

RESEARCH INTERESTS & OBJECTIVES

RESEARCH OBJECTIVE

My overall research objective is to understand human social behaviors and the social and cognitive processes that guide them (e.g. emotions, decision-making heuristics, etc). In carrying out this objective, I take a theoretically-driven, multi-method approach with an emphasis on integrating knowledge across traditional topical and disciplinary boundaries.

To advance my research objective, I combine the theoretical grounding made available by evolutionary theory and its focus on adaptive function with social psychological theory and its emphasis on interpersonal relationships and social cognition. In conducting research, I favor not only the use of the tried-and-true research tools developed by social psychologists, but also incorporate analytical tools from other disciplines such as behavioral ecology and economics.

As a researcher, I am interested in looking at research questions from a variety of angles. As such, I actively seek collaborations with other scientists whose area of expertise is different than my own. In my experience, such collaborations facilitate a deeper, more thorough understanding of a research question than can be achieved by myself or with others whose area of expertise is identical to my own. Thus far, I have joined forces with neurobiologists, evolutionary biologists, and psychologists from a range of subfields to examine social behavior, cognition, and decision-making from a variety of different research angles.

RESEARCH EXPERIENCE & INTERESTS

For the past five years at the University of Texas, I have worked both independently and collaboratively to develop a program of research aimed at understanding human social behaviors and the emotional and decision-making processes that guide them. More specifically, the primary foci of my research have been: 1) mate choice and 2) social competition for access to limited resources (e.g., mates, wealth, and status).

My research on mate choice has focused on: 1) how men and women choose their mates and mating strategies and 2) social cues that affect how men and women judge the desirability of potential mates. To this first end, I worked with Professor H. Kern Reeve to develop a game theoretic model designed to make predictions about conditional human mating strategies given environmental contingencies such as the distribution and mate values of men's and women's available mates (Hill & Reeve, 2004). Our theory accounted for strategic mating strategy differences both within and between the sexes in addition to generating a number of new predictions about human mating behavior.

While developing mating strategies theory, I became interested in the types of social cues that men and women use to inform their assessments of the desirability of members of the opposite sex as mates. I currently have a paper under review that demonstrates that men and women use the presence of members of their same sex in different ways to inform their

desirability assessments of unknown members of the opposite sex (Hill & Buss, under review). I have also done complementary research with Professor Michael J. Ryan in which we use an animal model to investigate similar decision-making heuristics used by non-human animals in mate search (Hill & Ryan, 2006).

In my most recent program of research, I have been exploring decision-making in the context of social competition. I first became interested in the importance and ubiquity of social competition while developing a model of behavioral tradeoffs between resource-generation and offspring-production to explain low fertility in humans (Hill & Reeve, 2005). Since publishing that paper, I have written a paper on how mate competition influences men's and women's judgments of the desirability of members of their same sex (Hill, in press) and have been working with Professor David M. Buss to explore how social competition affects decision-making in a variety of different domains. For instance, we have demonstrated that – when choosing between two offered social outcomes – individuals' decisions are often heavily influenced by how their outcomes compare to the prospects offered to their peers (what we call a *positional bias*). For instance, when testing the existence of the positional bias when reasoning about monetary incomes, we asked the following:

1. Assume that prices are what they are currently and that the purchasing power of money is the same in States A and B.

A.) Your current monthly income is \$3000.00; your same-sexed peers earn \$4000.00 each month.

B.) Your current monthly income is \$2700.00; your same-sexed peers earn \$1700.00 each month.

Here, the positional answer is choice B, in which the individual earns a positionally higher salary than his/her peers rather than an absolutely larger, but positionally smaller salary. Our theory makes predictions about the domains in which we expect to see the positional bias, those in which we don't, and how it is affected by whether the outcome is framed as a gain or a loss. We are using a similar forced-choice methodology to explore how the context of social competition affects individuals' preferences for risk-taking and the desire for present versus future payoffs. We have already published some selected findings from this research program in a paper aimed at economists (Hill & Buss, 2006) and are finalizing two empirical papers that will be submitted to top psychology journals in the near future.

Similarly, David and I are beginning to explore the role played by envy, dissatisfaction, and the positional bias as motivational mechanisms that mediate individuals' competitive behaviors and their effects on subjective well-being (Hill & Buss, in press). We have collected data bearing on these issues using a variety of self-report methodologies and research is underway that employs an ultimatum game methodology to explore the roles that envy and dissatisfaction play in modulating behavior in cooperative tasks.

FUTURE DIRECTIONS

I plan to seek out funding from the NIH/NIMH to support my continuing research exploring social behaviors and the decision-making and emotional processes that guide them. I will continue to develop new hypotheses about how envy, dissatisfaction, and the positional

bias influence decision-making in a variety of domains. I am also developing a program of research exploring the role played by these processes in memory encoding and retrieval. For instance, I am currently running an experiment looking at the effect of envy on memory for social information about same-sex peers. Eventually, I hope to use these findings to investigate 1) how the emotional states and decision-making processes that guide competitive behaviors negatively affect subjective well-being over the lifetime and 2) what potential environmental interventions can attenuate these negative effects.

More generally, I am committed to continuing to explore human social behaviors and the social and cognitive forces that guide them. I love doing research and I have a wide range of research interests and ideas. Thus, I am confident that I will have an active, innovative program of research. I plan on continuing to work both independently and with those scientists with whom I have established research relationships. Additionally, I look forward to meeting new collaborators both within and outside of psychology with whom to continue developing new ideas.