

HAEWON YOON

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EDUCATION & ACADEMIC EMPLOYMENT

- 2015-Current **Boston College**, Carroll School of Management.
Postdoctoral Research Associate, Department of Marketing
(*Consumer Insights Panel & CSOM Behavioral Lab manager*)
- 2014 **Boston University**, Questrom School of Business.
Postdoctoral Research Associate, 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

Consumer financial decision making, intertemporal choice, decision model, healthcare & public policy, debiasing intervention

JOB MARKET PAPER

Yoon, H., Yang, Y., & Morewedge, C. K. (2nd round). 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, exceeding credit card loans or auto loans in the United States. In response, government, for-profit, and non-profit agencies have encouraged students to consider the financial ramifications of their choice of college: both its upfront costs and long-term financial returns. Using the database from Department of Education, empirical experiments, and a field experiment, I find that this framing leads to substantial tuition myopia—many students overweight the costs of colleges relative to their long-term financial 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. The current study identifies and elucidates a consequential anomaly potentially affecting millions of consumers each year, which is a major contributor to consumer debt.

MANUSCRIPTS UNDER REVIEW

Yoon, H., Yang, Y., & Morewedge, C. K. (2nd round). Tuition Myopia: Temporal Discounting Induces a Myopic Focus on the Costs of Higher Education. *Journal of Marketing Research*.

Yoon, H. (3rd round). Impatience and Time-Inconsistency in Discounting Models. *Management Science*.

Yoon, H., & Morewedge, C. K. (1st round). Vicarious Debiasing: Improved Decision Making via Observational Learning. *Proceedings of the National Academy of Sciences*.

MANUSCRIPTS PUBLISHED

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.

CURRENT PROJECTS

Yoon, H. Financial impatience and optimism bias in automobile purchase decisions: tradeoffs between monthly payments and repayment periods.

Yoon, H., & Morewedge, C. K. Debiasing Financial impatience among NFL players (with Harvard University Football Players Health Study).

TEACHING EXPERIENCE

- 2016 Instructor, Marketing Principles (Undergraduate Course), *Boston College*
 2013 Teaching Assistant, Cognition Lab (Undergraduate Research Method), *Rutgers University*
 2012 Teaching Assistant, Cognition (Undergraduate Course), *Rutgers University*
 2012 Teaching Assistant, Conditioning and Learning (Undergraduate Course), *Rutgers University*
 2011 Teaching Assistant, General Psychology (Undergraduate Course), *Rutgers University*
 2008 Teaching Assistant, Advanced Cognitive Science (Graduate Course), *Yonsei University*
 2008 Teaching Assistant, Introduction to Psychology (Undergraduate Course), *Yonsei University*
 2008 Teaching Assistant, Modern Society and Psychology (Undergraduate Course), *Yonsei University*

REVIEWING

- Ad Hoc Reviewer *Management Science*
 Ad Hoc Reviewer *Journal of Consumer Research*
 Ad Hoc Reviewer *National Science Foundation - Decision, Risk, and Management Sciences*

CONFERENCE PRESENTATIONS (Selected)

- Yoon, H. (2017). *Dynamic Inconsistency and Discount Rate in Discounting Models*. Eastern Psychological Association, Boston, MA. (invited)
- 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. (talk)
- 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. (talk)
- 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. (talk)

AWARDS & GRANTS (Selected)

- 2013 Advanced Training in Web-Based Research, *NSF- Decision, Risk, and Management Sciences*
 2012 Dissertation Award [#1156072](#), *NSF Division of Social and Economics Sciences*
 2012 Student Paper Competition [Finalist](#), *INFORMS Decision Analysis Society*
 2005 Army Commendation Medal, *United States Department of Defense*

PROGRAMMING (Selected)

Matlab (10 years of experience), R (6 years of experience), JavaScript (4 years of experience)

REFERENCES

Carey K. Morewedge, Ph.D.

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Gretchen Chapman, Ph.D.

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ABSTRACTS

Yoon, H., Yang, Y., & Morewedge, C. K. (2nd round). 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 non-profit 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 psychologically 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. (3rd round). Impatience and Time-Inconsistency in Discounting Models. *Management Science*.

Extant theories in intertemporal choice entangle two aspects of time preference: impatience and time-inconsistency. Highly impatient people focus on the present consumption without worrying too much about the future. They spend freely and avoid exercise. An outsider may question their choices, but they should not experience conflict. In contrast, people who are time-inconsistent intend to save and exercise but fail to do so when temptation is proximate. Such individuals are conflicted; their preferences today differ from their preferences tomorrow. I diagnose how impatience and time-inconsistency interact in three leading theories by counting preference reversals in which people initially select a larger, later reward but then switch to a smaller, sooner reward. In the quasi-hyperbolic model (Laibson 1997), preference reversals increase with patience. The hyperbolic model (Mazur 1987) makes the opposite prediction, that preference reversals increase with impatience. In the constant-sensitivity model (Ebert and Prelec 2007), preference reversals peak at moderate levels of impatience. The experiment using real monetary consequences for delays up to one year supports this latter prediction.

Yoon, H., & Morewedge, C. K. (1st round). Vicarious Debiasing: Improved Decision Making via Observational Learning. *Proceedings of the National Academy of Sciences*.

We examined the efficacy of vicarious debiasing. We find significant improvement in decision making after observing another decision maker's biased judgments made and the feedback he or she received. Observational learning produced large reductions in bias overall ($d = 1.88$), and for each unique cognitive biases tested: anchoring ($d = .83$), representativeness ($d = 1.55$), and social projection ($d = 1.00$). Compared to the debiasing effects of training interventions providing practice, information, and personalized feedback observational learning was in all cases as or more effective than practice and

information alone, and was only less effective than personalized feedback for biases involving calibrated correction processes (i.e., anchoring and social projection). The results provide compelling evidence that decision making can be improved, as it is biased, by observing other decision makers.

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 per day were significantly related to smoking sooner in the task. Greater behavioral disinhibition predicted 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).⁴ Both systems give decision makers autonomy to choose according to their personal principles, but the opt-out system provides a “nudge”⁵ 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.