# HAEWON YOON

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## **EDUCATION & ACADEMIC EMPLOYMENT**

2018-Current	Indiana University, Kelley School of Business Assistant Professor of Marketing
2015	Boston College, Carroll School of Management.
	Postdoctoral Researcher, Department of Marketing
	(Consumer Insights Panel & CSOM Behavioral Lab)
2014	Boston University, Questrom School of Business.
	Postdoctoral Researcher, Department of Marketing
	(Project: Intelligence Advanced Research Projects Activity (IARPA) via the Air Force
	Research Laboratory Contract FA8650-11-C-7175)
2014	Rutgers University-New Brunswick, Ph.D. in Psychology.
	Dissertation: Qualitative predictions from intertemporal choice models
	(Committee: Gretchen Chapman, Drazen Prelec, Mary Rigdon, and Randy Gallistel)
2009	Yonsei University, M.S. in Cognitive Science.
	Thesis: Temporal Discounting and Risk Factors in the Dividend Puzzle
2007	Yonsei University, B.A. & B.B.A in Psychology & Business Administration

#### **RESEARCH INTERESTS**

Intertemporal choice, consumer financial decision making, debiasing intervention, healthcare

# MANUSCRIPTS

Yoon, H. (In Press). Impatience and Time-Inconsistency in Discounting Models. Management Science.

- Yoon, H., Scopelliti, I., & Morewedge, C. K. (In Press). Decision Making Can Be Improved Through Observational Learning. *Organizational Behavior and Human Decision Processes*.
- Yoon, H., Yang, Y., & Morewedge, C. K. (3<sup>nd</sup> round; under review). Tuition Myopia: Temporal Discounting Induces a Myopic Focus on the Costs of Higher Education. *Journal of Marketing Research*.

- Yoon, H., & Chapman, G. B. (2016). A Closer Look at the Yardstick: A New Discount Rate Measure with Precision and Range. *Journal of Behavioral Decision Making*, 29(5), 470-480.
- Morewedge, C. K., Yoon, H., Scopelliti, I., Symborski, C. W., Korris, J. H., & Kassam, K. S. (2015). Debiasing Decisions: Improved Decision Making With a Single Training Intervention. *Policy Insights from the Behavioral and Brain Sciences*, 2(1), 129-140.
- Bold, K.W., Yoon, H., Chapman, G.B., & McCarthy, D.E. (2013) Factors predicting smoking in a laboratory-based smoking-choice task. *Experimental and Clinical Psychopharmacology*, 21(2), 133-143.
- Chapman, G.B., Li, M., Vietri, J.T., Ibuka, Y., Thomas, D., **Yoon**, H., & Galvani, A. (2012). Using game theory to examine incentives in influenza vaccination behavior. *Psychological Science*, 23(9), 1008-1015.
- Chapman, G.B., Li, M., Colby, H., & **Yoon, H.** (2010). Opting in versus opting out of influenza vaccination. *Journal of the American Medical Association*, *304*(1), 43-44.
- Lim, S. J., Yoon, H., Yoon, Y. S., & Sohn, Y. W. (2009). Effective advertisement message based on the expected purchase time and product category: Focusing on construal level theory. *Korean Journal of Consumer and Advertising Psychology*, 10(2), 321-336.

# **AWARDS & GRANTS**

- 2013 Advanced Training in Web-Based Research, NSF- Decision, Risk, and Management Sciences
- 2012 Dissertation Award <u>#1156072</u>, NSF Division of Social and Economics Sciences
- 2012 Student Paper Competition Finalist, INFORMS Decision Analysis Society
- 2010 The Korean Honor Scholarship, Embassy of the Republic of Korea in United States
- 2005 Army Commendation Medal, United States Department of Defense

# TEACHING

Marketing Research (Undergraduate Course), *Indiana University* (2018 – Current) Introduction to Marketing (Undergraduate Course), *Indiana University* (2018 – Current) Marketing Principles (Undergraduate Course), *Boston College* (2016 – 2018)

# **PROFESSIONAL SERVICE**

Ad Hoc Reviewer National Science Foundation - Decision, Risk, and Management Sciences

Ad Hoc Reviewer Management Science

Ad Hoc Reviewer Journal of Consumer Research

Ad Hoc Reviewer Journal of Economic Psychology

Ad Hoc Reviewer Journal of Behavioral Decision Making

Ad Hoc Reviewer Decision Analysis

#### **CONFERENCE PRESENTATIONS**

- Yoon, H., Scopelliti, I., & Morewedge, C. K. (2020). Debiasing Decision Making through Observational Learning. 80th Annual Meeting of the Academy of Management. (Paper)
  \*Finalist for MOC Division Best Submission with Practical Implications for Organizations
- Yoon, H., Yang, Y., & Morewedge, C. K. (2018) Temporal Discounting Induces a Myopic Focus on the Costs of Higher Education. The Association for Consumer Research Conference, Dallas, TX. (paper)
- Yoon, H. (2018). *Dynamic Inconsistency and Discount Rate in Discounting Models*. Behavioral Decision Research in Management, Boston, MA. (paper)
- Yoon, H. (2017). *Dynamic Inconsistency and Discount Rate in Discounting Models*. Eastern Psychological Association, Boston, MA. (paper)
- Yoon, H., Yang, Y., & Morewedge, C. K. (2016) Tuition Aversion: Impatience Induced Suboptimal Financial Decision Making for Higher Education. Society for Judgment and Decision Making, Boston, MA. (paper)
- Morewedge, C. K., Yoon, H., Scopelliti, I., & Kassam, K. S. (2016). *Debiasing decision makers with a single training intervention*. Behavioral Decision Research and Management, Toronto, Canada. (paper)
- Morewedge, C. K., Yoon, H., & Yang, Y. (2016). *Tuition aversion: Temporal discounting induces a myopic focus on the costs of higher education*. Association for Consumer Research, Berlin, Germany. (paper)
- Morewedge, C. K., Yoon, H., Scopelliti, I., & Kassam, K. S. (2016). *Debiasing decision makers with a single training intervention*. Boston Judgment and Decision Making Day. (paper)
- Morewedge, C. K., Yoon, H., Scopelliti, I., Symborski, C., Korris, J., & Kassam, K. S. (2015). *Long term debiasing with limited training*. Society for Judgment and Decision Making, Chicago, IL. (paper)
- Yoon, H., Morewedge, C. K., Symborski, C., Korris, J., & Kassam, K. S. (2015). Debiasing cognitive biases with individualized feedback and simple decision strategies. Judgment and Decision Making Preconference, Society of Personality and Social Psychology. Long Beach, CA.
- Yoon, H. & Chapman, G.B. (2014). *Closer look at the yardstick: precision and range of discount rate measures*. Society for Judgment and Decision Making, Long Beach, CA. (paper)
- Yoon, H. & Chapman, G.B. (2014). Closer look at the yardstick: precision and range of discount rate measures. Annual conference of Society for Judgment and Decision Making, Long Beach, CA. (paper)

- Yoon, H. & Chapman, G.B. (2013). *How soon is immediate?: Hyperbolic and quasi-hyperbolic discount functions*. Annual conference of Society for Judgment and Decision Making, Toronto, ON.
- Yoon, H. & Chapman, G.B. (2013). *Exploring qualitative differences in intertemporal choice models*. 3rd Annual Interdisciplinary Symposium on Decision Neuroscience, Philadelphia, PA.
- Yoon, H. & Chapman, G.B. (2013). The end of the hyperbolic discounting function in intertemporal choice. American Marketing Association Winter Marketing Educators' Conference, Las Vegas, NV. (paper)
- Yoon, H. & Chapman, G.B. (2012). *Beyond the hyperbolic discounting function in intertemporal choice*. Annual conference of Society for Judgment and Decision Making, Minneapolis, MI. (paper)
- Yoon, H. & Chapman, G.B. (2012). *Re-designing discount rate measurement in intertemporal choice*. Annual conference for Psychonomic Society, Minneapolis, MI.
- Williams, K.L., Yoon, H., Chapman, G.B., & McCarthy, D.E. (2012) Developing a laboratory-based smoking-choice task. Annual conference of Society for Research on Nicotine and Tabacco, Houston, TX.
- Yoon, H. & Chapman, G.B. (2011). *Time pressure, time preference, and preference reversals*. Annual conference of Society for Judgment and Decision Making, Seattle, WA.
- McCarthy, D.E., Chapman, G.B., Yoon, H., Minami, H.M., & Yeh, V.M. (2011) *Dynamics of impulsive choice and impulsive behavior during smoking cessation*. Annual conference of Society for Research on Nicotine and Tabacco, Toronto, Canada.
- Yoon, H. & Chapman, G.B. (2010). *Testing and developing discount rate measurement*. Annual conference of Society for Judgment and Decision Making, St. Louis, MO.
- Yoon, H. & Ahn, S. (2008). *Unpuzzle the dividend puzzle*. Annual conference of Korean Society for Experimental Psychology, Seoul, Korea.
- Yoon, H., Ahn, S., & Sohn, Y. W. (2008). Psychological approach to 'the dividend puzzle'; Focusing on intertemporal choice. Annual conference of Korean Society for Industrial and Organizational Psychology, Seoul, Korea.
- Yoon, H., Ahn, S., & Kang, T.(2008). Investors' preference on firm's dividend policy: Focusing on market volatility. Annual conference of Korean Psychological Association. Seoul, Korea.
- Lim, S. J., Yoon, H., Lee, J. E., Lee, K. S., & Hwang, S. M. (2008). The construal level fit effect on consumer behaviors. The 20th Annual Convention of the Association for Psychological Science, Chicago, IL.
- Yoon, Y. S., Lee, S. A., Kim, J. A., & Yoon, H. (2008). Self-encoding and prospective memory: Evidence for the spontaneous retrieval. The 6th International Conference of the Cognitive Science, Seoul, Korea.

## REFERENCES

Carey K. Morewedge, Ph.D. Professor, Boston University, Questrom School of Business, Department of Marketing 595 Commonwealth Ave., Boston MA 02215 morewedg@bu.edu | 617-308-7033

Gretchen Chapman, Ph.D. Professor, Carnegie Mellon University, Social and Decision Sciences 5000 Forbes Avenue, BP 208, Pittsburgh, PA 15213 gchapman@andrew.cmu.edu | 412-268-7380

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#### ABSTRACTS

Yoon, H. (In Press). Impatience and Time-Inconsistency in Discounting Models. Management Science.

Extant theories of intertemporal choice entangle two aspects of time preference: impatience and time inconsistency. Impatient people focus on present consumption without worrying too much about the future; they may spend freely and avoid exercise. An outsider might question their choices, but impatient people do not experience conflict over those choices. By contrast, people who are time-inconsistent intend to save and exercise, but they fail to do so when temptation is proximate. Such individuals are conflicted; their preferences today differ from their preferences tomorrow. I characterize the interaction between impatience and time inconsistency in three leading models of temporal discounting that go beyond the exponential model, which does not predict time inconsistency at any level of impatience. The quasi-hyperbolic model predicts that time inconsistency increases with patience, while the hyperbolic model makes the opposite prediction. The constant-sensitivity model predicts that time inconsistency peaks at a moderate level of impatience. The results of an experiment using real monetary consequences with delays of up to one year align most closely with the prediction of the constant-sensitivity model.

# Yoon, H., Scopelliti, I., & Morewedge, C. K. (In Press). Decision Making Can Be Improved Through Observational Learning. *Organizational Behavior and Human Decision Processes*.

Observational learning can debias judgment and decision making. One-shot observational learning-based training interventions (akin to "hot seating") can produce reductions in cognitive biases in the laboratory (i.e., anchoring, representativeness, and social projection), and successfully teach a decision rule that increases advice taking in a weight on advice paradigm (i.e., the averaging principle). These interventions improve judgment, rule learning, and advice taking more than practice. We find observational learning-based interventions can be as effective as information-based interventions. Their effects are additive for advice taking, and for accuracy when advice is algorithmically optimized. As found in the organizational learning literature, explicit knowledge transferred through information appears to reduce the stickiness of tacit knowledge transferred through observational learning. Moreover, observational learning appears to be a unique debiasing training strategy, an addition to the four proposed by Fischhoff (1982). We also report new scales measuring individual differences in anchoring, representativeness heuristics, and social projection.

# Yoon, H., Yang, Y., & Morewedge, C. K. (3<sup>nd</sup> round; under review). Tuition Myopia: Temporal Discounting Induces a Myopic Focus on the Costs of Higher Education. *Journal of Marketing Research*.

College loans are now the second largest source of consumer debt in the United States. In response, government, for-profit, and nonprofit agencies have encouraged students to consider the financial ramifications of their choice of college: both its upfront costs and long-term financial returns. We find that this framing leads to substantial tuition myopia—many students overweight the costs of colleges relative to their long-term financial returns (Study 1). Tuition myopia is not due to pessimism regarding

the forecasted returns (Study 2), cost aversion (Study 3), or maximizing Return on Investment (Study 4). Because students realize costs when they are incurred - not after graduation when income begins temporal discounting increases their weighting of proximal costs and reduces their weighting of long-term returns. Financially impatient students thus prefer lower-cost and lower-return colleges to higher-cost and higher-return colleges in both hypothetical and real college choices (Studies 5 and 6). We identify and elucidate a consequential anomaly potentially affecting millions of consumers each year, which is a major contributor to consumer debt.

# Yoon, H., & Chapman, G. B. (2016). A Closer Look at the Yardstick: A New Discount Rate Measure with Precision and Range. *Journal of Behavioral Decision Making*, 29(5), 470-480.

In intertemporal choice research, choice tasks (i.e., choosing between \$80 today vs. \$100 in a year) are often used to elicit a discount rate. The discount rate derived from a choice task, however, is largely restricted by the granularities and ranges of the questions asked. We examined this restriction in three popular discount rate measurements using simulations and experiments, and we propose an alternative procedure (Three-option Adaptive Discount rate measurement, ToAD), which is capable of measuring a wide range of discount rates (from approximately 0.035% to 350,000% annual percentage rate) with high precision using 10 questions, in under a minute. ToAD can be easily implemented in online surveys (i.e., Qualtrics).

# Morewedge, C. K., Yoon, H., Scopelliti, I., Symborski, C. W., Korris, J. H., & Kassam, K. S. (2015). Debiasing Decisions: Improved Decision Making With a Single Training Intervention. *Policy Insights from the Behavioral and Brain Sciences*, 2(1), 129-140.

From failures of intelligence analysis to misguided beliefs about vaccinations, biased judgment and decision making contributes to problems in policy, business, medicine, law, education, and private life. Early attempts to reduce decision biases with training met with little success, leading scientists and policy makers to focus on debiasing by using incentives and changes in the presentation and elicitation of decisions. We report the results of two longitudinal experiments that found medium to large effects of one-shot debiasing training interventions. Participants received a single training intervention, played a computer game or watched an instructional video, which addressed biases critical to intelligence analysis (in Experiment 1:bias blind spot, confirmation bias, and fundamental attribution error; in Experiment 2: anchoring, representativeness, and social projection). Both kinds of interventions produced medium to large debiasing effects immediately (games > -31.94% and videos > -18.60%) that persisted at least 2 months later (games > -23.57% and videos > -19.20%). Games that provided personalized feedback and practice produced larger effects than did videos. Debiasing effects were domain general: bias reduction occurred across problems in different contexts, and problem formats that were taught and not taught in the interventions. The results suggest that a single training intervention can improve decision making. We suggest its use alongside improved incentives, information presentation, and nudges to reduce costly errors associated with biased judgments and decisions.

Bold, K.W., Yoon, H., Chapman, G.B., & McCarthy, D.E. (2013) Factors predicting smoking in a laboratory-based smoking-choice task. *Experimental and Clinical Psychopharmacology*, 21(2), 133-143.

This study aimed to expand the current understanding of smoking maintenance mechanisms by examining how putative relapse risk factors relate to a single behavioral smoking choice using a novel laboratory smoking-choice task. After 12 hr of nicotine deprivation, participants were exposed to smoking cues and given the choice between smoking up to two cigarettes in a 15-min window or waiting and receiving four cigarettes after a delay of 45 min. Greater nicotine dependence, higher impulsivity, and lower distress tolerance were hypothesized to predict earlier and more intensive smoking. Out of 35 participants (n = 9 women), 26 chose to smoke with a median time to a first puff of 1.22 min (SD = 2.62 min, range = 0.03– 10.62 min). Survival analyses examined latency to first puff, and results indicated that greater pretask craving and smoking more cigarettes shorter smoking latency in the first 2 min of the task, but not at a delay of more than 2 min. Lower distress tolerance (reporting greater regulation efforts to alleviate distress) was related to more puffs smoked and greater nicotine dependence was related to more time spent smoking in the task. This novel laboratory smoking-choice paradigm may be a useful laboratory analog for the choices smokers make during cessation attempts and may help identify factors that influence smoking lapses.

Chapman, G.B., Li, M., Vietri, J.T., Ibuka, Y., Thomas, D., **Yoon**, H., & Galvani, A. (2012). Using game theory to examine incentives in influenza vaccination behavior. *Psychological Science*, 23(9), 1008-1015.

The social good often depends on the altruistic behavior of specific individuals. For example, epidemiological studies of influenza indicate that elderly individuals, who face the highest mortality risk, are best protected by vaccination of young individuals, who contribute most to disease transmission. To examine the conditions under which young people would get vaccinated to protect elderly people, we conducted a game-theory experiment that mirrored real-world influenza transmission, with "young" players contributing more than "elderly" players to herd immunity. Participants could spend points to get vaccinated and reduce the risk of influenza. When players were paid according to individual point totals, more elderly than young players got vaccinated, a finding consistent with the Nash equilibrium predicting self-interested behavior. When players were paid according to group point totals, however, more young than elderly players got vaccinated—a finding consistent with the utilitarian equilibrium predicting group-optimal behavior—which resulted in higher point totals than when players were paid for their individual totals. Thus, payout structure affected whether individuals got vaccinated for self-interest or group benefit.

Chapman, G.B., Li, M., Colby, H., & **Yoon, H.** (2010). Opting in versus opting out of influenza vaccination. *Journal of the American Medical Association*, *304*(1), 43-44.

Changes in how a choice is presented can affect the actions of decision makers, who have a tendency to stick with the default option.1-3 For example, organ donation rates are much higher in an opt-out system

(donor status is the default, explicitly opting out is required if a person does not want to donate) than in an opt-in system (non-donor status is the default, explicitly opting in is required if a person wants to be a donor). Both systems give decision makers autonomy to choose according to their personal principles, but the opt-out system provides a "nudge" toward donation. Although influenza vaccination may help prevent morbidity and mortality from seasonal or other pandemic influenza (such as 2009 influenza A [H1N1]), many people decline to receive an annual flu shot even when it is available for free at the workplace. We assessed whether modifying the default option could influence seasonal influenza vaccination.

Lim, S. J., Yoon, H., Yoon, Y. S., & Sohn, Y. W. (2009). Effective advertisement message based on the expected purchase time and product category: Focusing on construal level theory. *Korean Journal of Consumer and Advertising Psychology*, 10(2), 321-336.

The construal level theory proposes that a psychological distance has a systematic effect on individuals' thought and behavior. The present study purposed to apply temporal construal to advertising and consumer behavior. Specifically, we examined the effect of construal level fit on consumer choice of products. 208 participants were presented with one of the four purchase scenarios, which were either near or far (today vs. December) and either convenience or shopping goods (portable multimedia player vs. toothpaste). Then their choices between two products with either feasible or desirable advertising messages were measured. Results showed that participants were more likely to select products of which product category, type of advertising messages, and expected purchase time were congruent. It suggests that the fitness of construal level affects consumer behaviors on product choice. Our findings have practical implications that they extended the application of the construal level theory to the consumer behavior domain.