

## 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 people choose between prosociality and selfishness? Humility and braggadocio? A short-term gain and their reputation among peers? Questions of decision-making are about more than simply calculating payouts displayed in a table: making *social* decisions adds a degree of complexity that extends beyond the classical notion of rationally estimating event probabilities. Thus, the primary question I attempt to answer in my research is: how does knowledge of the self and others influence 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 and life-satisfaction. To this end, my research has extended into three separate lines of work with the third line developing more recently.

### 1. 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 using a novel 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 claimed to be better (or worse) than average were shown to be quite accurate in their self-enhancing (or -effacing) claims.

Observers were shown to be sensitive to this distinction as well (Heck & Krueger, 2016). Those who claimed to be better than average but performed poorly on an objective measure were perceived as incompetent and immoral relative to those who made similar above-average claims supported by a strong performance. Claiming to be above average, however, was always viewed as less moral than humbly claiming to be below average. This work raised the novel notion of a humility paradox in self-perception where decision makers 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 a particular domain of decision-making; behavioral prediction). I am particularly interested in the positive and negative effects of reputation motivation on self-evaluation accuracy and confidence.

### 2. 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. For example, only one person has to call the utility company to report a neighborhood power outage. If nobody volunteers, all suffer. Coordinating to solve this task is surprisingly 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 tended to pay attention to their

own payoffs while ignoring the payoffs available to others when making their decision (Krueger, Heck, & Wagner, under review). 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 review). This work also showed and replicated a strong prevalence of outcome bias in observer judgments: those faced with the dilemma were viewed as less competent when others defected against them, regardless of the decision they themselves chose. This result raised an interesting theoretical question worth pursuing: what cognitive process causes individuals choose inefficiency over optimality when being observed by others?

### **3. 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. These are areas of interest where I would like to expand my research through independent work and collaboration with undergraduates and other faculty. 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 conference publication on individuals' willingness to punish untrustworthy agents (Heck & Elia, 2016), and book review of a trade book on happiness (Heck & Krueger, 2015).

### **4. Experimental Methods & 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 traditional experimental manipulations. I have experience with Qualtrics, Amazon Mechanical Turk, E-Prime, MATLAB, SPSS, R, Python, and Microsoft Office and Adobe Creative Suites. All of these are accessible and useful tools to undergraduates 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 setting. I am eager to share with others my commitment to effective and ethical data management using traceable computer programming.

Finally, much of my work contains 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 defect, 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.