



Joseph L. Rotman School of Management
University of Toronto

Rotman

**THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING: Ph.D. SEMINAR
(MGT 3058)
JANUARY-APRIL, 2015**

Instructor: Dilip Soman, Room 576
E-Mail: dilip.soman@rotman.utoronto.ca
Phone: 416.946.0195

Course Objectives

This course is designed to familiarize you with a wide variety of issues related to managerial and consumer judgment and decision making. Given the emphasis of the course on behavioral decision theory, the topics covered pertain mainly to descriptive rather than normative aspects of decision making. In addition to providing you with basic knowledge on behavioral decision theory, this course has three additional goals. First, it should acquaint you with empirical methods that researchers in this field use to test their theories. (Although decision-making researchers employ diverse methods, our emphasis will be on experimental methods.) Second, this course will provide you with an opportunity to develop your own research ideas - ideas you may wish to pursue in your remaining time in this program or in your future years as an academic. It is hoped that as your basic knowledge grows, your ability to generate interesting questions about consumer decision making will increase accordingly. Third, it also aims to train you in skills that are necessary in a successful academic career – presentation, critique, synthesis and journal reviewing.

Specific objectives include:

- Survey selected classic and current literature in the psychology of decision making and judgment and identify significant findings, theoretical approaches, methodological issues, and trends.
- Encourage appreciation for the value of psychological theorizing in understanding human decision making and judgment.
- Develop critical thinking skills in identifying research opportunities in the psychology of decision making and judgment.
- Provide a setting to conceptualize and design original research on the psychological mechanisms involved in decision and judgment tasks.
- Develop skills in reviewing articles and understanding the publishing process.

Course Material and Structure

There is no formal text for this course; instead, for each session, I have assigned a list of readings. Intensive reading of these articles is a necessary requirement for you to do well in this course. The reading list consists of articles appeared in marketing, psychology, and economics journals. Because no single course can cover the vast literature on behavioral decision theory, I am only assigning a small subset of the literature. The choice of articles has been based on my judgment about their level of interest and their relevance to marketing/consumer behavior. If you are interested in learning more about a theme, please contact me for additional references.

Each week I will assign a few articles. You need to read the articles carefully and participate actively in the discussions. The focus of the discussion will be on the concepts, theoretical contributions, methods & designs, and managerial implications.

Grading

Each assignment for this course will be given a letter grade. The final grade for the course will be computed using the Rotman School of Management Internal Grade Scale (see the *Policy on Grading Practices for Masters Programs*). Each grade will be assigned a point value ranging from 9 (for an A+) to a 0 (for an FZ). Each of these assignment scale values will be given the weight indicated below in calculating a final grade for the course:

Class Participation, Short Assignment / Reading Critiques	30%
Article Review Exercise	30%
Final Paper or Exam	<u>40%</u>
	100%

CLASS SCHEDULE AND READINGS

Session 1: Introduction, Who-is-who and History of J/DM Research

Goldstein, William and Robin Hogarth (1997), "Judgment and Decision Research: Some Historical Context," *Research on Judgment and Decision Making*, Chapter 1, 3-65.

Payne, John, James Bettman and Eric Johnson (1990), "The adaptive decision maker: Effort and accuracy in choice," *Research on Judgment and Decision Making*, Chapter 5, 181-204.

Session 2: Utility Theory, Probability Theory and Utility Measurements

Hauser, John R. and Glen L. Urban (1979), "Assessment of Attribute Importance and Consumer Utility Functions: von Neumann-Morgenstern Theory Applied to Consumer Behavior." *Journal of Consumer Research*, 5, March, 251-262.

Hastie, R. & Dawes, R. M. (2001). Appendix: Basic principles of probability theory. *Rational Choice in an Uncertain World* (pp. 331-356). Thousand Oaks, CA: Sage Publications.

Edwards, W. (1954). The theory of decision making. *Psychological Bulletin*, 51, 380-417.

Schoemaker (1982), "The Expected Utility Model: Its Variants, Purposes, Evidence, and Limitations," *Journal of Economic Literature*, 20, 529-563.

Luce, R. D. & von Winterfeldt, D. (1994). What common ground exists for descriptive, prescriptive, and normative theories? *Management Science*, 40, 263-279.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.

Who's Who: Jim Bettman (Duke)

Session 3: Validity of Heuristics and Biases

Peterson, C. R., & Beach, L. R. (1967). Man as an intuitive statistician. *Psychological Bulletin*, 68, 29-46.

Kahneman, D and A. Tversky (1984). Choices, Values and Frames, *American Psychologist*, 39 (4), 341-350.

Hogarth, R. M. (1981). Beyond discrete biases: Functional and dysfunctional aspects of judgmental heuristics. *Psychological Bulletin*, 90, 197-217.

Thaler, Richard H (1987), "The Psychology of Choice and the Assumptions of Economics." in Alvin Roth ed., "Laboratory Experimentation in Economics: Six Points of View." Cambridge University Press.

Gigerenzer, G. (1991). How to make cognitive illusions disappear: Beyond "heuristics and biases." *European Review of Social Psychology*, 2, 83-115

Gigerenzer, G. & Hoffrage, U. (1995). How to improve Bayesian reasoning without instruction: Frequency formats. *Psychological Review*, 102, 684-704.

Kahneman, D. & Tversky, A. (1996). On the reality of cognitive illusions: A reply to Gigerenzer's critique. *Psychological Review*, 103, 582-591.

Gigerenzer, G. (1996). On narrow norms and vague heuristics: A reply to Kahneman and Tversky. *Psychological Review*, 103, 592-596.

Yeung C.W.M. and D. Soman (2007). The Duration Heuristic. *Journal of Consumer Research*, vol 34, p. 315.

Kruger, J, D. Wirtz, L. VanBoven and T Altermatt (2004), The Effort Heuristic, *Journal of Experimental Social Psychology*, 40, 91-98

Who's Who: Richard Thaler (Chicago)

Session 4: Cognitive Approaches: Causality and Expertise

Einhorn, H and R Hogarth (1986), "Judging Probable Cause," *Psychological Bulletin*, 99, 3-19.

Barbey, A. K. & Sloman, S. A. (2007). Base-rate respect: From ecological rationality to dual processes. *Behavioral and Brain Sciences*, 30, 241-254.

Sloman, S. A. (1996). The empirical case for two systems of reasoning. *Psychological Bulletin*, 119, 3-22.

Chi, M. T., Glaser, R., & Rees, E. (1982). Expertise in problem solving. In R. J. Sternberg (Ed.), *Advances in the psychology of human intelligence* (pp. 7-77). Hillsdale, NJ: Erlbaum.

Camerer, C. F., and E. J. Johnson, 1991, 'The process-performance paradox in expert judgment: How can the experts know so much and predict so badly?' In **Towards a General Theory of Expertise: Prospects and Limits**, K. A. Ericsson and J. Smith, eds. Cambridge: Cambridge University Press, pp. 195-217.

Shafir, Eldar (1993), "Choosing versus Rejecting: Why Some Options are both Better and Worse than Others," *Memory & Cognition*, 21, 546-56.

Who's Who: Colin Camerer (Caltech)

Session 5: Hypothesis Testing and Overconfidence

Klayman, Joshua; Ha, Young-Won (1987), "Confirmation, Disconfirmation and Information in Hypothesis Testing", *Psychological Review* (American Psychological Association) 94 (2): 211–228

Wason, Peter C. (1960), "On the failure to eliminate hypotheses in a conceptual task", *Quarterly Journal of Experimental Psychology* (Psychology Press) 12 (3): 129–140

Hoch, Stephen J. and Young-Won Ha (1986), "Consumer Learning: Advertising and the Ambiguity of Product Experience," *Journal of Consumer Research*, 13 (September), 221-33.

Koriat, Asher, Sarah Lichtenstein and Baruch Fischhoff (1980), "Reasons for Overconfidence," *Journal of Experimental Psychology: Human Learning and Memory*, 6 (2), 107-118.

Soll, J. B. (1996). Determinants of overconfidence and miscalibration: The roles of random error and ecological structure. *Organizational Behavior and Human Decision Processes*, 65, 117-137.

Soll, J. B. (1999). Intuitive theories of information: Beliefs about the value of redundancy. *Cognitive Psychology*, 38, 317-346

McKenzie, C. R. M. (1997). Underweighting alternatives and overconfidence. *Organizational Behavior and Human Decision Processes*, 71, 141-160

Who's Who: Josh Klayman (Chicago)

Session 6: Perceptual Effects On Decision Making: The Decision Context

Huber, J et al. (1982), "Adding Asymmetrically Dominated Alternatives: Violations of Regularity and Similarity Hypothesis," *Journal of Consumer Research*, 9, 90-98.

Huber, J & C. Puto (1983), "Market Boundaries and Product Choice: Illustrating Attraction and Substitution Effects," *Journal of Consumer Research*, 10, 31- 44.

Simonson, I (1989), "Choice Based on Reasons: The Case of Attraction and Compromise Effects," *Journal of Consumer Research*, 16, 158-174.

Simonson, I & A. Tversky (1992), "Choice in Context: Trade-off Contrast and Extremeness Aversion," *Journal of Marketing Research*, 29, 281-295.

Yeung, Catherine and Dilip Soman (2005), "Attribute Evaluability and the Range Effect," *Journal of Consumer Research*, 32 (3, December), 363-369.

Lynch, John G. Jr., Dipankar Chakravarti and Anusree Mitra (1991), "Contrast Effects in Consumer Judgments: Changes in Mental Representation or in the Anchoring of Rating Scales." *Journal of Consumer Research*, 18, 3, December, 284-297.

Who's Who: Itamar Simonson (Stanford)

Session 7: Invariance Axiom and Preference Reversals

Lichtenstein, S. and P. Slovic (1971), "Reversal in Preference Between Bids and Choices in Gambling Decisions," *Journal of Experimental Psychology*, 89, 46-55.

Slovic, P. (2000), "The Construction of Preference," from D. Kahneman and A. Tversky (eds) *Choices, Values and Frames*, New York: Russell Sage Foundation, 489-502.

Tversky, A., S. Sattath, and P. Slovic (1988), "Contingent Weighting in Judgment and Choice," *Psychological Review*, 95, 371-84.

Nowlis, S. and I. Simonson (1997), "Attribute-Task Compatibility as a Determinant of Consumer Preference Reversals," *Journal of Marketing Research*, 34, 205-18.

Frisch, D. and R. Clemen (1994), "Beyond Expected Utility: Rethinking Behavioral Decision Research," *Psychological Bulletin*, 116, 46-54.

Hsee, CK (2000), Attribute Evaluability, from D. Kahneman and A. Tversky (eds) *Choices, Values and Frames*, New York: Russell Sage Foundation, 543-563..

Who's Who: Paul Slovic (Oregon)

Session 8: Mental Accounting

Thaler, Richard (1999), "Mental Accounting Matters," *Journal of Behavioral Decision Making*, 12 (3) 183-206.

Prelec, Drazen & George Lowenstein (1998), "The Red and the Black: Mental Accounting of Savings and Debt," *Marketing Science*, 17, 1, 4-28.

Heath, Chip & J. Soll (1996), "Mental Budgeting and Consumer Decisions," *Journal of Consumer Research*, 23 (1), 40-52.

Gourville, JT & D. Soman (1998), "Payment Depreciation: The Behavioral Effects of Temporally Separating Payments from Consumption," *Journal of Consumer Research*, 24 (2), 160-174.

Soman, Dilip and John Gourville (2001), "Transaction Decoupling: How Price Bundling Affects the Decision to Consume," *Journal of Marketing Research*, 38 (February), 30 - 44.

Soman, Dilip (2001), "The Mental Accounting of Sunk Time Costs: Why Time is Not Like Money," *Journal of Behavioral Decision Making*, 14 (3, July), 169-185.

Gourville, John T. 1998. Pennies-a-day: The effect of temporal reframing on transaction evaluation. *Journal of Consumer Research* 24(4): 395-403

Who's Who: George Loewenstein (CMU)

Session 9: Choice Over Time

Soman, Dilip (1998), "The Illusion of Delayed Incentives: Evaluating Future Effort-Money Transactions," *Journal of Marketing Research*, 35(4), 427-437.

Herrnstein, R. J. and D. Prelec (1992), "A Theory of Addiction," in *Choice over time*, ed. G. Loewenstein and J. Elster, New York, NY: Russell Sage, 331-360.

Rachlin, H. and A. Raineri (1992), "Irrationality, Impulsiveness, and Selfishness as Discount Reversal Effects," in *Choice over time*, ed. G. Loewenstein and J. Elster, New York, NY: Russell Sage, 331-361.

Soman, Dilip (2004), "The Effect of Time Delay on Multi-attribute Choice," *Journal of Economic Psychology*, 25, 153 - 175.

Li, Xiuping (2008), "The Effects of Appetitive Stimuli on Out-of-Domain Consumption Impatience," *Journal of Consumer Research*, Vol. 34 (Feb) 649-56.

Becker, G. and K. Murphy (1988) "A theory of rational addiction". *Journal of Political Economy*, 96, 675-700.

Soman, Dilip, G. Ainslie, S. Frederick, X. Li, J. Lynch, P. Moreau, A. Mitchell, D. Read, A. Sawyer, Y. Trope, K. Wertenbroch, G. Zauberman (2005), "The Psychology of Intertemporal Choice," forthcoming, *Marketing Letters*.

Who's Who: Drazen Prelec (MIT)

Session 10: Decision Support Systems and Decision Modeling

Blattberg, R. C. and S. J. Hoch (1990), "Database Models and Managerial Intuition: 50% Model + 50% Manager", *Management Science*, 36 (8), 887-899.

Dawes, R. M. (1979), "The Robust Beauty of Improper Linear Models in Decision Making", *American Psychologist*, 34, 571-582.

Gershoff, A.D. and P.M. West (1998), "Using a Community of Knowledge to Build Intelligent Agents," *Marketing Letters*, 9 (1), 79-91.

Hammond, K. R., T. R. Stewart, B. Brehmer, and D. O. Steinmann (1975), "Social Judgment Theory," in *Human Judgment and Decision Process*, ed. Kaplan, M. F. and Schwartz, S., New York, NY: Academic Press, 271-312.

Hoch, S. J. and D. A. Schkade (1996), "A Psychological Approach to Decision Support Systems", *Management Science*, 42(1), 51-64.

Who's Who: Robyn Dawes (CMU)

Session 11: Behavioral Decision Theory

Bettman, James R., Eric J. Johnson and John Payne (1991), "Consumer Decision Making," in Thomas S. Robertson and Harold H. Kassirjian (eds.) *Handbook of Consumer Behavior*, Chapter 2, Prentice Hall, Englewood Cliffs, NJ, 50-84

Bettman, James R., Mary F. Luce and John W. Payne (1998), "Constructive Consumer Choice Processes." *Journal of Consumer Research*, 25, 3, 187-217

Luce, Mary Frances (1998), "Choosing to Avoid: Coping with Negatively Emotion Laden Consumer Decisions." *Journal of Consumer Research*, 24, 4, 409-433.

Loomes, G. and R. Sugden (1982), "Regret Theory: An Alternative Theory of Rational Choice Under Uncertainty," *The Economic Journal*, 92, 805-824.

Lopes, Lola (1997), "Between Hope and Fear: The Psychology of Risk," *Research on Judgment and Decision Making*, Chapter 24, 681-720.

Who's Who: Robin Hogarth (Pompeau)

Session 12: JDM in the Field

Bertrand, M., Karlan, D. S., Mullainathan, S., Shafir, E., & Zinman, J. (2005). *What's psychology worth? A field experiment in the consumer credit market*. Discussion paper no. 918, Economic Growth Center, Yale University, New Haven, CT.

Camerer, Colin, Linda Babcock, George Loewenstein and Richard H. Thaler (1997) "Labor Supply of New York City Cab Drivers: One Day at a Time." *Quarterly Journal of Economics* 112(2): 407-441.

Keller, Punam Amand, Bari Harlam, George Loewenstein and Kevin Volpp (2011), "Enhanced active choice: A new method to motivate behavior change," *Journal of Consumer Psychology*, 21 (2011) 376–383.

Strahelivitz, Michal, Terrance Odean and Brad Barber (2011), "Once Burned, Twice Shy: How Naïve Learning, Counterfactuals, and Regret Affect the Repurchase of Stocks Previously Sold," *Journal of Marketing Research*, Vol. 48, 102-120.

Final reviews due