

DISSERTATION PROPOSAL

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“Essays on Creative Problem Formulation”

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A wealth of existing material prescribing problem-solving techniques is ineffective for many organizational teams, as they often attempt to solve the “wrong” problems—problems that do not address the root of the concern or that they are not equipped to solve. Why is this the case? How are problems formulated, and how does the way that they are formulated influence how problems are solved? In this dissertation composed of four chapters, I propose to review the problem formulation literature, generate grounded multi-level theory, and test that theory using multiple empirical methodologies to address these research questions.

In Chapter 1, I present a review that organizes the literature on problem formulation by considering the extant research across disciplines and levels of analysis, describing the importance of underlying assumptions regarding problem malleability, and constructing a clarifying framework that consolidates the various terminology used in the literature.

In Chapter 2, I present an inductive quasi-experimental field study that generates grounded theory regarding the effect of problem formulation approach on team process. Qualitative analyses reveal a recursive, multi-level process where, during problem formulation, individual cognition influences team interaction, which influences social norms, which reinforce individual cognition. My observations indicate that, compared to a problem recognition approach that begins with defining the focal problem, a problem design approach that begins with defining the desired end state results in the perception of problems as malleable entities (as opposed to stable ones), higher levels of team knowledge combination, and the ability to tailor a problem to team strengths.

In Chapter 3, I present a multi-method paper composed of an inductive qualitative study and a field experiment with improv comedy teams. Qualitative findings indicate that high-performing improv teams are those whose members have a high level of perspective taking, as this helps teams notice problems and then design them to their strengths. Manipulating team composition, the field experiment reveals that teams composed of high perspective-taking members outperform teams composed of low perspective-taking members, and that this effect is partially due to increased emergent interdependence. In addition, only teams with high perspective-taking members were able to translate individual improv experience into team improv performance.

In Chapter 4, I propose a laboratory experiment employing an escape room type task that addresses an existing puzzle regarding the generative or inhibitive effect of expertise on creativity. It does so by examining the interplay of problem formulation approach and team expertise awareness and their effects on team problem solving performance.