

## 2008 SJDM Conference POSTER TITLES LISTED BY SESSION

### Session #1 w/ Continental Breakfast (Sunday, 8:30- 10:30am, Grand Ballroom)

#### *1. Motivated Bias in Affective Forecasting*

Buechel, Eva C. (Carnegie Mellon University); Morewedge, Carey K. (Carnegie Mellon University); Vosgerau, Joachim (Carnegie Mellon University)

Affective forecasters show an impact bias, overestimating their emotional reaction to positive and negative events, even for events they have previously experienced. The present research examined whether affective forecasters overestimate their reactions to future events in order to motivate themselves to produce desirable outcomes. Despite having equal knowledge of a task's outcome, forecasters predicted they would feel better if they succeed and worse if they failed when forecasters were made before completing the task than after completing the task (but before learning of its outcome). The results suggest that the impact bias, in part, exists to motivate forecasters' subsequent behavior.

#### *2. Sequential and aggregate choice procedures and their effect on choices, anticipated and actual satisfaction*

Schurr, Amos (The Hebrew University of Jerusalem); Avrahami, Judith (The Hebrew University of Jerusalem); Kareev, Yaakov (The Hebrew University of Jerusalem); Ritov, Ilana (The Hebrew University of Jerusalem)

There are many real-life situations in which multiple choices are either made dynamically or planned ahead of time. We ask whether people choose differently in the two situations, and how the choice procedure affects their satisfaction with the obtained outcome. In three experiments using skill and non-skill tasks, we find that when facing dynamic choices between skill tasks people are more likely to select risky options, and end up being less satisfied in comparison to people who make one planned aggregate choice. We consider an explanation of the results in terms of hot vs. cold states of mind

#### *3. Incidental affect and charitable behavior: Feeling good (hypothetically) increase donations, feeling bad (really) does*

Västfjäll, Daniel (Decision Research); Peters, Ellen (Decision Research); Slovic, Paul (Decision Research)

Two studies investigated the role affect has in guiding donations behavior. Participants in a happy or sad incidental mood either made a real or hypothetical allocation decision to a single or multiple victim(s). For real donations, a negative incidental mood lead to higher donations, whereas the reverse was true for hypothetical donations (positive mood lead to higher donations). In a second experiment both integral and incidental affect was manipulated. We hypothesized that if the target is affect-rich (identified victim), incidental mood would have a lesser impact than if the target was affect-poor (statistical victim). We found support for this prediction.

#### *4. The Influence of Mood and Accountability on Students' Evaluation of Teaching Performance*

Gerlt, Jason, E. (University of Nebraska, Omaha); Dr. Scherer, Lisa, L. (University of Nebraska, Omaha)

We examined the effects of evaluators' mood and accountability on performance evaluations. One hundred and forty-seven students were shown video clips to induce a positive or a negative mood state prior to rating teaching assistants' teaching performance. Participants were either told they would need to justify their ratings to an authority figure (high accountability) or not (low accountability). Results indicated that all groups rated performance harsher than warranted, but individuals in the positive mood/ high accountability condition rated performance the harshest. Thus, mood and accountability are important factors to consider when evaluating the performance of others.

#### *5. Personality, Emotional Processes, and Investment Decision-Making Behaviors under Different Market Conditions*

Wranik, Tanja (University of Geneva, Switzerland); Hopfensitz, Astrid (University of Toulouse, France)

We examined how frequency of earnings feedback (three conditions) and market conditions (positive versus negative return) influence emotions and behaviors of different types of investors in multiple round investment tasks. In the first study, we found that investors with low self-efficacy and who lost money at the beginning of the task were especially likely to show myopic loss aversion, whereas self-confident investors with initial positive earnings demonstrated behaviors indicative of overconfidence. In the second study, we found that the overall level of investment remained equally high and that only a few participants adapted their strategy to the unfavorable market conditions.

#### *6. Contaminating Charity: When Perceived Motives of Donors Affects Perceived Magnitude of Contributions*

Johnson-Graham, Laura C. (University of Colorado Boulder); Pytell, Jarratt (University of Colorado Boulder); Van Boven, Leaf (University of Colorado Boulder)

We hypothesized that people would evaluate an intrinsically motivated donation as larger than an extrinsically motivated donation. People perceived intrinsically motivated donations of money (Study 1) and specific actions (Studies 2 and 3) to be subjectively larger

compared with extrinsically motivated donations of objectively equal magnitude. Compared with intrinsic motives to help, this contamination effect occurred for extrinsic motives of a romantic (Study 1) and resume padding (Studies 1 and 2) nature. The contaminating effect of motivations on donation evaluation was larger for moderately sized donations (5 hours) compared with less ambiguous small (2 hours) and large (15 hours) donations.

*7. Affect-rich and affect-poor outcomes in decision by experience and decision by description*

Lindvall, Johan (University of Gothenburg); Västfjäll, Daniel (University of Gothenburg)

In this study 344 participants choose between a sure or uncertain loss or gain, either after reading a description of probabilities or after experiencing the probability distribution. The gambles were either affect-poor (money) or affect-rich (saving pandas). For the affect-poor loss gamble participants overweighted rare events by description and underweighted when experiencing, replicating Hertwig et al. (2004). For the affect-rich gambles no difference between experience and description was found. Overall, affect-rich gambles produced more random choices compared to affect-poor gambles. Ratings of affect, perceived risk, and individual differences in risk seeking behavior mediated choices.

*8. Hedonic Conflict and the Role of Justifications*

Duyx, Bram (University of Amsterdam); Nijstad, Bernard A. (University of Amsterdam); Handgraaf, Michel J.J. (University of Amsterdam)

The role of justifications in hedonic conflicts is emphasized by many researchers, but justifications have not yet been investigated experimentally. We fill this gap by manipulating option justifiability in a scenario study, in which participants had to choose between trendy shoes (hedonic) and dress shoes (utilitarian). A gift certificate was added to either the hedonic or the utilitarian shoes as a means for justification. As predicted, participants chose the hedonic shoes more often when justifiable, but not the utilitarian shoes. We explain these results in the framework of motivated reasoning (Kunda, 1990).

*9. Cause related marketing: The role of mental accounting, price and product type*

Rubaltelli, Enrico (University of Padova); Baghi, Ilaria (University of Modena and Reggio Emilia); Tedeschi, Marcello (University of Modena and Reggio Emilia); Rumiati, Rino (University of Padova)

We investigated how mental accounting, product type (frivolous or utilitarian) and product price can influence people's perception of cause-related marketing (CRM) programs. CRM is a strategy aiming to improve a product image by way of a link to a social cause. Participants were presented with hypothetical scenarios about a product which was donating part of its price to a social cause. Results showed that the difference between separated and integrated mental accounts is significant only with frivolous and high price products. We found that, regardless the price, frivolous products a more positive reaction toward the CRM program.

*10. Can A Smile Help You Go The Extra Mile? The Effect of Affective Forecasting Calibration and Mood on Goal-Setting*

Easwar, Karthik (The Ohio State Univ); West, Patrica (The Ohio State Univ)

When setting goals, we are driven by two motivations; self-assessment and self-enhancement. In order to decide on our goal, we have to balance our forecast of the value of self-assessment information with our forecast of the affective cost of failure. It has been shown that people overestimate this affective cost. It is hypothesized that only in a good mood, when motivated by self-assessment, will we attempt to eliminate the affective forecasting error. In a 2x2 experiment, after manipulating mood and informing half the subjects of the forecasting error, we immediately analyzed the goal they set in an anagram solving task.

*11. The effect of mood states on variety seeking behavior: intrapersonal and interpersonal causes*

Lin, Chien-Huang (National Central University, Taiwan); Lin, Hung-Chou (National Central University, Taiwan)

This study is expected the variety seeking behavior to be greater when people in sad mood than those in happy mood. We examined the intrapersonal and interpersonal causes of this phenomenon. Study 1 explored that sad people incorporate more variety-seeking than happy people. Study 2 explored that NFC moderated the effect of mood states on variety seeking behavior. Study 3 explored the self-other difference and expected that sad people incorporate more variety-seeking than happy people when making choices for self, but no significant difference between sad and happy people when making choices for others.

*12. Dealing with Missed Opportunities: Action vs. State Orientation Moderates Inaction Inertia*

Van Putten, Marijke (K.U.Leuven, Belgium); Zeelenberg, Marcel (Tilburg University, The Netherlands); Van Dijk, Eric (Leiden University, The Netherlands)

People differ in how they cope with missed opportunities and bad decisions. Some people dwell on missed opportunities, feel bad about them for a long time and do not seem to be able to leave the past behind. Others get over those failures relatively quickly and focus on how to improve the here and now instead. Two experiments show that this individual difference determines whether people are influenced by missed opportunities when they decide on taking up on an offer, and that this effect is explained by the difference in using missed opportunities to estimate the value of current opportunities.

*13. When goal pursuit is unpleasant and depleting yet pleasant and replenishing*

Choi, Jinhee (University of Chicago GSB); Fishbach, Ayelet (University of Chicago GSB)

We propose that the same goal-related action will be experienced differently, depending on whether the individual construes it as a means to another end or as an end in itself. When an action is construed as a means to another end, it is subjectively unpleasant and depleting. Conversely, when it is construed as an end in itself, it is subjectively pleasant and replenishing. Three studies demonstrate these effects in various activities including puzzle solving and exercising. We further find evidence for greater motivation to continue the activity when it is construed as an end versus a means.

*14. How to Approach a Decision to Avoid a Crippled Finish*

McNeill, Ilona M. (University of Amsterdam); Nijstad, Bernard A. (University of Amsterdam); Handgraaf, Michel J. J. (University of Amsterdam); De Dreu, Carsten, K. W. (University of Amsterdam)

Previous research has shown that different motivations to start deciding lead to different decision processes and outcomes. The focus, however, has solely been on approach-motivators, ignoring avoidance motivators. In two studies we examined the approach-avoidance distinction in motivation to start deciding. Having a (stronger) approach motivation to start deciding increased decision vigilance and having a (stronger) avoidance motivation to start deciding decreased vigilance. These effects were mediated by process motivation (i.e. the motivation to stay and exert effort in the decision process) and could not be explained by extra effort incentives, differences in affective state, or reactance.

*15. Relative Measures of Trait Affectivity*

Rose, Jason P. (University of Iowa); Krizan, Zlatan (Iowa State University)

This study investigated relative measures of trait affectivity. On average, participants reported being higher than their peers on general positive affect (PA), but lower on negative affect (NA). Furthermore, there was some evidence of miscalibration when comparing predicted percentile rank to actual rank (derived from self ratings on the PANAS). Most notably, high NA participants vastly underestimated their high standing. Such miscalibration and “better-than-average” effects can be explained by motivational and/or non-motivational accounts. Finally, relative measures generally had more predictive utility for other variables (e.g., life satisfaction) than traditional self ratings, perhaps because such “absolute” measures are ambiguous and noisy.

*16. “Defocusing” Affective Forecasts – Shifting the Focus from Happiness*

Walsh, Emma (City University); Ayton, Peter (City University)

When predicting the impact of life events on happiness respondents are purportedly biased by the focusing illusion, i.e. people focus on the impact of the target event neglecting other events (Wilson, Wheatley, Meyers, Gilbert, & Axson, 2000). However, perhaps focusing respondents on a single feeling, neglecting other feelings, intensifies this illusion. When participants predicted the impact on happiness of living with Multiple Sclerosis, judgments were less extreme when made after judging the impact on several other feelings. Allowing people to express a range of other feelings influenced by the target event reduces the extremeness of their affective forecasts.

*17. Automatic Optimism: The Affective Basis of Judgments about the Likelihood of Future Events*

Lench, Heather C. (Texas A& M University)

People generally judge that the future will be consistent with desires, but the reason for this bias is unclear. This investigation examined whether affective reactions associated with future events influenced judgments about the likelihood of those events and the mechanism through which this occurs. Affective reactions were elicited in response to initially neutral events. Events that elicited positive affective reactions were judged as more likely to occur than when the events elicited negative reactions. Affective reactions also influenced risk judgments, support for risk-reducing policies, and protective behaviors. These findings demonstrate that affective reactions cause bias in judgments and influence behavior.

*18. Valuation In Restricted Processing Times: An Exploration of the Endowment Effect*

Ashby, Nathaniel J. S. (University of Oregon); Dickert, Stephan (Max Planck Institute for Research on Collective Goods)

The endowment effect has been characterized as a robust violation of normative economic decision models. Recent research suggests that differences in affective information processing contribute to the disparity between buyer and seller valuations. Using consumer goods and lottery tickets, we investigate this possibility with a repeated-measure WTA/WTP paradigm in which the propensity for affective processing is manipulated through time pressure. Affective and deliberative decision models make different predictions regarding the effect of time pressure. We test whether shorter processing times increase or decrease affective evaluations, and address the underlying mechanisms for the generation of affective processes in the endowment effect.

*19. Identical Cousins? Differentiating Depression and Sadness*

Ling, Kimberly (Carnegie Mellon University Tepper School of Business); Moore, Don (Carnegie Mellon University Tepper School of Business)

Past literature treats depression and sadness as interchangeable concepts— notably Alloy and Abramson's (1979) seminal paper examining depressed individuals but titled "Sadder but Wiser?" When drawing from the clinical literature to the more general study of emotion, is this parallel valid? Our research compares depressed and sad individuals' judgments of performance. Participants estimated the likelihood of making dean's list or receiving academic probation for themselves and others. Depressed individuals evaluated everyone's performance consistently for positive outcomes. Sad individuals evaluated negative outcomes under situational control more consistently. Overall, depressed and sad individuals make rational and consistent judgments but under different conditions.

*20. The roles of impulsivity, sexual disinhibition, and sexual arousal on heat-of-the-moment decision making.*

Macapagal, Kathryn R. (Indiana University & The Kinsey Institute); Fridberg, Daniel J. (Indiana University); Janssen, Erick (The Kinsey Institute); Finn, Peter R. (Indiana University); Heiman, Julia R. (The Kinsey Institute)

Previous research has demonstrated that impulsivity, sexual disinhibition, and sexual arousability are associated with a propensity for sexual risk-taking. However, the actual role of these traits in the sexual decision making process is unclear. Therefore, the present study tested whether these traits and sexual arousal were predictive of poor performance on a go/no-go task. Prior to engaging in the decision making task, sexual arousal was induced by a brief erotic video. In the control condition, a neutral state was maintained by a brief nonsexual video. The findings have implications for understanding sexual decision making in the heat of the moment.

*21. Examining unintended consequences of risk communications that evoke fear— a Bi-national study*

Bruine de Bruin, Wandi (Carnegie Mellon University); Fischhoff, Baruch (Carnegie Mellon University); Downs, Julie S. (Carnegie Mellon University); Florig, H. Keith (Carnegie Mellon University); Stone, Eric R. (Wake Forest University); Mandel, David R. (De

Effective risk communications are crucial to disaster preparedness. We hypothesized that scientifically sound risk communications (about avian flu and dirty bombs) may unintentionally evoke fear, potentially limiting their effectiveness. Drawing on appraisal-tendency theory (Lerner & Keltner, 2000), we predicted that trait fear and communication-induced state fear would undermine cognitive responses to risk communications (Fischhoff et al., 2006), including judgments of risk, resilience, comprehension, self-efficacy, trust, sufficiency of supplies, and compliance intentions. Because disasters cross national boundaries, we report results for American and Canadian community samples. We discuss implications for developing effective risk communications.

*22. Self-Efficacy: An Important Component in Decision Making under Time Pressure*

DeDonno, Michael A (Case Western Reserve University); Demaree, Heath A (Case Western Reserve University)

Purpose of present study was to determine if time pressure or an individual's degree of self-efficacy relating to time affects performance on a decision-making task called the Iowa Gambling Task. Results: (1) Participants advised time was typically insufficient to complete the task performed worse than those advised time was typically sufficient to complete the task. (2) Participants who actually had less time to complete the task did not under-perform those given adequate time to complete the task. In sum, present research found that on a decision-making task, perception of time pressure had greater deleterious effects than actual time pressure.

*23. The Role of Attentional Mechanisms in Affective Information Processing Underlying Donations*

Dickert, Stephan (Max Planck Institute for Collective Goods); Slovic, Paul (Decision Research & University of Oregon)

Emotional reactions towards victims in need often influence people's decisions to donate money towards relief efforts (e.g., Slovic, 2007). We investigated the role that attention towards victims plays in the generation of sympathy, a critical determinant for prosocial behaviour (Kogut & Ritov, 2005). In two experiments, participants rated their sympathy response either in the presence or absence of other victims and made their judgments either online or based on memory. Results show that victims elicit stronger emotional reactions when presented by themselves and participants make online judgments. This suggests that affective processing is dependent on the degree of attentional focus.

*24. Immorality from Guilt in Ethical Decision Making: overdo and overcorrection*

Wang, Long (Northwestern University)

This study investigates how guilt may lead to violation of morality and justice. As one of the most important moral emotions (Hollman, 1998; Eisenberg, 2000), guilt is typically a specific regret over wrongdoing (Eisenberg, 2000). Thus, guilt is positively related to moral behavior and moral character (Hoffman, 1998; Walker & Pitts, 1998). However, we demonstrate in this research that guilt can also be driven by egoism: when individuals' prior wrongdoings or mistakes create feelings of guilt in moral conflict situations, they are very likely to make reparations and even punish themselves. These reactions, paradoxically, may reduce fairness and justice.

*25. Are Failed Actions or Inactions Regretted More? The Critical Moderating Role of Perceived Opportunity*  
Karadogan, Figen (Ohio University); Markman, Keith D. (Ohio University)

This work examined whether the experience of regret stemming from a decision to switch from versus stick with an initial choice in the Monty Hall paradigm is moderated by perceived opportunity to improve upon the negative outcome in the future. Although participants reported more regret stemming from failed actions when they believed they had no opportunity to improve upon the outcome, they reported more regret from failed inactions when they believed that they did have an opportunity to improve upon the outcome.

*26. Risk perception and Affect: statistical formats and different interpretations*

D'Addario, Marco (University of Milano-Bicocca); Manfroi, Alessandra (University of Milano-Bicocca); Sala, Valentina (University of Milano-Bicocca); Passerini, Gabriella (University of Milano-Bicocca); Bagassi, Maria (University of Milano-Bicocca); Macchi

Results of past research suggested that affect has a strong influence on risk perception. Some recent studies (Yamagishi, 1997; Slovic et al., 2000, 2004) showed that the statistical format used to describe a potentially dangerous situation plays a crucial role in the perception of risk: they found a higher risk perception under frequency representations than under probability representations. Through a critical analysis on these studies, we found some alternative interpretations of these results, showing that the differences in risk evaluations, seemingly depending on the statistical format adopted, disappear when a pragmatic revision of the texts used in these studies was made.

*27. Proof and Doubt in Reasonable Doubt Instructions*

Dhami, Mandeep (University of Cambridge); Katrin Mueller-Johnson (University of Cambridge); Samantha Lundgran (University of Cambridge)

Reasonable doubt is the standard of proof used to reach verdicts in criminal trials. Evidence shows considerable variability in peoples' interpretations of this standard, and courts have thus developed judicial instructions defining reasonable doubt for jurors. However, such instructions may themselves be problematic. We study the effects of two instructions used in the US (i.e., proof making you willing to find the defendant guilty; and doubt making you hesitate to find the defendant guilty) on mock jurors' (members of the public) interpretations of reasonable doubt and their feelings associated with reaching a verdict.

*28. Sad and sensitive: The effects of sadness on advice seeking and taking*

Ling, Kimberly (Carnegie Mellon University Tepper School of Business); Gino, Francesca (University of North Carolina)

Prior research shows individuals in a sad state experience higher uncertainty and increased levels of information processing. We investigate this in the context of advice, where sad individuals are given the chance to seek and use the advice of others in a weight estimation task. We find that sad individuals seek advice but are less adept when integrating advice (study 1). However when presented with advice that included non-diagnostic data (outliers), sad individuals are less susceptible to using them (study 2). Individuals in a sad state may be willing to seek advice but are also sensitive to the quality of the information available.

*29. The Role of Accuracy and Focus on Majority and Minority Influences in Simulated Financial Market*

Andersson, Maria (University of Gothenburg, Department of Psychology); Hedesström, Martin (University of Gothenburg, Department of Psychology); Gärling, Tommy (University of Gothenburg, Department of Psychology)

In a simulated financial market setting we investigate the degree to which participants in judgment tasks were influenced by other (fictitious) participants' judgments. Two experiments examine the influence from random vs. accurate majorities (Experiment 1), random vs. accurate minorities (Experiment 2), and whether the influence was affected by instructing participants to focus on the accuracy in performance (Experiments 1 and 2). Results show that participants followed majorities irrespectively of their level of accuracy, whereas accurate minorities were more influential than random minorities. The focus instruction decreased majority influence, regardless of accuracy, but increased the influence from accurate minorities.

*30. Examining the Relationship Between Loss Aversion and Time Discounting*

Barkley-Levenson, Emily E. (UCLA Department of Psychology); Pottenger, Kai P. (UCLA Program in Neuroscience); Fox, Craig R. (UCLA Anderson School of Management & Dept of Psychology)

Recent neuroimaging studies have implicated the midbrain dopamine system in both loss aversion and time discounting, but no research has demonstrated a behavioral correlation between the two tasks. In this study, participants completed Tom et al.'s (2007) task for measuring loss aversion, as well as a delay discounting task. It was observed that more loss-averse individuals discount less and show more subadditive discounting. Additionally, the more sensitive to losses the participants were, the more patient they were; the more sensitive to gains, the more impatient they were. Possible common mechanisms of these tasks involving the dopaminergic system are discussed.

*31. Pricing Procedural Fairness*

Dittrich, Dennis (University of Erfurt ); Tontrup, Stephan (Max Planck Institute for research in Collective Goods)

While distributional fairness has been in the prime focus of experimental economics literature with prominent games designed like the dictator or the ultimatum game procedural fairness received scant attention so far. Motivated by legal reforms that aim to reduce costs in public administrations by reducing the citizens' rights to participate, we manipulate different institutional factors to gain insight into the sensitivity of procedural fairness norms. A replication of the experiments in China revealed that while it is sometimes claimed that basic elements of fairness should find universal acceptance, our studies suggest that procedural fairness highly depends on culture.

*32. The Influence of Choice Bracketing and Goals on The Intertemporal Substitution of Labor*

Weinhardt, Justin M. (Ohio University); Vancouver, Jeff B. (Ohio University); González Vallejo, Claudia (Ohio University); Harman, Jason L. (Ohio University)

How individuals frame decisions is an important topic in the decision-making literature studied by both psychologists and economists. Choice bracketing is the dominant theoretical framework investigating how individuals frame decisions. The work on choice bracketing has largely been theoretical and has been unexplored in a performance context. This study seeks to investigate the influence of choice bracketing, goals and procrastination on motivation and performance in a performance setting where individuals have the opportunity to intertemporally substitute labor. Results indicate that individuals that choice bracketing is important, but results are unclear as to which bracketing strategy (narrow or broad) is optimal.

*33. What motivates the Trust Game participant?*

Kausel, Edgar (University of Arizona); Connolly, Terry (University of Arizona); Kugler, Tamar (University of Arizona)

In Trust Games A is given some money and can send any part of it to B. The amount sent is tripled. B may return any amount she wishes. Contrary to rational predictions both players typically make substantial transfers. Various motivations have been suggested. In one experiment we primed senders with thoughts of regret from either over- and under-trusting. Both reduced amount sent. A second experiment suggested that this was the result of the regret manipulations priming consequential thinking. The game thus appears to reflect only generalized trustingness, not complex estimations of B's trustworthiness, equity, or altruism.

*34. Giving Costly Advice*

Choshen-Hillel, Shoham (Hebrew University of Jerusalem, Jerusalem, Israel); Yaniv, Ilan (Hebrew University of Jerusalem, Jerusalem, Israel)

Altruistic punishment is the phenomenon that people punish others for non-normative behavior, even at a cost to themselves. We suggest that advice-giving, like altruistic punishment, leads to cooperation and efficient social outcomes. Therefore, people would be willing to give helpful information to others, even at a cost to themselves. Our experiments investigated participants' willingness to pass useful information they had learned in a game to an anonymous participant, thus forfeiting an opportunity to win a lottery. The results demonstrated people's tendency to give costly advice. The rate of advice-giving increased with its effectiveness and the priming of advice-giving norms.

*35. How to restore injustice? A study on altruistic punishment vs. altruistic compensation.*

Leliveld, Marijke C. (Leiden University); Van Dijk, E. (Leiden University); Van Beest, I. (Leiden University)

Although our justice system provides two main types of reactions when justice is violated (i.e. punishment or compensation), research mainly focused on punishment. We developed the altruistic compensation game, in which observers of unjust situations can costly compensate the person suffering from injustice. We compared this behavior with altruistic punishment behavior (Fehr & Fischbacher, 2004). We show that people were willing to altruistically compensate the victim, even when they could also punish the perpetrator. Moreover, this was moderated by empathic concern. Participants high on empathic concern decided to compensate, whereas participants low on empathic concern decided to punish.

*36. Experimental Study on Time Discounting and Risk Preference under Timing Risks*

Komuro, Takumi (Hokkaido University); Kwaguchi, Tomonori (Hokkaido University); Kameda, Tatsuya (Hokkaido University)

In everyday life, we often face the timing risks in which the realization time of future payoff is uncertain. Onay and Onculer (2007) showed that participants' risk preferences under timing risk are aversive which is inconsistent with the prediction by the Discounted Expected Utility (DEU) Model. We hypothesized that preference under timing risk may be related to time discounting. We thus measured subjects' discount rate as well as their risk preference. Our results showed that participants are generally risk-prone, which is consistent with DEU model, and as expected, low discounters tend to be risk-prone.

*37. When is paying for something better than getting it free?*

Colby, Helen (Rutgers University); Chapman, Gretchen (Rutgers University)

135 college students read a scenario about buying soccer tickets. We manipulated whether the character in the scenario had saved money to get the tickets or simply had enough money and whether the character received the tickets at a discounted price or for free. Participants' ratings of how happy they were with the outcome showed an interaction ( $F(2, 132) = 5.42, p = .02$ ) such that when the character had not saved up, participants were more satisfied when the tickets were obtained for free, but when the character had saved up, participants were more satisfied when the tickets were obtained at a discounted price.

*38. The Surprising Influencers: How the Inferred Attributes of the Observed Shape the Buying Intentions of the Observer*  
Shalev, Edith (NYU Stern); Morwitz, Vicki (NYU Stern)

The paper examines how surprising attributes of an observed consumer influence the self perception and purchase intentions of the observer. We hypothesize that when a person we look down upon owns a product we don't have and that when her product ownership suggests she has outperformed us on a desired attribute, our self esteem is threatened. In response to this threat we are more likely to purchase the target product. The effect and suggested process is demonstrated for three products (MP3 player, apparel and organic food). The effect is seen only when the observer considers the product-related attribute as important.

*39. The effects of instability of stocks markets in the decision making of individual investors.*

Pascual-Ezama, David (Universidad Complutense de Madrid); Scandroglio, Barbara (Universidad Autonoma de Madrid); Gil-Gomez de Liaño, Beatriz (Universidad Autonoma de Madrid)

We have selected the Theory of Planned Behaviour (TPB) in order to explain the behavior of individual investors in the stocks exchange. The results show that TPB predicts intention (58%) and behaviour (42%). However, although the model does not take into account the decision making process, the results seem to show that the final conduct is mediated by the decision making. That decision for investing may be conditioned by the stability of stocks markets, as shown in results of present work. Moreover, past behavior seems to affect the decision making only in times of stability.

*40. Motivations to Join Informal Finance Group: The Case of "ARISAN" in Rural Java*

Takashino, Nina (Center for Experimental Research in Social Sciences, Hokkaido)

This study shows why rural Javanese villagers join the informal finance group, called "arisan" in Indonesian. The arisan is formed by a group of individuals who agree to regularly contribute money to a common fund that is allocated to one member who wins a lottery. Additionally, arisan involves loan activities using accumulated savings. Collected data shows that there are two main motivations for villagers to participate in arisan groups: to get small loans and to maintain good contact with other participants. Using experimental game, this study shows that the arisan system raises cooperation among villagers.

*41. Investment Decision-Making and Hindsight Bias*

Monti, Marco (Max Planck Institute for Human Development, Berlin); Legrenzi, Paolo (IUAV University, Venice)

We investigated the relationships between investment decision making and hindsight bias. Economic studies consider the agent's foresight perspective only, without taking into account the hindsight bias possible effects in the decision-making process. We studied the subject's overall perceived error by focusing on the causal relations between the estimate and memory errors and by analysing his confidence in estimates and memories, therefore, his meta cognitions. We found strong evidence for the consequences that hindsight bias can have on the investor's portfolio decisions: the portfolio allocation perception and therefore, the risk exposure.

*42. An Investigation of Individual Differences in Expected Utility Violations From the Dual Process Perspective*

Mukherjee, Kanchan (INSEAD)

Can thinking styles influence rational choice behavior? Investigating five types of expected utility (EU) violations yield the following results: (a) EU violations are independent of rational thinking but reduce on priming it; (b) experiential thinking correlates positively with overweighting of small probabilities and negatively with ambiguity aversion and priming it improves EU performance; (c) greater deliberation does not lead to lower violations; and (d) men are more rationally oriented while women are more experientially oriented, women violate EU more than men, and both show maximum improvement when primed on their dominant thinking orientations. A model accommodating the findings is proposed.

*43. Less is Worse Than None, But Less Chance is Better Than No Chance -- A Stochastic Ultimatum Game Study*

Gong, Min (University of Pennsylvania); Baron, Jonathan (University of Pennsylvania); Kunreuther, Howard (University of Pennsylvania)

We describe a stochastic ultimatum game to study decision making under uncertainty. Instead of splitting 100 beans (\$5), in the stochastic version two players split their chances of winning all 100 beans. We hypothesize that compared to a deterministic game: (H1) responders in a stochastic game are less likely to reject low offers; and (H2) proposers make lower offers. Data from 110 subjects support H1: the accepted offers in the stochastic game (35%) are significantly lower than those in the deterministic game (42%). Our initial study yielded no evidence for H2, but we expect to carry out additional studies.

*44. The Relationships among Weather, Mood and the Expectation of Stock Returns in China*

Shaojun, Xu (xushaojun@zju.edu.cn); Nenggan, Zheng (suyanxu\_2007@hotmail.com); Xuejun, Jin (cec\_jxj@zju.edu.cn)

This study explores the relationships among weather, mood and the expectation of stock returns from the point of risk attitude, which is evaluated by questionnaires to 481 students in China. After controlling framing effect, we find risk attitude can't mediate relationship between mood and expectation, while mood can directly mediate relationship between weather and expectation significantly. Further, with respect to short expectation, good (bad) weather is apt to cause positive (negative) mood which will then cause optimistic (pessimistic) expectation. While with respect to long expectation, positive mood doesn't show such effect. All these results take the doubt to the EMH.

*45. Individual and Social Decision Making in Finance: The Role of Heuristics and Advice-Taking Strategy*

Monti, Marco (Max Planck Institute for Human Development); Gigerenzer, Gerd (Max Planck Institute for Human Development); Berg, Nathan (University of Texas-Dallas)

This paper investigates how investors make financial decisions; we focused on individual and social decision-making processes in finance by considering the interplay between investors and financial advisors. We examined this relationship in the light of the Ecological Rationality concept (Gigerenzer et al., 1999). Information search strategies, categorization processes and decisions outcomes have been investigated and analyzed through an extended empirical survey. Preliminary findings recognized the impact of decision strategies that are really close to and mimic fast and frugal heuristics in their process. We developed and tested two competing models to evaluate the concept of ecological rationality within the investor-financial advisor interaction.

*46. Effects of Framing and Threat on Cheating in Economic Games*

Atanasov, Pavel (University of Pennsylvania); Dana, Jason (University of Pennsylvania)

Subjects were matched into pairs took a short multiple-choice test. Their relative scores determined the payoffs. Subjects could report either their own or their counterparts' scores (framing). One or both players in a pair could misreport scores (threat). Reporting the other player's score increased the probability of true reporting, while the full misreporting rate increased in the high threat condition. Compared to all other groups, significantly lower cheating ratio was observed in the condition where one participant per pair reports the score of her counterpart. Therefore, framing only influenced cheating in the absence of threat.

*47. Comparison Process at Retrieval (CPR): A memory theoretic account of relative judgment.*

Fan, Jeni (University of Oklahoma); Thomas, Rick P. (University of Oklahoma)

The present studies examine contextual effects on judgment within a memory framework. CPR can be contrasted with Prospect Theory which suggests valuation is based on psychophysical functions from an expected outcome (i.e., the reference point). In contrast, CPR postulates that valuation operates via a capacity-limited comparison set that consist of the target and task-relevant alternatives retrieved from memory. Thus, we posit that target assessment is a function of the context in which it is embedded as well as memory processes (e.g., encoding and retrieval variables). Empirical evidence, CPR simulations, as well as implications and future directions will be presented.

*48. How the other person's characteristics influence prosocial and proself proposers in the ultimatum and dictator games*

Hardman, David (London Metropolitan University)

In a series of ultimatum and dictator games prosocial proposers were, as predicted, more generous towards players described as honest or helpful than towards those described as intelligent. Both prosocials and proselfs were more generous towards those with positive personality types, indicating that proselfs are not totally insensitive to the nature of the other player. Both types were also more generous in the ultimatum game than the dictator game, indicating that prosocials are not completely immune from selfish temptations. Proselfs also appeared to offer less to intelligent people than they actually believed would be acceptable to those people.

*49. How much for your honesty? The role of values and incentives in determining honest behavior*

Tanner, Carmen (Department of Psychology, University of Zurich); Gibson, Rajna (Swiss Banking Institute, University of Zurich); Wagner, Alexander (Swiss Banking Institute, University of Zurich); Berkowitsch, Nicolas (Department of Psychology, University of Zurich)

Economic theories assume that people are opportunists and behave honestly when it is in their self-interest to be so. Conversely, the approach of sacred/protected values maintains that people feel committed to honesty and keep telling the truth even though they may forego gains. We examined the influences of values and incentives on honesty, the focus being on behaviors of managers and investors. Experiment 1 revealed that non-opportunistic CEOs were far less sensitive to costs of telling the truth than opportunistic CEOs. In Experiment 2, investors were more likely to invest into CEOs who were perceived to be committed to honesty.

*50. Generalized expectations and situational risk in the trust game*

Evans, Anthony M. (Brown University); Krueger, Joachim I. (Brown University)



Interpersonal trust depends upon the willingness to accept risks and expectations of how others will act. In the present study, Trust Game (TG) parameters were systematically manipulated to observe how individuals weigh the environmental aspects of trust. Decision making data from the Web were analyzed; participants played a series of one-shot games with randomized payoffs. Rates of trust were associated with cost of betrayal, but were only weakly related to the benefits of reciprocity. Trust was associated with expectation of how others would act; however, expectations were independent of the other player's incentives.

*51. How much do we care for others living in distant places and times?*

Kishimoto, Atsuo (AIST, Japan); Tsuge, Takahiro (Konan University); Takeuchi, Kenji (Kobe University)

Our concerns for people living in distant places and distant futures are key factors in achieving sustainable development. To elicit public preferences, we conducted internet surveys using choice experiment formats and estimated the depletion functions of our concerns for others. The evaluated attributes include country, the number of people saved from poverty, time of realizing effects, and amounts of donations. Respondents were asked to rate their familiarity with these countries in 100-point scale as a proxy for social distance. We estimated the discount rates for both time and social distance, and the exchange rate between them.

*52. Deciding Under the Influence: the Impact of Intoxication on Ultimatum Game Behavior*

Krishnamurti, Tamar (Carnegie Mellon University); Carey Morewedge (Carnegie Mellon University); Dan Ariely (Duke University)

Bar goers (N = 268) played 10 rounds of a modified ultimatum game after breath alcohol level was recorded. Intoxication was positively related to rejecting low offers. Consequently, greater intoxication led to lower total earnings. Intoxication was not negatively related to offers made by proposers, implying that intoxication did not increase selfishness. Interestingly, intoxicated participants' second offer was related to the size of the first offer they made as proposer but not the initial offer they received as responder. Results suggest intoxication leads to a myopic focus on pre-existing ideas of acceptable behavior, preventing consideration of motives of other agents.

*53. Economics and Greed*

Murnighan, J. Keith (Northwestern University); Wang, Long (Northwestern University)

Because economic models draw - at best - a fine line between self-interest and greed, we predict that studying economics will lead people to have more positive views of greed and, as a result, might make them more likely to engage in greedy action. Thus, our investigation assesses whether increasing study, i.e., more economics courses, lead people to view greed as being potentially positive and beneficial and see their own greedy actions as more favorable than others might see them. The results of our lab survey support this prediction: studying economics significantly increased people's positive opinions and feelings about greed.

*54. Peak Impact: Financial risk perception and the peak of the return distribution*

Summers, Barbara (Leeds University Business School); Duxbury, Darren (Leeds University Business School)

This paper investigates financial risk perception, evaluating a proposed heuristic based on the influence of the peak of the return distribution. Results from previous research suggest that risk perception may be driven by an evaluation of the value and probability of the most likely outcome or peak, although prior studies cannot isolate movements of the peak from other distributional characteristics. We manipulate variance and skew experimentally to operationalize movement of the peak of the distribution vertically and horizontally, respectively. Our results provide strong support for the peak heuristic conjecture, with evaluations being in line with range-frequency theory.

*55. When Equality Trumps Reciprocity: Evidence from a Laboratory Experiment*

Xiao, Erte (Carnegie Mellon University); Bicchieri, Cristina (University of Pennsylvania)

Inequity aversion and reciprocity have been identified as two primary motivations underlying human decision making. However, because wealth inequality exists to some degree in all societies, these two motivations can point to different decisions. When a beneficiary is less wealthy than a benefactor, a reciprocal action can lead to greater inequality. We report data from a trust game variant where trustees' responses to kind intentions generate inequality in favor of investors. In relation to a standard trust game, the proportion of non-reciprocal decisions is twice as large when reciprocity promotes inequality. We found strong evidence for inequality aversion.

*56. Nudging Cooperation in a Public Goods Game: When Self-Control Matters*

Myrseth, Kristian Ove Richter (University of Chicago GSB); Conny Wollbrant (University of Gothenburg); Peter Martinsson (University of Gothenburg)

We conceptualize a public goods game as a self-control dilemma, wherein individuals experience conflict between a higher order goal of cooperation by unconditional giving and a lower order temptation of not giving. Priming individuals to view choice opportunities as isolated or interrelated, we nudge participants to experience the game as a self-control dilemma or not. We find that individuals'

chronic self-control is a significant predictor of giving to the extent that participants experience choice conflict, which is successfully manipulated by our framing technique. Our results highlight the importance of a self-control model that distinguishes between conflict identification and choice resolution.

*57. Perceived Closeness to One's Future Self and Intertemporal Allocation Decisions*

Milch, Kerry F. (Columbia University); Weber, Elke U. (Columbia University); Higgins, E. Tory (Columbia University)

We manipulated social distance to future selves and examined its effect on allocation of pleasant experiences (vacation days) and negative experiences (dentist visits) between now and later. Respondents who wrote about similarities between the way they currently are and their future selves (three years from now) felt closer to their future selves than did people who wrote about differences. People in the difference condition reported liking their future selves more than those in the similarity condition, suggesting expectations of improvement. Closeness predicted allocating fewer negative experiences to the future self; liking predicted allocating more positive experiences to the current self.

*58. Choice in the eye of the beholder: Modeling intention with attention*

Raab, Markus (German Sport University, Institute of Psychology); Johnson, Joseph G. (Miami University, Oxford, OH, Department of Psychology)

Whereas process data are typically used to provide converging evidence for theoretical models, we instead use process data as an input to predict subsequent decision behavior. Participants were trained athletes who made a ball allocation decision following a video clip of a developing sports situation. Eye-tracking data as a proxy for visual attention informed a simple model relating gaze region to the location of the selected option. This parameter-free evidence accumulation model outperformed a baseline model in both fitting and cross-validation. These results support the strong link between perception and decision-making, without necessarily detailing mental representations, utilities, or computations.

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*60. Identifying the cause of distal events*

Young, Michael E. (Southern Illinois University at Carbondale); Nguyen, Nam (Southern Illinois University at Carbondale)

My laboratory has adapted a video game environment for the study of causal decisions: Which potential target is the true cause of distal explosions in the environment? I will share our latest results documenting the effects of delay, filling a delay with auditory events, delay variability, and outcome likelihood on the accuracy and speed of these decisions. Participants' accuracy was strongly affected by delays, these effects were partially alleviated by filling the delays with auditory events or varying the delays, and outcome likelihood produced no change in accuracy - participants simply took longer to make their decisions.

*61. Size Matters: Set Size and Accessibility Effects in Consideration Sets*

Sinha, Jayati (University of Iowa); Nayakankuppam, Dhananjay (University of Iowa); Priester, Joseph R. (University of Southern California)

This paper hypothesizes and finds support for the notion that attitude strength guides consideration set inclusion and choice, in part, by influencing consideration set size. Strongly liked alternatives are more likely to be associated with smaller consideration sets than weakly liked alternatives. The first study re-analyzes the results of two previously published studies that investigated the influence of attitude strength on consideration and choice. In the second experiment, participants are exposed to an ad under high or low elaboration likelihood conditions (HiE or LoE). The participants in the HiE report smaller consideration set sizes than those in the LoE.

*62. Choosing how many options to choose from: Is there such a thing as a desired-set-size?*

Hafenbraedl, Sebastian (HEC Lausanne); Hoffrage, Ulrich (HEC Lausanne)

In research on the size of the choice set, this variable is usually manipulated by the experimenter. In real purchase environments, however, it is often under consumer's control. Do people think about their desired-set-size (DSS) before choosing, do they deliberately determine it and, on what does their DSS depend? For eight different domains (e.g. chocolate, furniture, camera)

participants answered various questions about characteristics of purchase situations, DSS and costs and benefits associated with their choice. We found differences between the domains, and correlations between DSS and cost/benefit measures. Our findings can be explained with Reutskaja and Hogarth's (2005) cost/benefit model.

*63. Making Repeated Choices: A Dual-Step Process*

Luan, Shenghua (Singapore Management University); Yu, Shuli (Singapore Management University)

Participants were asked to make choices twice, one week apart. In the second session, the scenarios of those choice problems remained the same; but for some, either a new option was added in or an attribute in the previously selected option had changed. Results show that participants adopted a dual-step strategy in this task: They would try to locate their previous choice first, and then decide whether to continue evaluating other options or simply stop there. This strategy strikes a good balance between the goals of efficiency and accuracy, and demonstrates the importance of initial choices in repeated choice tasks.

*64. MySimon Sez: Reducing Inaction Inertia via Online Shopping Agents*

Andrews, Demetra (University of Houston)

Inaction inertia research focuses on a type of sequential choice phenomenon in which a consumer is less willing to accept an attractive offer if a better opportunity has been foregone. Research on inaction inertia has typically sought to identify its drivers, but few studies have focused on mitigating this potentially problematic behavior. This research proposes that employment of an intelligent online shopping agent may reduce the likelihood of inaction inertia by shifting consumer focus from temporal to contextual contrasts. Findings from the initial study appear to support this hypothesis.

*65. Effective Cost Based Choice*

Zhang, Charles Y. Z. (University of Michigan); Schwarz, Norbert (University of Michigan)

We find in hypothetical choice scenarios that consumers order more food in restaurants associated with higher travel cost and prefer more expensive cars when the purchase of any car requires a high fixed license fee than when the fee is implicitly included in the car price. Treating total cost as the sum of fixed cost (associated with any purchase in the choice set) and effective cost (unique to the specific choice), consumers prefer the choice that yields a high effective/total cost ratio. Theoretical and managerial implications are discussed.

*66. Fear of Contamination Goal and Life-stage Specific Biases*

Huang, Julie Y. (Yale); Bargh, J.A. (Yale)

We demonstrate that priming the evolutionarily adaptive fear of contamination goal activates functional life-stage specific preferences wherein extremely young objects are increasingly valued and extremely old objects devalued. In Study 1, participants were primed with the fear of contamination goal or a control goal. Those who were primed with the fear of contamination goal evaluated an older female target as more likely to be associated with a negative comment, compared with younger targets or people primed with a control goal. Study 2 extended this same goal-activated effect to the evaluation of objects within a consumer context.

*67. Boundary conditions for selecting default values*

Crow, Janis J. (Ohio State University)

Seven boundary conditions explore when consumers will select default values. In two experiments, the absolute number of defaults selected and the effects on boundary conditions change with different experimental methods. When presenting defaults randomly participants select 32.9% of defaults whereas participants select 21.8% when these defaults are on neutrally preferred attributes. Additionally, product type affects what consumers choose and different boundary conditions emerge within products to influence how consumers choose. With random defaults, five boundary conditions emerge and three boundary conditions are present with defaults on neutral attributes. Despite these differences, four trends appear to explain default selection.

*68. Modeling the joint effects of description and experience on impression formation and decision making.*

Phillips, Nathaniel D. (Ohio University)

Decision-making has been viewed as falling under one of two forms: decisions from description, where decisions are based on a description of options, and decisions from experience, where decisions are made purely on the basis of experiences with the options. A dynamic dual-process model of experiential impression updating and description integration is proposed that describes situations where individuals have access to both descriptive and experiential information with which to update impressions and make decisions between competing options. Parameters in the model describe use of descriptive vs. experiential information, maximizing vs. stochastic choice, and primacy vs. recency effects.

*69. Dueling Aspects of the Self as Determinants of Support for War*

Finnel, Stephanie (University of Pennsylvania); Reed, Americus (University of Pennsylvania); Aquino, Karl (University of British Columbia); Thau, Stefan (London Business School)

When a national government wages a war in foreign lands, its people must decide whether to support the war. McAlister et al. (2006) found that moral disengagement (MD), operationalized as the propensity for an individual to agree that war is acceptable given certain extenuating circumstances, is positively related to pro-war stances. We show that moral (Aquino and Reed 2002) and American identities have opposite moderating effects on this relationship, with the relationship being stronger (weaker) when American (moral) identity is chronically or temporarily activated. This dueling identities hypothesis predicted evaluations of advertisements (study 1) and actual donation behavior (study 2).

*70. A Dynamic and Stochastic Choice Model for Risk Seeking Behavior*

Harman, Jason L. (Ohio University); González Vallejo, Claudia (Ohio University); Vancouver, Jeffrey B. (Ohio University); Weinhardt, Justin M. (Ohio University)

The Stochastic Difference Model (González-Vallejo, 2000) is instantiated as a dynamic decision model to account for repeated decisions with feedback in a goal seeking environment. Model simulations predict a reversal of the reflection effect depending on distance from a goal and accumulation rate of payoffs, with people becoming more risk seeking in the gain domain and more risk averse in the loss domain as they approach a desired goal. An initial empirical study confirms these predictions in the gain domain.

*71. Now or later? Query theory explains asymmetric discounting for both gains and losses*

Appelt, Kirstin C. (Columbia University); Weber, Elke U. (Columbia University)

Query theory explains greater discounting when people are asked to delay rather than accelerate positive outcomes (receipt of gift-certificates). Decision frame (delay vs. accelerate) influences the order in which internal queries for the two options are generated, affecting the balance of support, with fewer arguments being generated for later queries. The present study applied Query Theory to intertemporal decisions with negative outcomes (payment of parking fines). Whereas for gains, people are more impatient when delaying than accelerating consumption, for losses, participants were more impatient when accelerating rather than delaying payment. Query Theory also explains this pattern of results.

*72. Search in long-term semantic memory*

Hills, Thomas (University of Basel); Todd, Peter (Indiana University); Jones, Michael (Indiana University)

Developing process models of search in predictions from inference has proved challenging due to a lack of appropriate semantic representations. Category fluency tasks (e.g., "name all the animals you can in one minute") involve search for items in semantic knowledge and statistical co-occurrence models offer a way to generate structural semantic representations. We collected transition time data from 140 subjects who performed a fluency task on six categories, producing thousands of unique instances. We compare models of search in this semantic space, revealing the importance of search trajectory, clustering of semantic information, and dynamic transition from exploration to exploitation.

*73. Relative and Absolute Decisions in Eyewitness Identification, Similarity, and Preference*

Rush, Ryan (University of California, Riverside); Clark, Steven E (University of California, Riverside)

Three experiments examined absolute and relative decision rules in eyewitness identification (who committed the crime?), similarity-based choice (who is the fraternal twin?), and preference (which candy bar would you like?) tasks. All tasks allowed no-choice options. According to an absolute decision rule, people make choices when the best alternative has a high value, whereas according to a relative decision rule, people make choices when the difference between the best and the next-best alternative is large. Results showed a shift from relative to absolute decision rules, from eyewitness identification to the fraternal twin task to the preference choice task.

*74. Probative Value of Absolute and Relative Decision Rules*

Breneman, Jesse S. (University of California, Riverside); Clark, Steven E. (University of California, Riverside)

It is well-accepted that eyewitness identification errors arise, in part, as a result of witnesses making relative, rather than absolute, judgments. We instantiated four decision rules within the WITNESS model (Clark, 2003) to address a fundamental question: Are absolute judgments better than relative judgments? The four models were: One-Above criterion model, Best-Above criterion model, Relative Difference model, and an Additive model. Correct identification rates were plotted against false identification rates to produce ROC-like curves. The Best-Above Criterion model did better than the Relative Difference Model, but the Additive model (combining absolute and relative judgments) was the best under some conditions.

*75. Incorporating Complexities into the Explanation of Decision Making: Strategies and Simulations*

Decker, Nathaniel K. (University of South Florida); Schneider, Sandra L. (University of South Florida)

We hypothesize that real people use information that is more contextually diverse when making decisions than what is typically used in decision research. We presented college students with a series of forced-choice two-outcome lotteries, but included a variety of additional cues; some were lottery-driven, while others changed over time relative to one's overall progress (e.g., current wealth, available style of living). We compare the effectiveness of specific cues using simulated decision strategies embedded with actual participants' environments. Our results emphasize the importance of decision criteria that change over time in explaining decision behavior.

*76. Thinking About Uncertainty: Deliberation in the Uncertainty Effect*

Chiu, Andrew G. (University of Chicago GSB); White, Rebecca J. (University of Chicago GSB); Wu, George (University of Chicago GSB)

Gneezy, List, & Wu (2006) demonstrate the uncertainty effect, where a risky prospect is valued less than its worst possible outcome. We use decision aids that help participants think more consequentially about the outcomes of the risky prospect. In study 1, participants price two quantities of air travel certificates before pricing the risky prospect. In study 2, participants view the risky prospects in a decision tree format. In both studies, these decision aids eliminated the uncertainty effect. We suggest that the uncertainty effect results from intuitive processing, but is reduced or eliminated when deliberate processing is facilitated.

*77. Using an expert when using the expert is harmful*

Sutherland, Steven (SIU-Carbondale); young, Michael (SIU-Carbondale)

Research has shown many factors that influence when and how expert advice has been used by judges in different contexts. In the present study, the experimenters looked at two factors, cost and expert accuracy, that influence the decision to request and the utilization of expert advice by judges. Participants were asked to determine which brand of a non-identified product their company should endorse and were given the option of requesting expert advice. The results of this study suggest that judges will request expert advice despite the fact that the advice is harmful, based on expected value, in completing the task.

*78. Framing frames: An exploration of risk tolerance in broad and narrow choice brackets*

Moher, Ester (University of Waterloo); Koehler, Derek J. (University of Waterloo)

We examine how broad and narrow frames, in conjunction with cognitive load manipulations, influence risk tolerance in decision making. Previous research suggests that broad brackets increase risk tolerance through inclusive framing. Our evidence suggests that bracketing effects are dependent on both choice and outcome framing: without aggregated outcome information, a reversed bracketing effect is observed; however, once broadly bracketed outcomes are aggregated, the usual bracketing effect is observed. These results hold in both the domains of gains and losses, and suggest that a broad bracket encourages risk tolerance even when it is not the economically superior strategy.

*79. Correspondence Bias in Performance Evaluation and the Benefits of Having Been Graded Leniently*

Moore, Don A (Carnegie Mellon University); Swift, Samuel A (Carnegie Mellon University); Sharek, Zachariah S. (Carnegie Mellon University); Gino, Francesca (Carnegie Mellon University)

We hypothesize that the correspondence bias will lead university admissions decisions to favor students coming from institutions with lenient grading because those students will have their high grades mistaken for evidence of high ability. In three studies using both laboratory experiments and actual admissions decisions, we show that those who obtain high scores simply due to lenient grading or to an easy task are favored in selection. These results have implications for research on attribution, because they provide a more stringent test of the correspondence bias and allow for a more precise measure of its size.

*80. Recognition heuristic and knowledge based inference: Unified explanation with the familiarity for objects*

Honda, Hidehito (Tokyo Institute of Technology); Yamagishi, Kimihiko (Tokyo Institute of Technology); Abe, Keiga (Aoyama Gakuin University)

Previous studies have argued that one can use recognition heuristic in having partial knowledge (i.e., one can recognize one of two objects), and that one has to make inference based on his/her knowledge in having complete knowledge (i.e., one can recognize two objects). An experimental study on population inference suggests that psychological processes of recognition heuristic and knowledge based inference are very analogous and people follow the rule such that "if there is difference of familiarity between two objects, then infer that the more familiar object has higher value with respect to the criterion."

*81. Adaptive Decision Making Across the Lifespan: An Examination of Risky Decision Making From Ages 5 to 85*

Weller, Joshua (Decision Research); Levin, Irwin (U of Iowa); Denburg, Natalie (U of Iowa); Bossard, Elaine (U of Iowa)

Little is known about the developmental trajectory of adaptive decision making (i.e., sensitivity to long-term reinforcement contingencies) under uncertainty. We present data on the decision making abilities of six age groups (Ages 5-7, 8-11, 18-22, 30-40, 45-65, 65+) using a novel task that measures competence in dealing with risky gains and losses. Consistent with neural development

research concerning the ventromedial prefrontal cortex, the amygdala, and the anterior insula, we show that the ability to make adaptive decision is a skill that increases in childhood, peaks in adulthood (beyond the college years), and begins to decline in some older adults.

*82. A single-trial delay discounting measure, and its association with impulsivity, demographics and behavior*  
Reimers, Stian (University College London)

Given the context effects which have recently been found to bias participants' choices in standard delay discounting titration procedures, we examine the extent to which a one-shot – and hence context-free – binary delay discounting choice can have meaningful associations. In two Studies, one with 10k participants and one with 100k participants, we show that our binary choice measure bisects the population effectively, is associated with impulsivity, age, education, and income in ways that standard delay discounting measures are, and has some intuitively 'impulsive' behavioral correlates.

*83. Individual differences in the impact of anecdotal evidence on medical treatment choice*  
Hulsey, Lukas (Wichita State University); Shaffer, Victoria A. (Wichita State University)

Participants made a decision between two hypothetical treatment options which required a trade-off between effectiveness and invasiveness. They received statistics about the effectiveness of the two treatments, testimonials, or both. After indicating their choice, participants rated the importance of the effectiveness and invasiveness of the chosen treatment to their decision. Decision making styles were assessed. Changes in the relative importance of effectiveness and invasiveness are not the mechanism through which anecdotal evidence changes treatment choice. However, individual differences in decision making style and in ratings of the importance of invasiveness account for a significant amount of treatment choice variance.

*84. Comparing individual and group level parameters of choice models*  
Broomell, Stephen B. (University of Illinois); Budescu, David V. (University of Illinois)

Many individual decision models involve free parameters designed to model individual differences in choice behavior. Prospect Theory (PT) is a typical example: It allows DMs to have various curvatures for their probability weighting functions, different shapes of value functions, and various loss aversion coefficients. Yet, in many tests of the model researchers ignore individual differences and use the same values (typically mean, or median, parameters from previous studies) for all individuals. We report results of simulations designed to study the effect of ignoring individual parameters on model fitting and model comparisons.

*85. The Role of Response Inhibition in Action Selection During Risky Decision Making*  
Wershbale, Avishai (Michigan State University); Pleskac, Timothy J. (Michigan State University)

A critical component of risky decision making is the ability to inhibit an impulsive response and instead carry out a primary response. While cognitive scientists have a decent understanding of the cognitive properties of response inhibition, what is less understood is the role it plays when an actual risky decision is made. To examine its role we used two versions of a laboratory-based gambling task—the Balloon Analogue Risk Task—one with and one without response inhibition. Results reveal that during risky decision making, response inhibition plays an integral role in the process of carrying out the intended action.

*86. The value of waiting and receiving in intertemporal choice*  
Cokely, Edward T. (Max Planck Institute for Human Development); Stevens, Jeffery R. (Max Planck Institute for Human Development); Read, Daniel (Durham University); Frederick, Shane (Massachusetts Institute of Technology)

The value of a future outcome can be divided into the change in value due to having to wait for the outcome and the value the outcome will have when it is received. In this study we investigated the consequence of emphasizing each component independently by comparing intertemporal choices presented with either a “waiting” or “receiving” cue. The effects were striking, with the waiting cue yielding more impulsive choice than the receiving cue. Results suggest implications for the preferences-as-memory approach and extend a query theory account of intertemporal choice (Weber et al. 2007).

*87. Creation and Deployment of a Computer-Based Decision Making Experiment: Making it Easy & Inexpensive*  
Westfall, Jonathan E. (The University of Toledo)

Running an experiment utilizing a computer can be a grueling process that may deter many from attempting to collect data in this manner. However, ignoring this research collection opportunity may also cause the researcher to miss out on a less time- and manpower-intensive way to collect quality data from willing participants. With new technology available and discussed in the present work, researchers can create and run their own computer based experiments with only basic programming knowledge, on a budget substantially less than commercially available survey or experiment delivery systems. A demo program will be shown, with code available.

*88. Accountability and Willingness to Make Hard Calls*

Han, Seunghee (Carnegie Mellon University); Lerner, Jennifer S. (Harvard Kennedy School)

The present studies examine the effects of accountability to recipients on willingness to make “hard calls” in resource allocations decision. Hard calls are defined as decisions that are more value creating in the long run despite imposing costs upon identifiable parties in the short run. Results from the two studies found that whereas control participants were more likely to choose an uneven division, participants who were informed that they would need to justify their choice to allocation recipients were much more likely to choose the even division. Thus, accountability in this context reduced willingness to make hard calls.

*89. Actor-Observer Differences in Preference Inferences Based on Choices*

Steffel, Mary (Princeton University); Oppenheimer, Daniel M. (Princeton University)

When we observe someone make a choice, we often feel that we have learned something about their general preferences. We may also feel that our own choices provide us with insight into our own general preferences. However, what we feel we have learned may depend on our perspective. The present research manipulates choice difficulty and demonstrates that decision-makers infer more about their preferences from easy choices than difficult choices, but observers infer more about a decision-maker's preferences from difficult choices than easy choices. We propose a model that explains these opposite inferences in terms of a single cognitive strategy.

*90. Why do people take risks differently from leisure to work?: The role of regulatory focus and perspectives in the reflection effect*

Hur, Taekyun (Korea Univ); Ahn, Sowon (Korea Univ); Namkoong, Jae Eun (Korea Univ); Park, Yulwoo (Korea Univ)

People tend to avoid risk in gain domains but take risk in loss domains. The reflection effect was recently found qualified within leisure activities and reversed when people made decisions for fun: risk-taking in gain and risk-aversion in loss. The present study replicated the reversal of the reflection effect and examined the roles of regulatory focus (promotion vs. prevention) and decision perspectives (opportunity vs. threat). Participants scored higher on promotion-focused strategies and opportunity-perspectives in fun-related decisions than in conventional (money & life) decisions. These findings propose potential explanations for inconsistent findings of prospect theory.

*91. Dating under the influence: the role of cognitive vs. hedonic judgments in risky behavior*

Krishnamurti, Tamar (Carnegie Mellon University); Downs, Julie (Carnegie Mellon University)

Intoxication leads people to engage in riskier behaviors, with the leading explanation being that drunk people attend disproportionately to cues more salient than risk. However, little research has addressed the mechanism of this effect. We conducted a between-subjects study in which sober and intoxicated males viewed a short “online dating” video, varying the target's benefit and risk as a sexual partner. Intoxicated and sober participants assessed risks and benefits similarly and had similar scores on three tests of cognitive ability. Mediation analyses show that hedonic factors, rather than cognitive ones, may drive behavioral differences between intoxicated and sober individuals.

*92. March Madness... or Is It? Training Effects on Predictions and Confidence*

Cullen, Kristin L. (Auburn University); Lester, Houston F. (Auburn University); Franco-Watkins, Ana M. (Auburn University); Svyantek, Daniel J. (Auburn University)

In making predictions about sporting event outcomes, one often relies on available information to guide predictions. Past research has demonstrated a clear distinction between decisions made from experience and decisions made from description using gambling tasks (Hertwig, Barron, Webber, & Erev, 2004). However, little is known about whether the distinction extends to single outcome events (e.g., one game: win or loss). We examined whether prior basketball experience and training on last year's tournament games (using description versus experience) affected prediction and confidence in the 2008 NCAA Men's Basketball Tournament. Results revealed differences in prediction and confidence based on training.

*93. Prospect Theory describes, but does not explain, Decisions from Experience*

Ungemach, Christoph (University of Warwick); Stewart, Neil (University of Warwick)

The results of our parameter estimations suggest that the differences between decisions from experience and decisions from description are also reflected within the prospect theory framework. The space occupied by the best fitting parameter values for the two formats implies an inversion of the underlying weighting functions with underweighting of small probabilities in decision from experience. Furthermore, the estimations from the two-stage model show that this reversal cannot be eliminated by incorporating judgment error into the model. On the basis of these results the explanatory quality of the prospect theory model has to be questioned.

*94. Learning to win: An analysis of retrospective evaluations and dynamic behavior in a multi-armed bandit problem*

Yu, Erica C. (University College London); Lagnado, David A. (University College London); Chater, Nick (University College London)

Does reinforcement learning theory fully capture behavior in a multi-armed bandit task or are there characteristics of payout distributions that affect arm choices and retrospective judgments? This research studies how agents trade off exploration and exploitation and how payout distribution characteristics such as peak wins, variance and skew bias arm choices and judgments of arm value and total winnings. Experiments used computer-simulated slot machines with stationary processes (unknown but fixed probabilities). Initial results suggest mean and variance strongly influence retrospective evaluations but not dynamic arm choice. Analysis includes comparison to epsilon-greedy, softmax, peak-end and range-frequency accounts of optimal behavior.

*95. Moral Judgments and Cognitive Focus: A Mediation Model*

Drwecki, Brian (University of Wisconsin-Madison); Kortenkamp, Katherine (University of Wisconsin-Madison); Moore, Colleen (University of Wisconsin-Madison)

This study examined the effect of cognitive focus on moral decision making. We tested whether reading footbridge and trolley dilemmas primes either a moral rule or moral math focus by having participants respond to both lexical and mathematical decision tasks and examining reaction times. We found that performance on the lexical decision task mediated the effect of dilemma type on moral judgments. In follow-up experiments we examined the effect of individual differences in cognitive focus on moral judgments and we directly manipulated cognitive focus to further test the mediation model.

*96. The construction of "good gestalt" in decision making*

Ostermann, Tanja (Max Planck Institute for Research on Collective Goods)

Inconsistent with the common assumption of unidirectional reasoning from cues to options, it was recently shown that subjective cue-validities are changed during the process of decision making (Simon et al., 2004). The observed bidirectionality in reasoning is explained by automatic processes of consistency maximizing (Glöckner & Betsch, 2008). Two studies were conducted to research into the process of consistency maximizing. In the first experiment it was shown that the number and distribution of cues have an impact on the strength of this change. Furthermore, using a Solomon four-group design data suggest a treatment effect, but no pretest sensitization (second experiment).

*97. When Healthy Food Makes You Hungry*

Finkelstein, Stacey R (University of Chicago, GSB); Fishbach, Ayelet (University of Chicago, GSB)

We propose that healthful food labels (e.g. "low fat" or "fat free") cue people to feel hungry, which increases the consumption of unrelated food items. This effect is driven by a perception of progress towards a person's goal of being a healthy individual as a result of exposure to healthy food labels. Consequently, a person feels that the competing motivation of satisfying hunger was neglected and increase food consumption. We report five experiments that manipulated the exposure to healthy product labels and documented increased subjective feelings of hunger, perceived progress towards the health goal, and actual food consumption.

*98. The effect of low and high blood sugar level on Unconscious Thought*

Bos, Maarten W. (Radboud University Nijmegen); Dijksterhuis, Ap (Radboud University Nijmegen); van Baaren, Rick B. (Radboud University Nijmegen)

Recent studies showed that a period of unconscious thought improves the quality of complex decisions. Under some circumstances, unconscious thought improves decisions even more than conscious thought. We know from previous research that conscious thought is dependent on blood sugar levels. A low blood sugar level impairs conscious thought. The question we addressed in our research is whether decisions made after unconscious thought show the same impairment from low blood sugar level. We propose that whereas low blood sugar level impairs conscious thought, this is not the same for unconscious thought.

*99. Inclusion versus Exclusion: The Effect of Perceived Uncertainty on Screening Strategies*

Ganesh Pillai, Rajani (University of Central Florida); He, Xin (University of Central Florida); Echambadi, Raj (University of Central Florida)

This paper investigates the role of perceived uncertainty on the preference for a screening strategy. Four studies in this paper show that consumers high in uncertainty are more likely to employ exclusion screening strategy whereas those low in uncertainty are more likely to use inclusion strategy. This relationship is primarily driven by perceived accuracy of the strategy rather than effort savings. Further, this perceived uncertainty-screening strategy relationship is reversed in the presence of larger consideration sets. Finally, we successfully replicate the experimental findings by analyzing verbal protocol data from the popular TV game show Who Wants to be a Millionaire?

*100. Online Purchase Decisions: How Much Influence on Information Display Do Consumers Desire?*

Reisen, Nils (University of Lausanne, Faculty of Business and Economics); Hoffrage, Ulrich (University of Lausanne, Faculty of Business and Economics)



Three prototypes of shopping websites were evaluated regarding their perceived utility. These prototypes varied with respect to their functionality, that is, the influence users had on how product information was displayed. Overall, people were most satisfied with the prototypes of high and medium functionality, and the least functional prototype received considerably worse ratings. The high functionality prototype was rated best regarding ease of eliminating and comparing alternatives but worst regarding understandability and ease of use. We conclude that consumers appreciate some functionality, but only as long as such a decision support system is easy to understand without instruction.

*101. Top 10 or Top 9?: The Influence of Category Floor Fluency on Consumer Preference*

Isaac, Mathew S. (Northwestern University Kellogg School of Management)

The present research examines the inferences that consumers make when encountering information about a product's category membership. I demonstrate a systematic Category Floor Tendency, whereby people who estimate a product's rank based on ordinal category membership information infer a rank close to the lower bound of the category. Additionally, I show that the Category Floor Tendency is more pronounced for disfluent (e.g. "Top 9") categories compared to fluent (e.g. "Top 10") categories. As a result, members of objectively better, but disfluent, ordinal categories may be evaluated less favorably than members of objectively worse, but fluent, ordinal categories.

*102. Privileging Innate Over Learned Ability in Perceptions of Achievement*

Tsay, Chia-Jung (Harvard University); Banaji, Mahzarin (Harvard University)

In two experiments on the judgment of talent, we demonstrate a dissociation between an explicit endorsement of hard work ("strivers") and the actual preference for innate talent ("naturals"). Study 3 suggested the assumption of a naïve theory that natural ability is encapsulated. In Study 4, musical performances given after "striving" primes were preferred to those given after "natural" primes. The implications for the naturalness bias in judging talent and its negative impact on performance are considered.

*103. Pulling up or pushing down? Exploring pro-leader and anti-trailer information processing in multi-option consumer choices*

Blanchard, Simon J. (Pennsylvania State University); Meloy, Margaret G. (Pennsylvania State University); Carlson, Kurt A. (Duke University)

In binary choice, tentative preferences created during the choice process influence decision makers to evaluate new information to favor the tentatively preferred alternative or "leader". What happens when more than two options are being evaluated? As the decision process advances, do decision makers process new information in favor of one leading option or alternatively, do they engage in processing to disfavor the option(s) that they prefer less, the "trailer(s)"? Experiments reveal that 1) individuals engage both in pro-leader and anti-trailer processing, and 2) biased processing increases in magnitude as the number of options in the consideration set increases.

*104. "Fifty-six percent of people believe Diet Pepsi tastes more like real cola": Do numbers matter in product claims?*

Sagara, Namika (University of Oregon, Decision Research); Peters, Ellen (Decision Research, University of Oregon)

We document and explore a novel instantiation of scope neglect. While the highly numerate integrated numeric information in their product evaluations, those who were less numerate demonstrated stronger neglect of numeric information. Experiment 1 with a Signal-Detection-Theory paradigm demonstrated that scope neglect led a majority of participants, especially the less numerate, to be more susceptible to Illusion-of-truth effect. Experiment 2 showed that the less numerate were more susceptible to scope neglect and failed to correctly evaluate unfavorable products, whereas the highly numerate were more successful. In Experiment 3, font manipulation induced greater use of numeric information in the less numerate.

*105. Vanilla or Mango: Existential Anxiety, Structure, and Novelty Seeking*

Williams, Todd (Grand Valley State University); Usta, Murat (University of Alberta); Haubl, Gerald (University of Alberta); Schimel, Jeff (University of Alberta)

The present research is aimed at enhancing our understanding of when and why we seek novelty in our consumption choices. Drawing upon terror management theory and previous research on variety seeking, we examine how existential anxiety, personal need for structure (PNS), and the level of perceived structure in a choice environment interact to cause novelty seeking. The results of two studies show that, when concerns about mortality are made salient, higher levels of structure in a choice context lead to increased novelty seeking. The theoretical contribution to terror management theory and the practical implications of structuring consumer environments are discussed.

*106. Communicating Statistics: Are Common Language Effect Sizes Really Easier to Understand?*

Dalal, Dev K. (Bowling Green State University); Nolan, Kevin P. (Bowling Green State University); Yankelevich, Maya (Bowling Green State University); Brooks, Margaret E. (Bowling Green State University)

The common language effect size indicator (CLES) and the binomial effect size display (BESD) are designed to simplify statistical information by using more accessible language and presentation than the traditional Pearson Correlation coefficient ( $r$ ). There has been debate about whether these indices are equivalent, but little attention paid to whether CLES and BESD are, in fact, easier to understand than  $r$ . This study investigated the influence of effect size indicator on judgments of quality, value, and information clarity. Findings have implications for researchers studying framing effects and for those interested in conveying statistical information to a lay audience.

*107. Biases and Patterns in Consumers' Estimates of Product Health and Safety Risks*

Feng, Tianjun (Fudan University); Keller, L. Robin (Univ. of California, Irvine); Wang, Liangyan (Shanghai Jiaotong University)

We examine consumer perceptions regarding the recent crises of contaminated pet food and lead-tainted toys shipped from China to the United States. Our web-based survey research focused on a) eliciting US consumers' subjective risk judgments of contaminated pet food and lead-tainted children's toys, b) examining biases in judged probabilities due to packing or unpacking of the focal event, c) identifying patterns in characteristics of these 2 health risk cases and several other health risks, and d) perceptions of products' health and safety risks from different countries. Insights are obtained on how to deal with such crises.

*108. Taboo Trade-offs in Death Care Decisions*

Davis, Derick F. (University of Colorado - Boulder); McGraw, A. Peter (University of Colorado - Boulder)

Death care decisions are difficult, emotional, and unavoidable. Funeral-related purchases require trade-offs between the secular (i.e., price) and the sacred (e.g., quality of the deceased's memorial). Putting a price on someone's life, or in this case someone's death, is not only emotionally difficult it is morally aversive or taboo. When confronted with taboo price-quality trade-offs, we show people choose premium options that carry higher price tags, thus implementing a strategy that avoids morally distressing trade-offs and signals the loved one's value. We present two experiments, introduce techniques that encourage price-quality trade-offs, and discuss implications for consumer advocacy and public policy.

*109. When I'll have what she's having: Uncertainty moderates the effects of social influence on decision-making*

Huh, Young Eun (Carnegie Mellon University); Vosgerau, Joachim (Carnegie Mellon University); Morewedge, Carey K. (Carnegie Mellon University)

One cue decisions-makers often use is the prior choice of another decision-maker. The results of a laboratory experiment suggest this cue is disproportionately weighted under uncertainty. Americans were significantly more likely to choose a tea chosen by an unknowledgeable confederate rather than its alternative when tea labels were printed in Korean (95%) than when they were printed in English (65%). Interestingly, for Korean teas, participants who chose after the confederate predicted they would enjoy the chosen and unchosen teas equally, whereas controls predicted higher enjoyment for the chosen tea than the unchosen tea, suggesting that social influence impairs cognitive dissonance.

*110. Pricing Out Environmental Outcomes Yields Lower Discount Rates*

Hardisty, David (Columbia); Weber, Elke (Columbia)

263 US residents from a range of demographic backgrounds considered hypothetical monetary and environmental scenarios with immediate or delayed outcomes (6 months or 2 years). When discount rates for environmental scenarios were measured through willingness-to-accept ("pricing out"), discount rates for monetary and environmental outcomes were equivalent. However, using a within-domain measure of discounting yielded much higher discount rates for environmental scenarios. For both monetary and environmental scenarios (regardless of the measurement method), participants demonstrated higher discount rates for shorter time intervals. A comparison of within vs between domain correlations of discount rates indicates partial domain dependence, or perhaps scenario dependence.

*111. A Life Stage Model of Climate Change Related Perceptions and Attitudes*

Soane, Emma (Kingston University); Rebecca Lunn (University of Strathclyde)

We use a life stage model to understand individual and group level perceptions and attitudes regarding climate change. A survey gathered data on a range of perceptions and attitudes towards climate change (e.g. likelihood, trust in scientists) and three outcome variables: importance of information and communication and willingness to change behaviour. The results showed that life stage, characterised by age and sex, discriminated strongly between groups for each of the dependent variables. Political affiliation was also aligned closely with particular attitudes towards climate change. Implications for understanding how individual factors shape perceptions and communication to interpretive communities are discussed.

## **Session #2 with Cash Bar** (Sunday, 5:15- 7:15pm, Grand Ballroom)

### *1. Cholera: Death and Decision-Making in the Victorian Era*

Fortey, Nicholas (Graduate Student Oregon State University)

The story of John Snow's analysis of the cholera outbreak in the Golden Square district of London in 1854 is a foundational narrative in several diverse fields, including geographical analysis, epidemiology, and, more generally, science. While Snow's efforts were significant, they did not serve to convince the authorities at the time that the disease was water-borne. This paper seeks to re-examine the historical record to determine the process of decision-making - both the cause of cholera and the possible responses to the epidemic.

### *2. The hot hand phenomenon as a cognitive adaptation to clumped resources*

Wilke, Andreas (UCLA Anthropology); Barrett, H. Clark (UCLA Anthropology)

We conjectured that hot-hand reflects an evolved adaptation to resources that are clumped, and used an experimental computer task to explore when American undergraduates and Shuar hunter-horticulturalists expected clumps in sequences of foraged fruits, coin tosses, and other resources. Subjects tended to expect clumps in sequences that were, in fact, random, with interesting population differences. Americans showed a clumped expectation for fruits, but less for coins. Shuar showed clumped expectations for both. This suggests a default expectation of clumps that is still present for Americans in a foraging context, but is reduced (though not eliminated) by experience with random phenomena.

### *3. MoralDM: A Computational Model of Moral Decision-Making*

Dehghani, Morteza (Northwestern University); Tomai, Emmett (Northwestern University); Forbus, Ken (Northwestern University); Iliev, Rumen (Northwestern University); Klenk, Matthew (Northwestern University)

AI research on decision-making has mainly focused on utilitarian theories. One of the domains in which utilitarian models fail to predict human behavior is moral reasoning. Psychological theories of moral decision-making extend beyond utilitarian models by identifying deontological and utilitarian modes of reasoning. We present MoralDM, a computational model of moral decision-making which supports these two distinct modes. MoralDM integrates several modules: order of magnitude reasoning to capture impacts of secular versus sacred values, first-principles and analogical reasoning to implement the rules of moral decision-making and to utilize previously made decisions. We evaluate MoralDM on stimuli taken from psychology experiments.

### *4. Cross-Cultural Differences in Financial Risk Taking*

Egan, Daniel (Barclays Wealth)

This study provides a few answers, but more questions, regarding cross-cultural differences in financial risk taking. Using a representative dataset across six nations including India and mainland China, we document roughly equal levels of propensity to take on financial risk in portfolio choice, but significant variation in risk perception and psychometric risk tolerance. Investment time horizons, support networks ("cushions"), recency bias, and lack of market maturity are all compared as competing explanations. The number of "cushions" an individual has regardless of country significantly predicts risk taking, as does risk perception. However considerable cross-cultural variation remains after accounting for these effects.

### *5. Memories for Generated Emotional Information*

Mojardin-H., Ambrocio (Universidad Autonoma de Sinaloa, MX); Velazquez-Cardenas, Jose (Universidad Autonoma de Sinaloa)

Generating information has been recognized as a strong resource for helping memory to retrieve information (Brainerd and Reyna, 2005), at the same time as for producing false memories. Is it the same for emotionally charged information? Two experiments following procedures of the generation-effect paradigm tested this question using words and sentences, with emotional content, as learning material. Results indicate that the Generation Effect do not interact with emotion to improve memory, or to produce false memories. Implications of these results for decision making in eyewitness testimony procedures are analyzed, using Fuzzy-trace theory as conceptual framework.

### *6. Reverse engineering and its problems: Separating decision strategies based on their outcomes*

Woike, Jan K. (HEC, University of Lausanne); Hoffrage, Ulrich (HEC, University of Lausanne); Hertwig, Ralph (Department of Psychology, University of Basle)

Decision strategies generate outcomes, but do outcomes allow for inferences regarding which strategy generated them? In a simulation study, various strategies (fast and frugal, linear, and Bayesian) solved paired-comparison tasks. We varied the percentage of missing cue values, of cue retrieval errors, and of strategy execution errors. Using a range of models, the decisions were subsequently modelled in an attempt to reconstruct the process that generated them. Because strategies often made identical decisions, they were barely separable. Thus, a good fit of a linear model does not necessarily exclude the possibility that a fast and frugal heuristic generated the decisions.

### *7. Leadership of Risk Decision Making in a Complex Technology Organization*

Flaming, Susan (Boeing Satellite Development Center)

Satellite program risks, if unsuccessfully assessed and mitigated, cause significant technical failures and multi-million dollar losses. How do technical, program leaders make decisions about difficult risks? What leadership practices balance the need for thorough technical analysis with the demands of program cost and schedule? This presentation describes how senior experts drive decisions to closure in a complex, aerospace technology organization. The company's extensive decision ecology incorporates leaders' adaptive toolbox of practices along with organizational factors that support effective risk decision making. A novel model of Deliberative Decision Making is proposed that builds on rational, normative and naturalistic decision models.

### *8. LIFE REALLY IS NASTY, BRUTISH, AND SHORT – AND NO ONE IS HAPPY ABOUT IT*

Anik, Lalin (Harvard Business School); Norton, Michael I. (Harvard Business School); Aknin, Lara B. (University of British Columbia); Dunn, Elizabeth W. (University of British Columbia)

Five studies explore the extent to which laypeople endorse Thomas Hobbes' (1651) depressing view that life is "nasty, brutish, and short" – and the consequences of this world view on people's decision-making and well-being. Given two choices – one between life as "short" or "long" and one between life as "easy" or "hard" – the vast majority of participants in national surveys perceived life as both short and hard. Most interestingly, this worldview impacted participants' everyday lives: the Hobbesian view was associated with decreased well-being, increased civic engagement, and fewer meaningful friendships – and even a shorter life span.

### *9. Decision Analysis Using Geographic Information Systems*

Simon, Jay (University of California, Irvine); Keller, L. Robin (University of California, Irvine); Kirkwood, Craig (Arizona State University)

In this work, we study decisions made using Geographic Information Systems (GIS). Decisions made with GIS nearly always involve spatially-varying attributes, and are often too complex to analyze without a decision aid. We develop certain types of value and utility functions to incorporate them, using principles from multi-attribute utility theory. In addition, we apply these functions to a few specific GIS examples, to illustrate their applicability and yield further insight. This area of research will provide a great deal of value to many types of policy decisions with environmental impacts.

### *10. Individual and collective intuition in managerial forecasting: Evidence from the music industry*

Seifert, Matthias (University of Cambridge, Judge Business School)

I adopted a lens model approach to examine the predictive power of intuition in a managerial forecasting setting. I thereby tested the effect of task ambiguity, domain-specific expertise and group judgments on the efficiency of aggregated model-manager predictions. The data indicated that intuition only resulted in substantially superior performance when the most skilled managers made judgments in highly ambiguous contexts. The study outlines the conditions under which the predictive power of collective intuition increases judgmental accuracy. Finally, the findings challenge the robustness of previous research proposing a 50:50 split between model and manager when optimizing judgments (Blattberg & Hoch, 1990).

### *11. Reconciling Support Theory and the Book-Making Principle*

Diecidue, Enrico (INSEAD); La-ornual, Dolchai (INSEAD)

Support theory postulates that probability judgments for uncertain events depend on the description of events. We show that the theory violates basic consistency requirements for subjective probabilities and normative decision under uncertainty. We illustrate how support theory's incoherence stems from its assumption of non-extensionality. We propose a relaxation of the book-making principle, a famous consistency argument, and bridge the descriptively appealing support theory with normative criteria. In this manner, we derive a unique way for using probability judgments from support theory as a consistent input for decision analysis.

### *12. Decisions from experience: Sampling vs. observation of sampling*

Haberstroh, Susanne (University of Osnabrück, Germany); Oeberst, Aileen (University of Osnabrück, Germany)

In most experiments on decisions from experience, a free sampling procedure has been employed and the data shown an underweighting of rare events (e.g. Hertwig, Barron, Weber & Erev, 2004). However, in our own experiments participants passively observed information sampling and the data tend to show the reverse pattern – an overweighting of rare events. In the study presented here we want to show how closing the gap between the procedures can solve the puzzle of contradictory results.

### *13. Failing to Account for Gas Costs in Driving Decisions*

Feiler, Daniel C. (Duke University); Soll, Jack B. (Duke University)

There are several reasons to believe that mentally accounting for the costs of fuel consumption is difficult for decision makers. Payment is significantly decoupled from the consumable driving miles through the medium of fuel, temporal separation, and the bulk purchasing of gasoline making marginal costs unclear. In two studies we provide evidence that individuals do not efficiently account for gasoline costs when making driving decisions. Decision makers often make sub-optimal driving decisions by failing to account for gas costs, but accounting for gasoline costs can be improved by asking people to estimate the costs of driving to each alternative.

*14. Can Quick Closure to Judgment Ever Be Helpful?*

Kajdasz, James (Ohio State University)

Disadvantages of coming to quick judgment are well known. But is early thinking about a problem always detrimental? It's hypothesized that early thinking about a problem is more hurtful in some situations than in others. In a rule discovery task, the way data is received is manipulated. The results provide strong replication of previous studies demonstrating the detriments of early judgment. A hypothesized interaction between the detriments of early judgment, and the way data is received is suggested, but not statistically significant.

*15. The Simultaneous Use of Multiple Reference Points in Risky Decision Making*

Koop, Gregory J (Miami University); Johnson, Joseph G (Miami University)

Prospect theory states that an individual's perception of loss or gain is dependent upon their starting point. Wang and Johnson's (2008) Tri-Reference Point theory proposes many choice situations also possess an implicit or explicit goal and minimum requirement, and that as these reference points become more ambiguous or less salient, use of them by individuals will decrease. We show that individuals simultaneously utilize a minimum requirement, status quo, and goal and most often choose to maximize their chance of reaching these reference points even when that decision is riskier, results in lower expected value, or results in lower expected utility.

*16. Surer but not Smarter: Cue Learning and Unconscious Thought*

Yeomans, Mike (University of Waterloo); Koehler, Derek (University of Waterloo)

Dijksterhuis' "deliberation without attention" effect (2004) shows that unconscious cognition may produce better decisions than conscious deliberation in preference judgments. This may result because unconscious resources cluster mutually supportive information, polarizing impressions of the decision targets. The present study examines the effect in a multiple cue probability learning paradigm, where decisions are based on cue-outcome relationships learned in an ecologically representative design. Results suggest that polarization by the unconscious affects inferential probability judgments; however, performance gains similar to Dijksterhuis' studies were not found, suggesting they may be limited to particular decision contexts.

*17. Eating to Even: How Retail and Sunk Costs Influence the Consumption of Bulk Goods*

Litvak, Paul M. (Carnegie Mellon University); Morewedge, Carey K. (Carnegie Mellon University)

What governs consumption of an unlimited good—the amount that would achieve perfect satiation, or an amount that would result in a discount in comparison to its retail price? Participants paying for bulk goods consumed more when reminded of its retail price than when price was not salient; price salience did not influence consumption when the good was free (Exp 1). Furthermore, consumption of that good was more affected by a good's retail price than the size of its sunk cost (Exp 2). The results suggest that people consume bulk goods to achieve a discount relative to its per-unit price.

*18. Money Matters in the Ultimatum Game: The Effects of Feedback and Framing on Proposer Offers*

Bruce, Leonardis L. (Auburn University); Montano, Michael J. (Auburn University); Franco-Watkins, Ana M. (Auburn University); Edwards, Bryan D. (Auburn University)

The ultimatum game is often used to assess individuals' willingness to allocate and share resources. However, in most money matters, the situation frame can dictate perceived fairness. We conducted a within-subjects experiment to investigate how the framing of the game (willingness-to-pay (WTP), willingness-to-accept (WTA), and original ultimatum) affected initial proposer offers. Additionally, we examined whether repeated plays with feedback (acceptance/rejection) influenced subsequent proposer offers. Results revealed that the decision frame matters in both the initial offers as well as in repeated plays. Differences were observed between WTP and WTA and these decision frames differed from the original ultimatum game.

*19. The Positive Time Order Error and its Relationship with Memory*

Waldum, Emily (University of North Carolina - Greensboro); Sahakyan, Lili (University of North Carolina - Greensboro)

Participants studied two unrelated word-lists of equivalent length, and made comparative retrospective time estimates prior to or following a free recall test. Half of the participants received a directed forgetting instruction after the first list, whereas the remaining participants received a remember instruction. Although directed forgetting instruction produced significant recall differences, it did not affect time estimates. However, making time judgments before versus after recall significantly influenced time estimates. The List

1 interval was judged as longer than the List 2 interval (positive time order error) when judgments were made before recall, but not when judgments were made after recall.

*20. Criminal Minds: Take-the-Best in Expert-Novice Decision Making in Residential Burglary*

Garcia-Retamero, Rocio (University of Granada (Spain)); Dhami, Mandeep K. ((University of Cambridge, United Kingdom))

To date, no-one has examined the decision strategies of experts and novices in terms of their use of heuristics like take-the-best or more complex weighted additive strategies. No-one has compared the strategies of experts who approach a task from different perspectives: They may be similar in their decision strategy (e.g., employing heuristics) but different in their cue use (i.e., relying on different cues); or vice, versa. One expert perspective may be more or less similar to that of novices. We examined these issues in the domain of residential burglary with experienced burglars and police officers (experts), and students (novices).

*21. Individual Differences on the Perception of Randomness*

Gomez, Laura I. (University of Texas at El Paso); de Moor, Anke (University of Texas at eEl Paso); Morera, Osvlado F. (University of Texas at El Paso)

According to research the perception of randomness varies depending on the scenario. If the streak of a scenario is perceived to be random, participants tend to stop the streak. In a skill-based scenario participants tend to continue the streak. Three scenarios were presented: two skill-based and a random scenario. Participants evaluated these scenarios for an experienced entity or a less experienced entity to demonstrate skill. Based on a participant's decision making style the perception of randomness can be predicted. Our findings support that decision making styles are related to perceptions of randomness and whether participants will stop or continue streaks.

*22. Evidence Use in Teacher Performance Evaluation*

Templin, Sara (Georgia Center for Assessment, University of Georgia); Recesso, Art (Learning & Performance Support Laboratory, University of Ga ); Segall, Matt (University of Georgia); Cavanagh, Sarah (University of Georgia)

Teacher's performance practices are evaluated by educators on a nationwide scale, creating a need for uniformity in the evaluation process (and the evidence used). A sample of 252 educators evaluated 16 pieces of evidence on two factors: 1. How often the evidence is used and 2. How much the evidence impacts their decision. Evidence use and impact varies widely across educators (Recesso, et. al., under review). A number of factors have been shown to determine differences at both the school level (School Grade Level, School Size, School Location, and Wealth) and the individual level (Gender, Ethnicity and Degree Earned).

*23. Judging performance in gymnastics: Intuitive physics or movement-related knowledge?*

Heinen, Thomas (German Sport University of Cologne); Pizzera, Alexandra (German Sport University of Cologne); Velentzas, Konstantinos (German Sport University of Cologne)

We addressed the question, if laypersons with basic motor experience evaluate gymnastic performance similar to judges with specific movement-related knowledge (Ste-Marie, 2003). 23 gymnastic judges and 23 students of sport science rated 21 videos of handsprings on the vault on an 11-point scale. The results show significant higher handspring-ratings of the experts compared to the non-experts. However rank correlations of groups show the same order of gymnasts and rates of gymnasts correlate in both groups with specific kinematic patterns. We speculate that kinematical parameters of the handsprings can be inferred using intuitive physics and therefore movement-related knowledge is not needed.

*24. Older adults and the adaptive use of strategies*

Karlsson, Linnea (Max planck institute for human development); Cokely, Edward (Max planck institute for human development)

Previous studies on older adults' learning in multiple-cue judgment (continuous estimates of a criterion) have focused on cue-integration strategies (Chasseigne et al., 1997). Recent research has demonstrated that young adults can adopt other strategies, like exemplar-memory (Juslin et al., 2003). However, little is known about the influence of aging on the adaptive use of exemplar-memory in judgment. Older adults show declines in hypothesis-testing abilities and declarative memory, while implicit associations are less affected (Filoteo & Maddox, 2004). In the current experiments we investigated older adults' adaptivity in judgment with a focus on conditions where an aging mind may be beneficial.

*25. Information search and cognitive representation in risky decision making: The Advantages first principle.*

Huber, Odilo W. (University of Fribourg); Huber, Oswald (University of Fribourg); Bär, Arlette S. (University of Fribourg)

In the process of risky decision making, information search and pre-selection of alternatives are assumed to follow the two phased Advantages-first principle: initially, decision makers search and evaluate information about advantages, i.e. positive outcomes of all alternatives. Subsequently, information search (e.g. for negative consequences) is continued for promising alternatives only. Experiment 1 (120 Ss) varies initial information about consequences (no information, positive or negative consequences for some

alternatives). Experiment 2 (60 Ss) tests information search after initial presentation of different combinations positive and negative outcomes. The Advantages-first principle was confirmed in all conditions.

*26. Reinforcement learning capturing causal judgments*

Karlsson, Linnea (Max planck institute for human development); Rieskamp, Jörg (Max planck institute for human development)

Causal model theory (e.g. Waldmann, 1996) asserts that people understands causality in the form of structured representations capturing causes and effects. In this study we aim at unraveling the learning mechanisms governing this understanding. We propose that causal judgments are driven by reinforcement learning (cf. Sutton & Barto, 1998) of what patterns of data that supports different hypotheses about causal structure. Simulations and data support the viability of our claim. Moreover we demonstrate how reinforcement learning mechanisms represents an alternative to Bayesian learning processes for capturing causal judgments (Steyvers et al., 2003).

*27. Harnessing local endogenous evidence to global exogenous evidence*

Hay, M. Cameron (Miami University); Weisner, Thomas S. (UCLA); Lieber, Eli (UCLA); Subramanian, Saskia (UCLA); Kravitz, Richard L. (UC-Davis); Duan, Naihua

Evidence Based Medicine (EBM) provides guidelines for physicians, but there is a gap in translating EBM to clinical practice. One way to close this gap is to collect local data to complement EBM. 63 informants considered physician use of a system that would systematically collect endogenous clinical experience of diagnosis and treatment. Informants would actively use such a system when the EBM literature and standards are not relevant to the patient-at-hand. Time and costs are constraints on potential use, not the perceived scientific value of such combined evidence.

*28. The quest for a theoretical understanding of decision aid neglect: Perspectives from identity theory and attribution theory*  
Sleesman, Dustin J. (Michigan State University)

Advancements in research have allowed for the creation of decision aids to help individuals arrive at more accurate and reliable decision outcomes. Numerous studies, however, have shown that individuals tend to neglect to use such tools in favor of intuitive judgment. Findings from an analysis of this literature will be presented. The results reveal that while contextual speculations abound in explaining decision aid neglect, there is a dearth of theoretical understanding of the phenomenon. The analysis, however, identified two possibly competing explanations rooted in identity theory and attribution theory. Theoretical and practical implications of these explanations will be presented.

*29. Two routes to inferring that others share your moral and nonmoral beliefs: Egocentric projection and the perceived objectivity of belief*

Goodwin, Geoffrey P. (Department of Psychology, University of Pennsylvania); Bartels, Daniel M. (Center for Decision Research, University of Chicago)

How do people infer whether their moral (and other) beliefs are well shared? One possible process relies on easily accessible (i.e., System 1) egocentric projections—people intuit that the more strongly they hold a particular belief, the greater the percentage of people who agree with them. Another possible process is more reflective (i.e., System 2)—people infer consensus from the objectivity of a particular belief (its ontological status). In four studies using different materials and methods, we found evidence that both of these factors predict moral consensus judgments in particular, but also consensus judgments about other kinds of belief.

*30. A Factor Analysis of Gambling, Risk, and Framing: A Fuzzy-trace Theory Approach*

Estrada, Steven M (Cornell University); Reyna, Valerie F (Cornell University); DeMarinis, Jessica A (Cornell University); Myers, Regina M (Cornell University); Stanisz, Janine, M (Cornell University)

According to fuzzy-trace theory, either verbatim-based analytic processing or gist-based intuitive processing exerts control over decisions. This study examined measures related to risk-taking, including those used in dual process approaches. The measures were behavioral activation, behavioral inhibition, sensation-seeking, gist and verbatim perceptions of risk, behavioral measures, and framing effects. Factor analysis delivered seven independent factors, distinguishing gambling propensity from specific measures of verbatim (reverse framing) versus gist (standard framing) processing. Gist and verbatim measures of risk loaded on separate factors. Also, predicted by fuzzy-trace theory, reverse framing was associated with greater risk-taking, e.g., had a greater number of sexual partners.

*31. Sound decisions: Ambient noise frequency affects risky-choice framing*

Gallagher, Patrick (Duke University)

Three studies investigated how risky-choice framing can be affected by environmental noise. All participants listened to the same recording of the Asian disease problem, except that background noise was manipulated so that for some participants the problem was the relatively lower-frequency information, and for others it was the relatively higher-frequency information. Based upon Ivry &

Robertson's (1998) theory of hemispheric asymmetry, we hypothesized that participants would respond to the problem differently based on its relative frequency. This hypothesis was supported – the classic framing effect appeared only among those participants for whom the problem was the relatively lower-frequency information.

*32. The Effect of Feedback Timing on Pre-Performance Optimism*

Kettle, Keri (University of Alberta); Häubl, Gerald (University of Alberta)

People tend to become less optimistic about their own performance at a future task as the task nears, an effect generally attributed to a less abstract construal of the focal task. We hypothesize that anticipating post-performance feedback also has a systematic effect on pre-performance optimism, with a greater expected delay of such feedback causing individuals to be more optimistic about their performance. A large-scale experiment involving students' predictions about their actual performance in components of a university course provides clear support for this hypothesis. Participants made significantly more optimistic performance predictions when they anticipated a longer delay in receiving feedback.

*33. Informed and (Mostly) Unbiased: Knowledge Negates Effects of Detailed Disjunctions*

Kramer, Karen M. (University of Kansas School of Medicine - Wichita)

Does knowledge or presentation have a stronger influence on probability judgments? Will the tendency to give higher probabilities for a detailed disjunction of an option disappear with greater knowledge about the options? Seventy-five college undergraduates, forty-seven medical students, and thirty-nine medical residents located in Wichita, Kansas viewed two contexts: causes of death and college majors, each with two options described in varying levels of detail. Participants estimated probabilities that the first option rather than the second option would occur. In both contexts, knowledge appears to reduce susceptibility to overestimate the probability of an option when presented as a detailed disjunction.

*34. Paying for Someone Else's Mistake: How Bystander Negligence Influences Perpetrator Blame*

Critcher, Clayton R. (Cornell University); Pizarro, David A. (Cornell University)

The ability of a perpetrator to commit a crime may depend critically on the oversight or negligence of an uninvolved bystander. How does such negligence influence moral judgments and sentencing decisions for the perpetrator? While participants believed that bystander negligence would lead others to discount blame for the perpetrator, bystander negligence was consistently found to amplify perpetrator blame. This blame amplification occurred because the bad action of the bystander provided an implicit standard of comparison for the perpetrator's act, framing it as more blameworthy. The results have theoretical implications for automatic comparison effects and applied implications regarding juror decision making.

*35. Out Of The Bioethicists' Box: How Do Lay People Value Life?*

Li, Meng (Rutgers University); Vietri, Jeffery (Rutgers University); Chapman, Gretchen (Rutgers University)

Health policies depend on the metric for the value of lives they target. How do lay people value life? 503 internet participants (18-89 years-old) rated the relative value of lives of people aged 5 - 80 years old with normal life expectancy or only 2 years to live. Ratings were influenced by question framing. In the "saved" frame, raters focused on "years left". In the "lost" frame, however, raters focused on "years lived" –younger lives were judged more valuable, even if they have equivalent number of years left as older lives. Ratings were also ego-centrally biased by raters' own age.

*36. Statistical judgments incorporate variance data when presented in a supportive context*

Obrecht, Natalie (Rutgers University); Chapman, Gretchen (Rutgers University)

When judging their confidence in a difference between groups on the basis of data, subjects attend to mean differences, nearly overlooking within-group variance. We sought to increase sensitivity to variance data by couching pairwise comparisons in a familiar context. Statistical data described either conductivity measurements obtained from elements samples (low variability category) or weight measurements obtained from samples of peoples (highly variable category). We manipulated (between subjects) whether variance data matched or mismatched the implied variability. Subjects who received data in a congruent context showed high sensitivity to variance data, while those in the incongruent condition ignored this factor.

*37. Are people less willing to play with their lives than with their money? How purpose and decision domain influence choices*

Gavaruzzi, Teresa (DPSS - University of Padova); Rubaltelli, Enrico (DPSS - University of Padova); Manfrinati, Andrea (Faculty of Psychology - University of Valle d'Aosta); Lotto, Lorella (DPSS - University of Padova)

We examined the effect of two factors on people's preferences between two alternatives (one riskier than the other): the decision maker's purpose (utilitarian vs. hedonic), and the decision domain (medical vs. financial). Participants' rated the riskiness of the alternatives and indicated their choice. While the utilitarian purpose did not affect choice, the hedonic purpose induced risk seeking choices in the financial domain and risk aversion in the medical domain. The difference between the ratings of the alternatives'



riskiness also predicted participants' choice. The study highlights inconsistency between risky and safe alternatives depending on the decision context.

*38. Goals, Performance, and Satisfaction in Marathon Running*

White, Rebecca (University of Chicago); Wu, George (University of Chicago); Markle, Alex (New York University); Sackett, Aaron (University of Chicago)

Marathon running offers a compelling and real-world context for understanding the motivating forces underlying goals. We surveyed over 1000 runners across twelve major marathons regarding their marathon goals, performance, and satisfaction, both before and after race day. We find evidence of loss aversion in runners' anticipated satisfaction with their performance, as well as actual satisfaction with performance, both of which are moderated by previous running experience. Actual satisfaction was considerably more compressed than predicted satisfaction, consistent with immune neglect.

*39. Nationalistic duty and support of policies that are admittedly worse*

Baron, Jonathan (University of Pennsylvania); Greene, Joshua (Harvard University); Ritov, Ilana (Hebrew University)

People perceive a duty to support their group, even when the consequences of doing so are worse. U.S. citizens (on a Web studies panel) considered nationalist policies concerning immigration, trade, foreign aid, and military intervention. They made judgments of consequences, their support for the pro-U.S. side of the policy, their duty to support it, and their self-interest. They were more nationalist in their duty and their support than in judged overall consequences, and this difference was independent of their self-interest. In part, it was related to their perceived obligation to reciprocate for what their nation has done for them.

*40. What Dyads Think About When Controlling Risks*

Mukherjee, Moumita (University of South Florida); Schneider, Sandra L. (University of South Florida)

This study explores what dyads talk about when they are making risky decisions together. In a prior study we used a passive risky choice paradigm, but here we used a paradigm in which dyads actively manipulate prospective lottery outcomes. We examined risk taking tendencies as well as dyads' communication via IM. As before, dyads were more risk averse than individuals. Also, content coding of IM transcripts revealed differences in the extent to which they focused on gains versus losses, better versus worse outcomes, and risk attitudes. To our surprise, a new focus area emerged involving future outlook and financial responsibility.

*41. Reducing the influence of Cognitive Biases in Group Decision-Making: An Application of the Bayesian Truth Serum*

Weiss, Rebecca (Massachusetts Institute of Technology); Prelec, Drazen (Massachusetts Institute of Technology)

Domain-specific expertise implies superior knowledge, which should produce superior decision-making. However, experts often experience cognitive biases, such as overconfidence or social desirability, which can nullify the advantages afforded by their knowledge. The Bayesian Truth Serum (Prelec, 2004), or BTS, is a scoring algorithm that optimally aggregates expertise from a group when applied to questions that have at least one correct answer. Theoretically, BTS scoring negates the influence of cognitive biases in group decision-making, even when the correct answer is not previously known. This research aims to highlight this strength of BTS scoring using chess as a medium of expertise.

*42. Frames in Context: Comparing Technology-Mediated and Face-to-Face Group Decisions*

Handgraaf, Michel (University of Amsterdam); Schuette, Philip (University of Amsterdam); Yoskowitz, Nicole (Columbia University); Weber, Elke (Columbia University); Milch, Kerry (Columbia University); Appelt, Kirstin (Columbia University)

The goal of the current study is to determine whether technology-mediated communication, which allows for easier access to real-world groups, is a valid alternative to traditional laboratory-based group decision research. We used face-to-face groups and technology-mediated groups to examine framing effects and the effect of prior consideration of a decision on decision making by groups. We found very similar patterns of results on both outcome and process measures. Our results suggest that technology-mediated communication is an advantageous method with great potential for use in future research on group decisions and decision processes.

*43. The Illusion of Political Sophistication: Why and How Voters Experience an Illusion of Explanatory Depth*

Alter, Adam L. (Princeton University); Oppenheimer, Daniel M. (Princeton University); Zemla, Jeffrey C. (Princeton University)

The illusion of explanatory depth (IOED) arises when people believe they understand a process better than they actually do. Although IOEDs have been demonstrated when people estimate their understanding of mechanical and natural processes (e.g., how do bicycles and solar systems work?), the mechanisms that drive IOEDs are poorly understood. In two studies, we identified a novel IOED in the domain of political policy comprehension, and showed that IOEDs occur at least in part because people confuse a broad, abstract understanding of the target issue with a deeper, concrete understanding of its nuances.

*44. Source Bias In Occupational Prestige Judgments*

Daniels, Michael (Bowling Green State University); Nolan, Kevin (Bowling Green State University); Highhouse, Scott (Bowling Green State University)

Professional deformation is the tendency to look at things from the point of view of one's own profession and forget the broader perspective. Although this phenomenon is rarely studied, the general idea is consistent with a wide array of self-serving biases. Using a large-scale sample of working adults, this study examines whether judgments of occupational prestige are biased in favor of one's own professional identity. Ratings of workers within a professional classification are compared with ratings of workers in other classifications. In addition, ratings of a person's specific job are compared with national prestige ratings for that same job.

*45. What we expect before we fail: Overly pessimistic expectations about how others see one's possible failure in the future*  
Kudo, Eriko (Tokyo Woman's Christian University)

This study investigated whether people expect them to be judged harshly by others before their performances, when the outcomes are unknown. In this experiment participants took a role of either an actor or an observer. The actor made inferences about how they would be evaluated by the observer either before they began the task or after they finished the task. Although actors' expectations were more pessimistic compared to observers' actual evaluations in both situations, their expectations were even more pessimistic if they were asked before the task. Discussion focuses on the role of this pessimistic expectation before the task.

*46. Learning order affects the use of cues in memory based multi-attribute decisions*  
Renkewitz, Frank (University of Erfurt); Jahn, Georg (University of Greifswald); Betsch, Cornelia (University of Erfurt)

In studies investigating probabilistic inferences based on cue values stored in long-term memory, many individuals appear to use the take-the-best (TTB) heuristic. TTB predicts that memory is searched for cue values in order of cue validities. A decision is made according to the first cue that discriminates between the alternatives. In most empirical tests of TTB the cue validity hierarchy matched the order in which the cue values were learned. In two experiments we disentangled cue hierarchy and learning order. The results show that the proportion of TTB users decreases when cue hierarchy and learning order are not aligned.

*47. The effects of decision-making styles on anchoring and adjustment*  
de Moor, Anke (UTEP); Guillen-Gomez, Laura (UTEP); Morera, Osvaldo F. (UTEP)

Decision making styles differ depending on the individual, as does their need for cognition. This research uses the Decision Making Inventory, Need for Cognition, and Analysis-Holism scales and relates these styles to the amount of adjustment people make according to a specific anchor. These individual-difference measures may be used to predict the adjustment from experimenter-generated anchors. The results showed that people who scored high on the analytical scale tended to adjust more from an anchor taking into account every aspect of a problem. People who scored high for holism tended to adjust less basing their decisions on their intuitions.

*48. fMRI Study of Rational versus Irrational Choices on a Ratio Bias Task*  
Krawczyk, Daniel (University of Texas at Dallas); Levine, Daniel S. (University of Texas at Arlington); Ramirez, Patrick A. (University of Texas at Arlington); Togun, Ifeoluwa (University of Texas at Arlington); Robinson, Rebecca (University of Texas at A

We use fMRI to study choices on a variant of a task Pacini and Epstein developed to study ratio bias. Participants get a sequence of 90 choices between low probabilities (e.g., 8/100 versus 1/10) and each time asked to choose the higher. Behavioral studies show wide individual differences in calculation efficacy, which also correlate with reaction time. fMRI indicates greater activation of dorsolateral prefrontal with correct choices and of anterior cingulate with detection of conflict (e.g., between higher probability and higher numerosity).

*49. Individual Differences in Counterfactual Production*  
Jasper, J.D. (University of Toledo); Barry, Kyle (University of Toledo); Christman, Stephen D. (University of Toledo)

Research shows that mixed-handers more so than strong-handers can maintain multiple and oftentimes opposing representations simultaneously. Because of this, mixed-handers demonstrate greater Stroop interference and better appreciate visual paradoxes. The current study extended this work into the area of counterfactual production. 126 students were asked to read 4 scenarios and generate as many counterfactuals as they could in 5 minutes. Results indicated that mixed-handers generated significantly more upward and downward counterfactuals than strong-handers, confirming our prediction. Theoretical implications as well as ongoing work on counterfactually-related decision phenomena such as hindsight bias, regret, and risk will be discussed.

*50. Patient teenagers?: A comparison of the sexual behavior of virginity pledgers and matched non-pledgers*  
Rosenbaum, Janet E (Johns Hopkins STD Center)

Millions of adolescents have taken sexual abstinence pledges, but it's unknown whether pledgers act differently from similar non-pledgers. Using Add Health, adolescents reporting a virginity pledge (n=289) were matched with non-pledgers (n=645) using exact

and nearest-neighbor matching on pre-pledge factors including religiosity and attitudes towards sex and birth control. Five years post-pledge, pledgers and matched non-pledgers did not differ in premarital sex, and sexually transmitted diseases; pledgers had 0.1 fewer past year partners, but the same number of lifetime partners. Pledgers had lower past year birth control and condom use.

*51. Withdrawn*

*52. Asymmetry in Moral Blame and Perceived Causality for Actions and Omissions as External and Internal Causes*  
Meng, Christina (University of Wisconsin-Madison); Moore, Colleen (University of Wisconsin-Madison)

Previous studies on moral evaluations have had actions causally linked to outcomes but not omissions. However, a causal agent need not be limited to actions. While an action exerts external agency, an omission exerts internal agency. The current study constructed omissions as “internal causes” and actions as “external causes.” When intent was ambiguous, external causes evoked more perceived causality and garnered more blame than internal causes. Based on these findings, we conclude a bias exists in perceiving causality for internal and external causes, and that this bias may play a role in the asymmetry in blame for actions and omissions.

*53. Entrepreneurial over-entry? The perceived costs (and benefits) of entrepreneurial errors.*  
Sackett, Aaron M. (University of Chicago); Sheldon, Oliver J. (University of Chicago)

Research on entrepreneurial decision-making suggests that people mistakenly over-enter into entrepreneurial ventures. We propose that this tendency may result from asymmetric tolerance for the two major errors potential entrepreneurs can commit: Failed Entry (FE) and Missed Opportunity (MO). Across multiple studies, potential entrepreneurs indicated they would rather commit errors of FE than of MO. Further analysis suggests why: FE’s were perceived as having more side-benefits--but no more costs--than MO’s. Additional data suggest a relationship between FE-tolerance and entrepreneurial risk-taking. Thus, entrepreneurial “over-entry” may result from a belief that it’s better to suffer failure than missed opportunities.

*54. ON THE DETERMINANTS OF THE CONJUNCTION FALLACY: PROBABILITY VS. CONFIRMATION*  
Tentori, katya (University of Trento); Crupi, Vincenzo (IUAV); Russo, Selena (University of Trento)

Despite extensive inquiry conjunction fallacy (CF) still lacks a satisfactory explanation as well as a model predicting its occurrence. Our research investigated two candidate accounts referring to either probability or confirmation as determinants of CF. In a first experiment an increase in both the probability and the degree of confirmation of the added conjunct was shown to positively affect CF rates. A second experiment allowed us to disentangle the effects of the two variables. The results strongly favor a confirmation-theoretic account of CF against competing hypotheses relying on probability of the conjuncts as major determinants of the phenomenon.

*55. Hindsight Bias Contributions to Overconfidence in Judgment Accuracy*  
Yates, J. Frank (University of Michigan); Dries, Elizabeth (University of Michigan); Jackson, Samuel R. (University of Michigan); Mattise, Nicole (University of Michigan)

There has long been speculation that hindsight bias might contribute to overconfidence in judgment accuracy, but there has been little empirical evidence bearing on such speculations. In the present research, subjects made judgments about general knowledge as well as future events (basketball game outcomes) over two occasions separated by several weeks. Longitudinal results showed that, for general knowledge, hindsight bias in Session 1 was associated with overconfidence manifested in Session 2. The effects for judgments about future events were similar but somewhat weaker. These findings are consistent with a proposed mechanism by which hindsight bias supports the maintenance of overconfidence.

*56. Anchoring Effects with Complete Information: Numeric Anchors Influence Answers to Math Equations*  
Smith, Andrew R. (University of Iowa); Windschitl, Paul D. (University of Iowa)

In the vast majority of studies on anchoring and adjustment, participants have very little information about the target estimate, and/or the estimate under question is subjective in nature. The goal of this study was to investigate anchoring effects in an area where there is an objectively correct answer and participants are presented with complete information. Specifically, participants were briefly shown a math equation. Participants compared the answer of the equation to an anchor value and then provided an estimate of the answer. Consistent with previous research, higher estimates were given following large anchor values as compared to low anchors.

*57. Measures of Indecisiveness: Evidence of Convergent Validity*  
Chiu, Poyee (Rutgers, State University of New Jersey); Fagley, Nancy (Rutgers, State University of New Jersey)

Convergent validity of two measures of indecisiveness was examined. 405 undergraduates completed two indecisiveness scales and measures of decisional procrastination, fear of commitment to a decision, dysfunctional impulsivity, and buck-passing. The indecisiveness scales correlated significantly with each other ( $r = .82$ ) and with the other variables in predicted directions. A second-order principal components analysis, which included the variables hypothesized to be related to indecisiveness, the two indecisiveness

scales, and measures of constructs believed to be distinct from indecisiveness. Three components were extracted; the first contained all but one of the measures hypothesized to be related to indecisiveness, indicating convergent validity.

*58. Individual Differences in Handedness: Comparing Adaptive Risky Decision Making in Children and Adults*

Bossard, Elaine A. (University of Iowa); Levin, Irwin P. (University of Iowa); Jasper, John D. (University of Toledo); Christman, Stephen D. (University of Toledo)

Expanding on previous handedness research, which relates mixed-handedness to increased risk sensitivity and aversion through increased interhemispheric interactions, children (5-7 years) and their parents completed a decision making task in which the expected value of the risky and riskless options varied across trials. While no handedness differences were found for overall risk-taking or risk sensitivity, interactions with handedness, age, and gender indicate increased risk sensitivity for strong-handed adult males. Because adults perform better than children and children show no handedness effect, it appears that higher cognitive functioning may need to be developed before handedness differences can emerge.

*59. Pathological Gambling and Sensation Seeking: A Closer Look at the Subscales of the SSS-V*

Littler, Erica E. (University of Georgia); Goodie, Adam S. (University of Georgia)

This project explored the relationship between sensation seeking (SS) and pathological gambling (PG), using two measures of gambling pathology and the Zuckerman Sensation Seeking Scale (SSS-V). Prior studies have found positive, negative, or no relationship between sensation seeking and PG. Significant positive correlations were observed between PG and the SSS-V total score and the Disinhibition (DS) and Boredom Susceptibility (BS) subscales. Discussion focuses on how differential exploration of these subscales, rather than the Thrill and Adventure Seeking (TA) and Experience Seeking (ES) subscales, may best account for the mixed literature.

*60. Tendency to Seek Advice: An item and scale analysis*

Pui, Shuang-Yueh (Bowling Green State University); Brooks, Margaret E. (Bowling Green State University)

In the advice literature, the roles of advice-seeking and individual differences in decision making have been largely ignored (Bonaccio & Dalal, 2006). Tendency to seek advice, a new individual difference construct, is the tendency to elicit advice about a decision (Pui & Brooks, 2008). In this study, the recently-developed Tendency to Seek Advice scale (TSA) was examined using item response theory and classical test theory approaches. This study refined the TSA scale based on the item and scale properties of the scale. Results showed that the TSA scale had good item and scale properties. Implications of the results are discussed.

*61. Executive Functions in Decision Making*

Del Missier, Fabio (University of Trieste); Mäntylä, Timo (Umeå University); Visentini, Mimì (University of Trieste)

Decision making is closely related to executive functions, which involve the ability to monitor and control information processing necessary to produce voluntary action. These research areas have proceeded relatively separately, and empirical research on executive control in decision making has been sparse and inconclusive. An individual differences study on a sample of 120 undergraduates examined the relationship between executive functions (shifting, updating, and inhibition) and a set of representative decision making tasks (A-DMC -Bruine de Bruin, Parker, & Fischhoff, 2007- and the Iowa Gambling Task). The results shed light on cognitive control processes underlying different aspects of decision making competence.

*62. Social Value Orientation as a Moral Intuition: Decision-Making in the Dictator Game*

Cornelissen, Gert (Universitat Pompeu Fabra, Barcelona); Dewitte, Siegfried (Catholic University Leuven, Belgium); Warlop, Luk (Catholic University Leuven, Belgium)

We studied the decision making process in the Dictator Game and showed that decisions are the result of a two-step process. In a first step, decision makers generate an automatic, intuitive proposal. Given sufficient motivation and cognitive resources, they adjust this in a second, more deliberated phase. We show that one's Social Value Orientation determines intuitive choice tendencies in the first step, mediated by the dictator's perceived interpersonal closeness with the receiver. Self-interested concerns subsequently lead to a reduction of donation size in step 2. Finally, we show that increasing interpersonal closeness can promote pro-social decision-making.

*63. Predicating Moral Judgments and Folk Intuitions: Evidence from Metaphysics, Metaethics, and Theory-of-Mind*

Feltz, Adam (Florida State University); Cokely, Edward T. (Max Planck Institute for Adaptive Behavior and Cognition)

In five experiments, we demonstrate that moral judgments and folk intuitions often predictably vary across individuals. Contrary to philosophical orthodoxy, results reveal that ethical and theory-of-mind judgments are often associated with stable individual differences, such as personality traits and cognitive styles. We argue that these individual differences pose unique challenges (and opportunities) for issues in psychology, philosophy, law and politics. For example, these results might partially explain why some philosophical debates are so intractable: People (including & #147;experts& #148; such as philosophers, lawyers, and judges) with

different personalities and cognitive representations may simply have different yet predictable intuitions. Implications will be discussed.

*64. Effect of perceived social distributions on subjective well-being*

Galesic, Mirta (Max Planck Institute for Human Development); Rieskamp, Joerg (Max Planck Institute for Human Development); Olsson, Henrik (Max Planck Institute for Human Development)

We study whether people's subjective well-being can be better predicted by social comparison processes or by their subjective aspiration levels. Range-frequency theory has been proposed to explain how social comparisons could influence well-being, but the results of studies testing its applicability have been mixed. Using data from a representative Dutch sample (n=500), we test whether using parameters of subjectively perceived, rather than objective population distributions, would improve the predictive accuracy of the range-frequency theory. We compare subjective and objective range-frequency models with an aspiration level model, and discuss the implications for the extant theories of well-being.

*65. I'll Have What She's Having: The Nomological Net of Indecisiveness*

Alexander, Katherine N. (Bowling Green State University); Daniels, Michael A. (Bowling Green State University); Diab, Dalia L. (Bowling Green State University); Pui, Shuang Y. (Bowling Green State University); Brooks, Margaret E. (Bowling Green State Univ

Indecisiveness is a tendency to experience difficulty in making choices (Germeijs & De Boeck, 2002). Although indecisiveness appears to be a fairly common phenomenon, very little research has been devoted to the correlates and outcomes of this trait (Rassin, Muris, Franken, Smit, & Wong, 2007). We examined the empirical relationship between indecisiveness and various related constructs in order to evaluate the nomological network surrounding the indecisiveness construct. We also examined the relationship between indecisiveness and several decision-making situational dilemmas and behavioral items. Results revealed relationships between indecisiveness and several variables. Implications of the results are discussed.

*66. Sequential decision making in a healthy and a clinical depressed sample*

von Helversen, Bettina (Max Planck Institute for Human Development); Wilke, Andreas (University of California, Los Angeles); Johnson, Tim (Stanford University); Schmid, Gabriele (Charité ); Klapp, Burghard (Charité)

Depression has been connected to a number of cognitive deficits regarding decision making. We investigated the performance of a healthy and a clinical depressed sample in a sequential decision making task. Both samples did not differ in performance. However, in the healthy population performance was linked to the personal goals and self reported difficulties in decision making, while this was not the case for the clinical sample. This indicates that the relation between problems in decision making and actual performance is limited to non-pathological samples. Further, in the clinical sample a dissociation between achievement goals and actual performance occurred.

*67. Resolving ethical dilemmas: More evidence for between-subjects variability in moral principles selection / preferences*

Blais, Ann-Renee (Defence R&D Canada Toronto); Thompson, Megan M. (Defence R&D Canada Toronto)

We continued to investigate the existence of individual differences in moral principle selection / preference in response to moral dilemmas and whether such differences were related to age, gender, religiosity, and political affiliation. In a follow-up and expanded version of the work we presented last year, and as part of a larger study on moral decision making, 212 participants reflected upon 4 ethical dilemmas. Once again, via multilevel modeling, we found significant between-subjects variability in the extent to which they relied on various moral principles to resolve those dilemmas. We discuss the potential implications in the use of moral principles.

*68. When the role fits: Regulatory fit in negotiations*

Appelt, Kirstin C. (Columbia University); Higgins, E. Tory (Columbia University)

A match between goal orientation and strategy creates a feeling of 'rightness' known as regulatory fit (Higgins, 2000). In two negotiation studies, we find evidence for regulatory fit from a match between regulatory focus and negotiator role. Specifically, in dyadic price negotiations, buyers adopt a loss/non-loss frame associated with a vigilant strategy and sellers adopt a gain/non-gain frame associated with an eager strategy. When people are assigned to the role whose preferred strategy matches their own chronically preferred strategy, they experience focus-role fit, which intensifies their responses. We demonstrate the effects of focus-role fit in negotiation preparation and actual negotiation.

*69. When competition breeds equality: Effects of appetitive versus aversive competition in negotiation*

ten Velden, Femke S. (University of Amsterdam); Beersma, Bianca (University of Amsterdam); De Dreu, Carsten K. W. (University of Amsterdam)

Across four experiments we distinguish between appetitive (seeking more than one's counterpart) and aversive competition (avoiding ending up with less than one's counterpart). Building on achievement motivation and regulatory focus theory we show that appetitive competitors are less anxious, more optimistic and confident, and settle more easily. However, these outcomes are limited to settings in

which negotiators are unaware of their partner's similar goal, or under conditions of incomplete information on payoffs. Although aversive competitors use information to build-in safety, to develop trust, and to achieve high quality agreements, information shatters appetitive competitors' confidence and, as a result, their outcomes.

*70. Correlates of a Scale of Numeracy*

Brooks, Margaret E. (Bowling Green State University); Pui, Shuang-Yueh (Bowling Green State University)

Numeracy is the ability to use basic numerical and probability information (Peters, et al., 2006). This paper examines the correlates of an 11-item measure of numeracy used in decision-making research (Lipkus, Samsa, & Rimer, 2001). We look at numeracy's relation to theoretically-related and otherwise interesting variables: cognitive ability, cognitive styles, and dimensions of personality. The Numeracy Scale showed the strongest relation with two variables that are conceptually related to numeracy – cognitive ability and rational thinking style – but numeracy does seem to be distinct from these constructs.

*71. Age differences in effects of the replayed images of one's own risky actions on self-understanding of those risks*

Inaba, Midori (University of Electro-Communications); Tanaka, Kenji (University of Electro-Communications)

This study examined how to present one's own risky actions for the self-understanding of those risks. We focused on risky driving. After the running on a driving simulator, drivers of various ages viewed the replayed risky scenes of their own driving. The scenes were replayed in three types of objective angles that were different from the perspective of the driver's seat. There was difference in the perspective that effectively inhibited the risky actions after replaying the scenes between ages. Effects of presenting the images might be affected by interaction between age and emphasis on who is suffered from the risks.

*72. Jekyll and Hyde Meet Task Switching: The Influence of Perceived Threat on Task Switching*

Siegel, Eric (University of Maryland, College Park); Curtis, Ryan (University of Maryland, College Park); Dougherty, Michael (University of Maryland, College Park)

The Jekyll and Hyde-ing of relationships refers to Graham and Clark's (2006) research explaining why people with low self-esteem judge their relationship partners to be primarily good or primarily bad at any given point. We found that participants under self-esteem threat were slower at judging whether positive and negative traits applied to a target when the traits were presented in an alternating, rather than segregated, format. This occurred specifically when the target was the source of the self-esteem threat. Furthermore, participants' performance on a separate task switching procedure predicted the judgment of the threat source when the participant felt threatened.

*73. Rexamining the white-male effect: The mediating role of cognitive skill in the judged probability*

Dougherty, Michael (University of Maryland); Hanges, Paul (University of Maryland)

Prior research has shown that white males tend to underestimate risks compared to females and minority male and females. This so-called white-male effect has been replicated a number of times, and is often attributed to cross-cultural differences in socio-political variables. We examined whether black-white differences in judgment might be attributable to differences in cognitive skill. We found that differences in judgment between black and white males were eliminated when individual differences in cognitive skill were factored out. We argue that the white male effect is an artifact of biased sampling by researchers or reduced capacity triggered by stereotype activation.

*74. Implicit race bias influences estimations of trustworthiness*

Stanley, Damian (New York University); Sokol-Hessner, Peter (New York University); Perino, Michael (New York University); Banaji, Mahzarin (Harvard University); Phelps, Elizabeth (New York University)

Trustworthiness estimation is basic to human social interaction. Research has demonstrated that such estimations depend on face morphology, suggesting that a person's degree of race bias should not influence their propensity to judge another trustworthy. Participants rated the trustworthiness of 291 unfamiliar male faces (100 Black, 100 White) and then completed implicit (IAT) and explicit measures of Black/White race bias. Those with stronger anti-Black IAT bias also rated Black faces as more untrustworthy ( $r = 0.42$ ). These results are the first to demonstrate that estimations of trustworthiness can reflect a perceiver's implicit, and likely unintended, degree of race bias.

*75. Individual Differences in Working Memory Capacity: How does cognitive load affect decision making?*

Montaño, Michael J. (Auburn University); Franco-Watkins, Ana M. (Auburn University)

People often make decisions while under additional cognitive demands, such as cognitive load or time pressure. This study examined how individual differences in working memory capacity (WMC) affect decisions based on pre-existing information. Participants were trained on different cities with feedback. After reaching the accuracy criterion, participants completed the decision task alone and under more demanding situations (e.g., dual-task and time pressure). Results indicate that individual differences in working memory play a role in the decision task training and decision performance under different cognitive demands.

## 76. INFORMED DECISION MAKING IN HEALTH CARE: WHAT IS IT AND DOES IT LEAD TO BETTER DECISIONS

Timmermans, Danielle (VU university Medical Center); Van den Berg, Matthijs (VU University Medical Center)

Informed decision making of patients for treatment or tests is seen as important in modern health care. An informed choice is one that is based on sufficient and relevant information about the choice options, reflects the decision maker's values and is deliberated. The study sample consisted of 1159 pregnant women who were offered a prenatal screening tests. While deliberation about a decision to undergo prenatal testing is associated with better self-reported decision quality, it is not clearly related to whether the choice is classified as informed. Informed choice was associated with more satisfaction with the decision and less decisional conflict.

## 77. Medical Decision Making for Today and for the Future: A Taxonomy of Shared Medical Decisions

Austin, Laurel C. (Copenhagen Business School)

Traditionally, medical decisions arise in response to a condition and involve choosing among a set of diagnoses, then from a set of treatments. Increasingly, medical decisions today pertain to uncertain future health states. For example, parents can choose genetic tests to predict the likelihood of future health conditions for their children. I develop a taxonomy of decisions professionals and patients face, including diagnostic, treatment, physical and genetic screening, preventive treatment and behaviours, and end-of-treatment decisions. The likely role of the professional and patient along a spectrum of shared decision making styles is considered for each decision type.

## 78. The "Understanding it Makes it Normal" Effect In Judgments of the Need for Psychological Treatment

Kim, Nancy S. (Northeastern University); LoSavio, Stefanie (Northeastern University)

Meehl (1973) informally proposed an "understanding it makes it normal" effect, such that having an explanation for a client's bizarre behaviors results in perceiving those behaviors as more "normal." Building upon this idea, we tested whether judgments of hypothetical clients' need for psychological treatment are influenced by the availability and type of explanations given. Undergraduates read vignettes describing clients with psychopathological behaviors, and read either a life event explanation for those behaviors (either within or outside the client's control) or no explanation. Relative to the control condition, only the external-control explanation elicited the effect. Implications for clinical thinking are discussed.

## 79. Framing the ward: communication biases in the medical domain

Lucchiari, Claudio (University of Milan); Pravettoni, Gabriella (University of Milan)

The way in which doctors and patients communicate may affect decisions and judgments. Our study was aimed at analyzing some of these biases in the medical domain. Sixty students and 32 physicians took part in the experiment. We manipulated the presentation of some clinical vignettes. Our data suggest that the framing effect is not always relevant. For both doctors and students some data format affects decisions more than others. However, it seems that there is the interaction between personal features, professional experience and data presentation that plays the key role in decisions and judgments in the medical domain.

## 80. Medical residents fail to recognize relevant co morbidity while focusing on the principle diagnosis

Zwaan, Laura (EMGO Institute/ VUmc, Amsterdam); Timmermans, Danielle R.M. (EMGO Institute/ VUmc, Amsterdam); Thijs, Abel (Dept. of internal medicine, VU Medical Center, Amsterdam); Wagner, Cordula (EMGO Institute/ VUmc, Amsterdam and NIVEL, Utrecht)

Medical diagnostic reasoning is a complex process involving many decision making skills. Physicians have to recognize a pattern in an environment with a lot of noisy information. This study focuses on the weaknesses of diagnostic reasoning by studying patient records followed by interviewing residents in the case of a suboptimal diagnostic event. The results showed that residents focused on the principle diagnosis mainly and they often ignored important coexisting clinically relevant abnormalities (i.e. pneumonia in a patient with lung cancer). We conclude that residents were subject to focusing effect on their original diagnosis.

## 81. Zero-risk tolerance and "risk acceptance" of four different medical activities: delivery vs. treatment

Hirahara, Norimichi (Tokyo Institute of Technology); Yamagishi, Kimihiko (Tokyo Institute of Technology); Wada, Chihiro (Keio University)

We investigated lay people's "zero-risk tolerance" and "risk acceptance" regarding four different medical activities: delivery and three types of cancer treatment (surgery, chemotherapy, radiotherapy). Four hundred and thirty-four people answered a web questionnaire that asked risk attitudes as well as perceptions toward each activity. The result showed significant difference between delivery and cancer treatments both in zero-risk tolerance and risk acceptance, while showing no difference among the three treatment types. Factor analysis revealed that "risk perception" consists of two lesser factors: namely, "known dangers" and "unknown dread." Also, the "complexity" of activities was found an important factor for risk perception.

## 82. How clinicians use research findings to guide clinical practice: Statistical reasoning

Suarez, Marta T. (Rutgers University); Chapman, Gretchen B. (Rutgers University)

Speech-language pathologists read fabricated abstracts describing research results. Different versions of the abstracts varied quality of study design, sample size, and effect size found in the study. Clinicians' willingness to apply a study in clinical practice was greatly influenced by effect size, somewhat influenced by study quality, and less influenced by sample size. Individual difference variables predicted use of statistical factors. More-numerate subjects showed more positive attitudes toward evidence-based practice (EBP), preferred better-quality sources of information and matched their patients to the abstracts' subjects more closely. Positive attitude toward EBP correlated with sensitivity to study quality and patient-matching.

*83. Memory is the harshest critic: How atypical memories influence serial judgment*

Davis, Alexander L. (Carnegie Mellon University); Morewedge, Carey, K. (Carnegie Mellon University); Bruine de Bruin, Wandii (Carnegie Mellon University)

People exhibit an order effect when making judgments, whereby the first stimulus is judged more harshly than are subsequent stimuli. We found that this effect is, in part, due to the cognitive accessibility of extreme category members. For example, participants who recalled no performance or the best performance they could remember subsequently judged the first performance they viewed more harshly than the second, whereas participants who recalled the worst performance showed a reversal of the order effect, subsequently judging the first performance they viewed less harshly than the second. Furthermore, recall tasks facilitated the first judgment relative to no-recall controls.

*84. Are Within-Subjects Designs "Transparent"?*

Lambdin, Charles (Wichita State University); Shaffer, Victoria (Wichita State University)

Three experiments tested the hypothesis that within-subjects designs are "transparent." In study 1, four between-subjects experiments were replicated using a within-subjects design (Bastardi & Shafir, 1998; Shafir, 1993; Tversky & Kahneman, 1986). In study 2, participants guessed the experimental manipulation in each of the same 4 experiments, reported their confidence in correcting identifying the manipulation, and rated each experiment on its transparency. In study 3, SJDM members rated the transparency of each of the same 4 experiments from the perspective of a naïve research participant. Taken together, the results suggest that within-subjects designs do not actually render tasks transparent.

*85. Evaluating an Indecisiveness Scale Using Two Psychometric Frameworks*

Diab, Dalia L. (Bowling Green State University)

Indecisiveness can be defined as having difficulty in making decisions. Recently, Germeijs and De Boeck (2002) developed a scale to measure indecisiveness, and they found preliminary evidence for its construct validity. The purpose of this study was to further evaluate this indecisiveness scale. Based on the recommendations of recent research (e.g., Ellis & Mead, 2002), both classical test theory (CTT) and item response theory (IRT) were used to assess the scale. The CTT and IRT results complemented each other, providing a more complete assessment of the measure. Overall, results showed that this indecisiveness scale had good psychometric properties.

*86. Wrong but funny: The absurdity of moral violations*

Warren, Caleb (UC Boulder); McGraw, A. Peter (UC Boulder)

Moral violations can make people shout, gag, grimace, or cry. But can they also make people laugh? Consistent with theories of humor, our research suggests that the absurdity of some immoral acts can elicit amusement. Compared to scenarios that described normal behaviors, scenarios depicting moral violations elicited mixed emotions of amusement and disgust. Moreover, respondents who were psychologically distant to the immoral act were more amused. For example, people who attend church were disgusted when a church gave away a Hummer SUV as part of a promotion, whereas those who do not attend church were both disgusted and amused.

*87. Do as I say not as I do: Factors influencing moral hypocrisy*

Clark, Brian A. (Wake Forest University); Stone, Eric R. (Wake Forest University)

We hypothesized that moral hypocrisy -- holding others to standards not applied to oneself -- is driven by a process whereby people base decisions for others primarily on a sociomoral value (e.g., lying is bad), but consider additional factors (e.g., chance of being caught) when facing identical decisions themselves. To test this, we manipulated three variables: 1) whether the participant or a hypothetical other was the subject/agent, 2) whether the action entailed considerable risk or little/no risk, and 3) whether the probe question was phrased normatively or descriptively. The primary finding was a 3-way interaction that contrasted with our predictions.

*88. In search for an "alibi". The role of justification in moral judgment*

Manfrinati, Andrea (University of Valle d'Aosta); Rubaltelli, Enrico (University of Padova); Mazzocco, Ketti (University of Trento); Lotto, Lorella (University of Padova); Rumiati, Rino (University of Padova)



This study investigated how people solve moral dilemmas and aimed to show that their answers are influenced by information about the life expectancy of a person that has to be sacrificed in order to save several other individuals. People should have a different reaction and a “different” mental representation of an individual if they know that this individual has a short life expectancy. The information about the life expectancy of a person could provide the decision maker with a sort of “alibi” allowing him to deem an action as acceptable despite the fact that he usually judges it inappropriate.

*89. The Role of Causality in Moral Dilemmas*

Iliev, Rumen (Northwestern University); Sachdeva, Sonya (Northwestern University)

The current focus of moral psychology emphasizes the link between ethical violations and emotional responses. Nevertheless, recent work by Waldmann and Dieterich (2007) suggested a cognitively-based approach that stresses the role of causal inferences rather than on ethical principles. In Experiment 1 we apply a popular paradigm for studying causality based on counterfactual reasoning (Kahneman and Miller, 1986), demonstrating that the mutability of an action could influence permissibility judgments. In Experiment 2 we replicate Waldmann and Dieterich (2007) finding that ethical principles could be overridden by causal factors, but our results also question their specific level of causal analysis.

*90. Perceptual judgement by either an actor or an observer are more accurate than the movement itself*

Hohmann, Tanja (German Sport University Cologne); Munzert, Jörn (University of Gießen)

Based on the concept of internal models, motor representations can be used to predict movement consequences. The present study analyzed how accurately actors and observers can predict the outcome of boule shots (ball flight invisible). Actors had to hit goals at different distances (7m, 7.5m or 8m). Pairs of participants were formed (blindfolded actor, observer). Both had to estimate the actual distance of the shot. Feedback was given after every trial. The results show that predictions based on kinesthetic feedback (actors) and on visual feedback (observers) do not differ. Furthermore both are more accurate than the performance of actors.

*91. The impact of justification pressure in risky defusing behaviour*

Bär, Arlette S. (University of Fribourg, Dep. of Psychology, Switzerland); Huber, Odilo W. (University of Fribourg, Dep. of Psychology, Switzerland); Huber, Oswald (University of Fribourg, Dep. of Psychology, Switzerland); Samson, Andrea C. (University of Fribourg, Dep. of Psychology, Switzerland)

Under justification pressure decision-makers know in advance that they have to justify their decision afterwards. Two hypotheses were investigated: (1) risk defusing operators (RDOs) search is increased under justification pressure, and (2) RDOs are a central element in the justification texts. In Experiment 1, 60 subjects decided in a medical scenario in conditions with and without justification pressure. In Experiment 2 (N=80), additionally success of RDO-search was varied. Both hypotheses were confirmed. In Experiment 2, under justification pressure RDO-search was more persistent in the unsuccessful search condition. The non-availability of RDOs was used as argument for not-choosing a specific alternative.

*92. Loss aversion in contrastive explanations*

Heussen, Daniel (City University, London); Belardi, Sophie (City University, London); Kusev, Petko (City University, London)

People do not explain a fact per se but by contrasting the target fact with some alternative. What is considered the to-be-explained fact and what the contrast, affects the way we explain the difference. Participants explained differences between males and females in typical and neutral attributes, such as being ambitious for professional football players or ballet dancers. Explanations were coded as either about males or females. Presenting the difference, as ‘Females are more ambitious than males’, focused most explanations on males. Exactly the same difference presented, as ‘Males are less ambitious than females’ divided explanations equally between males and females.

*93. Retrospective Bias in Everyday Decisions*

Kramer, Adam D. I. (University of Oregon); Hodges, Sara D. (University of Oregon)

Our research examines the subjective perceptions that decision-makers hold of the “everyday decisions” they have made or are in the process of making. Perceptions of decisions rated prospectively (while deciding) and retrospectively (after the decision has been made) predict satisfaction with the decision. We identify several subjective perceptions that predict decision quality, and also show a retrospective bias in everyday decisions: Decisions rated prospectively are perceived as easy to evaluate and as affecting other people predict less satisfaction once the decision has been made; however, when decisions are evaluated retrospectively, these qualities are positive predictors of satisfaction with the decision.

*94. Negotiating Trust: The Consequences of Cross-cultural Assumptions About Trust in Negotiation*

Gunia, Brian (Northwestern University); Brett, Jeanne (Northwestern University); Kamdar, Dishan (Indian School of Business)

A series of proposed studies investigate the tendency of Indian citizens to generate lower individual and joint gains than Americans in intra-cultural integrative negotiations. Underlying this result, we believe, are different assumptions about trust in negotiations. We propose that, although members of both cultures define trust similarly, Indians assume little trust at the outset of a negotiation, while

Americans assume a moderate level of "thin trust" (Meyerson, Weick, & Kramer 1996). We anticipate that data under collection from negotiation outcomes, transcripts, and surveys will support these proposals about trust and outcomes in negotiation.

*95. Team Negotiation: Exploring the Consequences of Sub-Group Conflict*  
Halevy, Nir (The Hebrew University of Jerusalem )

Large collectives (e.g., organizations, nations) usually consist of different sub-groups which often have conflicting interests. Nonetheless, negotiation research consistently regards negotiating teams, who represent these collectives, as monolithic parties with uniform interests. The present research introduced a conflict of interests within negotiating teams and investigated how this internal conflict affects the negotiation between teams. An experiment with 80 four-person teams found a detrimental effect of sub-group conflict on the performance of negotiating teams. Building on a recent model of motivated information processing in groups, this research also investigated possible processes underlying the detrimental effect of sub-group conflict on team negotiation.

*96. Negotiating under changing circumstances: motivated interpersonal evaluations*

Ramirez-Marin, Jimena Y (University of Seville); Steinel, Wolfgang (Leiden University); Medina, Francisco J. (University of Seville)

Across 2 experiments, the authors examined how increasing or decreasing sequences of outcomes and social motivation shape the relationship between negotiators. In Study 1, using a questionnaire, participants evaluated increasing sequences as more beneficial to negotiators' relationship than decreasing sequences. In Study 2, participants performed five negotiations in which the sequence of possible outcomes was either increasing or decreasing. Prosocially motivated people reported an improving relationship regardless of the sequence, while prosely motivated people reported a worsening relationship when facing a decreasing sequence. Implications for conflict resolution and negotiation over time are discussed.

*97. Avoiding Moral Temptation - People Pay to Walk Away*

Shalvi, Shaul (University of Amsterdam); Handgraaf, Michel J. J. (University of Amsterdam); De Dreu, Carsten K.W. (University of Amsterdam)

Negotiation is potentially beneficial to those engaging in it, but is nevertheless often avoided. Little is known about this pre-negotiation decision of whether or not to engage in interdependent interaction. Using a UBG with an avoidance option we test competing hypotheses derived from rational game theory and moral reasoning (specifically, an intrapersonal want-should conflict). In three studies we show that in contrast to rational prediction, people avoid negotiation when doing the morally correct thing (being fair) is also costly. Interestingly, people who actively enter negotiation behave differently than others who are forced to negotiate (as is common in experimental research).

*98. The Crying of the Lamb: When and Why Sadness Expression Helps Claim Value in Negotiations*

Sinaceur, Marwan (INSEAD); Kopelman, Shirli (University of Michigan)

We hypothesized that sadness expressions increase counterparts' concessions in negotiations, but only when the counterparts perceive expressers to have poor alternatives. This, we argued, occurs because sadness expression conveys neediness, and only counterparts who perceive expressers to have poor alternatives are affected by the neediness of their counterpart. In an experiment, dyads negotiated after one negotiator within each dyad was advised to show either sadness or no emotion. The results supported the hypothesized positive effect of sadness expression and the mediation of neediness. They suggest that sadness expression may be construed as the "weapon of the weak" in negotiation.

*99. When fair is unfair and when unfair is fair: halo effects in perceptions of organizational justice over time*

Bashshur, Michael (Universitat Pompeu Fabra); Cojuharenco, Irina (Universidade Catolica Portuguesa)

This study examines the role memory plays in shaping perceptions of organizational justice. Results from two longitudinal laboratory samples demonstrate that memory influences the relationship among justice facets, leading to halo effects in facet-specific perceptions. We point out conditions under which positive and negative events differentially persist in memory and the implications this has for both perceptions of organizational justice and workplace outcomes over time.

*100. The Intersection of Cognitive, Affective, and Moral Influences: Couple Choice Surrounding Preimplantation Genetic Diagnosis*  
Hershberger, Patricia E. (University of Illinois at Chicago); Pierce, Penny F. (University of Michigan)

Preimplantation Genetic Diagnosis (PGD) is a novel procedure where nuclei from oocytes or embryos are examined in vitro for specific genetic characteristics. To illuminate the current state of knowledge, we completed a critical review of published scientific literature surrounding couple choice to undergo PGD. Multiple strategies to identify articles and a comprehensive analysis were completed. Couple decision making about whether or not to use PGD emerges from three iterative and dynamic dimensions: cognitive appraisals, affective responses and moral judgments. Couple choice surrounding PGD represents a unique but burgeoning context for understanding dyadic decision making in an expanding genomic healthcare setting.

*101. Lay Beliefs About the Evaluation of Policies to Address Global Warming*

Huber, Michaela (University of Colorado, Boulder); Van Boven, Leaf (University of Colorado, Boulder); Morris, Joshua A. (University of Colorado, Boulder)

The results of two studies indicate that people's evaluation of policies to address global warming are influenced by their own political party, independent of policy content. A scale measuring attitudes about global warming was developed and the influence of attitudes was compared with the influence of information about parties' positions. Evaluations of policies regarding global warming were influenced by participants' own party's position, consistent with previous research (Cohen, 2003). However, when participants thought about the importance of policy content versus party position, their policy evaluations were influenced by their personal attitudes about global warming and not by their party's position.

*102. Revenge versus Social Justice*

Szymanska, Ewa (University of Pennsylvania); Baron, Jonathan (University of Pennsylvania); Kurzban, Robert (University of Pennsylvania)

Government replaces second-party revenge with third-party punishment, yet, our evolved intuitions of revenge may lead us to favor more severe penalties. Study 1 investigated punitive judgments as a function of the Victim ("You" vs. "Other") and the Punisher ("You" vs. "Justice system"). 83 subjects responded to an on-line questionnaire. The assigned imprisonment in "You the victim" was greater than in "Other the victim"; the Victim's identity did not affect perceived moral wrongness. Whether the punisher was a person or the justice system did not affect the punishment's severity. Present results have potential implications for international conflict research.

*103. Regret from a process perspective*

Schulte-Mecklenbeck, Michael (University of Bergen); Böhm, Gisela (University of Bergen); Zeelenberg, Marcel (University of Tilburg)

In this research we are interested in the information acquisition before a decision is made in a task with potential regret or disappointment. We test the 'Pattern Hypothesis' (regret emphasizes attribute wise search whereas disappointment emphasizes alternative wise search) and the 'Acquisition Hypothesis' (regret increases searches whereas disappointment decreases searches). Reb's (2008) findings of increased processing in the regret condition (absolute and over time) are replicated. Additionally we find differences in acquisition patterns between the regret and disappointment condition. These results are discussed in light of recent developments in regret theory.

*104. Understanding Risk: How Comparison Changes Probability Representation*

Bloomfield, Amber N. (DePaul University); Choplin, Jessica M. (DePaul University)

We investigated how the representation of risk, such as the probability of acquiring a disease, is affected by comparison-induced biases. Risk-related judgments are affected by how one group's risk compares to another's (Windschitl, Martin & Flugstad, 2002). Comparison-Induced Distortion (Choplin & Hummel, 2002) can occur when compared values differ by less or more than suggested by comparison language. The current studies investigate how the comparison of risk levels distorts memory for probabilities and influences worry about acquiring diseases. These findings suggest that describing risk in a comparison context can directly affect how people represent the probabilities associated with the risks.

*105. Cognitive Foundations of Risk Perception and Risk-Seeking Behavior*

Hussey, Erika K. (University of Maryland); Dougherty, Michael R. (University of Maryland)

The purpose of this study was to examine the relationship between measures of cognitive control, behavioral measures of risky decision making, and response variability. Participants completed two measures of cognitive control (Stroop and operation span), two behavioral measures of risky decision making (the Balloon Analogue Risk Task [BART] and the delayed discounting task), several measures of perceptions of risk, and measures of anxiety and impulsivity. Preliminary results indicate that response variability on the BART predicts both delayed discounting and anxiety, but is unrelated to measures of cognitive control.

*106. Risky Behaviors and Attitudes about Risk in Soldiers*

Kelley, Amanda M. (US Army Aeromedical Research Laboratory); Dretsch, Michael (US Army Aeromedical Research Laboratory); Killgore, William D. S. (Walter Reed Army Institute of Research); Athy, Jeremy (US Army Aeromedical Research Laboratory)

Preliminary evidence suggests an increase in risk propensity after a period of deployment in soldiers. The present study is the first in a series to address the effect of deployment on risk taking. In the present study, participants (Active Duty Soldiers) completed the battery of tasks assessing behaviors and attitudes about risk, including the Iowa Gambling Task and Balloon Analogue Risk Test, over three consecutive days. Preliminary test-retest results showed no significant changes in performance over the three day period when

analyzed by subject. An item analysis, however, indicated marginally significant changes in responses such that risk propensity decreased.

*107. Siting decisions - Siting conflicts*

Szanto, Richard (Corvinus University of Budapest)

Myriads of unwanted facilities were rejected by local communities and other stakeholders in the past decades, and public opposition campaigns were often successful. To explore influencing factors three case studies were elaborated in the domain of the Hungarian cement industry. By tracing siting decision making, important factors of risk perception could be identified. Case study results suggest that risk perception of the public is influenced by several factors, and political and social factors are salient. Risk perception is not a merely individual process, but rather a social construction where different actors influence the generation of the meaning of risk.

*108. Effect of age and gender on domain-specific risk taking: Risk perceptions and perceived-risk attitudes*

Qian, Jing (Columbia U); Weber, Elke (Columbia U)

Comparing older adults (age  $\geq 60$ ) to younger adults (age  $\leq 30$ ) in risk taking and risk perception across five domains outlined in the DOSPERT scale, we found significant difference in age, gender, and domain. In the domain of ethical, financial, health, and recreational risks, older people took significantly less risks than younger people, and they perceived the risks to be higher. However, in the social risk domain, older people took more risks than younger people and perceived the risks to be lower. Age also led to a significantly greater perceived-risk aversion, a result consistent with the positivity effect.

*109. Four Anomalies of Numerical Risk Perception*

Mayes, Ryan S. (The Ohio State University); Arkes, Hal R. (The Ohio State University)

In 1997, Yamagishi presented data suggesting that perception of risk is strongly influenced by numerical presentation. Further exploration of this phenomenon revealed four anomalies: risk/probability ratings are lower when (1) subjects use a fully-labeled scale rather than one with only the endpoints labeled, (2) the denominator of a risk is made more salient, (3) "chance" is rated rather than "risk," and (4) an event with a neutral valence is rated rather than a negative one. This suggests new ways in which risk perception can be influenced by the format in which the risk information is presented.

*110. Judgment and the Termination of Memory Search*

Harbison, J. Isaiah (University of Maryland); Dougherty, Michael R. (University of Maryland)

Memory retrieval is thought to influence judgment. This paper examines how people decide to stop generating potential risks from memory and the impact of this decision on judgment. We found that participants stopped generating risks similarly to how search is terminated in a general memory retrieval task. Furthermore, temporal characteristics of these termination decisions predict the magnitude of subsequent probability judgment. The longer participants go between generating their final risk and terminating search, the lower the magnitude of their probability estimate. Also, the rate of generation (but not the total number of risks generated) was positively correlated with judgment magnitude.

*111. Perceptions of Uncertain and Unethical Environmental Risks*

Kortenkamp, Katherine V. (University of Wisconsin, Madison); Moore, Colleen F. (University of Wisconsin, Madison)

The high levels of uncertainty and ethical challenges inherent to environmental risks are proposed to interact to influence risk perceptions. In three experiments, participants read hypothetical environmental risk scenarios created by a 2 (ethical violation: absent or present)  $\times$  3 (risk probability: small, moderate, or uncertain) factorial design. Results showed that ethical violations heightened risk perceptions of small probability and uncertain risks. In addition, moral evaluations and emotional reactions mediated the effects of ethical violations on risk perceptions. Finally, scientists who admitted to uncertainty in risk estimates were judged less blameworthy when negative health outcomes of environmental risks subsequently occurred.

*112. People Believe That They Are Prototypical, Not Above-Average*

Roy, Michael (Elizabethtown College); Liersch, Michael (Stern (NYU))

People tend to rate themselves as above average on a number of skills. This seems illogical: The majority cannot be above average. However, assuming people are indicating their absolute (rather than relative) ability level, a majority can be above average if many people have high, and few have low, ability. In three experiments, participants rated themselves on various skills and assessed the distribution of people's ability for those skills. Results indicate that people understand that there are various distributions for these skills, and believe that, on average, that their ability for these tasks is prototypical (modal), not above average.

*113. Framed Rationality: Unversality of the Subjective Expected Utility Model*

Lai, Shih-Kung (Department of Urban Planning, National Cheng Kung University); Tsai, Li-Hung (Department of Urban Planning, National Cheng Kung University)

We hypothesize that the decision maker is rational in the same sense as defined by the SEU model, regardless how questions are framed, and conduct an experiment to test that hypothesis of framed rationality. In the experiment, we intend to replicate the findings that are demonstrated by Kahneman and Tversky (1979), but use the same elicitation questions to further measure the subjects' SEUs to see if they maximize SEUs. The implications of the experimental results are that the SEU model might be universally valid and that we might need to rethink rationality in light of the framing effects.

*114. College Smokers' Estimates of their Probabilities of Remaining a Smoker in the Near Future*

Lipkus, Isaac M (Duke University Medical Center); Shepperd, James (University of Florida, Gainesville)

College smokers (N=662) estimated their probability of remaining a smoker in the next month and six months and rated their confidence in their estimates. Smoking status was assessed at one and six months. After controlling for desire to quit, self-efficacy, and temptation to smoke, estimates of smoking status interacted with confidence to predict smoking status at one-month. At six-months, only estimates predicted future smoking status. Results suggest that 1) smoking status is a unique correlate of continued smoking, and 2) confidence in personal estimates is a strong moderator, at least for short-term projections of smoking status.

*115. Influence of peer feedback on risk-taking*

Mitchell, Suzanne H. (Oregon Health & Science University)

Few studies have examined whether social interactions influence risk-taking. We used a risk-taking task requiring participants press a button to inflate a balloon on a computer screen: the larger the balloon, the more points accumulated but the larger the probability that the balloon would burst, causing points to be lost. In Study 1, participants were told that others had inflated the balloons more (heightened risk taking) and participants subsequently increased their risk taking behavior. In Study 2, we compared inflation in competitive or play-alone conditions. Risk-taking was higher in the competitive situation, but more so for females than males.

*116. Unpacking the Relationship Between Judgments and Working Memory*

Tomlinson, Tracy, D. (University of Maryland); Harbison, Isaiah (University of Maryland); Sprenger, Amber (Johns Hopkins University); Dougherty, Michael, R. (University of Maryland)

The magnitude of probability judgments is assumed to be negatively related to individual differences in working memory because high-span people generate and maintain more alternatives in working memory when judging a focal event. The present research tests the novel hypothesis that the correlation between WM and judgment depends on whether the focal versus alternative hypothesis requires unpacking. Larger WM capacity was related to decreases in judgment magnitude (and increases in judgment accuracy), but only when the alternative hypothesis could be unpacked. When the focal could be unpacked, this relationship disappeared.

*117. Decision making under time pressure: a prospect theory analysis*

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Many have studied the effects of time pressure on decision making; most agree that the quality of information processing deteriorates when people have limited time to make decisions. However, two important problems exist in this literature: decision making quality has been measured in disparate ways, and results have been relatively inconclusive - some have found increased weighting of negative information, while others have found increased weighting of positive information. We examined decision behavior using a mathematical model based on Kahneman and Tversky's prospect theory framework and found that decision making under time constraints led to an overall overweighting of probabilities.

*118. Teaching Brunswik's Lens Model*

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Brunswik's lens model is an ideal organizing framework for the JDM class. It is a useful way to begin the JDM course as students become aware of their decision making strategies and the importance of correspondence with the decision environments. The authors will share teaching notes, problems, exercises, and assignments developed over 25 years of teaching lens model concepts.