Team deep-level diversity, relationship conflict, and team members' affective reactions: A cross-level investigation ☆

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ABSTRACT

Drawing from recent advances in the study of deep-level diversity in work teams and the similarity–attraction paradigm, this study examines the ways in which diversity in personality characteristics and preference for teamwork among team members influences the relationship between relationship conflict and subsequent team member affective reactions. Using a longitudinal, multilevel sample of 53 teams (260 respondents), results reveal that similarity or homogeneity in agreeableness, conscientiousness, and emotional stability weakens the negative influence of relationship conflict on team member affective reactions, while heterogeneity in extraversion and preference for teamwork also weakens these relationships. A discussion of theoretical and practical implications follows.

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1. Introduction

A number of recent studies have advanced understanding of how deep-level composition variables influence team effectiveness (e.g., Barrick, Stewart, Neubert, & Mount, 1998; Bell, 2007; Harrison, Price, & Bell, 1998; Harrison, Price, Gavin, & Florey, 2002; Peeters, Rutte, van Tuijl, & Reymen, 2006a; Peeters, van Tuijl, Rutte, & Reymen, 2006b). Some consider how diversity in deep-level composition variables may influence team processes and outcomes, yielding "a vast array of mixed results" (Mathieu, Maynard, Rapp, & Gilson, 2008, p. 439). Two dominant theoretical paradigms are popular in the diversity literature to examine the positive or negative influence of deep-level diversity: the social categorization/similarity–attraction perspective (e.g., Byrne, 1971; Jackson, 1992; Tajfel, 1981; Williams & O'Reilly, 1998) and the information processing/decision making perspective (e.g., Auh & Menguc, 2006; van Knippenberg & Schippers, 2007). As van Knippenberg and Schippers (2007, p. 518) note, however, "In their simplest form (a main effect of diversity), neither analysis is supported. Evidence for the positive as well as for the negative effects of diversity is highly inconsistent … and raises the question of whether, and how, the perspectives on the positive and negative effects of diversity can be reconciled and integrated."

Team relationship conflict refers to disagreement and infighting due to personal "incompatibility …, which typically includes tension, animosity, and annoyance among members within a group" (Jehn, 1995, p. 258). In contrast to task-related conflict, relationship conflict involves contrasting viewpoints, ideas, opinions, feelings, and emotions that are not about the task at hand (Bono, Boles, Judge, & Lauver, 2002; Parayitam & Dooley, 2009). Relationship conflict also reflects interpersonal tensions (Edmondson & Smith, 2006). Prior research examining how deep-level diversity and relationship conflict are related has considered the "main effect" of deep-level diversity on relationship conflict (e.g., Mohammed & Angell, 2004). In keeping with the similarity–attraction paradigm (Byrne, 1971), however, similarity among team members in personality and values may indirectly influence team members by interacting with team relationship conflict. This study examines whether similarity in team members' deep-level characteristics mitigates the negative influence of team relationship conflict on team members' affective reactions. Consistent with deep-level diversity research (Bell, 2007; Mohammed & Angell, 2003), this study considers deep-level diversity with respect to the Big Five dimensions of personality and preference for team-based work (Campion, Medsker, & Higgs, 1993; Hackman, 1987).

Most prior research focuses on the *team performance* effects of both deep-level diversity and relationship conflict, although affective reactions of team members are equally important team effectiveness criteria (Hackman, 1987). In fact, relationship conflict and deep-level diversity may have a stronger effect on individual-level, perceptual affective reactions (e.g., desire to remain and satisfaction with the team) rather than on team-level performance (see Mohammed & Angell, 2003), because affective reactions are highly influenced by social

interaction (Hackman, 1992). This effect likely occurs first at the individual level, as team members perceive the ambient stimuli provided by others on their team and formulate attitudes about the team. However, scholars tend to study the respective impacts of deep-level diversity in work teams (e.g., Bell, 2007; Harrison et al., 1998, 2002; Mohammed & Angell, 2003, 2004; van Knippenberg, De Dreu, & Homan, 2004) and relationship conflict (e.g. Jehn, 1995; Mohammed & Angell, 2004) at a single level of analysis—usually just the team level.

Therefore, the contributions of this study are examining how and why individual team members react to team-level relationship conflict and how and why the reaction might be mitigated by team-level deep-level similarity. The study focuses on two affective reactions of individual team members–satisfaction and desire to remain with the team–and uses multilevel analyses (Bliese & Ployhart, 2002; Hofmann, 1997) to test cross-level hypotheses.

2. Theory and hypotheses

2.1. Team relationship conflict and individual-level affective reactions

Conflict is multidimensional (Jehn, 1995; Jehn, Northcraft, & Neale, 1999). Recent conceptualizations of conflict include task (e.g., Parayitam & Dooley, 2009), relationship (e.g., Jehn & Mannix, 2001), and process conflicts (e.g., Behfar, Mannix, Peterson, & Trochim, 2011). This study focuses exclusively on team relationship conflict. The associations between team relationship conflict and individual-level satisfaction and desire to remain with the team serve as a backdrop for the study of the potential moderating effects of deep-level diversity, because the negative effect of relationship conflict at the team level is well-established. Research consistently shows that relationship incompatibility leads to dissatisfaction with the team and, if the opportunity exists, the desire to leave the team (e.g., Edmondson & Smith, 2006; Jehn, 1995; Tekleab, Quigley, & Tesluk, 2009). For example, relationship conflict distracts members from the task at hand, raises frustration, pushes members away from the team, and enhances negative reactions (Jehn, 1995).

Despite the inherently multilevel nature of the theory involved (i.e., team level phenomenon influencing individual-level reactions), most studies that examine the impact of relationship conflict focus entirely at the team level and use traditional analytic techniques, since the data is represented at a single level of analysis (e.g., Jehn, 1995; exceptions are Duffy, Shaw, & Stark, 2000; Jehn et al., 1999). This process skips an important theoretical step, however. Hackman (1992) discusses the importance of considering the impact of group-level stimuli on individual attitudes, beliefs, and behaviors. As he notes, "… the groups to which a person belongs, together with the task … provide more stimuli that directly affect actual work behavior than do any other aspects of the organizational environment" (p. 202). Accordingly, team relationship conflict likely initially influences individual-level attitudes, and ultimately behaviors, before influencing team effectiveness. Two important individual-level attitudes to consider are satisfaction with the team and desire to remain with the team (Hackman, 1987). Building on prior research, a negative relationship across levels of analysis likely exists between team relationship conflict and individual satisfaction and desire to remain with the team.

Hypothesis 1. Team relationship conflict is negatively related to team member perceptions of (a) desire to remain with the team and (b) satisfaction with the team.

2.2. The Big Five personality dimensions and preference for teamwork

At the individual level, personality impacts attitudes, behaviors, and performance (e.g., LePine & Van Dyne, 2001). At the team level, personality affects team performance, team satisfaction, and job satisfaction

(e.g., Bell, 2007; Mohammed & Angell, 2003; Peeters et al., 2006a, 2006b). Most studies rely on the five factor model of personality (e.g., Costa & McCrae, 1985, 1992), which identifies extraversion (being outgoing, sociable, talkative, assertive, and active), agreeableness (being trusting, straightforward, altruistic, compliant, modest, and tender-minded), conscientiousness (being dependable, thorough, hardworking, responsible, organized, achievement-oriented, and self-motivated), emotional stability (being relaxed, calm, poised, and secure), and openness to experience (being imaginative, curious, broad-minded, and willing to experiment), as the major dimensions of personality. However, questions surround the direction/sign of the relationships, the consistency of the findings, and the operationalization of the personality dimensions at the team level.

Scholars operationalize personality at the team level in a number of ways. Most researchers use either elevation (i.e., the averaged scores for a personality dimension; e.g., Barrick et al., 1998) or heterogeneity/diversity (i.e., the standard deviation or variance on a specific dimension; e.g., Mohammed & Angell, 2003; Peeters et al., 2006a; please see Barrick et al., 1998; Bell, 2007; and Peeters et al., 2006a, 2006b for detailed explanations of the composition approaches). Although meta-analyses of the elevation approach provide support for the positive relationship between most personality dimensions and team performance (Bell, 2007; Peeters et al., 2006b), the examination of heterogeneity/diversity of deep-level characteristics results in conflicting findings (Mathieu et al., 2008). Prior meta-analyses find both significant and non-significant relationships between diversity in personality dimensions and team performance (e.g., Bell, 2007; Peeters et al., 2006b), suggesting that possible moderators need to be explored (e.g., Ely & Thomas, 2001; Harrison et al., 1998). Clearly, more work is necessary regarding the effects of deep-level diversity on team effectiveness (Bell, 2007; Mathieu et al., 2008).

The current study also focuses on one work value relevant for team situations: preference for teamwork. Some studies consider preference for teamwork or group work in tandem with the Big Five dimensions of personality (Bell, 2007; Mohammed & Angell, 2003) because preference for teamwork is an important antecedent of how individuals respond in team situations (Wageman, 1995). Preference for teamwork refers to the degree to which individuals prefer working with others, rather than autonomously (Wagner, 1995). Individuals who prefer to work in teams may be more satisfied and effective in groups (Campion et al., 1993). However, empirical evidence linking the average level of team members' preference for teamwork directly to team performance is mixed (Bell, 2007; Campion et al., 1993; Jung & Sosik, 1999). For example, Mohammed and Angell (2003) hypothesize that diversity in preference for teamwork will lead to lower team performance, but the study finds no evidence of a direct relationship. Bell's (2007) meta-analysis provides no evidence of this direct relationship, either.

One theoretical approach to the study of deep-level diversity is the similarity–attraction paradigm (Byrne, 1971), which suggests that people prefer others who exhibit similarity in their interactions. Specifically, the theory posits that individuals are attracted to others who seem similar, because they envision that these individuals reinforce their own preferences, values and beliefs. As Mohammed and Angell (2004) note, although research has primarily applied this theory in reference to surface-level diversity (e.g., gender; Dwyer, Richard, & Chadwick, 2003), as individuals work with each other over time, values and personality are more likely to become the basis of similarity–attraction rather than overt, demographic characteristics (Amir, 1969; Byrne, 1971). Indeed, Harrison et al. (1998, 2002) and Pelled, Eisenhardt, and Xin (1999) show that surface-level differences such as gender and ethnicity matter less and deep-level characteristics become more important as group members interact over time.

While similarities and differences in personalities and preferences for teamwork may be directly related to relationship conflict,