RELATIONSHIP CONFLICT, CONFLICT MANAGEMENT AND PERFORMANCE OF IT DEVELOPMENT TEAMS: THE MEDIATING ROLE OF TEAM SUPPORT AND TEAM COHESION

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ABSTRACT

The purpose of the paper is to examine how team support and cohesion mediate the effects of relationship conflict and conflict management on the performance of IT teams. Primary data were collected from students who worked in teams to design systems to be used by real-world enterprises. The data were analyzed using structural equations modeling. The mediators – team support and cohesion – positively affected each other and performance. The results support a full mediation model in which the total effects of conflict and conflict management on team performance are channeled through team support first and then indirectly through cohesion.

Keywords: relationship conflict, conflict management, support, cohesion, performance, team

INTRODUCTION

Team conflict, its management and their effect on team performance are of great interest to team-level researchers (e.g., Hempel, Zhang, & Tjosvold, 2009; Kirchmeyer & Cohen, 1992; Tekleab, Quigley, & Tesluk, 2009; Tjosvold, Hui, & Yu, 2003). The literature is replete with multidisciplinary studies focusing on the consequences of two predominant types of intra-team conflict – task conflict and relationship conflict (De Dreu & Weingart, 2003; Simons & Peterson, 2000). Relationship conflict represents friction “over group members’ personal preferences or disagreement about interpersonal interactions” (Jehn, Norhecroft, & Neale, 1999, p. 745) and arises due to differences in individual inclinations and personalities and is frequently negative affect-laden (Choi & Sy, 2010). Task conflict is defined as a disagreement about substantive, issue-related matters (Ward, Lankau, Amason, Sonnenfeld, & Agle, 2007) and is exemplified by such differences as “the distribution of resources, procedures and policies, and judgments and interpretation of facts” (De Dreu & Weingart, 2003, p. 741). The overall consensus in the literature points to the vitiating effect of both task and relationship conflicts (but see exceptions, e.g., De Dreu, 2006; Jehn, 1995), highlighting relationship conflict as most detrimental to team performance (De Dreu & Weingart, 2003; Hamm-Kerwin & Doherty, 2010). Conversely, conflict management, generally defined as the extent to which team members engage in activities aimed at diffusing team strife, is conceptually different from and complementary to team conflict. Conflict management has been empirically shown to consistently enhance team...
Much is known about the effect of relationship conflict and conflict management on team performance. Surprisingly, the literature is silent about how and through what mechanisms team conflict and team conflict management operate in affecting team performance. Even the more established individual-level conflict literature has only recently begun to delineate how relationship conflict affects performance (see Lau & Cobb, 2010). The objective of this study, therefore, is to partially close this gap, and to theoretically justify and empirically test the role two mediators – team support and team cohesion – play in channeling the effect of relationship conflict and conflict management on team performance.

The rest of the manuscript unfolds as follows: in §2, the theoretical background and testable hypotheses are established. In §3, the sample, survey procedures, and measures are described. In §4, the measurement model and hypothesis testing results are presented. And, in §5 and §6, discussion and conclusions are provided.

**THEORETICAL BACKGROUND**

Team performance is a result of intra-team processes. Intra-team processes, defined as the “interactions that take place among team members” (Stewart and Barrick, 2000 p. 136), can be loosely classified as either synergistic or dysfunctional. Synergistic processes (e.g., collaboration, goal setting, open communication) positively impact team performance; whereas dysfunctional processes (e.g., shirking, loathing, conflict) negatively impact team performance (Stewart and Barrick, 2000). Intra-team conflict, as a dysfunctional process, vitiates team performance in two ways. First, team conflict slows or shuts down synergistic processes necessary for a team to amalgamate individual contributions into a common deliverable. That is, “economically”-speaking, the time and energy spent by each team member dealing with the conflict is the time and energy taken away from engaging in synergistic productivity-facilitating processes. Second, conflict shapes the attitudes of the team members towards the team and towards one another. That is, psychologically-speaking, conflict has a destabilizing effect on performance by diminishing team members’ motivations to act on behalf of one another and the team and to engage in synergistic processes.

The aim of this study is to consider the way in which team conflict and its “reciprocal” – conflict management – affect performance. Specifically, this investigation focuses on two mediators that parallel the posited operation of conflict on performance (described in the previous paragraph). First mediator – team support – represents the availability of general helping behaviors of team members towards each other and is viewed here as a synergistic interaction processes (Drach-Zahavy, 2004). Second mediator – team cohesion – represents team members’ feelings of belongingness or attraction to the group and indicates team members’ attitudes towards the team and towards one another (Bollen and Hoyle, 1990). Currently, a holistic research that models and simultaneously tests the relationships among all the key factors including relationship conflict, conflict management, team support, cohesion, and performance is lacking. Therefore, the goal of the study is to describe and empirically test how team support and cohesion mediate the effect of relationship conflict and conflict management on team performance.
Relationship conflict refers to interpersonal strife such as differences “over personality, values and norms, and attitudes” (Lau & Cobb, 2010, p. 900). These differences may become visible in the context of simple interactions among the team members (De Dreu & Van Vianen, 2001) and may redirect cognitive resources from the task at hand (Roseman, Wiest, & Schwartz, 1994), limit openness to new ideas (Pelled, 1996), stagnate flexibility and creativity (Carnevale & Probst, 1998), and interfere with information processing (Simons & Peterson, 2000). A salient characteristic of team relationship conflict is negative affect, manifested as insults and rudeness, breaking of promises, or negative interpretation of the behaviors of others (Simons & Peterson, 2000). Consequently, by disrupting healthy relating of team members to each other, the team environment characterized by relationship conflict is likely to undermine team support (hypothesis 1a) and undermine cohesion (hypothesis 1b).

Conflict management is an important predictor of team performance (Alper, Tjosvold, & Law, 2000; Montoya-Weiss, Massey, & Song, 2001). The current literature is clear – the established intra-team process of conflict management mitigates the deleterious effect of all conflict types by enhancing procedural justice, intra-team work effectiveness, and resource utilization efficiency (Behfar et al., 2008). The conflict management literature primarily focuses on studying behavioral patterns such as avoiding, accommodating, cooperating, compromising, competing, and/or problem solving conflict management actions, and their effect in diffusing friction (Behfar et al., 2008; Cropanzano, Aguinis, Schminke, & Denham, 1999; Folger, Poole, & Stutman, 2001). This study does not attempt to distinguish between different conflict management behavioral orientations and their effects. Instead, conflict management is defined here broadly as the extent to which team members engage in activities aimed at diminishing team strife. The objective then is to examine how general conflict management practices affect performance. The effects of intra-team conflict management processes include the enhancement of working relationships, satisfaction of the working parties, and member willingness to contribute to the work of the team (Jehn, 1997; Lind & Tyler, 1988). Consequently, by promoting healthier interactions among team members and by diminishing/preventing conflicts, conflict management is likely to enhance team support (hypothesis 2a) and enhance team cohesion (hypothesis 2b).

Would the effect of conflict management on performance be also direct, beyond its effect through the mediators, or would the effect of conflict management be fully channeled through
collaboration and goal setting? Conflict management practices are likely to exert their influence in restoring healthy relational team dynamics when conflict occurs. Conflict management, like relationship conflict, is a distal construct and is connected to team performance via its effect in restoring healthy team functioning. Therefore, the expectation is for the effect of conflict management on performance to be fully mediated through team support and cohesion (hypothesis 2c).

The direct positive effects of team support and cohesion on performance (hypotheses 3a and 3b, respectively) are well documented (e.g., Beal, Cohen, Burke, and McLendon, 2003; Tekleab et al., 2009; Drach-Zahavy & Somech, 2002). The literature, however, is silent about the relationship between team support and cohesion. The connection between team support and cohesion can be enlightened via Tuckman’s (1965) developmental model. Namely, team cohesion as a structural attribute begins to emerge in the latter stages of group development and has to be preceded by team members’ commitment to work together as a unit (Guzzo, 1995; Yukelson, Weinberg, & Jackson, 1984). Therefore, the expectation here is for the team support – a collaborative process that is likely to emerge first – to directly and positively influence team cohesion (hypothesis 3c). On the other hand, team cohesion, once established or beginning to be established, as a unifying force, is likely to positively influence the propensity of team members to behave in the interests of one another (hypothesis 3d). Therefore, both team support and cohesion are expected to positively influence each other. Because support and cohesion are expected to directly affect each other and team performance, the effect of support on performance is also expected to be partially mediated through team cohesion (hypothesis 3e). And, the effect of cohesion on performance is also expected to be partially mediated through team support (hypothesis 3f).

All theorizing here implies a more complex mediation path from relationship conflict to performance and from conflict management to performance. The effect of relationship conflict on performance, mediated through team support and cohesion, is expected to be partially mediated through the effect team support has on cohesion (hypothesis 4a) and through the effect cohesion has on team support (hypothesis 4b). Similarly, the effect of conflict management on performance, mediated through team support and cohesion, is also expected to be partially mediated through the effect team support has on cohesion (hypothesis 4c) and through the effect cohesion has on team support (hypothesis 4d).

RESULTS

Supporting hypothesis 1a, relationship conflict was negatively related to team support ($\gamma = -0.154$, $p < 0.001$). Conflict management was positively related to team support ($\gamma = 0.509$, $p < 0.001$), supporting hypothesis 2a. Team support ($\gamma = 0.648$, $p < 0.001$) and cohesion ($\gamma = 0.172$, $p < 0.05$) were positively related to performance, providing support for hypotheses 3a and 3b. Team support ($\gamma = 0.613$, $p < 0.001$) was positively related to cohesion and cohesion was positively related to team support ($\gamma = 0.24$, $p < 0.001$), supporting hypotheses 3c and 3d. Hypotheses 1b and 2b were not supported with relationship conflict and conflict management having no direct effect on cohesion ($\gamma = -0.049$, $p = 0.225$; and $\gamma = 0.019$, $p = 0.613$, respectively).
Indirect standardized path coefficients were computed by multiplying respective standardized direct path coefficients. Indirect path coefficient’s significance testing was performed using Sobel (1987) test (see http://quantpsy.org/sobel/sobel.htm). Hypothesis 1c proposes that the effect of relationship conflict on performance is fully mediated through team support and cohesion.

A non-significant direct effect between relationship conflict and cohesion (see hypothesis 1b) preclude support for full mediation through team support and cohesion. Instead, given a non-significant direct path between relationship conflict and performance ($\gamma = -0.047$, $p < 0.202$), full mediating effect of relationship conflict on performance through team support was supported ($\gamma = -0.10$, $p < 0.001$). Hypothesis 2c proposes that the effect of conflict management on performance is fully mediated through team support and cohesion. A non-significant direct effect between conflict management and cohesion (see hypothesis 2b) preclude support for full mediation through team support and cohesion. Instead, given a non-significant direct path between conflict management and performance ($\gamma = 0.067$, $p < 0.209$), full mediating effect of conflict management on performance through team support was supported ($\gamma = 0.33$, $p < 0.001$).

Hypothesis 3e posits that the effect of team support on performance is partially mediated through cohesion. A significant direct effect of team support on performance (see hypothesis 3a) and a significant indirect path between team support and performance, through cohesion ($\gamma = 0.105$, $p < 0.05$), lend support to hypothesis 3e. Hypothesis 3f proposes that the effect of cohesion on performance is partially mediated through team support. A significant direct effect of cohesion on performance (see hypothesis 3b) and a significant indirect path between cohesion and performance, through team support ($\gamma = 0.205$, $p < 0.001$), demonstrate support for hypothesis 3f.

Hypotheses 4a through 4d that posit the effect of relationship conflict and conflict management on performance is partially channeled through the effect of team support on cohesion and through the effect of cohesion on team support. A significant indirect path between relationship conflict and performance, through the effect of team support on cohesion ($\gamma = -0.016$, $p < 0.05$), provides support for hypothesis 4a. A significant indirect path between conflict management and performance, through the effect of team support on cohesion ($\gamma = 0.054$, $p < 0.05$), provides support for hypothesis 4c. Both relationship conflict and conflict management had no direct effect on team cohesion (see hypotheses 1b and 2b), precluding support for hypotheses 4b and 4d.

**DISCUSSION**

This study is one of the first that examines how relationship conflict and its management affect performance (see also Tekleub et al., 2009). The study confirmed (an already established in the literature) direct positive effect of team support and cohesion on performance. The effects of relationship conflict and conflict management on team support, previously unexplored in the literature, were also examined. Expectedly, relationship conflict undermined team support and conflict management enhanced team support. The relationship between the two mediators, team

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1 Method, measurement model results, limitations, and future directions sections are available upon request from one of the authors.
support and cohesion, are unexplored in the literature. This study purports and empirically establishes the positive effect of team support on cohesion and the positive effect of cohesion on team support. The results are intuitive in that intra-team supportive behaviors are prerequisite to the establishment of cohesion. Yet, cohesion, once emerged or emerging, as a force of unity, positively influences the propensity of team members to help one another.

The unexpected findings in the study are non-significant effects of relationship conflict and conflict management on cohesion. These results are surprising given an existing literature that shows a direct negative relationship between relationship conflict and cohesion and a direct positive relationship between conflict management and cohesion (Tekleub et al., 2009). This “anomaly” is likely due to contextual factors and, surprisingly, it (“anomaly”) appears to support the theorizing presented in the previous sections. Specifically, the position of this paper is that the team work is a necessary condition for the emergence of cohesion. When team members are committed to working with each other it creates a foundation for the formation of unity. Cohesion, however, as a structural property of a team, takes time to develop. This study focused on teams that worked together for about 3 months. Hence, there is a strong effect of relationship conflict and conflict management on team support and no effect on cohesion. And, the effect of team support on cohesion is much stronger than the effect of cohesion on team support. This indicates that early in team’s development, team support processes are the drivers of cohesion formation. Hence, when conflict occurs, it undermines cohesion by slowing or shutting down the very mechanisms necessary to bring cohesion to “maturity.” The expectation, then, is for the links between relationship conflict and cohesion and conflict management and cohesion to become more salient in more established teams. Of course, it is possible, even in mature teams, for the effects of relationship conflict and conflict management on cohesion to still be fully channeled through team support and other processes. That is, cohesion as a positive team-level attribute emerges from and is likely to be sustained by the ongoing functioning of synergistic intra-team processes such as team support. And when, even in mature teams, synergistic processes are shut down, the cohesion has to diminish as well.

Lastly, the primary focus of this study is how relationship conflict and conflict management affect team performance. The results demonstrate strong support for the full mediation model. In particular, the total effects of relationship conflict and conflict management on performance were channeled through team support first and then indirectly through cohesion. These findings are intuitive in that helping behaviors within team and the cohesion that they nurture are proximal and necessary conditions for team performance. When conflict or its management is activated their operation is either disruption or repair of the team mechanisms and, consequently, team attributes that drive team performance.

REFERENCES


