

**PSYCHOLOGY 7536:**  
**HEURISTICS AND BIASES IN INTUITIVE JUDGMENT**

[http://psych.colorado.edu/~vanboven/teaching/p7536\\_heurbias/psyc7536.html](http://psych.colorado.edu/~vanboven/teaching/p7536_heurbias/psyc7536.html)

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**Overview**

Judgment and under uncertainty pervades human experience. “How much will I like it?” “Will the stock market increase?” “Why did she say that?” “Whom should I vote for?” This course will examine how—and how well—people make such intuitive judgments. The core idea is that judgments are usually based on simplifying heuristics rather than on more formal and extensive algorithmic processing. Although these heuristics typically yield accurate judgments, they also produce biased and erroneous judgments. This course will examine a variety of judgmental heuristics, both classic and recent. Students from all areas of psychology and related disciplines are welcome to enroll.

**Readings**

Gilovich, T., Griffin, D., & Kahneman, D. (2002). *Heuristics and biases: The psychology of intuitive judgment*. New York: Cambridge University Press. (GGK).

Purchase this book from a non-price-gouging vendor such as Amazon.com. Serious students of intuitive judgment will also want to obtain Kahneman, Slovic, and Tversky’s 1982 classic, “Judgment under uncertainty: Heuristics and biases.” Additional readings will be accessed via the course web site.

**Grades**

*Thought papers (25%)*

One-page commentaries are due for each class. You may discuss methodological flaws, highlight interesting implications or applications, pose questions, propose further research, or muse on the connections between the articles. The intention is for you to think carefully about the readings. Commentaries will be graded on a  $\sqrt{-}$ ,  $\sqrt{}$ , or  $\sqrt{+}$  scale.

*Participation and presentation (25%)*

All students are expected to participate in class discussion. Each week, two “discussion leaders” will guide our conversation about the readings. Leaders will meet with me prior to class to plan discussion topics.

*Final exam (50%)*

Each student will meet with me for up to one hour to discuss a research proposal. A one-page preliminary proposal will be due several weeks before the exam. Students may take the exam individually or in small, collaborative research groups.

## Calendar

*Class 1, 12 Jan, Introduction and organization*

*No class, 19 Jan, SPSP*

*\*Class 2, 26 Jan, Availability (need to reschedule to Mon or Tue)*

Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 4, 207-232.

Ross, M., Sicoly, F. (1979). Egocentric biases in availability and attribution. *Journal of Personality and Social Psychology*, 37, 322-336.

Schwarz, N., & Vaughn, L. A. The availability heuristic revisited: Ease of recall and content of recall as distinct sources. GGK.

Oppenheimer, D. (2003). Spontaneous discounting of availability in frequency judgment tasks. *Psychological Science*, 15, 100-105.

*Class 3, 2 Feb, Representativeness*

Tversky, A., & Kahneman, D. (1971). Belief in the law of small numbers. *Psychological Bulletin*, 2, 105-110.

Kahneman, D., & Tversky, A. (1972). Subjective probability: A judgment of representativeness. *Cognitive Psychology*, 3, 430-454.

Tversky, A., & Kahneman, D. Extensional vs. intuitive reasoning: The conjunction fallacy in probability judgment. GGK

Kahneman, A., & Frederick, S. Representativeness revisited: Attribute substitution in intuitive judgment. GGK

*Class 4, 9 Feb, Anchoring (and adjustment)*

Gilbert, D. T. Inferential correction. GGK.

Strack, F., & Mussweiler, T. (1997). Explaining the enigmatic anchoring effect: Mechanisms of selective accessibility. *Journal of Personality and Social Psychology*, 73, 437-446.

Trope, Y., & Gaunt, R. (2000). Processing alternative explanations of behavior: correction or integration? *Journal of Personality and Social Psychology*, 79, 344-354.

Epley, N., & Gilovich, T. Putting adjustment back in the anchoring and adjustment heuristic. GGK.

*Class 5, 16 Feb, Affect*

Slovic, et al. The affect heuristic. GGK.

Schwarz, N. Feelings as information: Moods influence judgments and processing strategies. GGK.

Forgas, J.P. (1998). On being happy but mistaken: Mood effects on the fundamental attribution error. *Journal of Personality and Social Psychology*, 75, 318-331.

Tiedens, L. Z., & Linton, S. (2001). Judgment under emotional certainty and uncertainty: The effects of specific emotions on information processing. *Journal of Personality and Social Psychology*, 81, 973-988.

*\*Class 6, 23 Feb, Judgmental myopia and focalism (need to reschedule Mon or Tue)*

Kruger, J., & Burrus, J. (2004). Egocentrism and focalism in unrealistic optimism (and pessimism). *Journal of Experimental Social Psychology*, 40, 332-340.

Wilson, T. D., Wheatley, T., Meyers, J., Gilbert, D. T., & Axson, D. (2000). Focalism: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 78, 821-836.

Moore, D. A., & Kim, T. G. (2003). Myopic social prediction and the solo comparison effect. *Journal of Personality and Social Psychology*, 85, 1121-1135.

Moore, D. A., & Small, D. A. (2005). *Error and bias in comparative social judgment: On being both better and worse than we think we are*. Unpublished manuscript, Carnegie Mellon University.

*Class 7, 2 Mar, Recognition, fast and frugal*

Goldstein, D.G., & Gigerenzer, G. (2002). Models of ecological rationality: The recognition heuristic. *Psychological Review*, 109, 75-90.

Oppenheimer, D.M. (2003). Not so fast! (and not so frugal!): rethinking the recognition heuristic. *Cognition*, 90, B1-B9.

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

Kahneman, D., & Tversky, A. (1996). On the reality of cognitive illusions. *Psychological Review*, 103, 592-591.

*Class 8, 9 Mar, Support Theory*

Rottenstreich, Y., & Tversky, A. Unpacking, repacking, and anchoring: Advances in Support Theory. GGK.

Tversky, A., & Koehler, D. J. Support Theory: A nonextensional representation of subjective probability. GGK.

Brenner, L. A., Koehler, D. J., & Rottenstreich. Remarks on Support Theory: Recent advances and future directions. GGK.

Savitsky, K. K., Van Boven, L., Epley, N., & Wight, W. (in press). The unpacking effect in allocations of responsibility for group tasks. *Journal of Experimental Social Psychology*.

*Class 9, 16 Mar, Counterfactual thinking and regret*

Kahneman, D., & Miller, D. T. Norm Theory: Comparing reality to its alternatives. GGK.

Medvec, V. H., Maday, S. F., & Gilovich, T. When less is more: Counterfactual thinking and satisfaction among Olympic medalists. GGK.

McGraw, A. P., Mellers, B., & Tetlock, P. (in press). Expectations and emotions of Olympic athletes. *Journal of Experimental Social Psychology*.

Kruger, J., Wirtz, D., & Miller, D.T. (in press). Counterfactual thinking and the first instinct fallacy. *Journal of Personality and Social Psychology*.

*Class 10, 30 Mar, Affective forecasting*

Gilbert, et al. Durability bias in affective forecasting. GGK.

Loewenstein, G. (1996). Out of control: Visceral influences on behavior. *Organizational Behavior and Human Decision Processes*, 65, 272–292.

Hsee, C.K., & Zhang, J. (2004). Distinction bias: Misprediction and mischoice due to joint evaluation. *Journal of Personality and Social Psychology*, 86, 680-695.

Van Boven, L., & Kane, J. (in press). Predicting feelings versus choices. In E. C. Chang & L. J. Sanna (Eds.), *Judgment over time: The interplay of thoughts, feelings, and behaviors*.

*Class 11, 6 Apr, Debiasing and expertise*

Phillips, J. K., Klein, G., Seick, W. R. (2004). Expertise in judgment and decision making: A case for training intuitive decision skills. In D. K. Koehler and N. Harvey (Eds.), *Blackwell Handbook of Judgment and Decision Making* (pp. 297-315). New York: Blackwell Publishing.

Wilson, T. D., Centerbar, D. B., & Brekke, N. Mental contamination and the debiasing problem. GGK.

Larrick, R. P. (2004). Debiasing. In D. K. Koehler and N. Harvey (Eds.), *Blackwell Handbook of Judgment and Decision Making* (pp. 316-337). New York: Blackwell Publishing.

Dawes, R. M., Faust, D., & Meehl, P. E. Clinical versus actuarial judgment. GGK.

*Class 12, 13 Apr, Confidence*

Gill, M. J., Swann, W.B., Silvera, D. H. (1998). On the genesis of confidence. *Journal of Personality & Social Psychology*, 75, 1101–1114.

Griffin, D., & Tversky, A. The weighing of evidence and the determinants of confidence. *GGK*, pp. 230–249.

Griffin, D., Dunning, D., & Ross, L. (1990). The role of construal processes in overconfident predictions about the self and others. *Journal of Personality and Social Psychology*, *56*, 1128-1139.

McGraw, A. Peter, Mellers, Barbara, & Ritov, Ilana (2004). The affective costs of overconfidence. *Journal of Behavioral Decision Making*, *17*, 281-295.

*Class 13, 20 Apr, Egocentrism*

Epley, N., Keysar, B., Van Boven, L., & Gilovich, T. (2004). Perspective taking as egocentric anchoring and adjustment. *Journal of Personality and Social Psychology*, *87*, 327–339.

Van Boven, L., Loewenstein, G., & Dunning, D. (in press). The illusion of courage in social-predictions: Underestimating the impact of fear of embarrassment on other people. *Organizational Behavior and Human Decision Processes*.

Karniol, R. (2003). Egocentrism versus protocentrism: The status of self in social prediction. *Psychological Review*, *110*, 564–580.

Ames, D. (2004). Inside the mind-reader's toolkit: Projection and stereotyping in mental state inference. *Journal of Personality and Social Psychology*, *87*, 340-353.

*Class 14, 27 Apr, Self-insight and perceptions of bias*

Pronin, E., Gilovich, T., & Ross, L. (2004). Objectivity in the eye of the beholder: Divergent perceptions of bias in self versus others. *Psychological Review*, *3*, 781–799.

Van Boven, L., White, K., Kamada, A., & Gilovich, T. (2003). Intuitions about situational correction in self and others. *Journal of Personality and Social Psychology*, *85*, 249–258.

Taylor, S. E., & Armore, D. A. When predictions fail: The dilemma of unrealistic optimism. *GGK*.

Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, *77*, 1121-1134.