

# DISSERTATION DEFENSE

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“RESOLVING THE CONFLICT-CREATIVITY TENSION IN FUNCTIONALLY-DIVERSE  
INNOVATION TEAMS”

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More and more organizations structure their innovation projects around functionally diverse teams. Why are some functionally diverse teams more innovative than others? In my dissertation research, I investigate how cognitive diversity, conflict, and creativity affect the success of functionally-diverse innovation teams. Some research points to the importance of cognitive diversity for stimulating group creativity and innovation. Other researchers have shown that cognitive diversity leads to misunderstandings, tensions, and conflict that harm innovation. Thus, paradoxically, cognitive diversity both benefit and harm innovation processes through the opposing forcing of conflict and creativity. To provide insights for understanding and managing the conflict-creativity tension, I study functionally diverse innovation teams. Cognitive diversity based on functional training and experience is particularly interesting because it comprises differences in perspectives, goals, approaches, values, and language that are hard to reconcile.

In three studies of functionally diverse innovation teams, I examine the effects of interpersonal creative processes, i.e., idea sharing and idea building, as well as conflict processes on innovation success. Furthermore, I investigate the relationship between interpersonal creative processes and conflict: when idea sharing and idea building can be stimulated or inhibited by conflict. To address these questions, I collect and analyze data from three different settings: interdisciplinary research groups, new product development teams in an integrated product development course, and teams developing entertainment and technology products.

The first dissertation study shows that task conflict stimulates the interpersonal creative process of *idea sharing* in diverse groups only if work design and diversity salience are managed appropriately. Using field data from 148 researchers in 29 interdisciplinary research labs, I provide evidence on the importance of social categorization states (i.e., diversity salience) in understanding both task conflict and idea sharing in groups with expertise diversity. Furthermore, the study shows that idea sharing affects group performance in interdisciplinary academic research over and above the effects of task conflict and expertise diversity.

The second dissertation study, a study of integrated product design teams, provides insights on how task conflicts in teams where functionally different team members trust each other can stimulate the interpersonal creative processes of *idea building* and thus make teams more innovative. Using a multilevel longitudinal approach, I examine the dynamic effects of both the forces that can bring functionally diverse team members together (such as cross-functional trust) and the forces that pull them apart (such as discovering how different others are after gaining more experience working with them).

The third dissertation study extends our understanding of the cognitive and affective mechanisms through which conflict affects the interpersonal creative processes of *idea sharing* and *idea building* in innovation teams. Using data from 180 master students in 41 new product development teams, the study shows that task conflict reduces the harmful cognitive differences in functionally diverse teams, i.e., the deep level value diversity, and increases the beneficial cognitive differences, i.e., the cognitive division of labor within transactive memory systems. Although negative emotions of fear engendered by task conflict interfere with idea sharing, task conflict spurs the group creative processes and innovation through its effects on team cognition, i.e., on deep level value diversity and transactive memory systems. Thus, in contrast to prior research on creativity and conflict that assumed only negative effects of conflict on creativity, this research provides evidence on both the positive and negative effects of task conflict on group creativity and innovation in functionally diverse teams.

Members of groups with creative tasks (such as brainstorming groups) are often discouraged from expressing disagreements while generating ideas based on the belief that it will interfere with members' willingness to take risks and "think outside the box". In three studies, I provide evidence whether and when team members with different functional backgrounds can be more creative not in spite, but because of engaging in disagreements and conflict. These studies extend our understanding of work diversity, conflict, creativity, innovation, and team cognition. They unravel the conflict-creativity tension and show how it can be successfully managed.