

Tentative JDM SCHEDULE, NOVEMBER 11-13, 1995

SATURDAY, NOV. 11TH

17:00-19:00: Reception & Registration, opening remarks, announcements; concurrent with...

17:15-18:45: Poster Session I

SUNDAY, NOV. 12TH

8:00-10:25 *Psychonomic Society session: Judgment and Decision Making I, San Gabriel Room, Lobby Level*
(see the September issue of the JDM Newsletter for the abstracts)

9:00-10:15

Parallel Session A:

9:00-9:25 Dan Lovallo
The Entry Decision: A Psychological Perspective

9:25-9:50 Ilan Yaniv
Weighting and Trimming: Heuristics for Aggregating Judgments Under Uncertainty

9:50-10:15 Thomas S. Wallsten
An Analysis of Judgment Research Analyses

Parallel Session B:

9:00-9:25 Oswald Huber
Risky Decision Making- Beyond Lotteries

9:25-9:50 Sema Barlas
How to Use Information Without Being Bayesian

9:50-10:15 Rachel T. A. Croson
Nonconsequential Thinking with Elicited Beliefs

10:15-10:45: Break

10:35-12:40 *Psychonomic Society session: Judgment and Decision Making II, San Gabriel Room, Lobby Level*
(see the September issue of the JDM Newsletter for the abstracts)

10:45-12:00

Parallel Session A:

- 10:45-11:10 Elise Coupey, Julie R. Irwin, & John W. Payne
Effects of Familiarity on Preference Construction
- 11:10-11:35 Douglas H. Wedell
Contextual Determinants of the Choice Process
- 11:35-12:00 Christopher K. Hsee
Elastic Justification: How Unjustifiable Factors Influence Judgment and Decision-Making

Parallel Session B:

- 10:45-11:10 Craig R. Fox & Amos Tversky
Subadditivity in Judgment and Choice: An Empirical Test of Support Theory in Action
- 11:10-11:35 George Wu & Richard Gonzalez
Curvature of the Decision Weighting Function in Prospect Theory
- 11:35-12:00 Michael Regenwetter, Jean-Claude Falmagne, & Bernard Grofman
A Stochastic Model of Preference Change and Its Application to 1992 Presidential Election Panel Data

12:00-13:30: Lunch

13:30-14:30: INVITED SPEAKER: Elizabeth Loftus
Remembering Dangerously

14:30-15:00: Break

15:00-16:15

Parallel Session A:

- 15:00-15:25 Subimal Chatterjee, Timothy B. Heath, & Karen R. France
Price Frames and Transaction Utility: The Moderating Role of Need for Cognition
- 15:25-15:50 Colin Camerer, Linda Babcock, George Lowenstein, & Richard Thaler
Labor Supply Decisions of Cab Drivers: How Do Hours Worked Respond to Wage Changes?
- 15:50-16:15 Michael L. DeKay, Gary H. McClelland, Brooke Goolsby, David A. Asch, & Peter A. Ubel
Applications of Expected Utility Theory to Public Policy: Ranking Endangered Species and Ranking Candidates for Organ Transplant

Parallel Session B:

- 15:00-15:25 Victoria Husted Medvec, Kathleen L. Valley, & Richard Thaler
Concession Aversion: A Case of Betrayal and Loss
- 15:25-15:50 Sally Blount, Melissa Thomas-Hunt, & Maggie Neale
An Empirical Examination of Market Price- Versus Reservation
Value-Driven Outcomes in Dyadic Price Negotiations
- 15:50-16:15 Reid Hastie
What Did the O.J. Simpson Trial Tell Us about Jury Decision Making?

16:15-16:45: Break

16:45-17:45: INVITED SPEAKER: Thomas Schelling
Rationally Coping with Lapses from Rationality

17:45-19:30: Social Hour, with..

18:00-19:30: Poster Session II

MONDAY, NOV. 13TH

8:00-9:15: Continental Breakfast + Business Meeting

9:30-11:00

Parallel Session A:

- 9:30-10:00 Jeremy P. Bagai
Risk and Hedonics: How Much Do We Value the Feeling of Winning?
- 10:00-10:30 Kip Smith & Paul E. Johnson
Calibrating Thresholds of Risk
- 10:30-11:00 Michael H. Birnbaum
Configurality in Judgment and Decision-Making

Parallel Session B:

- 9:30-11:00 SYMPOSIUM: DNA Evidence in a Post-O.J. World: Psychological
and Statistical Issues
Gary L. Wells (Organizer)
Jonathan J. Koehler, Paul D. Windschitl, Gary L. Wells, & William C.
Thompson
Barry Scheck (Commentator)

11:00-11:30: Break

11:30-13:00

Parallel Session A:

11:30-13:00 SYMPOSIUM: Medical Application of Decision Research
Gretchen Chapman (Organizer)
Elke Weber (Discussant)

Tom Tape
Learning to Differentiate Bacterial from Viral Meningitis: A Non-Linear
Judgment Task with Case Simulations and Feedback

Gretchen Chapman
The Role of Emotions in Decisions about Future Health and Money

Roy Poses
Ego Bias Revisited: Variation across Hospital Types

Sema Barlas
Attribute Weights in Contraceptive Decision Making

Parallel Session B:

11:30-13:00 SYMPOSIUM: Teaching Decision Psychology to Undergraduates
J. Frank Yates (Moderator)
Kathleen M. Galotti
James Shanteau
William Goldstein

13:00-14:30: CONFERENCE LUNCHEON, with PRESIDENTIAL ADDRESS

Society For Judgment and Decision Making 1995 Posters

Compiled by Monica Barnes and Sandra Schneider

Posters are listed in alphabetical order by first author and will be presented at poster sessions tentatively scheduled for Saturday and Sunday evenings. Poster presenters will be notified as soon as possible regarding final scheduling. A program with rooms and times for posters will be available at the meeting.

Predicting Self-Preferences: Do People Learn to Predict Preferences for Intact Objects with Cue Information?

Sowon Ahn, The University of Chicago

This study investigates whether people can learn to predict their own preferences for intact stimuli with decomposed cue information. The stimuli used were neckties, graphically shown on a computer screen. Subjects were given cue information of pattern, background color, and foreground color. They were asked to imagine intact neckties composed of the given cues and rate the attractiveness of the imagined neckties. The ratings of the imagined neckties (predicted judgment) were compared to the ratings of the intact neckties (criterial judgment). For analysis, the lens model equation was used, and between-block increases in the indices of the model were examined. It turned out that people were able to improve their predictive accuracy both by being more consistent and by acquiring knowledge about the relations between cues and criterion.

Relative and Absolute Satisfaction: Wanting to Earn Less and Lose More?

Dan Ariely, University of North Carolina at Chapel Hill

Looking at decision behavior as a link of past decisions and outcomes to current decisions and outcomes leads to a more general outlook into decision behavior. In this paper the ideas of habituation, expectations and deviations from them are explored in this light. 160 subjects participated in a stock market simulation game. Generally speaking, subjects violated dominance. That is, subjects viewed outcomes in a relative manner rather than in terms of monetary gains or losses. Subject's behavior is explained in terms of both adaptation and changes in the feeling of control over the environment.

Hot Handed Gamblers Believe in Both Luck and Chance

Peter Ayton, City University, U.K.; Ilan Fischer, Haifa University, Israel

Laplace (1814) wrote an account of the gambler's fallacy--the belief that runs of a particular random outcome (e.g. heads) will be balanced by a tendency for the opposite outcome (e.g. tails). Gilovich, Vallone and Tversky (1985) reported the hot hand fallacy--basketball players and fans fallaciously believe that a player on a run of success is more likely to score--because he is "hot." We report roulette players simultaneously showing the hot hand fallacy and the gambler's fallacy; they expected runs of success or failure to continue but runs of red or black to end.

Bridging the Experience Gap Between Students and Auditors

Monica Barnes, Christie Comunale, Gwendolyn Campbell, Sandra Schneider, & Gary Holstrum, University of South Florida; Ronald Marden, Appalachian State University

Auditing involves evaluation of subjective factors such as management's integrity, which is part of what auditors refer to as an organization's control environment. The quality of these subjective judgments may be improved by an auditors' education, training, and experience. We examined whether experienced auditors differ from auditing students in their organization of knowledge concerning the control environment. Fifty-four auditors and 53 students completed a questionnaire assessing the relative impact of 33 control environment features on financial reporting. The significant differences we found revealed patterns which may be used to bridge the gap between experienced auditors and auditing students.

Experiments Testing Interval Independence and Branch Independence in Judgments and Choices

Michael H. Birnbaum, William Ross McIntosh, Darin Beeghley, & David Bean, California State University, Fullerton

Five experiments tested nonconfigural theories of utility. Subjects either rated the difference in value between two lotteries, judged the amount they would pay to receive one lottery rather than another, or judged buying and selling prices. Interval independence requires that the difference in value between two lotteries produced by variation in one branch of a gamble should be independent of a common branch. Instead, judged strength of preference was greater when the common outcome was the highest than when it was lowest. Branch independence was violated in different ways in buying and selling prices. Choices also reversed as a function of the common outcome, violating nonconfigural theories, such as SEU. All 5 experiments could be explained by rank-dependent, configural weight theory.

The Impact of Different Types of Expert Testimony on Jurors' Judgments

Brian H. Bornstein, Louisiana State University

Subjects acted as jurors for a product liability case, in which each party called one of three types of expert: a statistician, who presented epidemiological data; an experimental scientist, who presented laboratory data; or a physician, who presented anecdotal case studies. Anecdotal evidence had the greatest impact on subjects' liability judgments, especially when it was presented on the plaintiff's behalf. Subjects' judgments were largely independent of both their perceptions of the expert testimony and their attitudes toward science generally. The results are discussed in terms of intuitive statistical reasoning and heuristics such as the base-rate fallacy.

Evoking Information in Probability Assessment: Knowledge Maps and Reasoning-Based Directed Questions

Glenn J. Browne, University of Maryland; Shawn P. Curley, University of Minnesota; P. George Benson, Rutgers University

The present research concerns knowledge evocation in probability assessment. One goal was to provide an empirical test of the evocative knowledge map methodology. Second, a theoretical analysis of probability assessment was used to develop a new prescriptive elicitation technique utilizing directed questions. Experimental results showed that both the knowledge map and the new directed questions methodology elicited a higher quantity and quality of information from decision makers than did a control condition. Further, the information elicited by the two techniques was qualitatively different, suggesting that the two methods might profitably be used as complementary elicitation techniques.

The Impact of Power and Legitimacy on Cross-Cultural Perceptions of Fairness

Nancy R. Buchan, Eric J. Johnson, & Rachel T. A. Croson, The Wharton School

Roth, et al. (1991) demonstrated that bargaining behavior in four countries deviated from the purely self-interested solution. The amount of deviation varied across countries however - suggesting that differing perceptions may exist in each culture as to what constitutes a fair outcome. Our research focuses on bargaining in Japan and the United States to determine how and why perceptions of fairness differ across the two countries. In a set of experiments we test the hypothesis that two factors--the power balance between the negotiators, and the legitimacy of the parties--may differentially impact perceptions of fairness among Japanese and American negotiators.

Analysis of Judgments Concerning Punishment and/or Sympathy for Shoplifters

Nancy Ann Carrafiello & R. James Holzworth, University of Connecticut

Appropriate severity of punishment and/or amount of sympathy for shoplifters was judged for 60 cases of shoplifting by 84 adults, in three different presentation conditions. Cases varied in terms of nine cues: age, gender, race, social status, employment status, value of stolen object, prior criminal record, perceived object need, and locus of control. Punishment judgments were less severe if made along with, or after, sympathy judgments. Sympathy judgments were not as much affected by punishment judgments. Punishment judgments were influenced mainly by value of object. Sympathy judgments were influenced mainly by age and social status.

I Know That You Know That I Know You Don't Know

Matthew V. Champagne, Rensselaer Polytechnic Institute; Alice F. Stuhlmacher, DePaul University

Decisions are frequently made based on information we believe to be factual. This study focused on the effects of misleading information on the decisions of parties involved in a negotiation. Both parties were assigned to one of four information conditions: 1) no information; 2) correct information; 3) misleading information (high); 4) misleading information (low). The latter two conditions led subjects to believe they possessed crucial information about their opponents, when, in fact, they were overestimating or underestimating their opponents' position. Results demonstrated that it was not the availability of information, but a combination of misleading and correct information that led to better outcomes.

Judgment Information and Time Pressure in Negotiation

Matthew V. Champagne, Rensselaer Polytechnic Institute; Alice F. Stuhlmacher, DePaul University

Subjects negotiated salary and job benefits with a computerized "company" under different conditions of judgment information (knowledge of own policy vs. knowledge of company policy vs. payoff table) and time pressure (high vs. low). These variables influenced different components of the negotiation process and outcome. For example, type of training had a significant effect on initial offers but made little difference on final offers, while high time pressure had no impact on initial offers but forced significant concessions. In fact, the entire structure of the bid-counterbid process changed under different types of information and time pressure.

It Can't Happen to Me ... Or Can It?

Carla C. Chandler, Washington State University; Leilani Greening, University of Alabama, Tuscaloosa

People use base rates (e.g., 20% chance of getting skin cancer) to estimate their risk. However, they adjust their estimates downward from the base rate, citing their better-than-average characteristics (e.g., no family history of cancer; low exposure to ultraviolet radiation). Underestimation of risk is greatly reduced by providing conditional base rates (e.g., high UV exposure = 40% chance; low UV exposure = 15% chance). The conditional base rates appear to (a) increase reliance on the named factor and (b) reduce the tendency to overadjust estimates based on other factors (e.g., no family history of cancer).

Procedural Intervention in Group Decision Making

Xiao-Ping Chen, The Hong Kong University of Science & Technology; Lorne Hulbert, University of Kent; James. H. Davis, University of Illinois

76 six-person mock juries made awards in a personal injury case under either a control condition where there was no procedural intervention during group deliberation; or an Initial-reflection condition in which subjects reviewed the pros and cons of each side's case before discussion; or a Break-in-reflection condition in which subjects were stopped to review the pros and cons after five-minute discussion. Results support the hypothesis that procedural intervention influences group decisions. Subjects in the Break-in-reflection condition awarded significantly smaller amount (\$339,569) to the plaintiff than in the Initial-reflection (\$500,588) and control (\$515,161) conditions. The "Wait a minute" effect and "Be serious" effect were proposed to explain the results.

A Portfolio Selection Framework for Choice under Conflict

Chen-Fu Chien & Francois Sainfort, University of Wisconsin-Madison

The theory of choice based on value maximization associates with each option a value such that, given an offered set, one would choose the option with the highest value. However, researchers have found violations of value maximization in choice under conflict (e.g., Tversky & Shafir, 1992). This paper presents a framework to take into account empirical findings of choice under conflict. In particular, this study shows that the classical decision theory could explain some observed violations if one considered conflict a "portfolio attribute" (Chien & Sainfort, 1995) in addition to the value of each option.

Tests of Hypotheses about Certainty Equivalents and Joint Receipt of Gambles

Youngee Cho, University of California at Irvine

The reported experiment tested several properties which are necessary in relating joint receipt(JR) and choice-induced certainty equivalents of gambles. Subjects were partitioned into "gamblers"(G) and "non-gamblers"(NG) by their performance on screening gambles. Monotonicity and additivity of JR over gambles were both rejected whereas additivity of JR over money, segregation, and additive segregation were all sustained for both groups. Convolution was not monotonic for G, but monotonic for NG. We discuss the reasons for these inconsistencies.

The Impact of State and Trait Anxiety on Decision Making

Joseph V. Ciarrochi & James F. Voss, University of Pittsburgh

How does state and trait anxiety influence decision making? Given that anxiety influences the attention to, interpretation of, and recall of threatening information (Eysenck, 1992), we hypothesized that anxiety increases weighting of threatening information, producing more negative decisions. State and trait anxiety were assessed by self report measures. Subjects were presented with a number of decisions ("Should you give David a tuition scholarship?") and received 3 positive and 3 negative pieces of information for each decision. Subjects subsequently rated the importance of each piece of information. The findings indicate that state anxiety influences the tendency to make negative decisions by decreasing the importance of positive information rather than by increasing the importance of negative information. Trait anxiety was not related to decision outcomes.

Preference Reversals with Missing Information: Changes in Attribute Inference or Combination?

Alan Cooke, University of California at Berkeley

The effects of missing information on preference depend on the response task. Subjects were asked to evaluate apartments described by one, two, or three attributes. Subjects rated the overall attractiveness of individual apartments and chose between pairs of apartments. Preferences for the same pairs of apartments reversed across tasks. In ratings, the effect of each attribute decreased as more information was presented, whereas in choices, the effect of each attribute increased as more information was presented. The observed preference reversals could result from differences in how people infer the values of missing attributes in ratings and choices, differences in how people combine attributes, or both. Previous studies have confounded inference and combination rules. I show how these theories can be unconfounded, explaining the source of preference reversals with missing information.

Consensus and Accountability in the Judge-Adviser System

Russell S. Cooper, United States International University; Janet A. Sniezek, University of Illinois, Urbana-Champaign

This study applied the information search model (Cooper and Sniezek, 1990) to explain the decision-making process under varying levels of consensus and accountability. The method used a simulated Judge-Adviser System (participants as judges and simulated advisers). The participants completed a sequence of decisions regarding a hypothetical investment selection. The participants could obtain additional information from available "advisers". The factorial design used consensus, accountability and justification as independent variables. Dependent measures included; confidence levels, amount of information search, and decision revision. Results reveal interactions of consensus and accountability on the dependent measures. Also, accountability and justification resulted in different decision-maker behaviors.

Herding Behavior: An Explanation for Analysts' Earnings Forecast Bias

Jane Cote & Debra Sanders, Washington State University

Herding behavior occurs when financial analysts use published forecasts to construct their earnings forecasts. The herding analyst transfers any forecast error in the published forecast to their forecasts. The original forecast error is magnified, creating a systematic forecast bias. The results of a field experiment with 320 sophisticated investors indicated that herding behavior significantly influenced the construction of earnings forecasts. It induced a systematic forecast bias. Herding behavior is greatest when forecasting confidence is low, where investors highly value their reputation as earnings forecasters, and when the credibility of the published forecast is perceived to be high.

Children's Knowledge About Their Decision Making

Denise Davidson, Loyola University Chicago

Previous research has shown that young children often do not make good decisions on simulated decision tasks. Using open-ended questions and rating scales, the present research showed that first graders could distinguish between types of decisions (e.g., good-bad;

easy-hard), but they generally thought that they did not make bad decisions. By third grade, children were quite good at distinguishing between types of decisions. Little difference was found between third and fifth grade children's responses. These results revealed a higher level of decision sophistication on the part of young children than often seen in previous research.

The Social Construction of Wisdom Judgments

Barbara DeFilippo, University of Oregon

This study investigated whether age and gender influence perceived wisdom. 100 undergraduates described their associations to wisdom, nominated wise men and women, and described reasons for their nominations. Common wisdom associations included age and gender referents, and reasons for nomination depended on the gender of the rater and nominee. Further studies showed that traits of wise nominees also differ with their age. Concluding studies investigated the robustness of these effects in an experimental context. The results are discussed in terms of their implications for the study of wisdom development and the role of societal norms and stereotypes in trait attributions.

Medical Malpractice and Decision Analysis: The Defensive Use of Diagnostic Tests

Michael L. DeKay, Ph.D., & David A. Asch, M.D., M.B.A., Philadelphia Veterans Affairs Medical Center and University of Pennsylvania

EU theory implies optimal decision thresholds for diagnostic testing. By comparing $P(\text{disease})$ to these thresholds, physicians can decide whether to treat, withhold treatment, or test and treat only if the result is positive. We adapted this approach to incorporate physician utilities, focusing on (1) perceived malpractice liability and (2) perceived reductions in liability due to testing. Effect (1) alone is often sufficient to widen the range of P over which testing appears optimal. Effect (2) further widens the testing range. For some P , testing appears optimal from the aggregate perspective even though it is not in patients best interests. Thus, defensive testing transfers utility from patients to physicians.

Medical Treatment of Individuals and Groups: Failure to Replicate Redelmeier and Tversky (1990)

Michael L. DeKay, Ph.D., Mark Spranca, Ph.D., Peter A. Ubel, M.D., John C. Hershey, Ph.D., & David A. Asch, M.D., M.B.A. Philadelphia Veterans Affairs Medical Center and University of Pennsylvania

Previously, Redelmeier & Tversky (RT; 1990) found that medical treatment was more likely to be recommended for individuals than for groups. However, information about individuals and groups was framed in terms of probabilities and frequencies, respectively. We replicated RT's study using a fully crossed design. Contrary to their results, Ss ($N=446$) were more likely to recommend treatment for groups than for individuals ($p=0.034$; $p=0.103$ for RT's cells). The framing effect and the interaction were not significant ($ps>0.2$). Although further investigations are underway, there is insufficient evidence to generalize RT's findings at this time.

A Neural Network Model of Stochastic and Dynamic Choice between Gambles

Clark E. Dorman & Paolo Gaudiano, Cognitive and Neural Systems Department, Boston University

A neural network model is presented that instantiates a decision making process during which gambles are alternately considered. During the deliberation process, evidence accumulates until there is sufficient evidence to choose one gamble. The model uses a neural network theory previously used to explain conditioning behavior and provides a neurally plausible implementation of random walk models of choice. Simulations are able to fit quantitatively a wide range of psychological data. Effects shown by the theory are stochasticity of choice, violations of independence between alternatives, consequences of time pressure, preferences reversals, violations of transitivity, and framing effects.

Modeling Performance in a Probabilistic (Decision Making) Environment

Stephen E. Edgell, Robert M. Roe, & Clayton H. Dodd, University of Louisville

There has been much data published in the area of nonmetric, multiple-cue probability learning (learning probabilistic categories) that existing models cannot account for (e.g., the effect of irrelevant information on the utilization of various forms of relevant information, the effect of relevant dimensional information on the utilization of relevant configural information, etc.). By adding a memory error component derived from work on salience effects to the Castellan/Edgell hypothesis scanning model, that model accounts for all these findings.

Argumentation and Decision Making

Paul A. Estin & J. Frank Yates, University of Michigan

Many significant decisions are made in contexts where others offer us arguments favoring one or more of the available options. Examples include voting in trials, legislatures, and referenda. Several scholarly and practical traditions (e.g., rhetoric, marketing) offer recommendations for designing arguments that have maximum impact on decision makers' choices. As part of a research program to evaluate, extend, and derive the implications of such ideas for decision processes, we tested various effects of examples in argumentation. Among other conclusions, results indicated that personalized illustrations have especially strong choice effects, as do examples that precede rather than follow "logical" arguments.

Choice/Judgment Disparities in Evaluation of Negative Consequences

Shane Frederick & Robyn Dawes, Carnegie Mellon University

People must often decide whether to accept a certain negative outcome to prevent the possibility of something even worse. For example, a person might have to choose between the scarring caused by removing a cyst, and the risk of malignancy if the cyst is left in place. For 13 hypothetical decisions of this type, one group stated the highest risk of the worse consequence they would accept to prevent the less bad consequence from occurring for certain. A second group judged the relative severity of the two consequences. Willingness to accept risks was much lower than severity judgments indicated.

Dynamics of Rule Induction by Making Queries: Transition between Strategies

Iris Ginzburg & Terry Sejnowski, Howard Hughes Medical Institute, Salk Institute

Using information theory in a Bayesian framework, we estimated the information gained by queries when the task is to find a specific rule in a hypothesis space. We determined the best strategy for making queries so that information gain is maximized at each step. We also tested subjects performance on such a task, using a paradigm introduced by Wason (1960). We found that subjects appear to use different strategies at different stages of the search: confirmation queries when confidence is low and diagnostic queries when confidence is high. This is theoretically optimal when queries are guided by a paradigm that maximizes information gain at each step.

Changing Preferences: The Role of Random Fluctuations in Choice.

Claudia Gonzalez-Vallejo, University at Albany

The fluctuating nature of preferences is modeled via the proportional difference (PD) model. PD assumes that decision makers trade attributes in proportions and that this trading is a random process (as perceiving is in Thurstone's theory), sometimes leading to intransitive preferences. PD was compared to four stochastic extensions of algebraic decision strategies found in the literature in analyses of five studies. The two-parameter PD outperformed all other two and three-parameter models. PD model has an intuitively appealing psychological interpretation and accounts parsimoniously for intransitivities. Implications of the PD strategy to multiattribute and vague situations are drawn.

Transaction Decoupling: When Costs and Benefits Become Losses and Gains

John T. Gourville, Harvard University; Dilip Soman, University of Chicago

Kahneman and Tversky (1984) and Thaler (1980) argue that consumers do not encode the costs and benefits associated with a normal economic transaction as separate "losses" and "gains." However, we propose that as the costs and benefits associated with an economic transaction become temporally separated, they become psychologically decoupled. For prepayments, where costs precede benefits by some period of time, this decoupling can lead to the benefits being perceived as "pure gains." Results of several studies support this claim, with subjects increasingly willing to forego a benefit as the time between cost incursion and benefit reception increases.

Does Doctors' Disease X Competence Depend on Number of Disease X Patients Treated?

Robert M. Hamm, PhD., University of Oklahoma Health Sciences Center

Does medical competency require experience of each disease separately? The study replicated Cohen and Jamieson (1985), determining the relation between the number of patients a doctor has seen with a disease and the doctor's clinical knowledge about it. Residents' scores on clinical questions on a national exam were compared with number of patients they'd seen with the disease. Other test items predicted clinical question scores more than case experience. Among other test items, clinical item scores were predicted by clinical scores in different areas as strongly as by general knowledge in same area; more weakly by general knowledge in different areas.

The Need for 3-Valued Logic in Hypothesis Testing

Richard J. Harris, University of New Mexico

If the standard, binary logic of hypothesis testing is adhered to, no conclusion about the direction of a population effect can be reached unless a one-tailed test is employed--but in that case we can only confirm--never disconfirm--our a priori hypothesis. I propose adopting 3-valued logic, i.e. recognizing that each single-df hypothesis test leads to one of THREE possible conclusions: (H1) The population effect is positive; (H2) the population effect is negative; or (H0) we have insufficient evidence to determine the direction of the population effect. Adoption of 3-valued logic would make formal decision rules consistent with good research practice.

Depreciation in Mental Accounting

Chip Heath, University of Chicago; M.G. Fennema, Florida State University

As consumers use their purchases, they often try to decide whether they are "getting their money's worth." In order to make such judgments for long-lived items (such as a camera or a household appliance), the cost of the item must be spread over some period of time or use. Using the corporate accounting practice of asset depreciation and findings from studies of "mental accounting" as guidelines, we propose that individuals practice "mental depreciation" as a way to make judgments of their money's worth. Several experiments and a field study explore factors that influence how individuals spread the cost of items and how that process affects subsequent decisions.

The Effect of Feedback on Use of the Reasons Generation Judgment Aid

Richard R. Hoffman III & Eric R. Stone, Wake Forest University

This experiment examined whether positive or negative feedback on a judgment task would increase use of a judgment aid (generating reasons) on a subsequent task. Subjects either were required to use the aid on the first task or received it for optional use on the second task. When subjects were forced to use the aid on the first task, positive feedback led to increased use of the aid on the second. When subjects received feedback on their unaided strategy, negative feedback increased subsequent use of the aid. These effects only occurred for novices, not experts, however.

The Application of Generalizability Theory to Judgment Analysis

James Hogge & Stephen Schilling, Vanderbilt University

This presentation demonstrates how generalizability theory, which emphasizes that measurement error can have multiple sources, can be applied to the assessment of the reliability of global judgments based upon multiple cues and can yield estimates of the relative magnitude of various components of error variation. In turn, these estimates facilitate the design of subsequent studies in which error is minimized and reliability is maximized.

Buying Protection in a Multistage Investment Task

Oswald Huber, University of Fribourg, Switzerland

In a multistage investment task decision makers attempt to increase their capital by investing some part of it in several trials in a risky opportunity. In the present extension, protection can be bought for any part of the investment. In an experiment (60 subjects), the effect of the joint variation of the winning probability and cost of protection was investigated. The proportion of invested capital increased with the winning probability, but was independent from the cost of protection. The percentage which was protected was not affected by winning probability and protection cost. A certain amount of wasting behavior was observed.

The Role of the Dominance Criterion on Organizational Decision-Making

Amy E. Hurley, The Catholic University of America; Laura O. Robinson, W. Averell Harriman School of Management and Policy, State University of New York at Stony Brook and The Milken Institute for Job and Capital Formation

The purpose of this study is to explore the effects of dominance on individuals confronted with alternatives that are difficult to compare. This exploration included extending Kahneman and Tversky's research on the topic. An experiment was conducted to establishing the degree to which dominance must be masked in order for individuals to switch away from the dominance criterion. Subjects were presented with equivalent lottery pairs in increasing order of similarity. The results indicate that when comparing two alternatives individuals are less likely to use the dominance criterion as the degree of similarity between the alternatives increases.

The Measurement of Environmental Attribute Values

Julie Irwin & Joan Scattone, Stern School of Business

The valuation of environmental goods can produce anomalies that appear particular to uncertain, morally charged items. Using conjoint measurement, these three studies tested for such anomalies (i.e. unwillingness to trade-off, insensitivity to level, and context effects) in the measurement of environmental attributes of everyday products. Subjects were willing to make reasonable trade-offs of environmental attributes (e.g. recycled content) for other attributes (e.g. price), but for some environmental attributes, values for everyday objects showed both insensitivity to level and context sensitivity. Results suggest these effects owe as much to confusion as to the "warm-glow" influences hypothesized to drive such effects for public environmental goods.

Validating a New Process Tracing Technique for Researchers and Decision Makers

J. D. Jasper & Irwin P. Levin, University of Iowa

"Phased narrowing" is a technique where decision makers narrow down the number of choice alternatives on successive stages. Like all process tracing techniques, phased narrowing imposes constraints on the decision maker. Methods are developed for analyzing this technique, both in terms of the usefulness of data provided to the researcher interested in studying individual decision processes and to the decision maker who uses this technique to arrive at a final choice.

Decision Making Strategies and Self/Other Perspectives

Laura Kray & Richard Gonzalez, University of Washington

We hypothesize that individuals who are giving advice are more likely to use a lexicographic ordering than when they are making the decision for themselves. This prediction was derived from several models including the literature on attribution theory. We had an opportunity to use a real decision making task. Students from departments that were slated to be eliminated due to budget cuts at UW were asked questions about how the cuts would influence their own studies and what they would recommend to other students in a similar predicament. The series of questions permitted an assessment of lexicographic v. trade-off strategies. Results support the hypothesis about the self-other perspective differences in strategy.

On Dividing the Loot and Claiming Debts

Dave Kuhn, Gwen Grams, & Ching-Fan Sheu, DePaul University

Subjects participated in team competitions with the goal of maximizing their profits. Assessment of responsibility for the outcomes

was the dependent variable. Results showed that participants have tendencies to take credit in winning situations and defer responsibility from themselves when they lose. Participants also showed that they used both controllable and uncontrollable events when making their contribution assessments. Participants were consistent in their use of controllable and uncontrollable events in winning conditions and inconsistent in losing conditions.

The Decision to Lease or Buy

Langholtz, McGhee, Paul, & Anderson, The College of William and Mary

What are the factors that cause people to choose to own something and when do they prefer to lease? What makes them decide to lease or buy? Will they be willing to pay a premium, or do they expect a discount for either choice? In this research we examine the factors that contribute to the decision to lease or buy. The data suggest that people expect a discount for leasing, and they are willing to pay a premium for ownership, especially if the item has personal significance.

The Effects of Discretionary Choice on Consumer Reactions to Product Bundles

Irwin P. Levin, Gary J. Gaeth, & Chifei Juang, University of Iowa

Product Bundles" were created by describing news or sports magazine subscriptions which would add an end-of-the-year volume or video of the highlights of the year in news or sports. Subjects indicated the amount they would be willing to spend for each product and bundle. Generally, "subadditivity" was found where the monetary worth of the bundle was less than the sum of its parts. Consistent with the psychological construct of "reactance," the amount of subadditivity was reduced for those subjects given some choice in the composition of the bundle compared to those given no choice.

The Influence of Outcome Effects on Evaluations of Professional Audit Judgment

D. Jordan Lowe, Virginia Polytechnic Institute and State University; Philip M. J. Reckers, Arizona State University

Outcome knowledge is generally available before evaluation of auditor performance. That is, evaluations are conducted from a position and arguably with the "benefit" of hindsight. The purpose of this paper is to examine the effects of outcome knowledge on evaluations of professional audit judgment. Specifically, we hypothesize that outcome effects will be attenuated by two factors: (1) incomplete use (truncated application) of available decision aids and (2) intolerance of ambiguity. The hypotheses were confirmed by the results of an experiment using an analytical review task. Outcome effects were revealed when available analytical procedures decision aids were perceived as "underutilized." In addition, auditors who were found to be intolerant of ambiguity were significantly influenced by outcome knowledge, while tolerant subjects were not.

The Explanation Effect: Cognitive and Strategic Components

Anne M. Magro, Rutgers University; Kathryn Kadous, University of Waterloo; Jacqueline S. Hammersley, University of Illinois, Urbana-Champaign

Researchers attribute explanation effects to cognitive factors; however, a portion may be strategic. We hypothesize that strategic behavior will cause larger explanation effects when explanations can be identified with individuals than when explanations are private. Further, we hypothesize that people with a high need for approval (as measured by the Marlowe-Crowne Social Desirability Scale) and those who engage in other-focused presentational behavior (as measured by a sub-scale of Snyder's Self-Monitoring Scale) will experience larger explanation effects than will others when the explanation is public, but not when the explanation is private. We tested our predictions in an experiment.

Relationship Formation in Risky Situations: Examining Cognitive Miser and Moral Sentiments

Mark D. Miller, Carnegie Mellon University

Nash Equilibrium solutions of a noniterated Prisoner's Dilemma game with an "Exit" option predict that rational players should exit; yet experimental evidence shows that most subjects play. Cognitive Miser theory (Orbell/Dawes, 1991) and a Theory of Moral Sentiments (Frank, 1988) both predict playing with some probability between 0 and 1. This poster operationalizes Cognitive Miser and Moral Sentiments, tests the assumptions of both, and then directly compares the two theories empirically. While the Cognitive Miser theory is supported, results suggest that the expectation of a beneficial relationship does not predict play/exit behavior.

Evaluating Faculty Performance Using SJA

Richard G. Milner, Ohio University

This article will demonstrate the value of Social Judgment Analysis (SJA), a psychometric tool for improving group judgment, via a case example addressing issues of pay-for-performance or merit pay in organizations. The SJA technique to be described enables groups to more fully define the information used in their deliberations. This article will address the use of this team evaluation procedure that attempts to reduce bias, increase consistency, and build consensus when dealing with a complex and rather murky problem such as assigning merit pay.

Decision Complexity and the Analytical Hierarchy Process

Osvaldo F. Morera & David V. Budesu, University of Illinois at Urbana-Champaign

Evidence from behavioral decision theory indicates that decision quality of multiattribute problems is enhanced if the problem is divided into smaller parts (Ravinder, 1992). One decompositional procedure is Saaty's (1977) Analytical Hierarchy Process (AHP).

In AHP, pairwise comparisons of the importance of each attribute and pairwise comparisons of the alternatives with respect to each attribute are made. Priority weights are derived from each set of pairwise comparisons and combined to obtain values for the alternatives. The results of a study are reported in which decision complexity was varied. The AHP and a "holistic" AHP (Jensen, 1983) were compared on several criteria to assess the benefits of decomposition.

The Conjunction Fallacy in the Pragmatics View

Giuseppe Mosconi & Laura Macchi, University of Milan

This paper considers the role of the conversational rules (Grice, 1975) in the "conjunction fallacy" phenomenon (Tversky and Kahneman, 1983). We argued that in a "natural" context (and the Linda problem is one of these), questions concerning a comparison of the extension of an inclusive and an included class violate a conversational rule (the maxim of quantity). Tautological comparison are not literally understandable except under certain specific condition (signaling). We showed that with an adequate signaling context (such as a rhetorical one) the conjunction phenomenon disappears. On the contrary, the last three experiments show that the subjects consider formulations violating this particular conversational rule as highly unnatural ("false" or "reticent").

The Dimensionality of Affective Response: A Connectionist Exploration of the Mere Exposure Effect

Christie Nordhielm, Center for Decision Research, The University of Chicago

The purpose of this research is to demonstrate the mere exposure effect at the dimensional level. Bornstein (1989) reviews a major body of research which concludes that there is a positive relationship between frequency of exposure and affective response. For large numbers of exposures, this positive relationship appears to reverse (Bornstein, Kale, & Cornell, 1990). Finally, tolerance for repeated exposures tends to be higher for complex stimuli than for simple stimuli (Berlyne, 1970; Bornstein et al., 1990). These findings suggest that affective response may be mediated by the number of exposures to particular dimensions of a stimulus: a complex stimulus has more dimensions, and is therefore less subject to boredom with repeated exposure. This hypothesis is tested with a connectionist model which predicts affective response based on the frequency of exposure to particular dimension values.

Can People Use Causal as well as Time Series Information?

Marcus O'Connor, University of New South Wales, Australia; Joa Sang Lim, Samsung Data Systems, Korea

Although contextual or causal information has been emphasized in forecasting, few empirical studies have been conducted on this issue in controlled conditions. This study investigates the way people adjust statistical forecasts in the light of contextual/causal information. Results indicate that people appeared to reasonably incorporate extra-model causal information to make up for what the statistical time series model lacks. As expected, the effectiveness of causal adjustment was contingent on the reliability of the causal information. However, people relied to heavily on their initial forecasts compared to the optimal model. People also seemed to prefer statistical forecasts in favor of causal information.

Trans-Personal Mental Accounting of Gifts

Suzanne O'Curry & Ching-Fan Sheu, DePaul University

Although most gift recipients would claim to agree that "It's the thought that counts," the amount the donor spent on a gift does affect the recipient's willingness to pay for subsequent reciprocating gifts. We investigated how actual price paid by the donor and the amount previously spent by the recipient affected the amount a gift recipient would spend on the next gift purchased for the donor. Willingness to pay was affected more when the recipient had spent more than the donor on a prior gift than when the recipient had spent less, suggesting an asymmetry in coding spending between the self and others.

Familiarity Effects and Hindsight: Reversals are not Anomalies

Matthew H. Olson & Rachel Traver, Hamline University

In a within-subjects study of familiarity effects on hindsight judgments, eighty-one subjects assigned probabilities to possible diagnoses in clinical/psychological case-study scenarios. Clinical disorders varied in popular familiarity as judged by a matched sample of subjects. Additionally, frequency of appearance of different disorders was manipulated during presentation of scenarios. Reversals of hindsight bias occurred for rare and unfamiliar disorders. Hindsight scores also varied as a function of manipulated frequency, with subjects making hindsight reversals when disorders appeared either rarely or very frequently in different scenarios.

Communication Strategies that Support Air Crew Decision Making

Judith Orasanu, NASA-Ames Research Center; Michelle Gaddy, San Jose State University

Teams of experts engaged in complex, distributed decision making tasks may exhibit distinct communication patterns that distinguish more effective teams from less effective ones. Communication among team members reflects problem structuring, information seeking, option generation and evaluation strategies. Data to be presented summarize communication features that differentiated between more and less effective 2-member air transport crews engaged in a simulated in-flight emergency. Transcripts of videotapes were the basis for communication analyses. Crew performance levels were determined by procedural and operational errors. The relation between decision strategies, communication, workload management strategies, and overall task performance will be discussed.

Super-Additivity in Binary Complementarity

Daniel Osherson, DIPSCO, Milan; Paolo Legrenzi & Laura Macchi, University of Milan

Suppose that event E is partitioned into subevents E1, E2, and that a person attributes probabilities Pr in such a way that $Pr(E) < Pr(E1) + Pr(E2)$. Then the person is said to exhibit "subadditive" judgment. Subadditivity has been demonstrated in several psychological studies, and elevated to a descriptive principle in Tversky & Koehler's Support Theory. In contrast, we present evidence that super-additivity alternatives to the event under evaluation are not made psychologically prominent.

Behavioral Explanations of the Popularity of Renting-to-Own

Andrew M. Parker & Brian J. Zikmund-Fisher, Carnegie Mellon University

Recently, there has been considerable growth in stores offering rent-to-own contracts. Such contracts, however, are controversial for two reasons: (1) usage is almost exclusively limited to the poor, and (2) the terms involve extreme implied interest rates, often approaching hundreds of percent per year. To explain the unexpected apparent popularity of renting-to-own, we use a series of surveys of low-income consumers to examine several alternative hypotheses: insensitivity to contract length, failure to understand the economic disadvantages, fear of future finances, lack of equivalent financial alternatives, perceived and actual liquidity constraints, placing rental costs into pre-existing mental accounts, and perceptual biases.

Standards of Performance in Social Dilemmas

Craig D. Parks & Lawrence J. Sanna, Washington State University

This study examined the use of standards of performance as a means of enhancing cooperation in a social dilemma. Subjects played either a four- person resource dilemma or public goods game, and were provided with either information on the typical group performance, information on the typical individual performance, or no performance information. It was found that, relative to the no-standard condition, a group standard produced large increases in the frequency of cooperation, but an individual standard produced no increase. The results are consistent with research on goal- setting.

Affect, Images, and Preferences

Ellen Peters, James Flynn, & Paul Slovic, University of Oregon

Using a variety of self-report measures, we examine the possible influence of affect and images on preferences. In two related surveys, subjects (N=220) responded to seven stimulus objects (including nuclear energy, church, and Seattle, Washington) on scales intended to elicit subjects' feelings towards each stimulus. The scales ranged from imagery ratings to ratings of discrete emotion terms. The results suggest that discrete emotion terms explain a much greater proportion of the variance in preferences compared to previous affective measures used. Affect seems to serve as an "orienting disposition" influencing intended behaviors and preferences.

Utilization of Social Information: Does Choice Behavior Reflect Personal Opinion?

Victoria L. Phillips & Irwin P. Levin

We are investigating the means by which "social influences" impact individual's decisions. Baseline opinion ratings (of university courses) were obtained months prior to an experimental manipulation of "social influence" (students comments). This methodology allowed for the direct assessment of the mode of social influence: either in implicit opinion change and/or in explicit choice behavior. Results indicate that personal opinion and choice behavior are both affected by social information. When asked to consider only personal experience, participants were unable to discount social influences. Additionally, participants' explicit consideration of both personal experience and other's opinions significantly increased the magnitude of "social influence" effects.

Assessment of Metaknowledge of Decision Processes in Adulthood

Rebecca M. Pliske, Klein, Associates; Sharon A. Mutter, Western Kentucky University

A questionnaire was developed to elicit metacognitive knowledge of the decision making process. Data were collected from 212 young adults (M=21) and 153 older adults (M=70). Results indicate that older adults report greater confidence in their decision making ability than younger adults. Neither age group reported that memory problems affected their decision making ability. Older adults were more likely to report the use of an analytic decision process and that they seek out extensive information prior to making decisions. Younger adults were more likely to report that they consult other people for advice prior to making decisions and that they often help others make decisions.

Familiarity Effects on Strategy Use in Tactical Problem Solving

Julia Pounds, Consortium Research Fellows Program, Kansas State University; Jon J. Fallesen, U.S. Army Research Institute, Ft. Leavenworth Field Unit

Skillful problem solvers are highly valued. However, how people employ different cognitive strategies to solve problems is not clear. Analytical step-wise processes are often trained but are often not used in dynamic situations. A recent trend has been to examine naturalistic behavior using familiar tasks which allow participants to exploit their prior knowledge. This study investigated how participants used different strategies while solving tactical problems that were more and less familiar. Results suggest that strategies are tailored by both the individual's experience and problem characteristics. Results suggest several future research issues. Individual differences in problem solving style will be explored concurrent with strategy effectiveness.

The Impact of Varying Temporal Distance on the Accuracy of Self-Evaluations

T. Probst, P. Radhakrishnan, J. Snizek & H. Arrow, University of Illinois at Urbana-Champaign

During a 15-week class, students evaluated their performance on five quizzes. Temporal distance between task performance and self evaluations was varied. For each quiz, students made evaluations several weeks before, on the class before, immediately prior to, during, immediately after, on the class after, and several weeks after task performance. Analyses suggest that as temporal distance from task performance increases, evaluations become increasingly inaccurate and optimistic. However, with increasing experience with task performance, the effects of temporal distance on self-evaluative accuracy are attenuated.

Randomization in a Two Person Zero Sum Game in Extensive Form

Amnon Rapoport, David Olson, & Elizabeth Abraham, University of Arizona

It has been widely reported that people are generally unable and/or unmotivated to produce random responses to situations which, on the surface seem like opportune times to display random behavior. We report the results of three experiments which test the degree to which subjects come close to the equilibrium solution in mixed strategy for two-person zero sum games in extensive form. The equilibrium solution for this game dictates randomized responses on the behalf of each subject on each trial of the game. We wish to find out whether players randomize their strategies and if they do, whether they do so according to the probabilities specified by the equilibrium solution. The present study departs from previous studies of randomization in interactive situations, in that it focuses on games in extensive form rather than strategic form.

Tacit Coordination in Large Groups: Tests of Adaptive Learning Models

Amnon Rapoport & Daryl Seale, University of Arizona; Ido Erev, Technion, Israel; Jim Sundali, Kent State University

Coordination behavior is studied experimentally in a class of market entry games featuring symmetric players, complete information, zero entry costs, and several randomly presented values of the market capacity. Each player must decide privately whether to enter the market and receive a payoff which is dependent on the total number of other entrants or stay out and earn a certain payoff. The major findings are substantial individual differences in decision policies, which do not diminish with practice, and aggregate group behavior which is organized extremely well in both the domains of gains and losses by the Nash equilibrium solution. Individual decision policies are modeled with several adaptive learning models.

The Effect of Missing Information on Decision-Making Strategy Performance

Frank Reitz, Duke University

A Monte Carlo simulation was used to examine the effects that different levels of missing information have on decision-making strategy effort and accuracy. The effort needed to respond to missing information was added to that consumed by different strategies. The frequency of the response and strategy generating a weighted-additive solution in the no-missing-information condition was used as a measure of accuracy. Discarding missing information resulted in linear reductions in effort/accuracy, while making inferences resulted in curvilinear reductions in effort/accuracy as the degree of missing information increased. Eliminating partially described alternatives was always a more efficient response than making inferences.

A Little Knowledge is a Dangerous Thing or Familiarity Breeds Contentment

Kathryn Ritgerod Nickles, Wake Forest University; Paul W. Fox & Judith Puncchar, University of Minnesota

This study examines the overconfidence bias. We tested the hypothesis that one factor contributing to overconfidence is familiarity with a prior answer, irrespective of answer accuracy; i.e., answer familiarity may be misinterpreted as answer correctness, leading to an increase in confidence. Subjects were tested on general knowledge questions and rated their confidence in each answer. One week later, they were tested again with the same items (and new ones). For repeated answers to old items, subjects' confidence increased substantially, an increase especially noteworthy when the same wrong answers were repeated. Thus, one contributor to overconfidence may simply be individuals' familiarity with their prior answers.

Medication Compliance Decisions

Christine S. Rundall, School of Professional Psychology, Los Angeles; David J. Weiss, California State University, Los Angeles

This study will examine how actual patients with specific diseases make decisions about medication compliance. Patients with the following diseases have been chosen for the study: iron deficiency anemia, hypothyroidism, epilepsy, inactive tuberculosis, non-insulin dependent diabetes, hypertension, coronary artery disease and chronic obstructive pulmonary disease. These illnesses were selected because they can be arranged in a naturalistic factorial design, in which symptom and prognosis level vary. It is hypothesized that the information about these factors and medication side effects will combine according to a multiplicative model. Functional measurement procedures will be utilized to analyze the data.

Counterfactual Thinking and Social Dilemmas

Lawrence J. Sanna, Craig D. Parks, & Kandi Jo Turley, Washington State University

246 participants read about extinction of wild salmon and steelhead in the Pacific Northwest. We varied action versus inaction (passing vs. not passing a law limiting fishing), and whether extinction occurred in 5 years, 100 years, or no extinction occurred. Participants also completed the Consideration of Future Consequences (CFC) scale, a measure of the propensity to consider future versus immediate consequences. Among other effects, when extinction occurred in 5 years, high CFC participants felt worse after

action than inaction; whereas, with extinction in 100 years, high CFC participants felt worse after inaction. The opposite pattern occurred for extinction in 100 years for those low in CFC.

What is, What Was, and What Might Have Been: Factors that Influence our Emotional Reactions to the Outcomes of Risky Decisions

Alan Schwartz & Barbara Mellers, University of California at Berkeley; Ilana Ritov, Ben-Gurion University, Be'er-Sheva, Israel

Our research is designed to understand the hedonic experiences associated with risky decisions. We use gambles (pie charts with associated monetary outcomes) to represent risky options and ask subjects to make choices between pairs of gambles. Then a spinner appears in the center of the chosen gamble, and the outcome is determined by the direction of the spinner when it comes to a stop. Subjects rate their feelings about the outcome. This paradigm allows us to examine hedonic experiences and their relationship to utilities. We present a theoretical framework for the results and relate hedonic experiences to actual choices.

Overconfidence, False Consensus, and Information: Forecasts and Inventory Decisions

Maurice Schweitzer, University of Miami

Results from this work describe the operation of false consensus and overconfidence in forecast and inventory decisions. We examine the operation of these biases in forecast decisions under three information conditions, and found that both accuracy and absolute levels of confidence rise with more information. While information curtails these biases, it does not remove them completely. In a second experiment we describe how biased forecast decisions translate to biased inventory decisions.

Exposition Effects on Decision Making

Winston Sieck & J. Frank Yates, University of Michigan

Many of us believe that, after writing about a subject, we understand it more deeply. Studies in education indicate that writing does indeed enhance comprehension. This research examined whether similar "exposition effects" exist for decision making. Control subjects made choices in standard framing situations (e.g., the Asian disease setting). Others chose after writing rationales for their selections or in anticipation of writing such rationales. Exposition had no influence on subjects' actual choices; it did not reduce framing effects. But it did markedly increase subjects' confidence that their choices were appropriate. Theoretical and practical implications are discussed.

Minority Influence: The Effects of Expected Group Interaction

Christine M. Smith, Grand Valley State University; R. Scott Tindale, Loyola University, Chicago

Past research suggests that minority influence may manifest itself differently in contexts where interaction with others is expected (Smith, Tindale, & Dugoni, in press). In the present study subjects read a transcript of a group conversation regarding establishing English as the official language of the U.S. Within the conversation transcript the status of the source of arguments was manipulated (either minority or non-minority within the group). Half of the subjects believed that they would join their respective groups and continue discussing the issue with them. Thought listing and attitude change data each suggest that minority influence is particularly affected by expected group interaction.

Contingency Judgments are Conditionalized on the Constancy of Other Causes

Bobbie Spellman, University of Texas

Human causal efficacy judgments often deviate from the "normative" Delta-p contingency rule. When there are multiple potential causes, however, that deviation is justified; one should conditionalize the effect of one cause on the constant presence or absence of other causes. In several experiments, with both trial-by-trial and summary statistics presentations, subjects used conditional rather than unconditional contingencies to rate the effectiveness of two potential causes. Conditional contingency use explains various "non-normative" cue-interaction effects including discounting.

Regret-Proneness and Pessimistic Decision Style as Contributors to Depression

Karen Steinberg, Jonathan Baron, & Martin E. P. Seligman, U. of Pennsylvania

The Decision-Style Questionnaire (DSQ), a new measure based on and incorporating the 12-item Attributional Style Questionnaire (ASQ), was used to test whether regret-proneness and pessimistic decision style are correlates of depression. Higher levels of regret-proneness and pessimistic decision style predicted higher levels of depression, but only when attributional style was pessimistic; the Regret x Attributional Style and Decision Style x Attributional Style interactions also predicted depression. In a second study, a revised, shorter version of the DSQ that eliminated the ASQ questions replicated the first study's correlations between regret-proneness, pessimistic decision style, and depression.

Effects of Proportional Liability Information on Damage Awards in a Civil Trial

R. Scott Tindale, Joseph Filkins & Linda S. Thomas, Loyola University Chicago; Susan Sheffey, Jewish Vocational Service, Chicago; Christine M. Smith, Grand Valley State University; Elizabeth M. Anderson, Loyola University Chicago

Study replicated and extended earlier findings concerning the use of a particular type of proportional liability information (Assigned Shares, Lagakos & Mosteller, 1986) by mock jurors in awarding damages in a civil trial. Mock jurors read a civil trial summary containing either high or low assigned share information, either associated or not associated with appropriate monetary awards. The

total amount asked for by the plaintiff was also varied. Consistent with previous findings, monetary awards were only influenced by the assigned share information if the assigned share was high and associated with a monetary value. Amount asked for by the plaintiff also affected damage awards. Various other aspects of mock juror perceptions were also affected.

Memory Representation, Contradiction and False Memory: A Fuzzy-Trace Theory Analysis

Allison L. Titcomb & Valerie F. Reyna, The University of Arizona

Previous studies have shown that false memories for gist differ from those for verbatim details. To determine whether these effects are due to differences in memory representations, judgments of contradiction between false memories and actual events were obtained for both consistent and inconsistent gist and verbatim details. Judgments paralleled dependency tests, and showed a continuum of contradiction anchored by consistent gist and inconsistent details, with intermediate values for inconsistent gist and consistent details. Thus, the memory representation--gist or verbatim--affected the degree to which memories were judged to be contradictory, accounting for differences in false memory.

Gender, Risk, and Uncertainty

Lori R. Van Wallendael & Hillary Johnson, University of North Carolina at Charlotte

Male and female college students were asked to answer questions regarding probability estimation, preferences for gambles, and risk-taking behaviors. Gender differences are discussed as they relate to risk aversion, framing effects, the gambler's fallacy, base rate neglect, the illusion of control, and optimistic biases.

The WTA/WTP Disparity and the Economic Value of Street Trees

Michael E. Walker, The Ohio State University; Osvaldo F. Morera & Joanne Vining, University of Illinois at Urbana-Champaign

Values associated with the willingness to accept compensation (WTA) typically exceed values associated with the willingness to pay (WTP) (Knetsch, 1990). Subjects provided WTA or WTP judgments for the values of street trees. Subjects were also told that removal of the tree was either natural (disease) or caused by humans (street widening). In the street widening condition, the ratio of the WTA/WTP estimates ranged from four to twelve. In the disease condition, the WTA/WTP ratios were less than one. These findings suggest that interactions between the type of value judgment and the context of judgment mediates WTA/WTP disparities.

Determinants and Performance Implications of the Pace of Strategic Decision Making

Stefan Wally & J. Robert Baum, University of Maryland at College Park

This study examines the relationships among strategic decision-making pace, environmental and organizational characteristics, and firm performance. A series of interviews with chief executive officers (CEOs) served as the basis for a decision-pace-sensitive business acquisition scenario, which was included in a questionnaire. The solution of structural equations with LISREL VII allowed for consideration of multiple measures of multiple constructs in data from 151 firms. Our results indicate that speed mediates the relationships between both centralization and environmental uncertainty and performance.

Relationships between "Think Aloud" Verbalizations and Judgment Processes for Partially Described Information

Celia E. Wills, Michigan State University; Colleen F. Moore, University of Wisconsin-Madison

Subjects' verbalized reasons for their ratings of medication acceptance were examined for health treatment scenarios in which partial information was presented. Subjects were instructed to make ratings on the basis of information that was presented, but often mentioned information in addition to that which was presented. The findings imply that tests of averaging models of judgment should consider imputed values for missing information.

Framing and Response Consistency: The Effects of Gender and Quantitative Skills

Mary Wurm-Schaar, The Western Pennsylvania Hospital

The effects of gender and quantitative skills on response consistency across positively and negatively framed decision tasks were examined in a sample of 233 graduate students. Individuals with higher self-rated quantitative, regardless of gender, evidenced higher levels of risk-averse or risk-seeking response consistency or diminished framing effects. When numbers of college level mathematics and statistics courses completed were used to determine quantitative skills level, males who completed less than five courses evidenced higher response consistency while the converse was true for females. In explanations for one choice, only 6% of subjects noted the implications of the provided probabilities.

Overconfidence and Feeling of Knowing

Dan Zakay, Tel-Aviv University

A model for the explanation of over-confidence, which is based on the feeling of knowing (FOK) phenomena, is suggested. It is suggested that when a general knowledge question is presented with distractors a preliminary FOK is automatically evoked. Confidence in response accuracy reflects this FOK whereas response accuracy itself depends on correct retrieved information only. Thus, overconfidence is an outcome of the potential discrepancy between the overall amount of information retrieved when a question is presented and the ratio of correct to wrong information. Empirical data supporting the model will be presented. Implications for a new calibration method and for the domain of multiple choice testing will be discussed.