

09:00 – 10:00

Auditorium

Jutta Joormann: ‘Cognitive Biases, Rumination, and Mood Regulation in Depression’

Experimental studies investigating the interaction of cognition and emotion have a long tradition in depression research. Most of this research, however, has narrowly focused on demonstrating the existence of biased processing. Very few studies have examined how deficits in free recall, attentional biases towards negative material, and mood-congruent memory are related to each other and, more importantly, are related to the hallmark feature of depression which is sustained negative affect. The critical question is why, in response to negative mood, some people initiate a self-defeating cycle of increasingly negative thinking and intensifying negative affect. If changes in mood are associated with activations of mood-congruent material in working memory, the ability to control the contents of working memory might play an important role in recovery from negative mood. A closer investigation of individual differences in cognitive inhibition and cognitive control may therefore help us to better understand rumination and dysfunctions in mood regulation in depression and may also have implications for our understanding of anxiety disorders. Specifically, depressed



persons experience difficulty disengaging from, and inhibiting elaborative processing of, negative stimuli or information. Thus, they cannot prevent negative material from entering and remaining in working memory, leading them to rehearse, or to ruminate about, negative content, which leads to better long-term memory for negative material and serves to exacerbate their negative affect. The presented studies also investigate neural correlates of this deficit in cognitive inhibition and address implications for interventions.

10:00 – 10:15

Break

10:15 – 11:55

Papers and Symposia

Room 1

Timing matters: Examining Factors that Influence People’s Sense of Time

Chair: Michael Roy

People frequently deal with issues of time, whether it is estimating how long a task has taken in the past or predicting how long something will take in the future. In this series of talks, we examine participants’ ability to remember previous task duration, predict future task duration, remember when to complete tasks, and envision their future. Some consistent themes appear in these investigations of participants’ conception of time. First,

participants tend to be biased in their memories and predictions. Second, participants' vision of the future is often related to their memories of the past. Third, a number of factors, both of the individual and of the task itself, influence bias in estimation and prediction. Here we examine some potential causes of bias and give an overview of important factors that influence people's ability to navigate through and deal with time. Given the importance of being able to accurately perceive, remember and predict duration, it is valuable to understand when and why problems and bias might occur.

Niels van de Ven, Leon van Rijswijk, Michael Roy - The return-trip effect: Why doing something twice makes it feel shorter the second time

Two field studies and a controlled lab experiment confirm the existence of the return-trip effect: the return-trip often seems shorter than the initial-trip, even though the distance and actual time travelled is identical. The return-trip effect existed when another, equidistant route was taken on the return-trip, showing that familiarity with the route does not cause this effect. Rather, it seems that the effect is due to a violation of expectations. New studies find that the return-trip effect is not limited to travel, but also happens for other repeated tasks.

Sebastian Schwab, Daniel Memmert & Michael Roy - The effect of motivation and attention on bias in memory for duration

We investigated the effect of regulatory focus on bias in memory for task duration.

Specifically, whether or not a person's motivational outlook, seeking gains (promotion) or avoiding losses (prevention), would cause shift in attention that would influence time estimation. Participants completed an origami task with motivational focus, experience with the task and amount of attention directed to the task manipulated. Participants with a focus on seeking gains tended to remember the task as taking less time when their attention was drawn towards the details of the task instead of away from the task.

Michael Roy, Nicholas Christenfeld, Meghan Jones - Influence of task involvement on estimation of task duration

People are often wrong in estimating both how long tasks have taken in the past and how long they will take in the future. Bias could be due to factors such as task involvement, an individual's engagement or motivation in completing the task, or aspects of the task such as its relative duration or memory storage size associated with it. We examined time estimation bias in actors (high involvement) and observers (low involvement) for predictions of and memory of task duration. Results suggest that bias appears to be due to memory storage size rather than to involvement with the task.

Emily Waldum - Why are you late? The Role of Time Estimation in Time-Based Prospective Memory

Relatively little work has investigated how timing biases affect behavior in real-world

timing situations, such as time-based prospective memory (TBPM) tasks (e.g. attend an appointment at 2pm). Such tasks require future time estimation of intervening events such as the drive to the appointment. Future under- and overestimates can lead to inefficient TBPM performance with the former leading to missed appointments and the latter to long stints in the waiting room. The current study aims to investigate prospective timing biases in both older and younger adults and further to determine how such biases influence later TBPM plans and performance.

Aline Cordonnier, Amanda Barnier & John Sutton - How imagining planning: the future helps us remember planning a past event

Past and future thinking are thought to rely on the same component processes and draw upon the same information pool consisting of past memories and knowledge. We investigated their relationship by asking participants to recall planning a past camping trip and to imagine planning a future camping trip set in either a familiar or unfamiliar setting. The order of the tasks was counterbalanced. We found that task order affected the amount of details recalled overall and of particular content categories. We discuss these results in terms of how using semantic knowledge to imagine the future can later support autobiographical remembering.

Improving unfamiliar face matching performance

Chair: David White

National security and crime prevention depend on our ability to verify an individual's identity. This is usually achieved by comparing a photograph in an identification document (such as a passport) with the appearance of the card bearer. Critically, psychological research has established that performance on unfamiliar face matching tasks is highly error-prone. Recently, a number of researchers have begun to investigate if it is possible to improve performance by better understanding the psychology of unfamiliar face matching. This symposium presents results of some of this innovative and important work, including research into individual variation in face matching performance, the effects of training on performance, and the cognitive processes underlying unfamiliar face matching tasks. The results both further our understanding of the psychology of face perception and, given the critical importance of this task in identification verification, also have important practical implications for government and business sectors.

David Ellis & Rob Jenkins - Weekday affects face matching ability

Observers are generally poor at matching unfamiliar faces for identity, though there are large individual differences in ability. In view of recent studies showing effects of weekday on cognition, we compared face matching ability on Mondays and Fridays (the most strongly contrasting

weekdays). In a single-trial online study (N>600), we found poorer performance for female participants on Fridays than on Mondays. In a second study, we replicated this weekday effect in a within-subjects design using the Glasgow Face Matching Test (GFMT). Weekday may have unexpected implications for decision making in applied settings.

Alice Towler, David White & Richard Kemp - Can feedback improve the detection of identity fraud?

Feedback training has been shown to improve accuracy on face matching tasks. Here we investigated the effect of feedback by manipulating the type of feedback given on a one-in-five matching task. Participants were given feedback on either target-present or target-absent trials, or were not given feedback at all. We found that feedback type modulated response bias, but did not affect overall accuracy. This method could be used by practitioners to systematically alter response bias on face matching tasks, which would be beneficial in situations where target prevalence varies, and where optimal response bias can be estimated.

David White, Richard Kemp, Mike Burton & Rob Jenkins - The crowd watches the crowd: Improving face matching performance by aggregating facial similarity ratings

Research on group decision-making has demonstrated that average group estimates are often more veridical than best individual estimates. Here we demonstrate 'crowd effects' on a standard psychometric test of face matching ability,

the Glasgow Face Matching Test (GFMT). We observe large improvements in performance by averaging pair-wise ratings of facial similarity across small groups of participants. With increasing group size, average accuracy quickly surpasses that of the best performing individual, and inter-group variation in performance is greatly reduced. These data suggest that accuracy of identity vetting procedures can be maximised by distributing face matching tasks across small groups of individuals.

Nadia Menon, Richard Kemp & David White - Do identity-level representations mediate face matching performance? Evidence from sequential and simultaneous matching tasks

Familiarisation improves performance on face-matching tasks. Familiar faces are represented as both image-specific pictorial codes, and as more abstract structural codes. However, it is not clear which representation causes improvement in matching accuracy. Two experiments explored this issue. We aimed to isolate effects of identity-level structural representations by informing participants that image pairs were either two photos of different people (2ID condition), or of the same person (1ID condition). Sequential-matching accuracy was greater in the 1ID relative to the 2ID condition, suggesting that matching was mediated by structural codes, and that these representations might be generated in working memory.

Social Memory

Chair: Charles B. Stone

In contrast to the Ebbinghausian move to strip acts of remembering of all social context, recent psychological research has attempted to directly examine acts of remembering as a social phenomenon. Two important avenues of research have emerged: (1) how the real or implied presence of a “social other” shapes the way individuals learn and remember the past and (2) how conversations or discourse affect subsequent individual and collective remembering.

This symposium presents recent work on these two topics. Stone, the organizer, will first provide a brief introduction. Kopietz will then explore how thinking about similar vs. dissimilar others after recall affect people’s representation of a shared experience. Shteynberg continues along these lines by examining the interpersonal contexts in which individuals are more likely to behaviorally imitate the “social other.” Stone then presents a formal paper investigating the mnemonic consequences of attending to a public speech. Congleton explores the conditions under which collaborating with others leads to a mnemonic consensus among the discussants. Hirst, our discussant, will close our symposium by distilling the important themes throughout the symposium and provide an overview of some important trends in studies of social memory.

René Kopietz & Gerald Echterhoff - The subjective experience of social sharing:

Germans’ Memory for a Collectively Relevant Sports Event

We investigated how people form a subjective sense of social sharing and explored whether experiences of sharing enhance people’s trust in their personal memory. In Experiment 1, German participants were asked to recall either episodic or semantic memories about the soccer world cup 2006 in Germany. We found that recalling episodic memories exhibited a stronger experience of mnemonic sharing and trust in their personal memory. In Experiment 2, we manipulated “perceived sharedness” by asking participants to think about people with similar (vs. dissimilar) memories. Perceptions of sharing and trust in one’s personal memory were more pronounced in the similar-memories condition.

Gariy Shteynberg - The power of shared experience: Simultaneous Observation with Similar Others Facilitates Social Learning

Across disciplines, social learning research has been unified by the principle that people learn new behaviors to the extent that they identify with the actor modeling them. We propose that this conceptualization may overlook the power of the interpersonal situation in which the modeled behavior is observed. Specifically, we predict that contexts characterized by group attention are particularly conducive to social learning. Across two studies, results reveal that imitation is especially likely among individuals placed in a specific interpersonal context: simultaneous

observation with a similar other. These findings suggest that this interpersonal context is uniquely adaptive for social learning.

Charles B stone, Olivier Luminet, Olivier Klein, Laurent Licata & William Hirst - Socially shared retrieval induced forgetting of 'collective' memories: The Mnemonic Consequences of Attending to the Belgian King's 2012 Summer Speech

We investigated whether a well-established laboratory finding – socially shared retrieval-induced forgetting – partially accounts for the effect of a recent speech by the Belgian King on Belgian public memories. The King selectively discussed several pressing political issues, while avoiding others. We collected memories associated with a wide range of issues before and after the speech. Those attending to the speech recalled significantly fewer memories after the speech. For those who attended to the speech, a negative association existed between the “importance” of events precipitating the speech and post-speech recall. We relate these results to the laboratory findings.

Congleton, A.R. & Rajaram, S. - Collaboration changes both the content and structure of collective memory

Cognitive researchers have recently become interested in examining how groups of people come to form and maintain shared, or “collective,” memories of the past. The goal of the experiment will be discussing was to investigate under what circumstances collaborating with others to remember the past would lead

to similar memory content and structure among former collaborators. Results indicated that the development and persistence of collective memory was strongly tied to the amount of shared organization that developed among participants, as well as to the size of the collaborative inhibition effect that has been traditionally observed in studies of collaborative recall.

Discussant: **William Hirst**

Amanda Selwoord, A. Barnier, C. Harris & J. Sutton - Collaborative recall in strangers, friends and siblings: Effects of relationship and task

Few studies on collaborative recall have examined how intimate acquaintance influences performance. This may be partly why collaborative inhibition is so robust. People in intimate relationships may benefit from collaboration in recall tasks that draw on their shared knowledge. This experiment aimed to determine whether level of non-romantic acquaintance impacts collaborative recall on different recall tasks. Pairs of strangers friends and siblings were tested on collaborative recall of a word list two self-generated lists and episodic events. Collaborative success varied across relational groups tasks and individual dyads supporting a more nuanced view of the costs and benefits of remembering together.

Room 4

Interdisciplinary approach to the study of involuntary autobiographical memories

Chairs: Amanda Miles & Gema Martin-Ordas

Until recently, the commonly accepted view was that autobiographical memories were strategically retrieved, voluntary autobiographical memories (VAM). However, growing evidence shows that such memories can come to mind with no preceding conscious search, involuntary autobiographical memories (IAM). Despite progress, several questions remain open. For instance, Do VAM and IAM share the same neural basis? Can non-human animals retrieve IAM? The proposed symposium aims to give a broad perspective on these issues, by bringing together four leading scholars, who represent a wide range of views on the subject.

Norman R. Brown, Tugba Uzer & Peter J. Lee - Cue repetition and the retrieval of autobiographical memories

People typically recall autobiographical events directly from memory when they are cued with phrases describing familiar people, places, activities and objects (Uzer, Lee, & Brown, 2012). Although such cues are ubiquitous in the environment, we are not overwhelmed by involuntary memories. In this presentation, we describe two cue-repetition experiments, which address this "cueing paradox." The first demonstrates that direct retrieval declines with cue repetition, and the second that the magnitude of this repetition effect is unrelated to delay. These findings suggest that interference and/or

inhibitory processes are likely to play an important role in the resolution of the cueing paradox.

Amanda N. Miles, Lise Fischer-Mogensen, Nadia H. Nielsen, Stine Hermansen & Dorthe Berntsen - Turning back the hands of time: Autobiographical memories in dementia cued by a museum setting.

The current study examined the effects of cueing autobiographical memory retrieval in older participants with dementia through immersion into a historically authentic environment that recreated the material and cultural context of the participants' youth. Participants conversed in either an everyday setting or a museum-setting furnished in early twentieth century style. More memories were recalled in the museum-setting, and these memories were more elaborated, more spontaneous and included more internal details compared to memories in the control condition. The findings have theoretical and practical implications by showing that the memories retrieved in the museum-setting were both quantitatively and qualitatively different from memories retrieved during a control condition.

Shana A. Hall, Amanda Miles, Simon W. Davis, Dorthe Berntsen, Roberto Cabeza, David C. Rubin - An fMRI investigation of the neural basis of involuntary memory: How do they differ from established voluntary memory networks?

The neural basis for involuntary memories is poorly understood. We predict that voluntary, and not involuntary, retrieval will evoke activity in frontoparietal regions

associated with retrieval effort. Participants heard sounds, some that had been paired with pictures during encoding. One group was instructed to remember the pictures, and one was not. Consistent with our hypothesis, time-course analysis revealed early differences between paired and unpaired stimuli in medial temporal regions, and later differences between voluntary and involuntary groups in frontoparietal regions. These results clarify the roles of frontoparietal and medial temporal regions in predicting retrieval effort and retrieval information, respectively.

Gema Martin-Ordas, Dorthe Berntsen, Josep Call - Elements of autobiographical memory in great apes

Autobiographical memory is the kind of memory that allows one to remember personal past events. It can happen spontaneously through associative cuing or strategically through goal-directed retrieval. Comparative research has mainly focused on whether animals remember what-where-when something happened (i.e. episodic-like memory). Using a new experimental paradigm we show that chimpanzees and orangutans recalled a tool-finding event that happened four times 3 years earlier and a tool-finding unique event that happened once 2 weeks earlier. Like in human spontaneous autobiographical remembering, a cued, associative retrieval process triggered apes' memories. Our results strongly suggests that apes' memories are autobiographical in nature and thus much more human-like than previously believed.

Elise Debeer, Filip Raes, J. Mark, G. Williams & Dirk Hermans - Flexible use of overgeneral autobiographical memory as an avoidant coping strategy in nonclinical individuals

According to the functional avoidance account overgeneral (autobiographical) memory (OGM) can be considered a cognitive avoidance strategy: People learn to abort the retrieval process at the stage of overgeneral memories to avoid the reactivation of negative emotions associated with the retrieval of specific negative experiences. We hypothesize that 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 depressed patients may apply this strategy inflexibly. In two experiments we found evidence for flexible use of OGM in nonclinical samples.

Room 5

Chair: Iris Blandon-Gitlin

Iris Blandon-Gitlin, Reinalyn Echon & Catherine Pineda Detecting Deception: The Benefit of Depleting Executive Control in Liars

We tested and confirmed the hypothesis that depleting interviewee's cognitive resources would negatively affect lying behavior and improve lie detection. Interviewees completed a depletion or control task prior to an interview where they lied or told the truth. A subset of interviewees practiced lies. Interviews were shown to observers for truth/lie judgments. The depletion task had the intended effect; interviewees in the experimental condition showed more

signs of cognitive depletion than controls. Depleted-unprepared interviewees reported more mental challenge and difficulty using verbal strategies during lying than controls. Observers were more accurate detecting deception in depleted-unprepared interviewees than other groups.

Elise Mayberry, Iris Blandon-Gitlin, Jennifer Coons, Catherine Pineda & Reinalyn Echon Improving Cognitive Control in Liars Reduces Observer's Lie Detection Accuracy

We investigated the inhibitory-spillover-effect on a deception task. This effect occurs when exerting physical impulse control benefits performance in unrelated domains such as impulse control in cognitive tasks. We tested and confirmed the hypothesis that inducing participants to experience high-bladder pressure (requiring physical inhibition) would affect lying performance (requiring cognitive inhibition) during a videotaped face-to-face interview. Participants in a high-bladder condition performed better on a cognitive control task than the comparison condition. Observers who viewed these interviews were less accurate detecting deception of participants in the high-bladder ($A'=.49$) than low-bladder condition ($A'=.64$). Reasons for this effect will be explored.

Renee Snellings, Amy-May Leach & Mariane Gazaille The Effect of Observer Language Proficiency on Second-Language Lie Detection

Law enforcement officials and other actors in the legal system must often determine the veracity of suspects. This process depends on both officers and suspects being able to communicate effectively with one another. In this study we examined speaker's and observer's language proficiencies and their effects on lie detection accuracy. Observers were more accurate when judging native-language speakers than second-language speakers. In addition advanced proficiency observers reported being more confident when judging second-language speakers than native-language speakers; speaker proficiency did not affect other observer's confidence levels. Implications for the justice system will be discussed.

Jacqueline Evans & Stephen Michael Detecting Deception in Non-native English Speakers

Native and non-native speakers may behave differently when lying. Non-native speakers may be thinking harder and feeling more anxious affecting the behavioral cues they display. Detectors may have a bias to disbelieve non-native speakers because of the behavioral cues they may display as well as their accents interfering with processing fluency. This set of two studies compared the ability to detect lies and truths provided by native speakers and non-native speakers and looked at differences in the cues displayed. Results from two samples with different demographic characteristics and backgrounds indicated that there was a bias to disbelieve non-native speakers.

Siegfried Sporer Why Scientific Content Analysis (SCAN) cannot Work to Detect Deception

Scientific Content Analysis (SCAN) is considered one of the most widely used content-based method to discriminate lies from truths but data regarding its reliability and validity are scarce. We review the few studies that do exist and point out the most critical methodological flaws that is to say the lack of a theoretical framework the lack of precision of criteria used contradictions to Criteria-based Content Analysis and reality monitoring research as well as problems with inter-rater reliability and validity of the criteria. Despite this dim outlook suggestions will be presented how some of the ideas inherent in SCAN could be tested properly.

Missy Wolfman, Paul Jose & Dr. Deirdre Brown Question and Answer: exploring the dynamic process in investigative interviews with children

Research has demonstrated children's reports of their experiences are significantly influenced by the questions posed. Currently little is known about how the interactions between interviewer and child shape subsequent questions and answers as an interview progresses. Using a sequential analysis method we will explore the reciprocal relationship between interviewer's questions and children's responses. Our study examines a recent sample of 60 interviews conducted in New Zealand with children (6 à 15 years) to investigate sexual abuse allegations. Understanding the dynamics of interview process will help facilitate

best practice techniques that will improve the quality of evidence elicited from vulnerable witnesses

11:55 – 13:30

Lunch break and Board Meeting

12:15-13:15

Room 1

Workshop by Geoff Cumming: 'The New Statistics: Into practice'

I will emphasize putting the new statistics into practice, for a range of effect size measures and research situations. Topics will include: six ways to think about and interpret confidence intervals (CIs), how to base conclusions on effect sizes (ESs) and their CIs, and the basics of meta-analysis. There will be ample scope for participants to raise issues for discussion, perhaps including data or examples from their own research. I will use ESCI (Exploratory Software for Confidence Intervals), which runs under Excel, to illustrate concepts and calculate and display confidence intervals. ESCI is a free download from www.thenewstatistics.com

13:30 – 14:25

Papers and Symposia

Room 1

Chair: Deborah A. Connolly

Deborah A. Connolly & Dayna M. Gomes - Can children recall an instance of a

repeated event if it was different from the others?

Across studies 257 children (5-10 years) were exposed to four instances of a repeat event. Some children experienced a change (deviation) in the repeat event while others did not. Responses to cued recall questions showed that younger children (5-7 years) who received a deviation had more intrusions from the three non-target instances fewer correct responses and marginally more external intrusions than younger children who did not have a deviation. Older children (8-10 years) recalled most details from the target instance regardless of the presence of a deviation. Younger children's memory may be uniquely affected by deviations.

Osman Skjold Kingo & Peter Krøjgaard - Eighteen-month-olds' memory for short movies of simple stories

This study investigated 26 18-month-olds' memory for dynamic visual stimuli. Initially participants saw one of two brief movies (30 seconds) with a simple storyline. After 2 weeks memory was tested in the Visual Paired Comparison paradigm displaying both movies simultaneously in two iterations for a total of 60 seconds. Data-analysis revealed a clear preference for the familiar movie thus indicating memory. Furthermore time-dependent analysis of the data revealed that individual differences in the looking-patterns for the first and second iteration of the movies were related to individual differences in productive vocabulary. The data-pattern is discussed in relation to infants' 'storyline-processing'.

Nicholas Lange & Timothy J. Perfect - Some of your best ideas are mine: Unconscious anti-plagiarism

Falsely claiming someone else's original contributions as one's own constitutes unconscious plagiarism. In a typical plagiarism study employing the Brown and Murphy (1989) paradigm participants generate content with a partner and subsequently recall their own ideas. Plagiarism at this stage has been attributed to a self-serving bias. We tested ninety-five participants in two studies manipulating delay and source similarity. Participants recalled not only their own but also their partner's ideas both separately and concurrently. Participants were more prone to give away ideas than steal them making the claim of a self-serving bias as the sole process behind plagiarism unconvincing.

Laura Visu-Petra - Relating deception skills to executive functioning in young children: A preliminary study using the Concealed Information Test

The study investigates children's ability to conceal relevant information in relation to individual differences in executive functions and theory of mind. The Reaction time-based concealed information test (CIT) was used for the first time with young children (6-8 years) following an enacted scenario which required them to withhold relevant information. Children were also given standard tests of executive functioning (inhibition updating shifting). Preliminary results on 27 children indicated that the concealed information effect was present (longer times for critical items compared to irrelevant ones). Moreover the extra

time needed to lie was related to individual inhibition and updating skills.

Room 2

Chair: Norman R. Brown

Berivan Ece Usta & Sami Gulgoz - Preventing typical life events eliminates the bump

The fate of the reminiscence bump was investigated when most typical life events were prevented. One group (N=71) completed the life script task listing events from a typical life while another group (N=71) completed the life story task writing events from their own life. Both groups were asked to exclude ten most typical life events. Exclusion of such life events eliminated bump in both groups. It is argued that life events retrieved from the bump period might be experienced particularly in that period because of certain biological or social constraints (marriage having a child military service etc.).

Connie Svob & Norman R. Brown - What makes an important event important?

The purpose of this study was to investigate the role of material change psychological change and emotional intensity in predicting subjective event importance. In Phase 1 undergraduates (N = 220) were asked to recall 3 autobiographical events in response to word-cues and to nominate 3 experienced transitional events from a list. In Phase 2 the events generated/selected in Phase 1 were re-presented and ratings were obtained on the Transitional Impact Scale

and several typical memory measures. Material and psychological change predicted event importance better than emotional intensity highlighting the central role of change in the evaluation of personal event importance.

Jonathan Koppel - The reminiscence bump is more pronounced for private events than for public events

In the current study, we compared, within-subjects, the age distribution of autobiographical memories versus the age distribution of memories for public events. We did so through two discrete methods, the *cue word method* and the *most important events method*. By each method, we found a stronger reminiscence bump for autobiographical memories than for memories of public events. We discuss the implications of these findings for current theories of the mechanisms underlying the bump.

Lauren Stern - Examining the relation between autobiographical memory and moral decision making

Moral identity the extent to which a person views being a moral person is central to their self-identity is an important predictor of moral behavior. Social-cognitive theories of moral identity propose that the link between moral identity and moral behavior depends on the accessibility of moral identity schemas. Across a series of studies we examined whether recalling morally-related autobiographical memories may be an effective method for increasing the

accessibility of moral schemas and in turn promote morally relevant behaviors. Findings suggest that retrieving morally-related autobiographical memory may prime a 'moral self' and increase cooperation and altruism.

Room 3

Chair: Annelies Vredeveldt

Annelies Vredeveldt, C. G. Tredoux, A. Nortje & K. Kempen - Eye remember what happened

We investigated whether the recall benefits associated with eye-closure during retrieval would extend to face recognition and line-up identifications. In Experiment 1 participants who thought about a previously seen face just prior to their recognition decision either with eyes open or eyes closed did not perform better than participants who completed an unrelated task. In Experiment 2 participants were interviewed about a witnessed event and viewed a line-up. Eye-closure during the interview and a 30-sec thinking period before viewing the line-up improved recall performance but did not affect lineup identifications. In conclusion eye-closure improves event recall but not face recognition.

K. A. Martire, R. I. Kemp, M. A. Sayle & B. R. Newell - Communicating uncertainty in forensic science evidence: Numerical, verbal and visual expressions of likelihood ratios and the weak evidence effect

Many scientists and scholars are advocating for the use of likelihood ratios

to convey the uncertainty associated with forensic science evidence; however little is known about how lay decision-makers respond to evidence presented in this format. In this study we examine the impact of numerical verbal visual and tabular presentations of likelihood ratios on belief change. We also consider the extent to which decision makers treat evidence in favor of one proposition as evidence in favor of the alternative proposition – a weak evidence effect. Results suggest the correspondence between expert intention and lay interpretation is low and requires refinement.

Kyle J. Susa, Christian A., Meissner & Amy B. Ross - Screening for Terrorists: A Cross-race Analysis of Face Perception

Two studies examined the effects of cross-race/ethnicity face identification during tasks that mimic procedures performed by travel document screeners. Study 1 examined the relationship between screener confidence and identification accuracy for both own- and other-race/ethnicity faces. Study 2 examined how the fraudulent ID frequency (i.e. base-rate) may moderate the CRE during this perceptual identification task. We found evidence of a significant CRE in discrimination accuracy in both studies. Further results indicated that participants' confidence exceeded their performance levels and cross-race effects were invariant to the frequency of fraudulent IDs. Theoretical and practical implications of cross-race face perception will be discussed.

Matthew A. Palmer, Neil Brewer, Nathan Weber & James Sauer - Disconfirming feedback impairs subsequent eyewitness identification of a different culprit

Recent research shows that post-identification feedback affects subsequent identification performance in single-suspect crimes: confirming feedback improves subsequent identification performance and disconfirming feedback impairs performance. The present research demonstrates similar effects in multiple-culprit crimes. Witnesses viewed a mock crime and attempted to identify two different culprits from separate lineups. Following the first lineup witnesses received disconfirming feedback or no feedback. Identification performance for the second lineup was measured via ROC curves and compound SDT estimates of discriminability. Disconfirming feedback (vs. no feedback) following an attempted identification of one culprit impaired the identification of a different culprit from a subsequent lineup.

Room 4

Chair: Andrew Mitchell

Steph Hunter, Ines Jentsch & Barbara Dritschel - The relationship between cognitive control and the experience of intrusive memories

The study investigates individual differences in cognitive control that may represent vulnerability towards intrusive memories. Student participants completed the AX version of the continuous

performance task (AX-CPT). Participants also made retrospective ratings of intrusive memories experienced 7 days previously and kept a diary of any intrusions experienced 7 days afterwards. Task performance was significantly related to depressive symptomatology. Conversely no significant relationship between task performance and number of intrusive memories was found (either by the retrospective or diary ratings). Results are inconsistent with the idea underlying deficits in cognitive control reflect a vulnerability factor for the experience of intrusive memories.

Lia Kvavilashvili & Chris Brewin - Therapeutic effects of recording intrusive memories in a diary: A study of non-clinical participants

To examine potential therapeutic effects of recording negative intrusive memories (IMs) 30 non-clinical participants kept a diary of their IMs for seven days. Participants in the 'memory' group recorded IMs in full while those in the 'acknowledge' group acknowledged their memories by ticking boxes on a diary page. In both groups depression scores dropped significantly post diary. However while 'memory' group believed that diary keeping improved their mood participants in the 'acknowledge' group reported experiencing no beneficial effect. Implications of these findings for research on expressive writing and clinical practice will be discussed.

Andrew Mitchell - The effects of induced negative mood state on recalled autobiographical memory

Overgeneral autobiographical memory has been suggested as a potential factor involved in depressive states. Series of experiments examined the relative accessibility of cognitive content and ability to recall specific event memories in those who had a previous history of depression or showed some aspects of current depressive symptoms. The results indicate that autobiographical memory is a phenomenon that is in part dependent on negative mood state and in part dependent on current depressive symptoms and history of depression. Specific negative mood components were shown to be important aspects that influence autobiographical content in those with depressive symptoms.

Room 5

Papers - Chair: Michael Bender

Andrew Laughland, & Lia Kvavilashvili - Smartphone Revolution in Psychology: Comparing Paper and Electronic Diaries for Studying Involuntary

Smartphone use (iPhone/Android) is growing rapidly. They can be programmed to record free-text and structured data and seem ideal for diary studies. We have developed smartphone apps to capture various everyday memory phenomena. In this study we compared paper and electronic diaries of Involuntary Autobiographical Memories (IAMs). Smartphone users were randomly allocated to record IAMs in a 12-item questionnaire

using either a phone-app or paper for seven days every time they experienced an IAM. Non-smartphone users completed a paper diary. Results will compare data from three diary groups in terms of compliance quality of data recorded and user feedback.

Michael Bender Cultural Frame Switching and Autobiographical Cognitive Complexity in Hong Kong and China

Past studies have demonstrated substantial cross-cultural differences in autobiographical recall between Asian and Western countries. These differences have been mostly attributed to different sociocultural orientations. We conducted an experimental study to investigate the link between the cognitive complexity of autobiographical memories (AM) (i.e., a separated and connected narrative structure) and cultural salience. A total of 253 participants from Hong Kong (a setting historically known for its biculturalism), and 129 participants from Guangzhou, China (a monocultural Chinese context) were presented with a Cultural Frame Switching (CFS) procedure, priming the salience of Chinese or Western culture. As expected, participants from Hong Kong in the Western condition responded with a more differentiated (separated) narrative structure, in line with previous studies on how biculturals adapt to situational cultural demands. Interestingly, monocultural participants from Guangzhou responded with a highly similar pattern in their autobiographical narratives. Finding such a pattern for both bicultural and monocultural participants suggests important limitations in the interpretation of evidence derived from

CFS studies. Implications for priming studies are discussed.

Roel Boon & Fiona Gabb Enhancing witness statements: the effects of reading a Self-Administered Interview on interviewer behaviour and reliability of witness statements

Several police forces internationally have adopted the Self-Administered Interview (SAI) as a method for obtaining good quality initial accounts from witnesses. The current research conducted with a Dutch police sample examined whether investigating officers should read a witness's completed SAI prior to conducting an interview. Results showed that reading an SAI prior to interview increases the amount accuracy and consistency of information provided by witnesses. An analysis of interviewer verbal behaviour did not identify why this was the case. Further research is needed to disclose the exact nature of the effects. Practical implications for criminal investigations and jurisprudence are discussed.

Christopher Was Sensitivity and Specificity as Predictors of Academic Achievement

Knowledge monitoring is an important metacognitive process which can help students improve study habits and increase academic performance. Which is more useful in predicting test performance: knowing what you know or knowing what you do not know? In our on-going research we are attempting to measure two distinct constructs of knowledge monitoring calibration: sensitivity and specificity. Consistent

results indicate that sensitivity a measure of correctly identifying what is known is the most useful in predicting overall test scores as the measure of student performance. Findings may be used to help guide attempts to improve student metacognition and strategies.

14:30 – 16:20

Papers and Symposia

Room 1

Creating and maintaining distorted beliefs and memories: The influence of images, text, and social pressure

Chair: Kimberley Wade

Myriad factors influence what we believe and what we remember. This symposium brings together experiments that examine how and why different forms of suggestion (e.g., verbal, images) affect our beliefs and memories, and research that explores why memory distortions persist. The first paper investigates how photos affect people's beliefs about claims, in particular the role of the semantic relationship between photos and claims and the context in which claims appear. The second paper examines how photos affect people's immediate judgments about actions they performed. The third paper asks whether faked photographic or textual evidence is more likely to elicit false beliefs and confessions, and whether the order in which people see the two types of evidence matters. The fourth paper examines how social pressure affects both younger and older adults' memories of a crime. The fifth paper investigates why people often continue to

be influenced by misleading information after that misinformation has been corrected. Taken together, the findings advance our understanding of the cognitive and metacognitive processes underlying belief and memory distortions. Each line of research furthers our understanding of source monitoring and human memory, and each has important practical implications.

Eryn J. Newman, Maryanne Garry, Christian Unkelbach, Daniel M. Bernstein, D. Stepen Lindsay - Truthiness and Falseness of Trivia Claims Depend on Judgmental Contexts

A brief exposure to a related, but non-probative photo can systematically bias people to conclude claims are true. In three experiments we examined the boundary conditions for this effect, manipulating the semantic relationship between the photos and claims and whether the presence of a photo was manipulated within or between-subjects. We found that the semantic relationship mattered: Pairing trivia claims with semantically unrelated photos biased people to conclude claims were false. We also found that the experimental context mattered. When we manipulated the presence of a photo between-subjects, the effect of photos (related and unrelated) was eliminated.

Brittany Cardwell, Eryn J. Newman, Jeffrey L. Foster, Linda A. Henkel & Maryanne Garry - Photos affect People's immediate Decisions about recently performed Actions

How do photos affect people's immediate decisions about their own actions? To answer this question, we asked people to press computer keys to "give food to" and "take food from" animals. Then they saw each animal name—half of which appeared with a photo of the animal—and reported if they had fed it. Photos biased people to report feeding. Followup experiments suggested that valence of actions mattered, and that the bias persisted for other actions. These findings fit with the idea that photos can help people generate metacognitive cues that they draw on as evidence of genuine experience.

Deborah Wright, Kimberley A. Wade & Derrick G. Watson - Inducing false Confessions: The Power of Misleading Images versus Misleading Text

Fabricated evidence can change the way people remember an event. We examined whether the type of evidence presented (Experiment 1), or the order in which it is presented (Experiment 2) influences its effect. Subjects were falsely accused of cheating on a task and shown either a fake photograph or fake text of the cheating (Experiment 1) or a combination in different orders (Experiment 2). Subjects were more likely to falsely confess to cheating, to falsely believe they cheated and to confabulate details about how the cheating occurred when shown text rather than a photograph or when shown text first.

Linda A. Henkel & Joy Polignano On Second Thought: Memory Distrust in Young and Older Adults

This study examined the impact of social pressure on memory for a crime when questioned a second time. Regardless of actual accuracy, young and older adults were either given negative feedback about their memory performance, were told that most people their age did poorly on the memory test (stereotype threat), or were simply asked to answer the questions again. Results showed that people changed significantly more responses following negative feedback and changed more responses on misleading than on nonleading questions. As age increased, rate of response change increased. People were moderately confident overall about both their correct and incorrect responses.

Patrick R. Rich & Maria S. Zaragoza - Correcting the Continued Influence of Misinformation May Require Belief in the Correction

Initial misinformation in news stories can continue to influence beliefs even after a correction, a phenomenon called the *continued influence effect* (Johnson & Seifert, 1994). However, recent research has found that a majority of participants, though they remember the correction, do not believe the correction. Aspects of the story such as the amount of information consistent with the initial misinformation and the strength of the correction may impact whether participants believe the correction. The current study examines the role of these factors in participants' belief in the correction and how belief in the correction impacts the continued influence effect.

Jane Goodman-Delahunty & L. Howes - Social Persuasion in Rapport Development with High Value Interviewees

Motivating cooperation in official police interviews is a professional challenge. A total of 123 experienced intelligence and investigative interviewers from five Asian Pacific countries were interviewed about rapport-building techniques used with high value interviewees. Responses were systematically analysed to assess the extent and forms of social influence applied in practice. All techniques were classifiable as one of Cialdini's principles of persuasion. Reciprocity was most ubiquitously used followed by affinity particularly through similarity. Forms of social proof and authority were culture-bound and diverse. Examples from high versus low context cultures are provided.

Room 2

Scaffolding memory Across the Life Span
Chairs: Amanda J. Barnier & Suparna Rajaram

We remember our past with others almost as often as we remember alone. Husbands and wives, parents and children, friends and colleagues reminisce about their past to develop bonds of intimacy, elicit empathy, share lessons learned and to coordinate future plans and appointments. In turn, the ability to share memories has important implications for everyday success and wellbeing. This Symposium begins by defining the concept of "scaffolding" (Sutton). It next showcases research on questions about shared remembering across the lifespan and across contexts: (1) How do parents and educators help young children to

remember past conflicts from multiple perspectives (Van Bergen)? (2) How do groups, teams or “systems” (e.g., study groups) coordinate their knowledge to optimize memory performance (Rajaram)? (3) Can a lifetime of sharing the past with important others promote memory and even spare us the effects of cognitive decline (Barnier, McIlwain)? These questions draw on a common idea: our individual, internal, memories are shaped, scaffolded, supported by – rely on – external people, objects and technologies. This idea, and research designed to apply and test it, could have important policy and practical implications for memory in education, memory in the workplace and memory in ageing.

John Sutton - Scaffolding: Themes, Theories, and Concepts

Through a historical, theoretical, and taxonomic survey of the concept of scaffolding since the 1970s, Sutton critically evaluates ideas about memory scaffolding. He traces uses of the concept across developmental psychology, education, and cognitive anthropology, and its adoption in the interdisciplinary field of distributed cognition in the 1990s. He addresses major conceptual and empirical puzzles about the current applications of the idea of scaffolding in the cognitive and developmental psychology of memory, concerning individualism, internalization, elaboration, contingency, and compensation. Responding to criticisms of the scaffolding metaphor, he defends the productivity of the concept in contemporary philosophy, cognitive science, and psychology.

Penny van Bergen - “But why was he mean to you?”: A School-based Intervention to Enhance Children’s Emotional Perspective-Taking during Recall

Emotional perspective-taking is an important developmental skill, particularly in cases of peer conflict. To investigate the influence of perspective-taking on 6-year-old children’s autobiographical remembering (n = 183), two 10-week interventions were conducted. In “memory”, teachers scaffolded perspective-taking during children’s reminiscing. In “storytelling”, teachers scaffolded perspective-taking using fairytales. Children in the “control” condition participated in classes-as-usual. Post-intervention, intervention children displayed higher emotion understanding and perspective-taking than did control children. When asked to recall a fight at school, children in the memory intervention also included more peer perspectives. Findings suggest that perspective-taking can be scaffolded, and contributes to autobiographical memory construction.

Sarah Pociask & Suparna Rajaram - Scaffolding Memory in an Educational Domain: Collaborative Practice in Statistical Problem Solving

Applied educational research tends to highlight the positive social and academic outcomes of collaboration. Conversely, laboratory research on collaborative memory shows that working with others to remember can sometimes impair individual memory. The present study

sought to bridge these domains by experimentally testing how collaborative practice affects statistical problem solving, a topic that often involves collaborative practice in classrooms. Results show an immediate benefit of collaboration, but this benefit did not persist on a subsequent individual test. The bounds of collaboration benefits in the findings are discussed as a function of gender and type of test problem (computational or conceptual).

Amanda Barnier, Jenn Broekhuijse, Alice C. Priddis, Celia Harris & Donna Rose Addis - Sowing What They Will Reap: Benefits of Collaboration and Intimacy for Young and Older Adults' Recall of Autobiographical Memories

We created a social version of Addis et al.'s (2010) episodic memory paradigm to investigate if collaboration with a long-term partner scaffolds successful memory of autobiographical events. In Experiment 1, long married, older adult couples generated more "internal" – on topic, episodic – details when they remembered together versus alone, but the same amount of "external" – off-topic, semantic – details. In Experiment 2, young adult couples who reported higher levels of intimacy and relationship satisfaction generated more internal details. This suggests that intimate couples develop "transactive memory systems" over time, which scaffold memory as they age and may even compensate for age-related declines.

Doris McIlwain, Penny van Bergen, Amanda Barnier, Elaine Reese, Greg

Savage & John Sutton - The span of scaffolding: Intergenerational Remembering as a Form of Reciprocal Enhancement

Developmental research reveals that parents and children negotiate characteristic styles of recall (inflected by gender) while remembering together. These forms of scaffolding reflect and enhance the parent-child relationship, benefitting the child's nascent episodic and semantic memory. Do these benefits also occur across generations? Using an in-depth qualitative approach, we test memory recall and scaffolding amongst multiple pairs from the same families. Our data outline patterns and individual differences in memory scaffolding within and between two multi-generational families. We uncover the degree to which there are negotiated 'styles' of recall, forms of scaffolding transmitted from grand-parent, adult offspring and their children.

Clare J. Rathbone - Memories associated with positive and negative self-images

Memories are considered to play a central role in shaping our sense of self. This study investigated the ways in which autobiographical memories are used to support positive and negative information about the self. Results showed that both positive (e.g. I am talented) and negative (e.g. I am a failure) self-images were associated with sets of autobiographical memories that formed temporal clusters, organised around periods of identity formation. Results also suggested that negative self-images were formed earlier

in life than positive self-images. This novel result suggests that organised sets of salient memories may help perpetuate negative beliefs about the self.

Room 3

Cognitive aspects of survey research Chair: Wander van der Vaart

Psychological issues always have been important in methodological studies into survey data collection. In particular the 'cognitive aspects of survey methods' (CASM) movement has made a huge contribution to the field of data collection. More recently both conversational interviewing methods and survey calendar methods again steered attention towards psychological aspects of data collection. This concerned not only specific issues like question wording but also more general procedures such as the style of interviewing and the integration of (aided recall) tools in the interview. The rise of conversational interviewing and calendar interviewing in survey practice, urges for a more profound examination of psychological mechanisms that underly these and related data collection procedures. The current symposium focuses on cognitive and conversational aspects and brings together studies from fields like linguistics, communication, sociology and psychology. Topics of research encompass:

- Verbal interaction, framing, non-verbal behavior;
- Memory, life histories, timeframes, date estimates, aided recall, probing;

- Visual and verbal characteristics of survey data collection tools;
- The impact of these issues on data quality.

In sum the aim of this symposium is to discuss how conversational and cognitive insights can be used to enhance data quality as produced by flexible interviewing methods.

Yfke P. Ongena, Wander van der Vaart & Robert F. Belli - The Effect of 'Do-you-remember' Probes in calendar Interviews`

The current study contributes to further development of Calendar interviewing approaches by systematically examining sequential patterns of interviewer-respondent verbal interactions in Calendar interviews, and their effects on data quality.

We focus on spontaneous interviewer probes and the resulting quality of the answers obtained. Analysis of 100 transcripts of Calendar interviews of the Panel Study of Income Dynamics showed that timing probes ("When did X happen?") are spontaneously reformulated as "do you remember when X happened?", and respondents are more than three times as likely to give a don't know answer after 'Do-you-remember' probes than after direct probes.

Naomi Kamoen & Bregje Holleman - Why are negative Questions Difficult to answer? On the processing of linguistic contrasts in surveys

Respondents are more likely to disagree with negative survey questions ("*this book is bad*") than to agree with positive ones

(*"this book is good"*). Our eye-tracking study (N = 122) showed that negatively formulated questions are somewhat more difficult to comprehend. Yet, respondents retrieve the same information from memory and activate the same opinion about the attitude object. This suggests that contrastive questions measure the same underlying attitude, and hence, are equally valid. The main answering difference occurs during the final cognitive stage: for negatively formulated questions, it is more difficult to map an opinion to the responses.

Robert F. Belli, L. D. Miller, Leen-KiatSoh & Tarek Al Baghal - Predicting the Occurrence of respondent Retrieval Strategies in Calendar Interviewing: The Quality of Autobiographical Recall in Surveys

Calendar based survey interviewing enhances the quality of survey reports of the past by encouraging a variety of cues in interviewer probing and respondent retrieval strategies. These cues can be observed in verbal behaviors that consist of parallel (using a contemporaneous event) and sequential (remembering what happened earlier or later) types. We reveal patterns of interviewer verbal behaviors that predict the occurrence of respondent parallel retrieval strategies, and test whether these patterns are associated with data quality. Interviewer sequential probing, when followed by a respondent parallel, was associated with greater accuracy, but interviewer parallel probing was not.

Aleš Neusar & Wander van der Vaart - Would you be Willing to Testify under Oath that the Event Happened on this Date? Assessing the accuracy of temporal data in survey research

In survey research respondents usually are asked to provide temporal data about events. In two studies - on 1.018 "remote" and 1.560 "recent" events respectively - we explore how the accuracy of event dates can be assessed without having verification data. It appeared that even respondents who were willing to "swear under oath" that their date estimate is correct, were accurate in only 70.5% and 84.4% of cases respectively. This paper examines to what extent variables like event importance, vividness, sharing the event, and type of date retrieval can be used to predict dating accuracy.

Wander van der Vaart - The Respondent's Need for Cognition and the Applicability of a Calendar Method: a validity study

In survey research aided recall procedures like calendar methods aim to support respondents in handling difficult recall tasks. However, since a calendar method also adds tools (grids, instructions) to the questioning procedure, its impact may depend on the respondent's ability to handle this 'complexity'. The current field experiment (N=233) indeed demonstrates that the calendar method especially enhanced accuracy of date recall for those respondents who scored higher on Need for Cognition (NfC). Two different dimensions of NfC were found (need for 'thinking' and 'complexity') that interacted with the calendar method regarding

'direction of error' (telescoping) and 'amount of error' respectively.

Jeffrey L. Foster, Kenny L. Hicks & Randall W. Engle - The Pros and Cons of Measuring Working Memory and Fluid Intelligence with Online Subjects

We developed online versions of several Working Memory Capacity (WMC; e.g. Operation Span) and Fluid Intelligence (Gf; e.g. Matrices) tasks with the aim of making them applicable for online subject pools (e.g. Mechanical Turk). We asked if 1) people would perform similarly on the online and in-lab versions of these tasks and 2) If the online versions would conform to traditional constructs of WM and Gf. We found that most of these tasks were good predictors of WMC and Gf when administered online but found serious problems with verbal based tasks most likely caused by the ability to 'cheat'

Room 4

Memory and cognition in education
Chair: Gino Camp

The research presented in this symposium is directed at the question how phenomena that stem from cognitive psychology can be applied to education. In recent years, an increasing number of studies have appeared that attempt to bridge the gap between research in cognitive psychology and educational practice. The four studies that are presented in the symposium investigate a wide variety of phenomena from cognitive psychology and apply them to learning and forgetting of text material. These include the testing effect, retrieval-induced forgetting, and the metacognitive

phenomenon of overconfidence. Two papers investigated the testing effect in the context of learning from texts. In Goossens et al.'s study, the benefits of retrieval practice were investigated in children's vocabulary learning, while de Jonge et al.'s study focused on the effect of text coherence on the occurrence of retrieval practice benefits in text learning. Camp and Matil's study demonstrated that text coherence can protect against retrieval-induced forgetting. Finally, de Bruin and Kok investigated how students' overconfidence when learning from texts can be measured through eyetracking.

Nicole A. M. C. Goossens, Gino Camp, Peter P. J. L. Verhoeijen, Huib K. Tabbers & Rolf A. Zwaan - A Comparison Between Retrieval Practice, Restudying and Elaboration in Children's Vocabulary Learning

The testing effect is the phenomenon that retrieval practice after studying enhances retention more than restudying. We examined this effect in primary school vocabulary learning. Third graders learned word definitions in the context of a story and performed exercises according to three learning conditions; restudy, elaboration or retrieval practice. Children in the restudy condition reread the definition, children in the elaboration condition completed semantic exercises with the definition, and children in the retrieval practice condition recalled the definition. On a final retention test after one week, children in the retrieval practice condition outperformed children in the other conditions.

Mario de Jonge, Huib K. Tabbers & Remy M. J. P. Rikers - Differential Effects of Retrieval Practice on the Retention of Coherent and Incoherent Text Material

We investigated the effect of fill-in-the-blank retrieval practice on the retention of complex text material. In Experiment 1, using a coherent text, we found no retention benefit of retrieval practice compared to a restudy (control) condition. In Experiment 2, text coherence was disrupted by scrambling the order of the sentences from the text. For this incoherent version of the text, retrieval practice slowed down the rate of forgetting compared to a restudy (control) condition. The results suggest that the connectedness of materials can play an important role in determining the magnitude of testing benefits for long-term retention.

Gino Camp & Albert Matil - Text Coherence Protects against Retrieval-induced Forgetting of Narratives

Retrieval-induced forgetting refers to the finding that retrieval of particular items in memory can lead to forgetting of non-retrieved related items in memory. We investigated whether text coherence can reduce or eliminate retrieval-induced forgetting in narratives. In the high coherence condition, the sentences within a narrative were presented in normal order at study. However, in the low coherence condition, all sentences within a narrative were randomly intermixed. Retrieval practice with a subset of concepts from the narratives induced more forgetting of other concepts within

the narrative in the low coherence condition than in the high coherence condition.

Anique de Bruin & Ellen Kok - Eye Movement Indicators of Students' Overconfidence when Studying Text

When students judge their comprehension of key terms from a text, they tend to overestimate themselves. Overconfidence leads to poor study regulation, and may cause suboptimal learning. Previous research has revealed that students have at least partial knowledge of overconfidence. We examined students' knowledge of overconfidence by analyzing eye movements when judging comprehension of key terms on a 5-point scale. Our analyses revealed, among others, that when students made a correct judgment they showed less dwell time on other points on the judgment scale compared to when they were overconfident. Eye tracking analyses thus provide insight into students' overconfidence.

Discussant: **Liesbeth Kester**

Kazuo Mori & Akitoshi Uchida - Conformity and Scholastic Levels: An fMORI-Asch Experimental Study of Japanese Junior High School Students

We examined the relationship of conformity and scholastic levels of junior high school students utilizing the fMORI-Asch paradigm. Same sex foursomes of 264 students participated in the study. Only the third participant in each foursome observed the standard lines differently from the others without noticing the presentation trick that

created the minority and majority without using confederates. We classified the students into three levels with their scholastic achievements. The results showed that the low-level students tended to conform more frequently than other level students irrespective of the levels of the majority students they were grouped with.

Room 5

Agnieszka Niedźwieńska, Peter G. Rendell, Krystian Barzykowski, Alicja Leszczyńska, Beata Janik Enhancing Memory for Intentions in Old Age

There is evidence of substantial age-related deficits in prospective memory which is defined as remembering to do things in the future. As memory for intentions is crucial for independent living in old age the present studies set out to identify effective strategies of facilitating prospective memory performance in healthy older adults and the cognitively impaired elderly. We found that compared with no-feedback group feedback given in the social context substantially reduced age-related deficits in prospective memory. For the cognitively impaired elderly it was the experimenter-initiated reminders that enhanced memory for intentions.

Julia Mayas, Laura Ponce de León, Pilar Toril, Carmen Pita, Antonio Prieto & J. Manuel Reales Brain Training with Videogames Improves Speed of Processing in Older Adults

We investigated whether older adults could benefit from brain training with

videogames in two demanding processing speed tasks a simple reaction time(RT)(detection) task and a choice RT(selection) task. Two groups of older adults took part in this study: the experimental group who received 20 1-hour videogame training sessions and the control group that did not receive the treatment. We used a commercially brain-training package. Results showed that only the performance of the experimental group in the selection task improved significantly after training suggesting that brain-training may transfer to cognitive performance on speeded tasks that demand controlled processing.

Peter G. Rendell, Julie D Henry, Phoebe E Bailey, Louise H Phillips, Mareike Altgassen & Melisa Bugge Older Adults' Prospective Memory Improved with Implementation-Intentions Statement

Implementation-intentions is one strategy found to improve older adults' prospective memory (PM). This strategy involves repeating a future intention statement in specific format and imagining carrying out the task. One hundred young and 100 older adults completed the validated PM measure Virtual Week with four between-groups conditions: statement alone; statement plus imagining; imagining alone; and control. This first ageing study to disentangle the two key features found the statement with or without imagining task eliminated the substantial age-related deficits on event-based tasks but did not reduce age differences on time-based tasks. Imagining task alone did not reduce age differences.

Julia Teale & Malcolm D. MacLeod Do Older People Suffer Inhibitory Deficits during Retrieval?

Inhibitory control deficits are considered to be major contributors to general age-related memory decline in older people. Recent research in this field however has produced mixed results. Using modified retrieval practice paradigms as measures of memory inhibition the present studies established that retrieval-induced forgetting emerged in both young adults and old adults thereby indicating intact inhibitory control. However older adults also reported twice as many covert intrusions as did young adults which would suggest that covert cuing may in part be driving these forgetting effects in older adults.

Coral J. Dando External Support of Older Adults Remembering: Sketching to Encourage Effortful Episodic Retrieval

Environmental retrieval support can improve older adult's (+ 65yrs) episodic remembering but few techniques have been empirically evaluated for older witness/victims of crime. Forty-five participants (M = 78.9 years) witnessed an unexpected live event and 48 hours later were interviewed using either i) Sketch Reinstatement of Context; ii) Mental Reinstatement of Context; iii) Control. In line with predictions from cognitive theories of aging the Sketch Reinstatement of Context interview elicited more correct information with no increase in intrusions and increased participants remembering of correct person details. Benefits of sketching may

stem from self-initiated retrieval cues and reduced split-attention effects.

Christin Köber The Longitudinal Development of Global Coherence in Life Narratives from Age 8 to 70 and its Relation to Personality

In our longitudinal study with three measurement covering 8 years and 6 age groups spanning life from age 8 to 70, we studied the development of the global coherence of life narratives by coding linguistic indicators and by rating the global impression of listeners. We will present first results of the third wave of this longitudinal study regarding the development of temporal, causal-motivational, and thematic global coherence including the overarching linear temporal macrostructure and the complexity of beginnings and endings of life narratives. Further, the measures will be explored in relation to the participants' Big Five personality traits.

16:20 – 16:40

Break Coffee/tea/water (provided)

16:40 – 17:40

Auditorium

John Hibbing: 'Predisposed The Deep Root of Political Difference'

Politics is a universal element of the modern human condition and divisions in nearly all political systems reflect tension between those individuals who value tradition and security and those more favorably disposed toward innovation and

risk. In fact, on occasion, this division becomes almost paralyzing. Why are political differences so persistent and patterned? In this talk, I summarize recent research on the deeper bases of individual-level variation in political orientations, including personality traits, tastes, cognitive tendencies, physiological responses, endocrine levels, brain activation patterns (EEG and fMRI), and genetics. This research suggests political orientations have biological and broad psychological signatures and, as such, that political differences arise not just because of some people's lack of information or unwillingness to think but rather because people experience the world in fundamentally different ways. I conclude by drawing out the implications of these findings for political tolerance and for political participation.