

Research Statement

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As a social psychologist, I am interested in understanding how the self influences the judgments and decisions people make in a social environment. How do we choose between prosociality and selfishness? Humility and braggadocio? A short-term gain and our longer-term reputation among peers? Social behavior is about more than simply calculating payoffs and probabilities: making *social* decisions adds complexity that extends beyond the classical notion of rational estimation. In my research, I primarily seek to understand *knowledge of the self and others influences the judgments and decisions agents make in a social world*. Discovering the answer to this question provides opportunities not only to improve the efficiency and consistency of human decision-making, but also to increase individuals' subjective experiences of happiness, agency, and life-satisfaction. To this end, my research extends into three separate lines of work.

Measurement and Perception of Self-Enhancement

Is there a psychological distinction between those who correctly claim to be better than average and those who make the same claim but do so in error? I have demonstrated this distinction by developing a measurement tool that utilizes decision theory to diagnose accurate and inaccurate self-enhancement (Heck & Krueger, 2015). My work revealed that self-enhancement errors in judgment are overdiagnosed by commonly accepted theories and measures: it is insufficient to simply ask individuals whether they *think* they are better than average. In a simple performance domain, most people who claim to be better (or worse) than average are quite accurate in their self-enhancing (or -effacing) claims. Observers are sensitive to this distinction as well (Heck & Krueger, 2016). Those who claim to be above average but perform poorly on an objective measure are perceived as incompetent and immoral relative to those who make similarly boastful claims supported by a strong performance. Claiming to be above average, however, is viewed as less moral than humbly claiming to be below average. This raises the novel notion of a humility paradox in self-perception where agents face a reputational conflict between being viewed as competent but hubristic or as moral but unintelligent.

This research program has opportunities for expansion into broader categories (i.e., personality and individual differences) and more specific ones (self-enhancement in any particular domain of decision-making; behavioral prediction). I am currently interested in the effects of reputation motivation on self-evaluation accuracy and confidence. In simpler terms what are the benefits and consequences of strategic bragging and humility? By varying the valence of a statement or claim alongside an agent's performance and whether their claim is made publicly or privately, I seek to develop a theory of strategic reputation management using self-enhancing (and -effacing) claims. Along these lines, I am also interested in studying information-search processes the presence of such strategic reputational claims.

Solving and Evaluating the Volunteer's Dilemma

How do individuals reason when choosing whether to help others at cost to themselves? How do social perceivers think about the decision to behave prosocially (volunteer) or selfishly (abstain)? In a Volunteer's Dilemma, one person must pay a small cost to benefit those around them. Only one person has to call the utility company to report a neighborhood power outage, but if nobody volunteers, all continue to suffer. Coordinating to solve this task is difficult for decision-makers. My work in this area shows that when placed in this type of dilemma, individuals reason egocentrically to solve it: players tend to pay attention to their own payoffs while ignoring the payoffs available to others when making their decision (Krueger, Heck, &

Wagner, under revision). My co-authors and I demonstrated that volunteering is viewed as both a moral and a competent decision, and that observers disparage defectors (Heck & Krueger, under revision). This work found and replicated a strong prevalence of outcome bias in observer judgments: those faced with a volunteering dilemma are viewed as less competent when others defect against them, regardless of the decision they themselves choose. This result raises an interesting theoretical question worth pursuing: what cognitive process causes individuals to choose inefficiency over optimality when being observed by others? In this line of work, I am interested in understanding the process underlying the decision to volunteer (or defect), and how these decisions may be punished or rewarded by others.

Understanding the Social Self: Uniqueness, Happiness, Morality

When are social judgments influenced by a motivation to be distinct from others? When is the experience of happiness relative and when is it absolute? Why are some moral judgments sensitive to the outcome (e.g., victim-blaming; drunk driving) while others are sensitive only to an agent's behavior or decision (defecting in strategic interactions)? In this developing line of research, I am interested in broad questions of how one's sense of self influences the motivation to be an adequately unique, happy, and moral individual. Some preliminary data in this area suggest that those who are motivated by a need for uniqueness are more likely to make self-superiority claims when they know that actual superiority is rare in the population. Peripheral work in this area has resulted in a coauthored chapter on the Self (Krueger, Evans, & Heck, 2016), a collaborative mentorship publication on individuals' willingness to punish untrustworthy agents (Heck & Elia, 2016), and book review of a trade book on happiness (Heck & Krueger, 2015). Here, I ask the broad question, when are individuals satisfied with the self as they see it? This is a growing area of research accessible to undergraduate researchers.

Experimental Methods, Open Science, and Simulation

During my research I have developed substantial theoretical, empirical, and analytic skills. My work has been conducted in lab, class, and online, using survey methodology, vignette stimuli and economic games, and more traditional experimental manipulations. I have experience with Qualtrics, Mechanical Turk, E-Prime, MATLAB, SPSS, R, Python, and Adobe Creative Suites. These are accessible and useful tools to students interested in conducting collaborative or independent research. A particular strength of my research paradigm in a teaching setting is that little technology is required beyond a computer, a white board, and a classroom or laboratory. Similarly, I am committed to the principles and practice of open science; I post data and code for analyses in supplementary journal material and on my website. I am eager to share with others my commitment to effective and ethical data management using traceable computer programming, and the importance of conducting well-powered and replicable studies.

Finally, much of my work contains a unique aspect: computer simulations that test boundary conditions and specific 'what-if' scenarios. For example, what happens to a population-level accuracy correlation if one person chooses to self-enhance, or if all choose to do so? Approaching questions computationally supplements my experimental thinking and allows for creative hypothesis generation and testing that requires a minimal investment of resources. Some peripheral research interests I have in this area include building a model of inductive reasoning (the Inductive Reasoning Model Simulator; Krueger, Freestone, & Heck, under review) and testing arguments for and against Null Hypothesis Significance Testing as a valid method of inference (working papers with Joachim Krueger). This is a methodological and analytic skill I will continue to develop and a unique strength I will bring to the lab and the classroom.