Team processes and outcomes: Diversity, information sharing, reflexivity and innovation

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**Knowledge management and team innovation: Understanding the team processes underlying high innovativeness**

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Being innovative means being willing ‘to go the extra mile’ beyond routine tasks in teams. It also means that team members are willing to consider different perspectives in heterogeneous teams and to share information. Important antecedents of team innovation are successful information sharing and helping behaviour among team members. Although the importance of information sharing for innovation is seemingly self-evident, we still know very little about the group processes that support team innovation (West, 2002).

Information sharing is a group process that is an indispensable part of team integration. Team roles and team tasks need to be discussed to successfully achieve team goals. In heterogeneous teams with members from different occupational backgrounds integrating processes such as information sharing are even more important. To date, research on information sharing has focused mainly on the type of information that is shared or unshared (Brodbeck, Kerschreiter, Mojzisch, Frey, & Schulz-Hardt, 2002; Stasser, Stewart, & Wittenbaum, 1995) and on antecedents of information sharing, such as trust (Butler, 1999), task and reward interdependence (Moser & Wodzicki, 2007), or how person perception might affect information exchange (de Bruin & Van Lange, 2000). The link between output measures of group performance, such as innovativeness, and information sharing has always been implied and has been explored theoretically to some extent (Diehl & Ziegler, 2000), but empirical studies that go beyond organisational case studies (Basadur & Gelade, 2006) are still scarce.
If we define innovation as the introduction of new ideas and new ways of doing things at work as suggested by West (2002), then sharing information about these new ideas and developing ideas further in the team through information sharing is a prerequisite for team innovation. However, the role of information is likely to be very different for routine team tasks and for team innovation. Especially in heterogeneous teams with members from different occupational backgrounds, task interdependence is likely to be lower for new and innovative processes than for established procedures and routine tasks. This means that information sharing is ‘nice to have’ and would be expected to affect team innovation, but is at the same time not indispensable for completing routine team tasks. This distinction is important, because under low task interdependence different social processes come into play in groups (Moser & Wodzicki, 2007). Information sharing under low task interdependence can be defined as a form of prosocial behaviour at work. It means that team members are willing to put in an extra effort and ‘go the extra mile’ to discuss their perspectives on the team task with colleagues from a different disciplinary background.

In the studies presented here we argue that the importance of information sharing and helping behaviour for team innovation should therefore increase if occupational diversity is high and team size is large. The hypothesis was tested in two independent samples of health care teams (N₁=72 breast cancer care teams, N₂=113 community mental health teams), using team innovation rated by independent experts as outcome variable. Multiple regression analysis showed that helping behaviour had a significant independent effect on innovation for both team types, while information sharing only had a significant association with innovation for breast cancer teams. The interaction effects of team size and occupational diversity were tested with moderated regression analysis for both helping behaviour and information sharing. Both team
processes showed strong main effects, which were even stronger if occupational diversity was high. There was also a main effect of team size on innovation, which is increased especially if helping behaviour in the team is strong. The interaction effect with team size could thus be confirmed for both teams, while the interaction with team size was only found for the mental health care teams. The partially different results for the two different team types could be explained by the differences in task and team structures. While mental health teams have stable membership and meet less regularly than breast cancer teams, breast cancer teams are cross-functional teams with multiple team memberships. In conclusion, it can be said that especially helping behaviour seems to be crucial for team innovation. If teams are large, and helping behaviour among team members is strong, the capacity for innovation seems to be greatly increased. Implications for understanding the psychological processes underlying team innovation and for managing knowledge sharing in teams are discussed.