was found between the results obtained in DAS’s Total and individual dimension’s results and the type of memories recalled by depressed and non depressed individuals.

Treatment implications and general clinical perspectives
**111 Early Maladaptive Schemas: A comparison between bipolar disorder and major depressive disorder**

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**Background:** Previous studies comparing cognitive content specificities between bipolar disorder and major depressive disorder have been inconsistent. This study aimed to identify differences and similarities between these mood disorders in terms of early maladaptive schemas.

**Method:** The sample consisted of 80 individuals with mood disorders (30 with remitted major depressive disorder and 50 with remitted bipolar disorder) who completed the short version of the Young Schema Questionnaire.

**Results:** The bipolar disorder group scored higher than the major depressive disorder group on most of the schemas and seven reached significance: abandonment, failure to achieve, insufficient self-control, subjugation, unrelenting standards, enmeshment and entitlement.

**Conclusion:** The findings draw attention to differences between the two mood disorders in need of further consideration in terms of their causes and implications for differentiated psychotherapeutic treatments.

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**112 Centrality of the loss event in relation to long term complicated grief reactions.**

Maja O’Connor & Dorthe Berntsen.

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**Background:** The death of a spouse is often a distressing experience that may become a reference point to how the widowed experience the life that is left to live after the death of the spouse. Boelen (2009) found that the centrality of the loss (CES) was correlated with complicated grief (CG), depression and PTSD, and neuroticism but that CES correlated with CG over and above the other constructs.

**Objective:** To investigate the correlations between CES and CG, depression and PTSD in line with Boelen’s findings and to investigate early predictors for CES in a sample of elderly bereaved people.

**Method:** A survey consisting of the Harvard Trauma Questionnaire, the Complicated Grief Scale, the Beck Depression Index, and a specially designed hallucinations questionnaire was completed by 175 elderly bereaved (mean age = 76±4, 61% females) 4 years after their loss.

**Results:** We expect to find that CES is correlated with all three measures of distress, but correlated with CG over and above PTSD and depression. We expect that both personality related variables such as neuroticism and sense of coherence and psychological distress such as PTSD and depression at two months post loss predicts CES 4 years post loss.

**Conclusions:** Our results indicate that hallucinatory experiences such as hearing, seeing and talking to the lost partner are common in the elderly bereaved and are associated with trauma-related psychopathology. The nature of these experiences may be attachment or memory-related. These results may have some bearing on how we understand the nature of hallucinations and how we address treatment of trauma and loss in the elderly.

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**113 Hallucinatory experiences of the lost partner in the elderly bereaved are common and are associated with Posttraumatic Stress Symptoms (PTSS), depression and complicated grief.**

Andrew Moskowitz, Helle Spindler, Maja O’Connor, Aarhus University

**Background:** Few studies have examined loss-related hallucinatory experiences in the elderly bereaved. To our knowledge, this is the first study focusing on PTSS, complicated grief, and depression in relation to hallucinatory experiences such as hearing, seeing or talking to the deceased spouse in a large sample of elderly bereaved.

**Method:** A survey consisting of the Harvard Trauma Questionnaire, the Complicated Grief Scale, the Beck Depression Index, and a specially designed hallucinations questionnaire was completed by 180 elderly bereaved (mean age = 76±4, 61% females) 4 years after their loss.

**Results:** A little more than half (53%) had experienced the presence of their loved one in some form. Of these, 53% had seen their loved one, 48% had heard their voice, and 33% had talked to their loved one. Many of these experiences lasted for months or years. Four years after the death, hallucinatory experiences of their spouse were strongly associated with PTSS, (r=0.40, p<0.01), symptoms of complicated grief (r=0.40, p<0.01), and depressive symptoms (r=0.43, p<0.01).

**Conclusions:** Our results indicate that hallucinatory experiences such as hearing, seeing and talking to the lost partner are common in the elderly bereaved and are associated with trauma-related psychopathology. The nature of these experiences may be attachment or memory-related. These results may have some bearing on how we understand the nature of hallucinations and how we address treatment of trauma and loss in the elderly.
Enhancing Perceived Self-Efficacy in Posttraumatic Stress Disorder through Recalling autobiographical memories of Success

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Posttraumatic Stress Disorder (PTSD) is characterized by distressing autobiographical memories and currently the most effective treatment for PTSD involves repeatedly recalling trauma-related autobiographical memories (e.g. exposure therapy). However, a large proportion of individuals fail to benefit from these treatments. Clinically, PTSD patients who perceive themselves as lacking self-efficacy are resistant to exposure therapy. To examine whether we could change perceptions of self-efficacy in a PTSD population, we developed a novel induction in which individuals selectively retrieve autobiographical memories of success. We hypothesized that by recalling memories of success individuals with PTSD would view themselves as possessing greater agency, and in turn would perform better on clinically relevant tasks. We describe the self-efficacy induction technique in a sample of US veterans with PTSD who served in Iraq and Afghanistan, and findings that demonstrate how guiding autobiographical memory retrieval can impact self-identify, and enhance processes that aid in recovery following trauma.

Cultural life scripts, personal life stories, and depression in a Mexican adult population

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Cultural life scripts are semantic information that contain the important life events that a person should live within a culture (Berntsen & Rubin, 2004). These life events are mainly considered positive events, e.g. going to college, getting married, and having children. Therefore, the cultural life script represents an idealized life. It is hypothesized that people whose personal life stories deviate highly from the cultural life script may suffer from more symptoms of depression and/or posttraumatic stress disorder (PTSD) (Rubin, Berntsen, & Hutson, 2009). 120 Mexican adults, over 40 years old, were asked to list the 7 most important events in the life of a typical infant living in their culture and the 7 most important events in their own lives. They also completed measures of depression, PTSD, and life satisfaction. Data is analyzed to investigate the existence of the Mexican cultural life script and to establish the amount of overlap between the Mexican cultural life script and personal life story events for each participant. Further analyses explored the relationship between the overlap mentioned above and depression and PTSD symptomatology.
**Post-Traumatic Stress Disorder Symptoms Predict Event Encoding and Memory**

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The ability to segment ongoing activity into meaningful events is integral for event understanding and memory. Neuroimaging and behavioral studies suggest that Post-Traumatic Stress Disorder (PTSD) could impair some of the mechanisms of event segmentation, and that this may hurt memory. To test this hypothesis, 163 participants completed event segmentation and event memory tasks; tests of working memory, verbal episodic memory, general knowledge, executive function, and processing speed; and questionnaires assessing severity of PTSD, dissociation, and perceived social support. PTSD and social support explained unique variance in event segmentation performance. Furthermore, social support explained unique variance in event memory. Difficulty segmenting events may affect PTSD patients’ ability to interpret the activity occurring around them, perhaps contributing to symptoms such as intrusive recollections. If so, then interventions aimed at improving event encoding may help compensate for episodic and autobiographical memory disruptions in PTSD.

**Examining Measures of Coherence: Life Narratives of Adults With and Without Post-traumatic Stress Disorder**

Samantha A. Deffler, Christin M. Ogle, Nia Dowell, Arthur C. Graesser, and David C. Rubin  
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We examined the coherence of life narratives of community-dwelling adults with and without PTSD using textual measures of coherence from Coh-Metrix, the Discourse Attributes Analysis Program (DAAP), the Linguistic Inquiry and Word Count (LIWC), and the Narrative Coherence Coding Scheme (NaCCs). Analyses were conducted to examine associations among the coherence measures, and the relations between narrative coherence and PTSD diagnosis. Strong to moderate inter-correlations emerged among the NaCCs components, DAAP Referential Activity, and Coh-Metrix Temporal Cohesion. In contrast, the LIWC was not correlated with other textual measures of coherence. The narratives of individuals with PTSD compared to those without were rated significantly less coherent on some NaCCs components. In contrast, no differences emerged among participants with and without PTSD for DAAP Referential Activity or the Coh-Metrix principal component measures. Findings suggest that hand-coded narrative coherence measures capture both similar and different aspects of coherence than do computer-based measures.
Intrusive and involuntary autobiographical memories I

118 Real-Life Involuntary and Voluntary Memories are not that Different: A Comparison of Naturalistic Involuntary and Voluntary Memories in a Diary Study
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Involuntary autobiographical memories are spontaneously arising memories of personal events, whereas voluntary memories are retrieved strategically. Involuntary memories have mainly been examined in diary studies, whereas voluntary memories typically are examined in controlled laboratory settings. Until now, studies employing the standard diary method procedure have used word-cued memories as the voluntary comparison to involuntary memories. No studies have compared involuntary and real-life voluntary memories in a naturalistic setting. Here, we compared involuntary, voluntary and word-cued autobiographical memories, employing the standard diary method procedure for involuntary memories on naturalistic voluntary memories. We replicated the results for previously found differences between involuntary and voluntary word-cued memories. However, our findings suggest that naturally occurring voluntary memories have more in common with involuntary than with word-cued memories, but differ from involuntary memories with respect to their perceived functions. The results are discussed in relation to the current methodology of studying involuntary and voluntary memories.

119 Susceptibility to Involuntary Autobiographical Memories of a Positive Film
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Involuntary autobiographical memories (IAMs) are typically discussed in the context of ‘flashbacks’ and trauma memories (Holmes, James, Coode-Bate, Deeprose 2009). However, IAMs are not limited to clinical populations, nor do they have to be negative (Berntsen & Rubin, 2008). The trauma film has been used to generate negative IAMs (Holmes & Bourne, 2008). Recently a positive film has been created (Davies et al., in press). The current study induced IAMs of a positive film (n=95) and measured them in a weekly diary. Psychological reactions to the film, and trait measures relating to psychopathology were taken to assess susceptibility to IAMs of the positive film. Positive mood reaction to the film was significantly associated with the number of IAMs recorded in the week after viewing the film. Results are discussed in relation to clinical models of flashback memories and clinical models of mania in bipolar disorder (Holmes et al., 2008). References

Depressed mood mediates the relationship between rumination and intrusions

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Research suggests that rumination is a causal factor for intrusive memories. A longitudinal study was conducted to replicate this finding, and to test whether one route via which rumination leads to (an increase in) intrusions is via depressed affect. At three different time points, secondary school students (n = 72) filled out questionnaires measuring their level of rumination, depressive symptoms, and intrusive memories. Both bootstrapping analyses and cross-lagged analyses yielded evidence for depressive symptoms as a partial mediator of the relationship between rumination and intrusion frequency. Both depressive rumination and rumination about the content of intrusions seemed to be maladaptive: They may exacerbate negative emotions, which in turn trigger intrusions. Rumination also directly led to (an increase in) intrusions. These findings might suggest that people suffering from intrusions may not only benefit from therapies directly aimed at reducing intrusions, but also from therapies aimed at reducing rumination and depressive symptoms.

Voluntary and involuntary Autobiographical Memories: the relation with Early Maladaptive Schemas, Attachment Styles and Interpersonal Relationships

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In this investigation, based on the importance in understanding the processing and recall of information, content associated with the schemas of the self, we studied the voluntary and involuntary autobiographical memories and their relation to early maladaptive schemas, attachment style and interpersonal relationships. The sample consists of 52 participants aged between 18 and 52 years. We used a battery of clinical and experimental instruments, such as the Autobiographical Memory Task and a Diary of Involuntary Autobiographical Memories. We applied the Portuguese version of all instruments. The results indicate a greater recall of autobiographical memories for positive valence. With regard to recall of voluntary and involuntary autobiographical memories, no significant differences were found. The results are discussed emphasizing the importance of attachment styles and early maladaptive schemas in information processing and interpersonal relationships of the individual.

Using smart phones as electronic diaries in memory studies

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The use of smart phones, particularly Apple iPhone and Google Android devices, is growing rapidly and the users typically carry and access them at all times. These powerful computing devices can be programmed to store free text, and structured data (scores, ratings, dates and times) but also have microphones, cameras, accelerometers and geolocation, facilitating rich data gathering opportunities. They can store data locally on the device and transmit and receive data over a network connection when available. We have developed phone apps to use in place of paper diaries for the collection of spontaneous autobiographical memories. These methods could be extended to a wide range of psychological studies where near real-time participant initiated, or prompted (scheduled or random), data recording is required. We will present initial data comparing findings from electronic and paper diaries for research on involuntary autobiographical memories.
Small children’s involuntary memories

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In recent years, the notion of involuntary memories has been increasingly discussed in autobiographical memory research (Berntsen, 2009). It has been established, that involuntary memories are common in the lives of adults, maybe even more so than voluntary memories (Rasmussen & Berntsen, 2011). However, very little is known about the involuntary memory of small children, and the few studies that do exist are mainly based on anecdotes or cases (e.g. Eisenberg, 1985; Hudson, 1990; Nelson, 1989 and Nelson & Ross, 1980). In the present study-in-progress children, who previously participated in a memory study in our lab, are brought back to the same lab. Here, their spontaneous verbalizations about the previous experiment are recorded and compared to that of a naïve control group. Hypothesis is that the experienced group will produce more correct and relevant references to the previous experiment than the control group thus indicating involuntary memory.
Autobiographical memory, processing-style and goals I

124 The Role of Processing Mode in Positive Autobiographical Memory Recall
Aliza Werner-Seidler & Michelle L. Moulds
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The recall of positive autobiographical memories is a powerful emotion regulation strategy that can be used to improve low mood and alleviate negative affect. Studies have shown that unlike healthy individuals, those with current or previous depression do not experience an improvement in their mood as a consequence of recalling positive memories. In the current study, we examined whether the elaboration of positive autobiographical memories in a ruminative, abstract mode of processing compared to a concrete processing mode could account for the impairment in mood repair observed among depressed and formerly depressed individuals. As predicted, individuals in the concrete processing condition exhibited an improvement in mood. However, for those in the abstract condition, formerly but not currently depressed individuals derived emotional benefits from the exercise. These results suggest that in the context of depressive disorders, the process through which positive memories are recalled is important in determining the emotional outcome.

125 This seems really far away (when it failed), but that feels very close (when I succeeded)
Burcu Demiray & Alexandra M. Freund
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The current study examined the link between self-esteem and subjective temporal distancing of autobiographical memories, and their influence on affect. In an online survey, 131 young adults recalled a recent memory of achieving a personally significant goal and a recent memory of failing in a significant goal (either a social or an achievement goal). They rated how temporally close or distant these memories psychologically felt on a 3-item scale. Hierarchical regression analyses showed that both feeling psychologically close to a failed goal and feeling psychologically distant from an achieved goal was associated with lower self-esteem (controlling for actual date of goals). Furthermore, as young adults felt more distant from their achieved goals, their negative affect increased, and as they felt more distant from their failed goals, their negative affect decreased. Results are discussed in relation to the temporal self-appraisal theory (Ross & Wilson, 2002).

126 Comparative thinking in observer perspective memories
Sabine Nelis and Renée Slegers, University of Leuven
Emily A. Holmes, University of Oxford
Filip Raes, University of Leuven

Life events can be remembered from the original field perspective or an observer perspective. The two perspectives imbue a memory with different emotional experiences and cognitive appraisals. For example, some authors suggest that an observer perspective may facilitate a comparative style of thinking. This can be of clinical relevance as an increased use of an observer (vs. field) perspective has been associated with depression. This study investigates if a comparative/dampening processing style leads to more observer perspective in the retrieval of positive memories. In a between-subjects design, the processing style of three positive memories (school, hobby, and social context) is experimentally manipulated: A dampening style, a sensory-perceptual processing style and a no induction control condition. Characteristics of the memory image will be assessed before and after the induction. We expect that shifts to an observer perspective will be greater in the dampening condition compared to the other two condition. The study will be completed in April 2012. Results will be discussed.
127 Mental maps as part of the autobiographical memory

Jesper Jorgensen, Roskilde University

The paper explores the importance of representations of ‘mental maps’ as part of the autobiographical memory. Mental maps, which is the representation of conscious spatial-temporal structures, often combined with affective material, gives the individual a point of reference in both present geographical structures, in the memory of geography of the past and in possibilities in the future. The memory of past landscapes is often laid in some kind of mental map, which can differ from the objective physical geography, due to the interconnectivity to emotional materials. The paper will discuss the construction of mental maps, both as a natural visualization of space and time, and the use of mental maps to recover autobiographical memory.

Functions and narratives - memories across the lifespan I

128 Adaptive and maladaptive functions of autobiographical memory

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Recent research in cognitive psychology has emphasized the uses, or functions, of autobiographical memory. Theoretical and empirical approaches have generally settled on three uses – self, directive, and social. This tripartite model only includes functional, or adaptive, uses of autobiographical memory. However, the potential for autobiographical memory uses to be maladaptive, for instance in clinical disorders, is well established. Across four studies, we therefore aimed to broaden the current conceptualizations of memory functions to include both adaptive and maladaptive uses of autobiographical memory. We combined measures from the autobiographical memory and reminiscence literatures and postulated four general memory functions: Reflective, Generative, Ruminative, and Social. In contrast to previous conceptualizations, these four functions link to broader adaptive and maladaptive individual differences as well as life span development. Our studies provided converging evidence to support our conceptualisation, particularly the positive vs. negative nature of these four classes of autobiographical memory functions.

129 Remember/forget and life story relevance are predicted by different event characteristics: Results from a 3 year follow-up on a 5 month diary study

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We examined whether similar event characteristics (unusualness, rehearsal, goal-relevance and emotional intensity and valence) predicted whether events would be remembered or forgotten and whether they would be rated as central to the life story. 45 participants described and rated two events each week at their first term at university. 3.5 years later they were given their event descriptions in mixed order and for each events asked 1) whether they remembered the event and 2) to rate the event on 5 questions measuring life story relevance. A multiple regressions showed that only higher unusualness and rehearsal predicted whether the event would be remembered. A multiple regression showed that only higher goal-relevance, emotional intensity and importance predicted whether the event was rated high on life story relevance. The results suggest that theories on autobiographical memory should emphasize different mechanisms depending on whether they wish to explain remembering or life story relevance.
The Age Distribution of Autobiographical Memories in Older Adults with Depression

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There has been considerable research on some aspects of autobiographical memory in individuals with depression. Most prominently, depressed individuals have been found to demonstrate overgeneral autobiographical memories, whereby, compared to matched control samples, a higher proportion of their memories are for general events, rather than specific episodes. However, other components of autobiographical memory in depression remain uninvestigated. For instance, there has been no research on the age distribution of autobiographical memories in depression. It remains an open question, therefore, whether depressed adults evince the classic tripartite distribution of autobiographical memories—childhood amnesia, followed by the reminiscence bump, and, lastly, a recency effect—or exhibit an alternative age distribution. The present research examines this question through a reanalysis of previously published data, culled from several sources, on autobiographical memories in older adults (i.e., aged 50 or older).

Eye tracking as means for studying the encoding process in a deferred imitation task

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The purpose of the present “work-in-progress” is to investigate the encoding process of 16-month-old infants participating in a deferred imitation (DI) task by means of eye tracking (ET) methodology. Current assessments of encoding within the DI paradigm have primarily focused on whether the child has learned a given sequence. However, there seems to be a lack of knowledge regarding the encoding process and how an infant encode relevant information. In the present study we will use ET as means for investigating “the how” of the encoding process by means of having children watching a video tape of a demonstration while being eye tracked. This may lead to a clarification of which parts of the encoding process that is essential for a child to have a successful encoding. Hopefully more information about how preverbal children encode event sequences will emerge.

Changes in positive and negative autobiographical memories as a function of low mood

Lynn A. Watson & Dorthe Berntsen

The characteristics of autobiographical memories are known to be influenced by mood and changes in these characteristics have been associated with both the onset and maintenance of psychopathology (Williams et al., 2007). The aim of the present study was to identify if the characteristics of positive and negative autobiographical memories are differentially affected by mood. Participants took part in an online study during which they were asked to retrieve their most positive and most negative memories. Participants were also asked about the qualities of their memories (emotional and physical reactions, memory content, memory structure, cognitive reactions retrieval mode and function) and about their current levels of psychopathology (symptoms of depression and post-traumatic stress were recorded). Findings will be discussed in relation to current models of autobiographical memory retrieve during depression and the broader framework of autobiographical memory research.
A Longitudinal Examination of Overgeneral Memory and Psychopathology in Children Following Trauma: Is the CaR-FA-X model applicable to children?

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Overgeneral memory (OGM) in 7-17 year olds who had experienced a single-incident trauma was compared to a control group of school students. The sample consisted of a mixture of low impact events (e.g., falls of less than 2 metres, skateboarding accidents) and high impact events (e.g., MVAs, falls of above 2 metres). Assessments were completed at 1 month, 3 months and 6 months post-trauma in order to determine whether OGM changed over time along with how OGM related to the course of psychopathology. Measures included the Autobiographical Memory Test, Child Posttraumatic Stress Scale and the Child Depression Inventory. Rumination, inhibition and working memory capacity were also measured to assess the CaR-FA-X model in young people. Impact of trauma severity on the presentation of OGM was also examined. Limited support was found for the CaR-FA-X model. Results on the course of OGM for six months post-trauma will be presented.

Abstract repetitive thought leads to more generalization: A new paradigm.

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Many psychological problems are characterized by a gradual broadening of the complaints over stimuli, contexts, and behaviors. This expansion of the complaints over stimuli, contexts, and behaviors is known as generalization. Recently, abstract repetitive thought (A.RT) has been proposed to be a transdiagnostic marker in several Axis-I disorders (e.g., worry in anxiety; rumination in depression; Watkins, 2008; Ehring & Watkins, 2008). The present study examines the impact of A.RT (compared to a more concrete repetitive thought, C.RT) as an important mechanism towards generalization. Participants will be induced in either an A.RT or a C.RT-mode followed by a learning phase and finally a generalization test phase. Results are expected to show a broader (steeper) generalization gradient for the A.RT group (C.RT group), showing more generalization for the A.RT group. Implications for the impact of A.RT on overgeneral memory (OGM) will be discussed.

Comment: Data will be collected in March/April 2012
Extended autobiographical memories and brooding scores are associated with clinical symptoms in schizophrenic patients

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Autobiographical memory (AM) disturbances in schizophrenia may be associated with comorbid negative mood when patients focus on negative life experiences generated by their illness (e.g., hospitalization). Thirty-three schizophrenic patients and 31 matched controls completed measures of AM, rumination, mood state and symptoms of schizophrenia. In the sample of schizophrenic patients, BDI scores were positively associated with positive symptoms of schizophrenia, \( r = 0.41, p = 0.02 \). Brooding scores and the number of extended memories were positively associated with total PANSS scores, \( r = -0.42, p = 0.01; r = 0.361, p = 0.04 \); respectively. In non-schizophrenic participants, brooding was negatively associated with the number of specific memories, \( r = -0.45, p = 0.01 \), but it was positively associated with the number of extended memories, \( r = 0.49, p < 0.00 \). These results show that overgeneral AM and brooding are associated with clinical symptomatology in schizophrenic patients.

Validation of the CaRFAX model in older adults using structural equation modeling.

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In order to assess the interrelationship of the different variables involved in the access to specific memories following the CaRFAX model (Williams, 2006), 80 elderly (\( M = 72.12 \) years) and 155 young people (\( M = 21.38 \) years) completed the following tests: 1) Capture and rumination: Scale about Ruminative Styles (SRS), Visual Analogue Ruminating Scale (VAR); 2) Functional avoidance: Functional avoidance subscale from Impact of Event Scale-Revised (IES-R); 3) Working memory and attentional inhibition: Forward and Backward Digit Span test. Reading Span test (RS), Verbal Stroop test and Stop Signal task; 4) Autobiographical memory: Autobiographical Memory Test (AMT), Autobiographical Memory Interview (AMI), and Sentence Completion for Events from the Past Test (SCEPT); 5) Social problem solving: Social Problem-Solving Inventory – Revised (SPSI-R). We expect to obtain results according to those obtained in older adults that emphasize the implication of the executive functions from working memory (Ros, Latorre & Serrano, 2010).

Cognitive and emotional change and specific autobiographical memories development in children from 3 to 6 years old: a longitudinal study

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The objective of this work is the description of the access to specific autobiographical memories in children from 3 to 6 years old and its relation with their cognitive and emotional development. It is a longitudinal year-long study currently in its second phase. The sample consists of 203 subjects in the first, second and third grades (Elementary School). The following tests were used: evaluation of execute function (Shape School), Word Span forward and backward, Wechsler Preschool and Primary Scale of Intelligence (WPPSI-III). Autobiographical Memory Test, adapted to children in nursery school (AMT) (Williams & Broadbent, 1986) focused on its verbal-visual information, an evaluation of personal and medical history (Parental Interview), psychopathology (Early Childhood Inventory, ECI-IV) and stress (Daily Stress Children Inventory, IIEC). The preliminary results found an inverse relationship between variable stress and specific memory skill development.
206 Autobiographical memory specificity and social problem solving in females with subclinical eating psychopathology

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“Loughborough University Centre for Research into Eating Disorders, School of Sports Exercise and Health Science, Loughborough University, UK

In comparison to healthy participants, patients with clinical eating disorders have been shown to retrieve fewer specific, and a greater number of general, memories on the autobiographical memory test (AMT). ‘Overgeneral’ memory is associated with poor social problem-solving (SPS). The current study examined if subclinical eating psychopathology is also associated with ‘overgeneral’ AM and poor SPS. High and low scorers on the eating disorders inventory (EDI) were compared on their ability to retrieve specific memories in response to emotional word cues. Participants also completed the means-end SPS task (MEPS). High EDI scorers retrieved significantly fewer specific, and a greater number of categorical, memories than did the low EDI scorers. They also produced fewer, and less effective, means on the MEPS. Performance on the MEPS was positively related to AM specificity and negatively related to the number of categorical memories. These findings remained significant even after controlling for depression.

207 Personality Correlates of Specificity, Meaning-Making, and Affect in Self-Defining Memories

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Self-defining memories (SDMs) are recurrent and vivid autobiographical recollections that are emotionally salient and contain individuals’ prominent concerns. The narrative features of SDMs, including specificity, meaning-making, and affective valence, have been linked to major psychopathology (e.g., schizophrenia, bipolar disorder, and posttraumatic stress disorder). We assessed the three features of SDMs vis-à-vis measures of adaptive and maladaptive personality. Participants (N = 133, 77% women, M = 19.8 years) at a Northwestern U.S. private 4-year college recorded 10 SDMs and completed the NEO Five-factor Inventory, Schedule of Nonadaptive and Adaptive Personality, and Weinberger Adjustment Inventory – Short Form. Factor analysis reduced the personality and personality pathology dimensions to Tellegen’s (1985) three overarching dimensions – Constraint, Positive Emotionality, and Negative Emotionality. In regression analyses, SDM Specificity and Meaning-making predicted Constraint, whereas Positive Memory Affect and Meaning-making predicted Positive Emotionality. Only Negative Memory Affect predicted Negative Emotionality. Implications for personality assessment and psychotherapy are discussed.

208 Autobiographical Memory and Episodic Future Thinking - The Role of Cue Imageability and Executive Function

Katrine Willemoes Rasmussen & Dorthe Berntsen – Department of Psychology & Behavioral Sciences, University of Aarhus, Denmark
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Recalling the past and imagining the future is thought to employ very similar cognitive mechanisms. The strategic retrieval of specific past autobiographical events has been shown to depend on executive processes, and to be affected by cue imageability. The cognitive mechanisms underlying the construction of specific events during episodic future thinking remain largely unexplored. In this study, we examined whether episodic future thoughts depend on executive processes and are affected by cue imageability to the same extent as autobiographical remembering of past events. Results showed that autobiographical memory and episodic future thinking were affected similarly by cue imageability, suggesting that retrieval strategy can be manipulated in similar ways for both temporal directions. Furthermore, executive control processes (as measured by verbal fluency) was correlated with fluency and number of details in both memories and future thoughts, indicating the involvement of some common component processes in autobiographical memory and future thinking.
209 Effortful Control mediates between Borderline Symptoms and Vantage Perspective during Autobiographical Memory Retrieval

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Traumatized and depressed patients have difficulties retrieving specific autobiographical memories (overgeneral memory, OGM), and they more frequently use an observer perspective (as set against a field perspective) during memory retrieval. We studied these phenomena in relation to borderline symptoms and effortful control (EC). 148 (66 males) volunteers completed the Autobiographical Memory Test, the EC Scale of the Adult Temperament Questionnaire, and the Borderline Syndrome Index. When controlled for depression, OGM was not associated with EC levels, nor with borderline symptoms, but higher EC scores reflected less borderli ne complaints. Furthermore, interpersonal borderline symptoms were positively associated with the proportion of observer memories, and this relationship was found to be mediated by the EC scale activation control, suggesting that borderline patients would benefit from (experimen tal) exposure.

210 Pilot study of a potential computerised cognitive training intervention to improve cognitive ability deficits in depression

Melissa Schapero and Barbara Dritschel, University of St Andrews
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Depression has been found to diminish executive functioning and to negatively affect autobiographical memory retrieval. Computerised cognitive training to improve executive functioning has previously been found to be successful with children with ADHD and elderly stroke patients. Such training has been applied to depression: Elgamel et al. (2007) and Siegle et al. (2007) completed small proof-of-principle studies on adults with depression and found global cognitive improvement. This pilot study applies cognitive training intervention to young people with depression in order to specifically examine the training’s impact on autobiographical memory specificity. The training consisted of 3 cognitive functioning tasks (Corsi Block, automated Operation Span, Stop Signal) performed 5 days per week for 5 weeks with steadily increasing difficulty. Five participants with depression completed the training and 5 participants with depression did not. The training did have any impact on autobiographical memory or executive functioning, as measured by pre/post-training cognitive battery performance.

211 Specificity of in-session autobiographical memories told by clients with bulimia nervosa: Relation to client attachment and therapy type

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Various forms of psychopathology have been linked to a tendency towards retrieving general rather than specific autobiographical memories. Studies focusing on depression have indicated that the proportion of specific memories may increase following treatment. The present study examined the frequency, specificity, emotional valence, and content of autobiographical memories told by clients during psychoanalytic psychotherapy or cognitive-behavioral therapy for bulimia nervosa. Client attachment was assessed with the Adult Attachment Interview. 277 autobiographical memory narratives were extracted from 8 sessions from each of 8 clients receiving treatment in the context of a randomized clinical trial. Memory narratives were rated by trained coders, and data were analyzed using multilevel modeling. The proportion of specific memory narratives increased across time in both therapy types, but increase in memory specificity was not related to treatment outcome. There was an interaction between client attachment and therapy type in predicting level of specificity. Clinical implications are discussed.
212 The Use of Training in Self-Compassion to Reduce the Distress Associated with Intrusive Memories in Depression

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Negative appraisals ascribed to intrusive memories are established maintenance factors in depression (e.g. Starr & Moulds, 2006). The present study explores compassion training to reduce this unhelpful cycle of emotional reactivity. Being self-compassionate has been associated with reduced depression and anxiety (Neff, 2003), less intense reactions and ruminations about real and hypothetical unpleasant events (Leary, Tate, Adams, Allen & Hancock, 2007) and can be improved through training (Kelly, Zuroff & Sharpe, 2009). Exercises, adapted from Compassionate Mind Training (Gilbert & Proctor, 2006), encourage participants to use compassionate imagery in times of distress, particularly exciting given the demonstrated influence of imagery on emotion (e.g. Holmes & Mathews, 2005). Training begins with Mindfulness sessions to enhance participants’ ability to work and respond more adaptively to emotions experienced in the present moment. It is predicted training will reduce distress associated with intrusive memories, consequently breaking the well-established ruminative cycle.

213 Anxious memories in anxiety disorder outpatients: The impact of cognitive behavioral therapy on perceived centrality of event and psychological trauma

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Background: Previous research indicates that current imagery in mental disorders is disorder specific and may be linked to early traumatic events.

Objective: To investigate characteristics of anxious memories in patients with social anxiety disorder (SAD) and panic disorder (PD), and to detect possible changes following cognitive behavioral therapy (CBT). The hypotheses are that highly unpleasant memories are disorder specific, are associated with current imagery, and are perceived as both central to identity and traumatic. Following CBT, the perceived traumatic impact and centrality of event are expected to decrease.

Methods: 50 participants (25 with SAD and 25 with PD) will take part. Questionnaires will be administered before and after 10 sessions of CBT.

Implications: If the hypotheses are confirmed, it could point to the importance of studying the causal relationship between symptom decrease and changes in impact of the anxious memories, in order to target therapeutic strategies accordingly.
Influence of Autobiographical Memories on Cultural Differences in Self-Identity and Implications for Post-trauma Psychological Adjustment

Alberta Engelbrecht
Contact information: a.engelbrecht@uea.ac.uk

There is an urgent need to improve our understanding of the influence of culture on the onset and maintenance of post-traumatic stress disorder (PTSD). However, substantial evidence indicates that autobiographical memory, central to the understanding and treatment of PTSD are found to differ across cultures. The study examined how self-identity was affected by autobiographical memories of trauma. British and Asian participants (N = 75; 41 Asian, 34 British) completed a questionnaire booklet providing self-defining memories and trauma self-reports. Findings indicated a trauma-centered self-definition for the Asian group to be significantly associated with enhanced integration (indicating highly integrated traumatic memories), no such relationships were found for the British group. Additionally, stronger self-definition centered on trauma was significantly negatively related to posttraumatic symptom severity for Asian participants on IES-R (arousal and total subscales), indicating a trauma-centered self does not necessarily predict poor post-traumatic psychological adjustment and maintenance of symptoms within interdependent cultures.

Event Centrality as a Double-Edged Sword: Event Centrality, PTSD, and Posttraumatic Growth

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Recent research has explored the impact of the extent to which a person construes a stressful event as central to their identity, referred to as event centrality. Event centrality is highly associated with PTSD symptoms and depression (Berntsen & Rubin, 2006). However, researchers are recently acknowledging possible positive consequences of trauma, such as posttraumatic growth (PTG), the ability to thrive after trauma (Calhoun & Tedeschi, 1999). The purpose of the current study was to explore the relationship between event centrality, PTSD symptoms, and PTG. The sample consisted of 1022 undergraduate students. The results revealed that event centrality was significantly related to PTSD symptoms, even after controlling for depression, perceived stress, and PTG. Event centrality also significantly predicted PTG, even after controlling for depression, perceived stress, and PTSD symptoms. These combined results suggest that construing a stressful event as central to identity has the ability to both devastate and foster growth.

Cohesion of Trauma Memory and Life Story Are Unrelated to PTSD Symptoms.

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In the autobiographical memory model of PTSD, memories for traumatic events are not viewed as fragmented, but rather the memory becomes centralized in the life story. We focus on the cohesiveness of the trauma memory and life story as a function of PTSD symptoms and centralization of the trauma memory. A sample of 110 students reported frequency of PTSD symptoms and centrality of trauma events and provided accounts of their most stressful memory and life story. The frequency of PTSD symptoms was not related to ratings of the cohesiveness of the account of remembered event, the life story, or textual analyses of the frequency of coherence related words. Centrality was positively related to PTSD symptoms and some measures of cohesiveness.

Influence of Autobiographical Memories on Cultural Differences in Self-Identity and Implications for Post-trauma Psychological Adjustment

Alberta Engelbrecht
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There is an urgent need to improve our understanding of the influence of culture on the onset and maintenance of post-traumatic stress disorder (PTSD). However, substantial evidence indicates that autobiographical memory, central to the understanding and treatment of PTSD are found to differ across cultures. The study examined how self-identity was affected by autobiographical memories of trauma. British and Asian participants (N = 75; 41 Asian, 34 British) completed a questionnaire booklet providing self-defining memories and trauma self-reports. Findings indicated a trauma-centered self-definition for the Asian group to be significantly associated with enhanced integration (indicating highly integrated traumatic memories), no such relationships were found for the British group. Additionally, stronger self-definition centered on trauma was significantly negatively related to posttraumatic symptom severity for Asian participants on IES-R (arousal and total subscales), indicating a trauma-centered self does not necessarily predict poor post-traumatic psychological adjustment and maintenance of symptoms within interdependent cultures.
217  The Prevalence and Differential Impact of Traumas Encountered Across the Lifespan: Findings from an Older Adult Sample

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David C. Rubin, Duke University and Center for Autobiographical Memory Research, Aarhus University
Dorthe Berntsen, Center for Autobiographical Memory Research, Aarhus University
Ilene C. Siegler, Duke University and Duke University School of Medicine

We examined the frequency and impact of lifetime exposure to traumatic events among a large non-clinical sample of older adults. Current PTSD symptom severity and the centrality of events to personal identity were assessed for currently most distressing events. Approximately 90% of participants experienced at least one trauma. Cannot discuss events were associated with greater PTSD symptom severity. Personal illnesses/accidents were rated as most central to identity. The distribution of events as a function of age-at-exposure revealed that early life traumas were associated with greater PTSD symptom severity, whereas traumas that were prevalent later in life were linked to less severe symptoms. Life-threatening events, early life events, interpersonal events, and events that evoked extreme emotional reactions predicted greater PTSD symptom severity. In contrast, only life-threatening events and those that elicited strong emotional reactions predicted greater centrality to identity. Results underscore the differential effects of trauma encountered throughout the life course.

218  Shame autobiographical memory: An integrative model for the relations among autobiographical and traumatic shame memory properties, shame feelings and psychopathology

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This paper explores the phenomenological properties of shame autobiographical memories (AM) and how these relate to their traumatic and centrality features, shame and psychopathology, using a sample of 412 participants from the general population. Results showed that AM properties were related to traumatic and centrality qualities of the shame memory, shame feelings and psychopathology. Across analyses strength of recollection, reliving and similarity of emotions, importance to self and rehearsal properties of shame AM indirectly predicted heightened external and internal shame and elevated symptoms of depression, anxiety and stress through increased traumatic and centrality qualities of shame memory.

This integrative model of shame AM may have implications to current conceptualizations of shame and autobiographical memory, and to clinical work.

219  Positive and negative memories in Danish soldiers – before, during, and after deployment

Kim B. Johannessen, Annette Bohn, Søren Staugaard and Dorthe Berntsen

This study compares the characteristics of positive and negative memories in 610 Danish soldiers across three measurement points (before, during and after deployment). Participants were asked to report the most positive and most negative memory from their lives before deployment, and to report the most positive and most negative memories concerning their deployment (during deployment and right after deployment). The memory narratives were coded by two independent raters for specificity, coherence, and degree of desorganisation. For all three time points, these ratings were compared across time and valence. Further, the relation between level of PTSD symptoms and depression (measured at all three time points) and memory characteristics was explored.
Intrusive and involuntary autobiographical memories II

220 Developing Preventative Strategies to Reduce Intrusive Imagery Following Trauma

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Emotional, intrusive imagery to a traumatic event (e.g. Flashbacks) is a hallmark symptom of post traumatic stress disorder (PTSD). We use the laboratory-based stressful film paradigm to induce intrusive imagery in healthy volunteers allowing us to investigate the mechanisms underlying intrusion development (Holmes & Bourne, 2008).

A series of studies (Holmes et al 2009; Holmes et al 2010) will be described which examine the effect of cognitive tasks on flashback development following a stressful film. These tasks are performed during the memory consolidation phase i.e. within 6 hours of an analogue trauma. In translating such findings to a clinical setting it is critical to know whether intrusive memories can be disrupted AFTER the memory has consolidated. New findings will be presented in which a visuospatial task (Tetris) is played during memory reconsolidation phase (Nader & Hardt, 2009) i.e. 24 hours following an analogue trauma. Findings suggest that particular tasks (e.g. Tetris) may warrant further investigation to inform treatment strategies to reduce flashbacks after trauma.

221 The Influence of Negative Mood and Content Specificity in Voluntary and Involuntary Mental Time Travel

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The field of Mental Time Travel (MTT) has experienced enormous development in recent years. Information on how mood influences voluntary and involuntary MTT is crucial for a better understanding of how mood disorders might affect and be affected by MTT and thus, for a better understanding of certain psychopathological disorders.

The objective of this study was to analyse how past and future, voluntary and involuntary MTT is affected by mood, particularly negative mood. Additionally, the relation between mood and MTT content specificity was also analysed, given the sparseness of existing studies analysing content specificity of involuntary MTT.

To analyse this relation, the BDI, the STAI-Trace/State and a 2-weeks Diary Record Procedure were applied to a sample of Portuguese university students (n=80).

The results concerning the relation between these variables are explored in light of recent literature on MTT and their relevance for future studies involving psychopathological populations is analysed.
Involuntary future projections are as frequent as involuntary autobiographical memories, but are more positively biased

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Center on Autobiographical Memory Research, Department of Psychology and Behavioral Sciences, Aarhus University

Mental time travel (MTT) is the ability to mentally project oneself into one's personal past or future, in terms of memories of past events or projections of possible future events. We investigated the frequency and valence of involuntary (spontaneously arising) MTT in the context of trait worry. High (N=18) and low (N=16) worriers recorded the frequency and valence of involuntary memories and future projections using a structured notebook and completed measures probing individual differences related to negative affectivity. Involuntary future projections were as frequent as involuntary memories. We found a positivity bias for both past and future MTT, in that fewer negative events were reported than positive or neutral ones. This positivity bias was greater for future than for past events. Individual differences related to negative affectivity were positively associated with the proportion of negative events, indicating a reduced positivity bias in individuals with a tendency to experience negative affect.
Autobiographical memory, processing-style and goals II

225 Does abstract recall of a happy memory have consequences for memory characteristics in depression?
Kate Hetherington, University of New South Wales
Michelle L. Moulds, University of New South Wales

The capacity to repair sad mood through the deliberate recall of happy memories has been found to be impaired in depressed individuals. There is some preliminary support for the hypotheses that this may be the consequence of adopting an abstract processing mode during happy memory recall resulting in a dampening of the memories positive affective impact. These findings highlight the importance of understanding the consequences of recalling happy autobiographical memories in either an abstract or concrete way. In a recent study, we examined the differential consequences of processing positive material in either an abstract or concrete way (Hetherington & Moulds, submitted). Data from a subsequent study examining the impact of abstract and concrete recall of a happy autobiographical memory on memory characteristics (including vividness, distancing) as well as affect will be presented. Implications for memory as a clinical target in depression will be considered.

226 The relationship between cognitive response styles, the construction of life stories, and psychological distress
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Self-event connections, statements linking a past experience to a current characteristic of the self, are a common feature of the life story (Pasupathi, Mansour, & Brubaker, 2007). This study examined whether making positive vs. negative self-event connections reflects underlying cognitive styles known to predict psychological distress, or whether these narrative features predict psychological distress in a unique way. Life story narratives collected from 100 young adults were coded for positive, negative and neutral self-event connections. Participants also completed a measure of negative psychological states, attribution style, rumination, and emotion regulation strategies. Negative, but not positive, self-event connections were significantly associated with depression. Negative attribution style was the strongest predictor of negative connections, and accounted for the relationship between negative connections and depression. These results suggest that the way young adults construct autobiographical narratives may reflect underlying cognitive styles that contribute to experiences of psychological distress. Further statistical modelling will provide a more complete view of the inter-relationships between these variables.

227 Self-esteem and the retrieval of positive autobiographical memories
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This study examined the relation between self-esteem and the retrieval of positive autobiographical memories. Participants recalled the seven most important events from their personal lives and rated these memories in terms of characteristics, such as importance and valence. Half of the participants were given Rosenberg’s Self-Esteem Scale before starting the memory questionnaire, whereas the other half was given the scale after answering the memory questionnaire. Participants who completed the self-esteem scale prior to memory retrieval reported significantly higher self-esteem and recalled significantly more positive memories than participants who completed the self-esteem scale after recalling memories. Although results showed medium-sized correlations between self-esteem and the number of positive memories in both groups, it appears that making self-esteem salient primes the subsequent recall of personal successes and other positive events, suggesting a bi-direction relation between self-esteem and the retrieval of positive autobiographical memories.
228  Life Narratives over the lifespan and their correlation with well-being
Anda Constantinescu, Christin Köber & Tilmann Habermas

The narration of a life story can illustrate one’s identity (Erikson, 1981). The global coherence of narratives represents a measure of self-coherence and -continuity (Habermas & de Silveira, 2008). It is assumed that these are a precondition for well-being.

We asked 150 participants to tell us their life story in a longitudinal study covering eight years and three measurement dates, four years apart. At the initial measurement, subjects were aged 8, 12, 26, 20, 40 and 65. Three aspects of global coherence (temporal, causal and thematic) were quantified via global ratings and the relative frequencies of local indicators. We additionally tested the subjects’ psychological well-being with the Ryff-scale.

The main subject was whether life stories that have a high degree of global coherence coincide with higher well-being. In addition, we try to show that a coherent life story not only correlates with well-being concurrently, but also predicts it over time.

229  Characteristics of autobiographical memories underlying life-story narration in depression
Kate Smith, Barbara Dritschel
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Research has shown a clear link between the ability to form complex, coherent autobiographical narratives and mental health (DiMaggio, 2006; McAdams, 2001; Pennebaker and Seagal, 1999; Schaer, 1983), with narrative change a positive outcome of interventions. However, while narrative approaches have been reported to be successful in depression the cognitive biases experienced by people with depression (Williams, et al, 2007) may also inhibit the ability to therapeutically ‘re-story’ a life narrative.

A study by Habermas et al. (2008) examined the style and content of autobiographical narratives for a clinically depressed sample in terms of negative bias, temporality and explanatory style. The current study expands on this methodology by eliciting life story narratives from 20 clinically depressed, 20 sub-clinically depressed and 20 non-depressed participants, with subsequent recall of autobiographical memories associated with them, to establish what characteristics of memories might allow them to be included in a more positive self-narrative.

230  Adults’ earliest memories as a function of age, gender, and education: Women and people with higher education have earlier childhood memories
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Childhood amnesia, with an offset in the fourth year of life, is a robust finding in the memory literature. We present the first study on adults’ earliest memories based on a large, stratified sample covering the adult life span from age 20 to 70 (N = 1,043). The results revealed a higher average age at the earliest memory (M = 4.2 years) than usual which probably should be explained by sample bias effects in existing studies. Age at earliest memory was related to educational level, with highly educated individuals reporting earlier memories. The data demonstrated that women had earlier first memories and significantly more vivid memories relative to men. Older people had more vivid and coherent first memories relative to younger people, but there was no effect of age on the age of the memories. Finally, the data indirectly supported the claim that elaborative parents have children with earlier memories.
Warm-up questions on early childhood memories affect the reported age of earliest memories in late adolescents

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We report a study on earliest memories in 445 Danish high school students (Mage = 17.94) – a hitherto neglected sub-sample in the literature on earliest memories. Meanwhile, we wished to explore a potential methodological concern. Researchers have recently used warm-up questions concerning childhood memories at specific early ages (e.g., three years of age) in an attempt to facilitate the retrieval process on the subsequent question regarding the earliest memory. Although this methodology may indeed facilitate the retrieval process, it might also unintentionally put further demand characteristics on the respondents. In the present study we systematically manipulated the reference age (either three or six years of age) for the warm-up question preceding the target question (‘earliest memory’) in order to test this possibility. The results revealed that manipulating the target age in the warm-up question had a strong impact on the age of the earliest memory subsequently reported by the adolescents.

It’s all in the detail: Intentional forgetting of autobiographical memories using the autobiographical think/no-think task

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Two experiments were carried out which sought to establish whether individuals can intentionally forget autobiographical memories using a modified version of the Think/No-Think task. In both studies, 30 never-depressed participants were asked to generate 12 positive and 12 negative autobiographical memories. Participants were asked to provide a ‘personal’ word that reminded them of each memory. Cue/personal-word pairs were then learned to criterion. Once learning had been established, participants were told to recall the memory associated with some of the cue/personal-word pairs (i.e., respond condition) or to avoid saying or thinking about the memory associated with other cues (i.e., suppress condition). In a final test, participants were asked to recall the memories associated with all the cue/personal-word pairs. Systematic forgetting effects emerged for the level of detail recalled for autobiographical memories in both studies. The role of goal-oriented forgetting in autobiographical memory and its possible relationship to well-being are explored.