

SARMAC I: Vancouver, July 1995

Abstracts

HARRY P. BAHRICK, LYNDIA K. HALL & STEPHANIE A. BERGER, Ohio Wesleyan University

Accuracy and Distortion in the Recall of Autobiographical Memory Content

One-hundred and three college students recalled 3360 high school grades and rated their confidence and satisfaction with each. Recall accuracy declined monotonically with the level of grade. Errors were asymmetrical, with incorrectly recalled grades higher than actual grades. The degree of asymmetry was used as an index of memory distortion. Those who distorted most exhibited higher confidence, satisfaction, and academic achievement. Contrary to expectation, accuracy and distortion were uncorrelated. Emotional and motivational variables affected both accuracy and distortion of autobiographical content but the two processes were independent. Distortions occurred when the objective content was lost for other reasons.

DEBRA BEKERIAN, Medical Research Council

No Title or Abstract Available.

ROBERT F. BELLI, University of Michigan

Forms of Memory Impairment: A Review of Research and Testing Paradigms

Three main research paradigms are instructive with investigations of memory impairment: Misinformation effect, traditional retroactive interference, and directed forgetting studies. Each of these research paradigms have used recall, recognition, and implicit memory testing paradigms. The patterns of results with these testing and research paradigms suggest that all of the research paradigms have produced relatively weak retrieval-based memory impairment, but that there is a more entrenched form of impairment that has been produced in certain misinformation effect studies. Discussion will explore considerations and practical implications on whether the entrenched form of impairment is retrieval or storage-based.

LUCY BERLINER, Harborview Sexual Assault Centre

Child Witnesses: Children's Memory and Child Protection

There is a body of literature drawn from experiments in which age and memory testing conditions are manipulated. For various reasons, including the difficulty of establishing ground truth in field based studies and the ethical constraints on the one hand or the lack of ecological validity on the other for analogue studies, less is known about trauma and memory. There are data showing that victimized children have significant rates of dissociative symptoms and engage in cognitive avoidance that may reduce the accuracy and completeness of memory. In addition, there is evidence from experiments and clinical samples indicating that children are extremely reluctant to report misbehavior by adults even when directly questioned. As a result, the optimal conditions for learning about victimization may, of necessity, require questioning conditions that increase the risk for error. This means that policy recommendations and standards for interviewing must consider the social and psychological forces that interfere with or inhibit complete and accurate recall.

DOROTHE BERNTSEN, University of Aarhus, Denmark

Spontaneous Memories are Normally not Stressful

The paper reports results from a diary study of involuntary memories. Virtually all memories had identifiable cues in the present situation, and a mood-congruence effect was found. The memories were most frequently rated emotionally positive. Prior rehearsal was rated as surprisingly infrequent. These findings do not conform to the common clinical descriptions of involuntary memories as being (1)

intrinsically triggered (2) emotionally negative and (3) highly repetitive. The results suggest that the stressful, or "intrusive", memories as described clinically may be a pathological form of spontaneous memories in general.

WILLIAM F. BREWER & DAVID W. LOCKHART, University of Illinois at Urbana-Champaign

Recollective Recall in Laboratory Memory Tasks and in Autobiographical Memory Tasks

The goal of this paper is to apply theory and data from the study of autobiographical memory to the study of standard laboratory memory tasks. Particular attention is directed to data and theory relating to the phenomenal experiences that occur during the memory process. The paper provides a description of recollective memory (memory for a specific episode from an individual's past). We review the data on phenomenal experience in autobiographical memory tasks and in laboratory recognition memory tasks. Finally, we report preliminary data from several experiments directed at understanding the role of phenomenal experience in laboratory recognition tasks.

JOHN C. BRIGHAM, Florida State University

Evaluations of the Accuracy of Children's Memory and Testimony

Questions about experiences with children and general evaluation of children's memory were asked of 701 adults, 344 college undergraduates and 357 community adults. Three alternate forms asked about children of 4, 8, or 13 years of age. A number of interesting findings emerged regarding subjects' age, gender, and whether or not they had children of their own, as these factors interacted with the age of the child evaluated (4, 8, or 13) and the aspect of child memory considered. Factor analyses identified four central dimensions of adults' evaluations of children: Accuracy of memory, ability to distinguish fact from fantasy, suggestibility, and honesty. Younger children were seen as less able to distinguish fact from fantasy and less accurate, but more honest, than their older counterparts. There were no age-related differences in perceived suggestibility. Implications of these and other findings will be discussed.

C. A. ELIZABETH BRIMACOMBE (LUUS), University of Victoria

The Malleability of Eyewitness Confidence

What does it mean when an eyewitness says, "I am very confident that the person I identified is the person who committed the crime"? This research explores the possibility that co-witness information (i.e., information that one eyewitness might pass on to another eyewitness regarding an event that they both observed) can influence the confidence that witnesses hold in their identifications. The role of social influence (the influence of other people) on eyewitnesses has, in previous research, been confined to research on the malleability of eyewitness memory with no attempt to examine the role of social influence on eyewitness confidence. In the current research, participant-witnesses observe an unexpected interaction, attempt an identification from a photo lineup and later learn of the alleged identification decision of a co-witness to the event. The results show that eyewitness confidence can be both inflated and deflated by post-identification information concerning a co-witness' identification decision.

NORMAN R. BROWN, DONALD SCHOPFLOCHER & JEFFREY N. STEPNIISKY, University of Alberta

Event-Cueing Autobiographical Memories

The cue-word method has been used extensively to study autobiographical memory. We describe an extension of this method that utilizes recently recalled autobiographical events, rather than experimenter-selected items, as retrieval cues. First, subjects were timed as they recalled a second personal event in response to a previously recalled personal event. Next, they evaluated relationships between the cueing and event-cued events, and finally they dated them. When dates for cueing and event-cued events were plotted against one another a striking pattern emerged. This pattern is partially explained by the number and type relations (e.g., causal, personal, geographical, functional) holding between retrieval-paired events. STEPHEN CECI, Cornell University Social and Cognitive Factors in

Children's Testimony I will describe a program of empirical research that has been aimed at examining 2 broad families of factors involved in the reliability and validity of very young children's statements. Depending on the context, these factors can have beneficial or baleful consequences on children's testimonial accuracy. After reviewing this work, I will attempt to place it in the current socio-political context in which zealots on both extremes are pushing the outer limits of data and argument to support their advocacy claims.

CARLA CHANDLER, GARY GARGANO & BRIAN MOLT, Washington State University

Memory Traces are not Altered by Similar Events

Our evidence suggests that a memory trace for an event is not changed by witnessing similar events. Our subjects read a story that contained target details (hammer), followed by a story that changed some details (to screwdriver) and replaced others with a neutral category name (tool). On an immediate test, targets (hammer) were recalled less often if they were followed by other details (screwdriver). However, the trace for hammer was not changed permanently. Instead, the interference effect disappeared across a 24-hour retention interval. Presenting other details just prior to the 24-hour test reinstated the interference effect.

GILLIAN COHEN, The Open University, U.K.

The Effects of Aging on Autobiographical Memory

A number of changes in autobiographical memory occur in the course of normal aging. These include changes in the organization and structure of memories characterized by retention of generalized event memories and loss of specific details. There are also changes in the nature of what is remembered, and changes in the accuracy of memories. These effects can be linked to a shift in the relative importance of different functions of autobiographical memory.

CONSTANCE J. DALENBERG, Trauma Research Institute, California School of Professional Psychology

The Accuracy of Continuous and Recovered Memories of Childhood Sexual Trauma

Seventeen women with recovered and continuous memories of sexual abuse participated in a collaborative research project. The taped transcripts of the therapies were coded to determine when a memory was reported during therapy, how the memory surfaced, and the behaviors of therapist and client that immediately preceded memory report. Accuracy of continuous and recovered memory, assessed through joint investigation of the researcher, the clients, and their abusers, did not differ, although great individual variation in accuracy was found. Accuracy was related to diagnosis. Post-therapy, clients were not able accurately report the timing or source of the abuse memories.

GRAHAM DAVIES, LISA MORRISON, University of Leicester & DEBRA DHILLON, Cambridge University

Composite Production: A Direct Comparison of Mechanical and Electronic Systems

Experimental studies of police composite systems ("IdentiKit"; "PhotoFit") suggest that the standard of likeness achieved by witnesses is generally low. Such mechanical methods have largely been superseded in Britain and America by computer-based systems which offer greater flexibility and range of facial features. However, few studies have directly compared the quality of likeness created by the old and new techniques. We report the results of a study which matched the manual "PhotoFit" system against its computer-based equivalent: "Efit". Witnesses composed composites both of familiar and unfamiliar faces from memory and in the presence of a photograph of the target.

SUZANNE DOMEL, WILLIAM O. THOMPSON & HARRY DAVIS, Medical College of Georgia

Self-Reports of Diet: How Children Remember What They have Eaten

Determining how children remember what they have eaten may help nutrition researchers design

dietary assessment methods with specific cues that help children more accurately report consumption. At the Medical College of Georgia, research is underway based on a cognitive processing approach to elucidate the answering strategies by which fourth-graders remember and report what they ate at the school lunch. Answering strategies are identified and evaluated both for same day and next day recall. Reported consumption is compared to observation. Results from three studies are provided.

PHIL ESPLIN, Private Practice

Trauma and Children's Memory for Abuse

No Abstract Available.

ROBYN FIVUSH, Emory University

Gendered Narratives, Gendered Lives

Gender differences in adults' autobiographical recounts may be related to differences in early mother-child reminiscing. Longitudinal data indicate that mothers encourage preschool daughters' participation in joint reminiscing more so than sons through greater use of elaborations and confirmations. In turn, girls recount more information about past events than boys, both with mothers and an unfamiliar adult. However, mothers' use of narrative devices is similar with girls and boys. Yet girls' narratives are more sophisticated and complex than are boys', both with mothers and an unfamiliar adult. Explanations and implications of these early emerging gender differences in autobiographical narratives are discussed.

JOSEPH M. FITZGERALD, Wayne State University

The focal topics of the present paper are reminiscence effects in autobiographical memory sampling and reminiscence behavior in adulthood, two largely independent research areas. The reminiscence effect was identified in studies of the temporal distribution of autobiographical memories. Reminiscence behavior, in contrast, became an object of empirical research in the context of the life review model of aging. New data broaden earlier interpretations of both reminiscence effects and the nature of reminiscence behavior. A life span view provides the basis for new theories and empirical research in which these two streams are merged in studies of the self and its relation to memory.

ANDREA FOLLMER, University of North Carolina at Chapel Hill

The Role of Behavioral Styles in Individual and Age Related Variation in Children's Memory Reports

A study of 3- and 5-year-olds' memory for pediatric examinations explored the relation between children's behavioral styles, as rated by their parents, and recall performance. The relation between behavioral style and patterns of recall varied as a function of both age and the conditions under which children were interviewed. Individual differences in behavioral styles accounted for much of the individual variation among 3-year-olds' memory reports, but did not explain variation in 5-year-olds' performance. Moreover, the results suggest that age differences in children's recollections may be due in part to age related variation in the effects of behavioral style on recall.

ISTVAN GECZY, Institute for Psychology of the Hungarian Academy of Sciences, Budapest, Hungary, & ISTVAN CZIGLER, Institute for Psychology of the Hungarian Academy of Sciences, Budapest, Hungary & LASZLO BALAZS, Institute for Psychology of the Hungarian Academy of Sciences, Budapest, Hungary

The Brain Registers Correlations but People Cannot Report Them: An Event-Related Potential Study

Four visual warning stimuli (S1s), combinations of features in two dimensions (size/orientation), were equiprobably presented and followed occasionally by a visual target (S2). S1s of one particular size were followed by the target 75% of the time and those of the other size 25% of the time. Orientations of S1s were uninformative of S2 deliveries. Task requirements included counting of target appearances. No attention to S1-S2 correlations was needed for good performance. Postexperimental interviews

showed little evidence of verbal recognition of S 1-S2 associations. The P300 component of event-related potentials to S2, however, indicated automatic detection of the correlations.

GAIL S. GOODMAN, University of California, Davis, MITCHEL EISEN, Mt. Sinai Medical Centre & JIANJIAN QIN, University of California, Davis

Eyewitness Testimony in Victims of Child Maltreatment: Stress, Memory, and Suggestibility

Research on children's memory and suggestibility about emotionally stressful events has flourished in recent years, motivated in part by concerns about children's allegations of traumatic sexual abuse. Yet few of these studies have included children with a known history of child maltreatment. In this talk, recent findings concerning child abuse victims' memory for genital contact will be presented. Implications for eyewitness testimony by child victims/witnesses will be drawn.

ODEITE N. GOULD, North Dakota State University & L. McDONALD-MISZCZAK, Lakehead University

Medication Regimens as a Prospective Memory Task: How Do Younger and Older Adults Remember?

Sixty-two young ($M = 19.6$) and 58 older ($M = 75.9$) adults reported on compliance and use of mnemonic strategies in relation to medication taking. Other measures were collected to determine factors predicting self-reported compliance and strategy use. Surprisingly, seriousness of the illness and complexity of the medication regimen did not predict strategy use or compliance by either age group. However, for the older adults, (a) perceived importance of medication compliance, (b) memory self-efficacy, and (c) beliefs regarding strategy effectiveness predicted strategy use. Discussion focuses on possible applications of these findings in increasing medical adherence.

MICHAEL M. GRUNEBERG & KATE PASCOE, University of Wales, U.K.

The Effectiveness of the Keyword Method for Receptive and Productive Foreign Vocabulary Learning in the Elderly

This paper reports on an experiment in which a group of elderly healthy active female subjects were required to learn 20 Spanish vocabulary items using the keyword method of foreign language learning. This involves using a mediator to link an English word to its Spanish target. As Wet (1994) has recently pointed out, despite considerable evidence that the keyword method is effective for normal populations, there is little work studying its effectiveness in elderly populations. The present study shows that the keyword method significantly enhances recall of the English word given its Spanish equivalent (receptive learning) and significantly enhances the learning of Spanish equivalents of English words (productive learning) using 'soft' criterion of correctness, compared to a control group given no instruction on how to learn. This latter finding fits in with previous studies showing the effectiveness of the keyword method in productive learning to the extent that the keyword and the target word overlap (Pressley et. al. (1980)). The methodological problems of investigating the keyword method where images as well as the keyword are provided, are discussed, as are the practical and theoretical implications of the study.

CATHERINE A. HADEN, Emory University

Reminiscing with Preschool Siblings: Autobiographical Memory Development in Families

Research indicates that maternal narrative styles influence children's autobiographical memory development. The present study focuses on whether mothers are consistent in their style of talking about the past with different children, and how siblings' memory participation relates to relative consistency of maternal style. Subjects were 24 white, middle-class mothers with two preschool-age children. Analyses reveal that maternal styles are extremely consistent across siblings. Older siblings who contribute much memory information have younger siblings who show similarly high levels of recall. Maternal stylistic consistency and relationships to siblings' memory participation will be discussed with implications for autobiographical memory development in families.

JOHN H. HARVEY & MIKA A. UEMATSU, University of Iowa

Why We Must Develop and Tell Our Accounts of Loss

Accounts and account-making are defined, discussed and related to issues in the study of storied lives and autobiographical memory and identity. Further, research on account-making and the related idea of confiding in others is presented that suggests these processes are vital in people's effective coping with major loss in their lives. The relevance of this work for understanding autobiographical narratives and memory is discussed.

DOUGLAS HERRMANN, National Centre for Health Statistics

Doing Good Science and Appreciating the Basic Applied Relationship

Ideally, basic and applied research influence each other in a cyclical manner. Basic research identifies fundamental principles that explain a phenomenon. Applied researchers attempt to apply these principles and inform basic researchers about difficulties that were encountered in applying the principles. Basic researchers then start the cycle anew by refining their understanding of the phenomenon, revising established principles and identifying newer principles. The cyclical relationship between basic and applied research is indeed valid but it is also incomplete. The likelihood of developing adequate principle and of making adequate applications depends also on how the basic and applied cultures get along with each other. This paper will describe the impact of these two cultures on the success of both basic and applied research. It will be proposed that the future success of the applied cognitive movement will depend critically on how often members of each culture successfully cross the basic/applied cultural barriers.

DOUGLAS HERRMANN, National Centre for Health Statistics

The Characteristics of a National Survey on Cognitive Functioning

I believe that those SARMAC members interested in the idea of a national survey on cognition could give me and my colleagues in the government valuable advice on how such a survey might be put together. I will review, for about ten minutes, the work that has been done by government researchers and certain academic researchers toward developing such a survey. Then I will ask the SARMAC members present to propose the cognitive functions that they think should be measured by a national survey on cognition and then propose further the kinds of tasks that should be used to measure those functions.

KENNETH L. HIGBEE, Brigham Young University

Acquiring Expertise With the Phonetic Mnemonic

Virtually all mnemonics research has used subjects with limited training in mnemonics. This study explored the potential performance of college students who were trained to a high level of expertise with the Phonetic mnemonic. Four college students spent about 40 hours acquiring such expertise. Three of the four students duplicated the performance of Luria's well-known mnemonist, S., by memorizing a 20-digit matrix in 40 seconds and a 50-digit matrix in three minutes, with perfect recall. The results expand our perspective on the limits of potential skilled memory performance for normal people given sufficient training and practice.

WILLIAM HIRST & STEPHEN HARTMAN, New School for Social Research

On The Meaning of an Emotional Landmark: Coming Out as a Case Study

We address the question "What is meant by an emotional landmark" by contrasting its uses in the context of cognitive maps and autobiography. Emotional landmarks serve a different mnemonic function than do the urban landmarks of cognitive maps. Urban landmarks are fixed, stable entities, but an emotional landmark is mutable, its narrative meaning changing frequently. Thus, rather than facilitating remembering, as urban landmarks do, they actually make the task of narrating the past more

difficult. They serve as springboards for interpretation, eliciting conflicts and resistances to straightforward tellings. We illustrate these points by carefully examining five coming out stories.

CHERYL K. HISCOCK, J. MICHAEL ELLIOTT, MARK CARPENTER, & KEVIN COLWELL,
Sam Houston State University

Discriminating Honest from Biased Recall in Eyewitness Testimony: A Credibility Assessment Through Statement Validity Analysis

Scant research has explored those situations where a witness intentionally provides false testimony. This study examined how biased recall differed from imperfect honest recall, in an attempt to devise means of detecting differences between honest failures of memory and deliberate distortions. University students were instructed to answer questions about a witnessed staged crime, so as to either preclude or ensure a conviction. Transcripts of subjects' audiotaped testimonies were coded using Statement Validity Analysis in order to assess their credibility. Results will address future research and judicial system implications.

ALVA HUGHES, Randolph-Macon College & LINDA J. WELDON, Essex Community College

Expertise Effects on Memory for Star Trek Voyager

In the present study 23 participants were asked to recall character, space ship, and story information from a single viewing of the premiere episode of Star Trek Voyager. There were significant correlations between amount of previous exposure to Star Trek and the amount recalled. Fans have schemata for the Star Trek universe that enable them to remember more when confronted with novel information. These results suggest that fans are experts in their field of interest and that expertise in a topic increases memory for new relevant information.

DAVID F. HULTSCH, University of Victoria, CHRISTOPHER HERTZOG, Georgia Institute of Technology & LESLIE McDONALD MISZCZAK, Lakehead University

Stability and Accuracy of Self-Perceived Memory Change: A Longitudinal Analysis

The stability and accuracy of memory perceptions was examined longitudinally. The sample consisted of 234 adults (55-86 years) tested 3 times over 6 years. Measures of perceived and actual memory change were obtained. A primary focus was whether perceptions of memory change stem from application of an implicit theory about aging and memory, or from accurate monitoring of actual changes in performance. The overall pattern of results was largely consistent with predictions derived from an implicit theory hypothesis. Perceived memory self efficacy appears highly stable over time. Moreover, retrospective reports of change were only weakly related to actual changes in memory performance.

JENNIFER S. HUNT, LORI A.C. KOMORI, LISA M. KELLEN, JULIE R. GALAS & TRACI R. GLEASON, Creighton University

Faulty and Non-Productive Questioning Techniques: Potential Pitfalls of the Child Interview

Several potential pitfalls stand between an interviewer and the receipt of accurate information from a child witness. Faulty questioning techniques (e.g., use of multi-part questions or incorrect modifications of children's statements) may lead to inaccurate responses, whereas non-productive questioning techniques (e.g., making metacognitive inquiries or asking questions that lead to nonverbal responses) may yield uninterpretable responses. This presentation assesses the relative impact of faulty and non-productive questioning techniques on children's responses obtained from 42 Child Protective Services interviews and highlights the impact of age as a mitigating variable.

IRA E. HYMAN, Jr., Western Washington University & ELIZABETH LOFTUS, University of Washington

False Childhood Memories: Research, Applications, and Theory

Applying traditional eyewitness research to the creation of childhood memories is problematic. Instead of changing aspects of events, memory creation involves the acceptance of entire events. We describe studies showing adults will create childhood memories and outline factors related to memory creation. Accessing self knowledge related to false events, forming mental images, and some individual differences increase false memory creation. All of these factors lower an individual's ability to make reality monitoring decisions regarding the suggested events. Certain types of therapy are likely to result in the creation of, rather than the recovery of, childhood memories.

DAVID J. KEULER, MARTIN A. SAFER & PETER CIMBOLIC, The Catholic University of America

Memory for the Assessment of Pre-Therapy Distress

The present study investigated whether clients seeking mental health care would recall past distress consistent with their previous reports. Thirty-seven clients were asked to recall how they were feeling prior to entering therapy and to fill out the Hopkins Symptom Checklist-90 (HCL-90) exactly as they had at their pre-therapy session. Clients as a group overestimated both the number of symptoms and the intensity of their pre-therapy distress. We discuss some reasons why individuals appear to misremember previous emotional states.

GUENTER KOEHNKEN, Universitaet Kiel, Germany

A Phased Approach to Interviewer Training

Interviewing skills have received increasing attention during recent years. Whereas research on suggestion and suggestibility has emphasized the importance of appropriate question types, both the Cognitive Interview as well as Research on Statement Validity Assessment have focused on the cognitive and social components of the entire interview. Conducting an appropriate interview is a complex skill. Skills can be (and have to be) learned. A phased (or stepwise) program for the training of interviewing skills will be described that has been used in research as well as workshops for police officers, lawyers, and psychologists.

BARBEL KNAUPER, RONALD C. KESSLER, CHARLES F. CANNELL, Institute for Social Research, University of Michigan & MARTHA L. BRUCE, Yale University School of Medicine

When Did it Happen First? Remembering Age of First Onset of Mental Disorders

Data from a U.S. national representative survey of mental disorders were used to investigate determinants of the ability to remember the exact age of first onset of an experienced mental disorder. The findings demonstrate large but systematic variations in recall accuracy and precision by disorder. The number of diagnosed disorders and the time since first onset were the most important predictors of the ability to remember the exact onset age of the various disorders.

STEEN F. LARSEN, University of Aarhus, Denmark

What is it Like to Remember? On Phenomenal Qualities in Autobiographical Memory

The symposium will discuss conscious experience in autobiographical remembering. A distinction is made between experience of memory processes and of memory content. The former include retrieval strategies, "remember" vs. "know" reports, and confidence. These do not map onto corresponding experiences in the past. However, memory content represents the past, more or less accurately. The experience of memory content is called phenomenal qualities (PQs, cf. qualia in philosophy) and includes sensory qualities, emotion and pain, temporal and spatial qualities (e.g., perspective), etc. The most commonly investigated PQ is vividness, reported to be predominantly visual. An experiment explores vividness profiles across several modalities in memories of emotional events, compared to imagined future events.

LINDA J. LEVINE & STEWART BURGESS, University of California

Beyond "Arousal": Effects of Specific Emotions on Event Memory

Happiness, sadness, anger, and anxiety were evoked in 274 undergraduates by randomly assigning grades of "A" or "D" on a surprise quiz. Immediately afterwards, students participated in an "unrelated" study during which they heard and recalled a narrative and described their emotional state. Intensity of emotional arousal was positively correlated with recall accuracy for happiness and anger, but not for sadness or anxiety. As predicted, angry subjects recalled more goals; sad subjects tended to recall more negative outcomes. These findings demonstrate that specific emotions differ in their effects on memory and may lead to selective recall for particular types of information.

D. STEPHEN LINDSAY, University of Victoria

Aware Versus Unaware Uses of Postevent Information

Sometimes subjects knowingly report postevent suggestions when tested on memory for a witnessed event, either because they assume that the postevent information is a reliable source of knowledge about what happened in the event or because they assume that the experimenter wants them to use the postevent information. Thus sometimes suggestibility "errors" reflect aware uses of postevent information. Other times, subjects believe that they remember witnessing things that were in fact merely suggested to them. This paper reviews previous evidence and introduces new findings regarding the factors that determine the likelihood of aware and unaware uses of postevent information.

R.C.L. LINDSAY, WENDY CRAIG, KANG LEE, JOANNA POZZULO, SAMANTHA CORBER, VICKI ROMBOUGH & LESLE SMYTH, Queen's University

Identification Accuracy of Adults and Children: Showups, Sequential, and Simultaneous Lineups

Three experiments examined the identification accuracy of children (N = 522) and adults (N = 399). The experiments replicate Parker and Ryan's (1993) study comparing adults' and elementary school children's identification performance; the accuracy of preschool children's identifications from simultaneous lineups, sequential lineups, and showups; and the accuracy of adults and elementary school children using all three procedures. Our results replicate the tendency for children to guess, indicate that it is difficult to obtain reliable identifications of strangers from preschoolers, and demonstrate that the risk of children's false identifications is greatest from showups.

GIULLANA MAZZONI, MANILA VANNUCI, University of Florence & ELIZABETH F. LOFTUS, University of Washington

Dream Contents can be Mistaken for Real Events

In this research three experiments investigated if subjects can be induced to falsely recall dream contents as part of their waking experience. Results have consistently shown that, after misleading information, words taken from the subjects' dreams were falsely recognized with a high degree of confidence as words seen in a previous list. For each subject the effect was particularly dramatic for the words taken from her/his dream. Results are discussed in terms of their implications for understanding the mechanism responsible for the implantation of new memories, and for the debate on repressed memories.

KATHLEEN B. McDERMOTT, Rice University

Factors Affecting Creation of False Memories

Experiments that show reliable, predictable false memories are reported. I presented subjects with short lists of words; each list was composed of associates (e.g., hot, snow, warm, winter, ice, etc.) of one nonpresented word (e.g., cold). I used this straightforward word-list paradigm to search for some basic characteristics of false recall and false recognition. Some of the questions addressed include: (1) What is the role of initial testing in inducing later false memories? (2) What is the effect of test delay on such memories? (3) If subjects are given multiple study-test trials, will they eventually be able to edit out their intrusions?

AMINA MEMON, LINSEY WARK & ANGELA HOLLEY, University of Southampton

Eliciting Information and Misinformation in Cognitive and Structured Interviews

The Cognitive Interview (CI) may increase the amount of information a child witness reports, but our data suggest the additional information cannot be attributed to the use of "cognitive" techniques. Eight-year olds were presented with script-consistent and script-inconsistent misleading suggestions prior to and after engaging in either a CI or a structure interview (SI). There were no significant differences in recall performance across CI and SI conditions. Children were more likely to respond to a misleading suggestion presented after an interview. The CI group was more likely to respond correctly to misleading suggestions regardless of script conditions.

KATHERINE NELSON, City University of New York Graduate Centre

Social Construction of Autobiographical Memory

Research with 3- and 4-year-old children talking with their mothers about ongoing experiences is considered in relation to the children's later memory for the experience. Strong effects of style of parental talk are found that are resistant to subsequent influence of the alternative interviewing style. This evidence is related to cultural differences in onset of early memory, in parent-child talk, and in self-other orientations. It is proposed that early personal memories are shaped through social interactions, which simultaneously scaffold self definition. Thus autobiographical memory functions as a self-history that reflects a distinctive social-cultural view of self-other relations.

PETER A. ORNSTEIN, University of North Carolina at Chapel Hill, KATHY A. MERRITT, Duke University Medical Centre & LYNNE BAKER-WARD, North Carolina State University

Children's Recollections of Medical Experiences: Exploring the Linkage Between Stress and Memory

Drawing upon studies of children's memory for three types of medical experiences -- a routine well-child physical examination, a visit to a plastic surgeon for sutures, and an invasive radiological procedure involving urinary catheterization -- we examine the relation between stress experienced during the event and subsequent recall. Our findings indicate that the stress-recall linkage may vary considerably across different measures of stress. Moreover, differences in this relation, as a function of whether stress is assessed with biological (e.g., salivary cortisol) or behavioral (e.g., the judgments of medical personnel) measures, suggest the importance of examining factors that influence children's interpretation of stressful situations.

JANAT F. PARKER, LORRAINE E. BAHRICK, BRENDA LUNDY, Florida International University, ROBYN FIVUSH, Emory University & MAY J. LEVITT, Florida International University

Children's Memory for a Natural Disaster: Effects of Stress

We investigated the effects of stress on memory in 3- and 4-year-olds for events surrounding Hurricane Andrew. Stress was defined as low, moderate, or severe according to the severity of storm exposure. Children were given a structured interview assessing memory for 1) prehurricane preparations, 2) the hurricane itself, and 3) the posthurricane recovery period. Interviews were coded according to a propositional analysis. Analyses conducted on the total number of propositions indicated a main effect of age, with 4-year-olds recalling more than 3-year-olds. There was also a main effect of severity and a quadratic function relating amount recalled across severity. Children with moderate severity recalled the most, particularly for the posthurricane recovery period. Results suggest that memory is a curvilinear function of stress and extremely stressful experiences lead to a decrement in recall.

DOUGLAS PETERS, University of North Dakota

Stress, Context Reinstatement, and False Memory of a Fire

Children who had participated in a stress and memory study involving a fire alarm 4.5-5 years earlier were tested again (1) outside the experimental setting (2) in the same experimental setting, and (3)

following a 20 sec. videotape of their earlier participation when the fire alarm was on. All of the subjects were asked in each condition what they could remember about their previous visit, and then half were given a series of leading questions focused on the erroneous suggestion of having experienced an actual fire years earlier. The free recall results for condition 1 revealed that the high stress children remembered less correct information than the low stress children but did not differ on incorrect information. Context reinstatement, conditions 2 & 3, aided recall to a greater degree for the low stress subjects than the high stress subjects, and the high stress subjects were more affected by misinformation, e.g., falsely remembering the occurrence of a fire. Finally, pulse rates of the high stress subjects were higher than the low stress subjects during the videotape presentations.

DAVID G. PAYNE, JEFFREY, S. NEUSCHATZ, CLAUDE J. ELIE & JASON M. BLACKWELL,
State University of New York at Binghamton

False Memory: Empirical Demonstrations and Practical Implications

We report several experiments documenting a powerful false memory effect. Subjects studied list items associated to common themes (e.g., sleep, anger) and then completed recall, recognition, and source monitoring tests. On the recall and recognition tests subjects reported (with high confidence) the non-presented theme items as having appeared in the study list. Subjects were also willing to make source attributions (i.e., which experimenter spoke the word) concerning these non-presented items. These false memory effects persist across the retention interval and increase across tests. We discuss several possible accounts for these effects and speculate as to possible practical implications of these results.

NANCY WALKER PERRY, Creighton University

Interviewing Child Eyewitnesses: Ask, But You may not Receive

During the past decade, psycholegal experts have delineated several principles for structuring and conducting effective, non-leading interviews of children who allege to have been sexually assaulted. In this presentation we assess how well the interview structure and questioning techniques employed in 42 Child Protective Services interviews of children aged two to 13 conform to experts' recommendations. Although U.S. statutes from most states are silent on the topic of procedures for interviewing child witnesses, we also summarize the existing statutory guidelines for interviewing children in forensic contexts and suggest directions for statutory reform.

KATHY PEZDEK, The Claremont Graduate School

Childhood Memories: What Types of False Memories can be Suggestively Planted?

This experiment tests the discrepancy theory of suggestibility -that events are more likely to be suggestively planted in memory if they are familiar and not discrepant with one's real life experiences. Confederate participants tested the memory of a sibling who was at least 15 years old. The confederates read descriptions of three events that they reported had happened when the sibling was 5-6 years old and asked them what they remembered about each. One event was true; two events were false. One false event described the sibling lost in a shopping mall (familiar event). The other false event described the sibling receiving a rectal enema (unfamiliar event). Consistent with predictions three of the 20 participants "remembered" the false event involving being lost; zero of the 20 participants "remembered" the false event involving the enema. This difference is statistically significant.

DAVID B. PILLEMER, AMY B. DESROCHERS, & CAROLINE M. EBANKS, Wellesley College

Remembering the Past in the Present: Verb Tense Shifts in Autobiographical Memory Narratives

Spoken autobiographical memory narratives representing a wide variety of topics contain abrupt verb tense shifts from the past to the present. Case examples and systematic analysis of an extended oral history indicate that the present tense is used primarily to describe moments of heightened emotionality and vivid perceptual experience. Verb tense shifts provide indirect evidence for separate but interacting levels of representation in autobiographical memory. Parallels between the momentary reliving of emotional episodes during normal remembering and clinical phenomena--including hypnosis,

involuntary flashbacks accompanying post-traumatic stress disorder, and event reinstatement during psychotherapy--are identified.

MARGARET-ELLEN PIPE & JEMMA GREENSTOCK, University of Otago, Dunedin, New Zealand

Improving Children's Reports of Past Events: The Role of Peer Support and Specific Questions

We examined the influence of (1) peer support in interviews, and (2) the phrasing of misleading questions, on children's accounts of past events. Children were aged between 5 and 10 years. The presence of a peer did not increase the amount or accuracy of the information children reported about a neutral (Experiment 1) or stressful (Experiment 2) event unless the peer support child actively contributed during the interview (Experiment 3). When children had to disagree with the interviewer to resist misleading suggestions (e.g., the lady touched your ear, didn't she?), younger children were more likely to be misled than older children but when misleading questions were phrased neutrally (did the lady touch your ear?), younger children were no more likely to be misled and all children were very accurate.

JOANNA POZZULO & R.C.L. LINDSAY, Queen's University

Which Identification Procedures are Best When Appearances Change?

Undergraduates (N = 225) viewed a videotaped purse snatching where the criminal appeared either clean-shaven or bearded. In the lineup, his appearance was changed from the time of the crime. The lineup foils matched the criminal's description at the time of the crime, were similar to the suspect's current description, or were mixed (including both match-to-description and similarity-to-suspect foils). Lineups were presented either sequentially or simultaneously. A similarity-to-suspect identification procedure produced a significantly higher rate of correct identifications but only if the lineup was presented simultaneously.

J. DON READ, University of Lethbridge

Confidence and Accuracy in Eyewitness Studies: Is the Conclusion Changing?

The counter-intuitive absence of a significant relationship between confidence and accuracy (CA) has simultaneously perplexed triers of fact and delighted defense lawyers. However, a new pattern of results supportive of a stronger CA relationship in identification studies is emerging. First, CA relationships are higher in identification than recognition tasks. Second, when only relevant witness decisions are considered, CA relationships are substantially higher. Finally, few studies have provided sufficient variation in accuracy or confidence to support the subjects' calibration of one to the other. Laboratory and field studies are presented that demonstrate substantial and meaningful CA relationships, $.50 < r's < .90$.

JOHN A. ROBINSON & LESLE TAYLOR, University of Louisville

Life Stories

Many theorists have proposed that people organize their life history in a self-narrative or master account. These narratives are not simply the sum of a person's life memories. Why are certain events and experiences included in a self-narrative and others excluded? The life events which comprise a self-narrative may be quite stable across the lifespan, but evaluative perspective and linkages among events may change. Continuity is still a culturally valued feature in lives even though it is no longer the norm. Some strategies for producing continuity and coherence in self-narratives will be discussed.

GEORGE C. ROSENWALD, University of Michigan

Life Narratives as Cognitive Remediation

Individuals in our culture tend to have a shallow sense of how their experience of life compares with that of others, a truncated sense of their own developmental continuities and discontinuities, an

occluded view of the consistencies and inconsistencies among their life commitments, and a weak sense of social integration. Narratives, because they encourage a contextualist approach, tend to strengthen the sense of one's comparability with others as well as the senses of developmental, transfunctional, and psychosocial wholeness. The referential spread characteristic of life narratives tends to sensitize one to these larger wholes in human lives.

DAVID C. RUBIN, Duke University

Ruminations on Reminiscence

Reminiscence has been a replicated empirical finding for about a decade. People over the age of 40 recollect more autobiographical memories from between the ages of approximately 15-25 than would be expected from a monotonically decreasing retention function. Explanations have been offered from a number of theoretical perspectives in psychology and sociology. Here recent data will be reviewed and alternative explanations will be offered that integrate this finding of autobiographical memory into more general theories of memory and memory development.

JONATHAN W. SCHOOLER, University of Pittsburgh & ELIZABETH LOFTUS, University of Washington

When a Good Memory Hurts: Understanding the Surprising Relationship Between Individual Differences in Eyewitness Accuracy and Suggestibility

The relationship between individual differences in eyewitness memory and suggestibility is surprisingly complex. Often, individuals who show poor eyewitness accuracy also show a particularly marked susceptibility to misinformation. However, under some circumstances individuals with generally good memories show a relatively great susceptibility to misinformation, and individuals with lesser memory abilities appear to show a relative resistance to misinformation. These complexities can be clarified by distinguishing between immediate misinformation acceptance, which corresponds to whether or not an individual immediately accepts the inaccurate presupposition of a misleading suggestion, and misinformation reproduction, which involves incorporating a misleading suggestion into a subsequent memory report.

JONATHAN W. SCHOOLER, ROBERT S. RYAN, University of Pittsburgh & RACHEL A. FOSTER, Central Michigan University

How accurate are witnesses who are certain in their identifications?

The typically low correlation between eyewitness accuracy and confidence is often used to discredit eyewitness identifications. However, such correlations belie a very simple question: how accurate are witnesses who are certain about their identification? Using a realistic bank robbery video with 626 subjects, the present study revealed that of the 28% of subjects who were certain in their identifications 93% were accurate, as compared to 68% of subjects who were less than certain. Although more research is needed, these results suggest caution in using the typically poor correlation between confidence and accuracy to discount the identification of witnesses who are certain.

JEFFERSON A. SINGER, AMY CANFIELD, EMILY FISHER, PATRICIA FITZGERALD, SHANNON JACKSON, ANDREW WAGNER & CAROLYN ZITTEL, Connecticut College

Self-defining Memories of Men with Chronic Addiction

This paper reviews a theory of self-defining memories and its application to personality and clinical psychology. It then discusses a data set of self-defining memories collected from 30 chronic alcoholics and drug addicts. These memories were evaluated for dominant metaphors that re-emerge over the course of the men's life histories. The memories were also matched with 30 randomly selected self-defining memories from a data base of college student memories; each set of memories was scored for intimacy and power themes. Results of this analysis and the addictive narratives in general are discussed with regard to current personality theories.

JEFFERSON A. SINGER, JUDY MUSICANT, Connecticut College & IAN SADLER, University of Florida, Gainesville

Autobiographical Memories of Racial Ethnic Identity and Prejudice

This paper suggests that autobiographical memories of positive and negative racial/ethnic encounters contribute to one's current sense of racial/ethnic identity. Drawing on a theory of self-defining memories and a life story model of identity, it is argued that these memories can represent both episodes of continuity and turning points in the lives of individuals. Three empirical studies on White, African-American, and Jewish-American subjects are presented which demonstrate moderate and significant relationships between scales of racial/ethnic identity and affective responses to autobiographical memories of racial/ethnic awareness and/or prejudice.

LINDA L. SPERRY & DOUGLAS E. SPERRY, Indiana State University

Autobiographical Narratives in an African-American Community: Fact versus Fiction

When young children fail to distinguish fantasy from reality, they may actually relate reality which is imagined, or fantasy which is remembered. In this study, we examine naturally occurring conversations about autobiographical past and fantasy events between very young African-American children and their families. Analyses identify contextualization cues that function to help children sort out differences among these categories of discourse.

SIEGFRIED LUDWIG SPORER, University of Aberdeen, Scotland

Fact or Fiction? Self- and Other-Ratings of Reality Monitoring Criteria in Invented and Self-Experienced Accounts

According to the reality monitoring approach memories of internally imagined and externally experienced events differ systematically. Can these differences also be found in accounts of self-experienced vs. invented highly complex events, and can these differences be reliably detected by other judges? In a 2 x 2 factorial design truthfulness (invented vs. self-experienced) and preparation time (immediate vs. one week) were varied. True and invented stories differed systematically in self-ratings and could also be reliably discriminated by an external judge on the basis of reality monitoring criteria. Some of these differences were noticeable only after a one week delay.

CHARLES P. THOMPSON, Kansas State University

The Bounty of Everyday Memory

Findings from research on everyday memory which are difficult, or impossible, to reproduce in the laboratory are discussed. Well-known examples include Harry Bahrick's "permastore" and the remarkable inaccuracies in flashbulb memories demonstrated by Dick Neisser and others. Our diary research has produced similar findings. Our data include striking evidence for temporal schemata reproduced in more than a dozen diary studies. Our most interesting result may be from some new research suggesting that Freud may have gotten it backwards when he discussed repression.

AVRIL THORNE, University of California

The Relative Endurance of Negative and Positive Interpersonal Memories

An abundance of psychological theories suggest that negative events serve as particularly potent emotional landmarks in personal memory, functioning to guide current actions and to anticipate future events. The present study compares the relative endurance of negative and positive interpersonal memories across 6 months time in a sample of late adolescents. Endurance is examined for both specific memories, as well as for wish-outcome-relationship themes aggregated across each person's 16 memories. Implications are drawn for theories of personality development.

MICHAEL P. TOGLIA, State University of New York at Cortland, JEFFREY S. NEUSCHATZ, State University of New York at Binghamton, KERRI A. GOODWIN & MEREDITH L. LYON, State

University of New York at Cortland

Thematic Abstraction and the Creation of False Memories

Remembering an event in a distorted manner or recalling an incident that never happened are false memories we create with surprising frequency. Following Roediger and McDermott's lead, we report a series of learning experiments with thematically related lists designed to examine theme detection and the likelihood of observing false memories. Level of processing and blocked/random presentation were expected to influence the discovery of themes, while retention interval was predicted to affect theme memory. The false memory effect was quite robust even with shallow processing, random presentation, and delayed testing. Also, false memories were assigned high degrees of confidence. Interpretations are offered in terms of thematic abstraction.

JOHN TURTLE, Ryerson Polytechnic University

Officers: What Do They Want, What Have We Got?

Data, comments, and recommendations are presented based on Cognitive Interview training and research with more than 500 veteran police officers over a 4 year span. Pre- vs. post-training evaluations show that officers incorporated the Interview strategies in practice sessions and that their performance ratings were correlated with researchers', although significantly higher in absolute terms. A survey of 1994 trainees reveals which Interview components are still in use by the officers. A problem with the training program is a perceived gap between the police's need for a technique that reveals deception and the Interview's offering of information gathering.

JONELL A. USHER, ULRIC NEISSER & STEPHANIE ANIKSTEIN, Emory University

What Variables Predict the Age of "Earliest Memories"?

Mullen (1994) has suggested that demographic variables related to children's early linguistic environments (especially birth order) affect the development of autobiographical memory, and hence predict the age from which adults recall their "earliest memories" (EM). We closely replicated Mullen's procedures in two separate studies (N=682), but failed to find the correlation between age of EM and birth order that she had reported. Moreover, our Emory subjects reported appreciably later EMs than her Harvard subjects. Variations in home background and test-assessed academic ability were examined in an attempt to explain these discrepancies.

ANNE GRAFFAM WALKER & MARCIA J. McKINLEY-PACE

"Do You Know the Difference Between the Truth and a Lie?": An Incompetent Competency Question

A crucial competency issue for child witnesses is their ability to distinguish between truth and lies. We investigated the timing and structure of truth/knowledge questions in 93 child interviews. Three question types accounted for more than 50% of incorrect or absent responses: (a) Yes/No (e.g., "Do you know the difference...?"), (b) Hypothetical (e.g., "If I tell you this is a dog...?"), and (c) WH (e.g., "What happens when you tell the truth?"). We offer an alternate line of questions that could form the basis for improved assessment of children's awareness of these important concepts.

A. DANIEL YARMEY, University of Guelph

Recall and Person Identification in Showups and Lineups

Recall and 1-person or 6-person lineup identifications were tested in field situations either immediately, 30 minutes, 2 hours, or 24 hours after a 15-second encounter with a target. Targets and foils wore either similar or different clothing from that of the encounter on the identification test. Discussion of results will focus on: the accuracy and completeness of descriptions; the facilitating effects of imagery instructions on time estimations; the effects of similar clothing on false identifications in showups; the superiority of 6-person lineups over 1-person lineups; and performance differences and witness confidence differences in showup identifications using photographs versus live targets.

JOHN C. YUILLE, University of British Columbia

The Impact of Trauma on Victim Memory

The impact of trauma on memory is very complex. This presentation expands on the Yuille and Tollestrup model of trauma and memory by relating recent cases of amnesia for traumatic events. Both circumscribed and selective amnesia cases are examined.