The Relationship between Task Conflict, Task Performance and Team Satisfaction in Management Teams:

The Mediating Role of Relationship Conflict

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THE RELATIONSHIP BETWEEN TASK CONFLICT, TASK PERFORMANCE, AND TEAM MEMBER SATISFACTION IN MANAGEMENT TEAMS: THE MEDIATING ROLE OF RELATIONSHIP CONFLICT

Abstract

Task conflict and its potential positive effect on team outcomes has been questioned over the years. The findings have been inconsistent, with different studies indicating that task conflict can be positively related, negatively related or unrelated to measures of team outcomes. This study is a response to the request presented in de Wit, Greer and Jehn’s (2012) recent meta-analysis, to further investigate the effect relationship conflict can have on the association between task conflict and team outcomes. The purpose of the study has been to investigate and explain the effect of task conflict through relationship conflict on task performance and team member satisfaction, using relationship conflict as a mediator. 208 Norwegian and Danish management teams in the private and public sector were studied. In line with earlier findings, task conflict and relationship conflict were found to be positively associated ($B=.24$). Results from the SEM-analysis suggest that task conflict and its effects must be considered in light of the presence of relationship conflict. Significant mediation effects implies that task conflict is indirectly negative to task performance ($B=-.16$) and team member satisfaction ($B=-.18$). However, when relationship conflict was held constant, task conflict was actually shown to have a positive direct effect on task performance ($B=.19$) and team member satisfaction ($B=.29$). Hence, the problem for management teams may not be task conflict itself. Task conflict may actually be beneficial for team outcomes if relationship conflict is absent. However, task conflict has a tendency to elicit relationship conflict. The challenge is therefore how management teams can engage in open and direct task discussions, without eliciting destructive relationship conflicts.
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Introduction

Task conflict and relationship conflict tend to occur together, but have been shown to create different consequences. Is it possible for management teams to act rationally and filter out destructive relationship conflicts while encouraging high levels of task conflict inside a team to make effective and good decisions, and at the same time perceive team member satisfaction?

Task conflicts are part of the daily interactions of management teams (MT). Issues are analyzed and discussed, team members have different knowledge, information and interests, different perspectives are presented and decisions must be taken in MT meetings, often within the context of time pressure (Amason, 1996; Edmondson, Roberto & Watkins, 2003; Jehn, 1995). Management teams often interact on a regular basis and need to function effectively during different team processes to achieve goals and produce satisfying results (Bang & Midelfart, 2012). The MTs may for instance be responsible for the strategic, operative and institutional management (Nadler & Spencer, 1998) and decision making in complex situations, which may result in severe consequences for the entire organization (Edmondson, et al., 2003).

Due to distinct demands from the external environment, there is a wide range of challenges inside the MT that the MTs need to handle to be able to function and deliver results effectively alongside with high quality. Challenges like diversity (Jehn, Chadwick & Thatcher, 1997; Stasser, 1992), social integration and communication (Smith, Smith, Olian, Sims, O’Bannon & Scully, 1994; Wall & Callister, 1995), differing interests, goals, as well as other individual characteristics, such as personality (Wall & Callister, 1995), might be sources of pressure and intensity in a task conflict situation. As directive agencies in highly knowledgeable organizations, management teams need to quickly understand the needs and demands of their unit, produce solutions and make important decisions - often in a context of time pressure and competition over resources (De Dreu & Van De Vliert, 1997; Pondy, 1967). A mix of individual, organizational and contextual factors may therefore easily provide ground for conflict.

Task conflicts arise when there are “disagreements among group members about the content of the tasks being performed, including differences in viewpoints, ideas and opinions” (Jehn, 1995 p.258). Task conflicts may be both demanding and unpleasant, but also important for effective team functioning. For instance, consequence of avoiding task conflicts may lead teams into a ditch of groupthink as a psychological drive for consensus (Janis, 1972). At the same time, escalation of task conflicts may cause coordination loss and process loss (Steiner,
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1972), which may cost unnecessary time and resources. Hence, team members depend on having constructive discussions to improve their knowledge and groundwork of their team performance. Still not all kinds of disagreements may be beneficial for team outcomes.

Disagreements around topics which trigger discussion about team members’ belief systems, interests or personal preferences, may cause relationship conflict or affective conflict (Smith & Edmondson, 2008). Relationship conflict arises when there exist “interpersonal incompatibilities among group members which typically include tension, animosity and annoyance” (Jehn, 1995, p. 258). Relationship conflict may easily influence a team’s ability to perform effectively when time is spent on solving derails and personal conflicts among team members. Thus, relationship conflict tends to generate a destructive climate, which often fosters negative affections, misattribution and non-collaborative team behavior, that may lead to unsuccessful team functioning and performance (de Dreu & Weingart, 2003; de Wit, et al., 2012; Smith & Edmondson, 2008). Ideally, management teams should utilize task conflict to engage in problem solving, avoiding the conflicts fueled by negativity.

Task conflict, or cognitive conflict, has in some studies been found to positively influence team outcomes under certain circumstances (Amason, 1996; Eisenhardt, Kahwajy & Bourgeois III, 2000; Jehn, 1995). In contrast, relationship conflict has almost solely been related to negative outcomes, like reduction of team member satisfaction (Jehn, 1995; De Dreu & Weingart, 2003), collaborative problem solving (De Dreu, 2006), team performance (De Dreu & Weingart, 2003; De Wit, et al., 2012), organizational performance (Amason & Mooney, 1991), decision quality (Amason, 1996), team effectiveness and helping behavior (De Dreu & Van Vianen, 2001), organizational citizen behavior (de Wit, et al., 2012), team trust (Simons and Peterson, 2000; de Wit, et al., 2012), affective acceptance and understanding (Janssen, Van De Vliert & Veenstra, 1999; Amason, 1996), and relational closeness (Rispens, Greer, Jehn & Thatcher, 2011). However, meta-analyses investigating the effect of task and relationship conflict indicate that both types of conflict (albeit to different degrees) are negative for both team performance and team member satisfaction in all types of teams.

The aims of this paper are 1) to provide further knowledge on how task conflict and relationship conflict may be linked together and how these two types of conflict may affect task performance and team member satisfaction in management teams, and 2) contribute to the debate of whether or how task conflict in management teams may be beneficial for team outcomes.
Setting the Stage: Past Research on the Association between Task Conflict, Task Performance and Team Member Satisfaction

The effect of team conflict on team outcomes has been investigated and questioned over the years. Early conflict theories considered team conflicts to be an impediment to effective team functioning (Argarys, 1962, Blake & Mouton, 1984; Pondy 1967). For instance, conflict within teams was expected to be negative for team functioning when conflict was evident and the teams’ goals and actions were blocked and frustrated (Pondy, 1967).

Later, other scholars within the conflict performance field were starting to highlight positive effects of conflict instead of only focusing on the potential detrimental effects of team conflicts on team outcomes (Amason, 1996; Jehn, 1995; Van De Vliert & De Dreu, 1994). Task conflict was now considered to also improve decision quality (Amason, 1996) through stimulation of critical interaction (Schwenck, 1995; Schwenck & Cosier, 1980). Teams that discuss task issues in a critical manner were assumed to be better suited to map all the necessary aspects of the problem and then be able to make better decisions. In light of contrary findings, the picture of team conflict and its effect was more nuanced and one was looking for other factors that could explain these incompatible findings. For instance, some scholars examined the role of the amounts of task conflict in the performance context through a curvilinear relationship (De Dreu, 2006; Jehn & Mannix, 2001) or the complexity of the task (Jehn, 1995). Hence, task conflict could be beneficial in moderate forms and in non-routine task situations when team members are in need of critical evaluation to avoid thoughtless agreement and complacency.

However, concerning the first meta-analysis (De Dreu & Weingart, 2003), some incompatible findings of task conflict and its effect on team performance and team member satisfaction were reported. In 2003 De Dreu and Weingart presented some interesting results in their meta-analysis that brought the traditionally positive view of task conflict in a context of team performance into the spotlight. Based on a sample of 28 empirical studies, they found a negative mean corrected population correlation of -.23 between task conflict and team performance, and -.32 between task conflict and team member satisfaction. Moreover, relationship conflict and team performance were found to correlate almost on the same level as task conflict, with a mean negative corrected population correlation of -.22, while relationship conflict and team member satisfaction correlated -.54. These findings suggest that
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Conflict, despite conflict type, is negative for team effectiveness and should be avoided (De Dreu & Weingart, 2003). As a consequence, scholars have been arguing against the positive effects of workplace conflict and claim that the benefit of task conflict is very limited and …”found under an exceedingly narrow set of circumstances” (De Dreu, 2008, p.5). In addition, there is also an argument that the small positive effect of task conflict on performance “…breaks down as conflict becomes more intense, cognitive load increases, information processing is impeded, and team performance suffers” (De Dreu & Weingart, 2003, p.746). Regarding the work of De Dreu and Weingart (2003), task conflict was not assumed be beneficial to neither the teams’ performance nor their feelings of team satisfaction.

Nine years later, a new meta-analysis of the effects of task and relationship conflicts (de Wit, et al., 2012) challenged De Dreu and Weingart’s findings. Their meta-analysis included 88 more studies (a total of 116 empirical studies, based on 8.880 groups) and showed that task conflict and group performance correlated with -.01 and task conflict and team member satisfaction -.24. Relationship conflict was found to correlate -.16 with group performance and -.54 with satisfaction. In addition to finding a less negative relationship on a study level between both task and relationship conflict on one side, and group performance on the other, they found a positive effect of task conflict on group performance when task conflict, relationship conflict and process conflict were added to the same path analysis.

Moreover, their moderator analysis (co-occurrence of task conflict and relationship conflict) showed that the stronger association between task conflict and relationship conflict, the more negative the relationship between task conflict and team member satisfaction and task performance. Hence, when the correlation between task conflict and relationship conflict is strong, it is likely a corresponding association or effect on team member satisfaction and task performance. Compared to non-management teams, top management teams were actually found to benefit more from task conflict (-.21 vs. .09). Such a reliable difference across level of management suggests that task conflict may be constructive for higher level teams in contrast to non-management team.

Interestingly, a positive relationship between task conflict and group performance was also found when it was measured in terms of decision-making quality or financial performance (de Wit, et al., 2012). The authors explain their different results with the incorporation of 23 “pure” decision-making teams in the analysis. Thus, this finding indicates
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that potential positive effects of task conflict may not be interesting in context of general team performance, but in certain team performance measures such as decision making processes.

Taking potential measurement problems and operationalization of the performance concept into account, there seems to be more to discover around this topic of interest. Task conflict might not be as negatively associated with group performance, as previously assumed, and there might even be instances where task conflict is positively associated with group performance.

Conceptual Framework and Development of Hypotheses

In many cases, people are not rational decision makers and people’s interaction with one another tend to be affected by several factors. There are different perspectives and theories that may explain how task conflict and relationship conflict tend to stick together and influence each other. Management teams need to discuss and wrestle around topics to some degree to be able to perform and make good decisions, preferably with as little “bias” as possible and with high levels of dedication from the entire management team. Perspectives presented below brought from social-cognition- psychological frameworks seek to explain and describe how the role of the content of discussion, individual perception, the way feedback is provided, attribution and judgment processes may create interferences in human interaction and interpretation.

Perspectives of Co-Occurrence of Task Conflict and Relationship Conflict

Topics. The topic which team members are discussing, may influence the task conflict situation that takes place in a management team meeting. Task conflicts that involve “cool topics” are often characterized as reasonable conflicts that engage people to argue, express opinions and ideas based on actual facts (Smith & Edmondson, 2008). However, when the MT needs to discuss “hot topics,” the task conflict situation may turn out to be incongruous rather than reasonable. A hot topic scenario may for instance be a discussion about delegation of tasks and the distribution of resources or budgeting when all parties represented are deeply concerned about fulfilling the need of their own unit. When the topic in a task conflict touches upon personal belief systems, convictions or interests (Smith & Edmondson, 2008), the hot topic may trigger or activate the hot emotional system that deals with the emotional processing. The hot system, which is stimulus-controlled, reflexive and fast in contrast to the cool system with “slower,” complex, reflective and self-controlled features (Metcalfe &
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Mischel, 1999), increases the likelihood of activation of negative emotions, that may in turn lead to personal friction and thereby occurrences of relationship conflicts.

Conflicts could also be negatively and emotionally loaded in the first place, when having a relationship conflict which is independent of the task conflict (e.g. general personal disliking). The “cool” topic of budgeting in the first place may be heated through the tense discussions with different points of views rooted into personal interests or just through interpersonal conflict that occurred before the task conflict situation. A task conflict involving “cool topics” may be more or less replaced by “hot” conflicts, discussing and confronting one another’s personal meanings and convictions instead of the “real task conflict”. Relationship conflict generated by interpersonal conflict may neglect use of the cognitive or cool system that enables the individual team members’ self-regulation (Metcalfe & Mischel, 1999).

Undermining of the cool system or the “seat of self-control” may affect team members’ efforts in dealing with emotional loaded information. Team members may experience that the dialogue or discussion is all about surviving and maintenance of own needs: The objectives in the conflict situation may change from being largely shared “our goal is to find the most profitable solution,” to be more narrowed: “I need to defend my viewpoints and protect my interests.” Thus, hot topics and interpersonal conflicts may trigger features of relationship conflict in a task conflict situation through a domination of activation in the hot emotional system.

**Misattribution.** Misattribution is one cognitive explanation of how task conflict may foster relationship conflicts. Misattribution occurs when a team member attributes another team member’s behavior in a biased manner to dispositional causes. Practically, people tend to interpret other’s intentions, motivations and behavior and evaluate the source of that behavior as rooted in internal or external factors (Fiske and Taylor, 1991). Team members may then assess the completeness of other team members’ arguments based on these evaluations (Simon & Peterson, 2000). In a conflict situation, this general tendency of making attributions about others, may result in misattribution and misjudgment. Relevant information provided by a team member may be “weighed or paired” in the wrong way. For instance, a statement or argument presented in the discussion of resource allocation may be interpreted by another team member as being internally motivated (e.g. hidden agenda or being negative) instead of being attributed to the team member’s external contribution (e.g. his or her attempt of acting critically upon the decision context in order to improve the foundation of performance). Instead of considering attributing the team member’s role or
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Involvement to the context (temporary), one may rather attribute it to a personal level (e.g. personality or ability).

Our decision, or intention to pursue a particular action, is also informed by our judgment or the evaluations that we make. Our ability to judge accurately depends on these evaluations and how accurately we assess the validity of the cues or events in our environment, and then integrating this information all together (Hardman, 2009). If our judgment is incorrect, it will most likely influence our attribution, but also the quality of our decisions and conclusions. The tendency to underestimate the influential power of situational factors on other’s behavior (also called the fundamental attribution error) (Hardman, 2009), misattribute and misjudge in a task conflict-scenario, may easily lead to relationship conflict.

**Misinterpretation.** Occurrences of relationship conflict may also happen through misinterpretation in a context of information-processing. A task conflict can be misinterpreted as a relationship conflict (de Wit, et al. 2012; Simons & Peterson, 2000; Yang and Mossholder, 2004). The negative effects from relationship conflict may be manifested through a conflict-scenario if the task issue is perceived as a relationship conflict. De Dreu and van Knippenberg (2005) explain this process in light of how individual feelings of ownership over own viewpoints may make the decision maker activating a more competitive mindset (De Dreu & van Knippenberg, 2005).

Instead of elaborating on the arguments, counter-arguments from other team members in the task discussion may be evaluated as «threats» to others - causing the task related issues to be perceived as personal criticism. Research shows that personal judgment potentially triggers speculations, distrust and agendas among team members when a cognitive or task orientated discussion is perceived as personal criticism or relational attacks (Fiske & Taylor; 1991; Amason, 1996; Smith & Edmondson, 2008). It may be easy to foster negative effects of relationship conflict and hard to gain benefits of the task conflict if the task discussion involves elements of relationship conflict. With the example of discussing “cool topics”, the discussion may escalate because the disagreement about the task is interpreted as having a personal conflict instead of just having task disagreement. Accordingly, consequences of corresponding inferences, personal judgment and misinterpretation in task debates, may cause relationship issues, which in turn may lead to neglect of facts over personal beliefs, interpretations and perceptions.
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**Information asymmetry.** Another view on how relationship conflict may occur in a task conflict situation can be found in cases with prominent information asymmetry within the MT. This perspective takes the situational factors into account, such as the effect of time and amounts of distributed information within the team (Edmondson, et al., 2003). Thus, the match between the stable characteristics within the team (e.g. competencies) and the available information (e.g. goals or expectation) differ among team members in the decision making process. For instance, team members may have different mental models, which is the organization of information or knowledge into structured patterns (Rouse & Morris, 1986). Mental models may include everything from different expectations, roles, and strategies with regard to the task at hand or to the team interaction. If the MT members have very different mental models, team members could more easily misinterpret each other’s comments in a conflict situation through what they perceive through each “lens” influenced by his or hers current information about the task. In addition, team members may underemphasize the unshared information in their own considerations, because they may question its validity (Stasser, 1992; Stewart & Stasser, 1995). A diverse distribution of information or information asymmetry among team members in the MT may have the potential to stir up internal, relational conflicts.

**Destructive feedback.** Occurrence of person conflicts and activation of the hot system in task conflict may also happen through destructive feedback. The way feedback in a task conflict is provided, may influence the task discussion. If the given feedback is destructive in nature (e.g. person attack), the feedback has great potential to evoke negative emotions, such as anger and frustration. If team members are incapable of providing constructive feedback (i.e. specific and considerate, see Baron, 1988), the feedback situation in the task discussion may create negative feelings that activate the hot system, causing the individual to become more emotional stimuli driven and less motivated to try to consider reflection (Smith & Edmondson, 2008). Team member interaction may be negatively affected of the tensed conflict situation provoked by the destructive feedback in the task conflict situation, because it inhibits rational interaction of individuals.

Given these underlying social and cognitive factors and human tendencies of biased attribution and judgment processes in context of handling task conflicts, the first hypothesis assumes that task conflict (TC) is positively related to relationship conflict (RC). Thus, a MT having task conflicts inside their team is also expected to experience relationship conflict.
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**H1:** Task conflict is positively related to relationship conflict

**Task Performance**

In the literature, teams’ performance has been measured and operationalized through different performance typologies such as group performance (Jehn, 1995; Goncalo, Polman & Maslach, 2010; de Wit, et al., 2012), team performance (De Dreu & Weingart, 2003; Jehn & Chatman, 2000) proximal and distal team outcomes (de Wit, et al., 2012), decision making (de Wit, Jehn & Scheepers, 2013; Amason, 1996), team effectiveness (Shaw, et al., 2011), team innovation (De Dreu, 2006; Lovelace, Shapiro & Weingart, 2001) and constraint adherence (Lovelace, et al., 2001). Regarding this study, task performance is operationalized as a distal outcome which corresponds to measures that for instance include team performance, productivity and effectiveness. Proximal outcomes differ from distal outcomes because they confine to measures such as emergent states, like team member satisfaction, team cohesion and intragroup trust. Hence, task performance in this context refers to MTs’ experience of own ability to make high quality decisions.

The effect of relationship conflict on task performance. The effect of task conflict on team outcomes seems to depend on the presence or absence of relationship conflict (Shaw et al. 2011). Whereas task conflict seems to have a rather unstable relationship with team outcomes, varying from negative (De Dreu & Weingart, 2003), through unrelated (de Wit, et al., 2012) to positive (Amason, 1996), relationship conflict has been systematically linked to negative team outcomes. Since, a MTs ability to create high quality team results seems to be heavily weighted on interpersonal processes to lay a foundation of important and effective team processes (Marks, Mathieu & Zaccaro, 2001), factors that may disturb functional interpersonal processes inside the team may be crucial to address.

Relationship conflict has been proved to be detrimental for team processes and team outcomes. As previously described, negative emotions from personal conflicts among team members, easily damage a MT’s team interactions, functioning and performance. For instance, having a relationship conflict going inside the MT, may cause team members to be more focused on each other than the team’s task related problems (De Dreu & Weingart, 2003). This is in line with de Wit and colleges’ (2013) findings. The presence of a relationship conflict during a task conflict was found to increase team member’s rigidity in holding on to own suboptimal preferences, leading to poor decision making. Participants in the study were further found to ignore information from other group members when the task
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Conflict was perceived as a threat, at the same time their motivation to process information systematically was decreased.

Moreover, relationship conflict is also shown to encourage withdrawal through distress and animosity among team members (Jehn, 1995). Team members may turn out to be too demotivated to engage in the task conflict that one may resign from participation, because the conflict situation is dominated by unproductive and interpersonal confrontations. Withdrawal may not be beneficial for either the ongoing team process or the performance outcome, because the final solution of the task itself often demands different perspectives and collective engagement to improve the discussion. Elements of relationship conflict are not a desirable ingredient in a task conflict situation.

The effect of task conflict on task performance when relationship conflict is present. If task conflict may lead to relationship conflict, negative effects from relationship conflict will most likely harm task performance, resulting in no positive effect - or in worse cases - a negative task conflict effect on task performance. Task conflict has been more positively associated with group outcomes when it does not co-occur with relationship conflict (Eisenhardt, Kahwaji, & Bourgeois, 1997). Further, the work of Shaw and colleagues (2011) illustrated this thought when relationship conflict was found to aggravate the relationship between task conflict and team effectiveness. These findings are perfectly in line with the significant moderator effects (e.g. relationship conflict as moderator) in the meta-analysis from 2012 (de Wit et. Al., 2012). Team members experiencing less relationship conflict would most likely experience less amounts of negative emotions, not interpret information in a biased manner and having less personal friction inside their MT compared to teams with presence of relationship conflict.

Hitherto illustrated, the negative effect of task conflict may be understood as an indirect effect on task performance, because it operates through relationship conflict. A MT may suffer from having task conflict because of unavoidable negative effects from relationship conflict. Based on the assumption of an effect of co-occurrence of task conflict and relationship conflict (H1), presence of relationship conflict is assumed to mediate the relationship between task conflict and task performance.

H2: The relationship between task conflict and task performance is mediated through relationship conflict.

Team Member Satisfaction
As a supplement to the performance measurement, team member satisfaction was included as the second outcome variable of interest. Team member growth and well-being can be understood as individually experienced motivation and stimulation inside the team. Wageman, Nunes, Burruss and Hackman (2008) suggest that team members’ growth and well-being should be a competitive measure of team effectiveness and performance. In their model of conditions for team effectiveness they highlight individual team members’ learning and team capability as an additive measure of team effectiveness together with team performance. As proposed by Hackman and Katz (2010), effective teams should be evaluated through a more multidimensional framework of team effectiveness. A wider team outcome measure may include answers to questions on both productive outputs (e.g. performance) and social processes that enhance group capability, individual learning and well-being.

In the study of Allmeninger, Hackman and Lehman (1996) team members of an orchestra was found to perform well, but scored lower on satisfaction with opportunities for personal growth and development than federal prison guards and industrial production teams. Group processes and experiences may foster good performance, but this may be at the expense of team members’ well-being (Hackman & Katz, 2010). A team may deliver satisfying results in line with the performance criterion, but not necessarily deliver the personal well-being criterion. Such a one dimension outcome focus may have a detrimental effect with regard to their team function and performance over time. With regard to the understanding of Wageman and colleagues’ (2008), an effective team is better measured by different effectiveness criteria, which include both a performance level and a satisfaction measurement. A management team will, in light of this description, be characterized as being effective, if it is able to achieve satisfying levels of task performance and at the same time experiences high levels of team member satisfaction and learning. Thus, team member satisfaction will function as a measure of proximal outcome in addition to the distal outcome variable task performance.

The effect of relationship conflict on team member satisfaction. Considering the meta-analyses from 2003 and 2012 on conflict and team outcomes (De Dreu & Weingart, 2003; de Wit et al. 2012), task conflict has generally been negatively linked to team member satisfaction (-.32). Figuratively, a team having task conflict may feel less satisfied despite its productivity (i.e. high insensitivity of argumentation) concerning these results. How could more problem solving or perspective taking provide dissatisfaction among team members?
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Similarly, in the context of performance, the answer to this question may rest upon the role of relationship conflict and its tendency of occurring together with task conflict.

Obviously, teams having relationship conflicts will most likely experience feelings of dissatisfaction rather than satisfaction. A summary of nine studies provided by De Dreu and Van Vianen (2001) showed an average negative correlation between relationship conflict and satisfaction on -.48. Relationship conflict has been found to have a larger negative impact on both performance and satisfaction than task conflict. de Wit and colleges’ (2012) meta-analysis reported and supported De Dreu and Weingart’s (2003) findings (-.32) about a greater negative effect of relationship conflict than task conflict (-.54 vs. -.24), which acknowledges the thought of viewing relationship conflict as distinct from task conflict.

Low team member satisfaction by verbal assaults, infringement of dignity and professional knowledge. It is hard to gain team member satisfaction and learning in situations of task disagreements when the task conflict also generates negative emotions. One possible explanation may be found in the role of negative emotions, similar to the context of task conflict and task performance. Negative emotions have been shown to be negatively associated with satisfaction before (Brief & Weiss, 2002; Spector, 1997), and may therefore (when it occurs) affect the self-regulating processes that are central in regulating thought and behavior.

Given the context of what kind of organizations or work environment MT often operates in, the challenge of handling conflict may be complex. For instance, Bjorklund (2014) highlights the importance of the context of formalized knowledge in work tasks and social relations in knowledge-intensive work environments, when it comes to potential infringement. It is likely that most team members’ interaction and contribution to a task conflict are based upon team members’ knowledge and competence. Potential infringement of team members’ professional knowledge in a task conflict through counter-arguments may create person conflicts and feelings of dissatisfaction if the confrontations question their professional knowledge or violate their dignity (even if the task conflict is not directly loaded with general personal disliking).

Furthermore, if the personal confrontations in the conflict situation were experienced as unjustified, this would most likely produce even more provocation to the confronted team member than if the assault was relatively justified (Geen & Donnerstein, 1983). Since people care deeply about being treated with respect (Tyler & Lind, 1992), task conflict with harsh language may create feelings of disrespect and animosity, which again correspond to
relationship conflict characteristics (Simons & Peterson, 2000). Assaults and infringement that may appear in a task conflict situation may cause great dissatisfaction because the individual team member may feel disrespected or less successful during the task discussion. Negative feelings of animosity, distrust and distress may lead to decreased feelings of satisfaction, well-being and opportunities for learning, because of used energy on derails and irrelevant topics instead of concentrating on the actual content of the discussion. A team climate with lots of relational conflicts may have trouble enhancing the team’s capability if its members continuously tend to end up having biased and tense discussions.

The effect of task conflict on team member satisfaction when relationship conflict is present. If task conflicts may involve negative emotions, this may influence self-regulating processes in a negative manner that may be associated with team members’ feelings of satisfaction. Thus, similar to hypothesis 2, the third hypothesis assumes that the effect of task conflict on team member satisfaction is mediated by the presence of relationship conflict.

H3: The relationship between task conflict and team member satisfaction is mediated through relationship conflict.

Method

Self-report data from a sample of 216 management teams (135 Norwegian and 81 Danish teams) from public and private sector, comprising 1271 managers, was used to perform regression analysis and SEM analysis using SSPS 22.0 and AMOS 4.01.

Sample

The sample of 216 MTs included organizations from a broad range of sectors: healthcare, consultancy, economy and finance, facility and support, industry, entertainment, public administration, commercial service, transport, culture, energy and education. The respondents were recruited through consultation and development work in Norway and Denmark.

The size of the MTs varied from large teams with 23 leaders to small teams of 2 leaders with an average MT size of 7 members. The majority of MTs comprised 4 to 6 persons. The distribution of gender was almost equal across MTs with a total percentage of 54.1% males and 45.9% females. In the present sample, 50 were top management teams, 70 middle-level management teams, 94 lower-level management teams and 2 non-management teams.

Procedure
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The participants rated their respective management teams on several dimensions of effectiveness, using a questionnaire called \textit{effect} (Bang & Midelfart, 2015), developed by Henning Bang and Thomas Nesset Midelfart, based on the research described in their book “Effektive ledergrupper” (Bang & Midelfart, 2012). There was no systematic procedure of recruitment of the sample. Approximately 40 % of the MTs answered the survey as an introduction to a following development course. The other 60 % was asked to participate and be part of a research project. All MTs received an email with a web link with invitation to answer the questionnaire with a deadline of one week. The MTs that had not responded within the deadline received an additional email with a reminder. All of the participants in the survey received a written report after completion, containing management team scores and feedback on the questionnaire results.

The mean response rate across management teams was 96.9%.

Measures

The questionnaire \textit{effect} consists of 27 scales that attempt to capture management team effectiveness and functioning through \textit{conditions of team effectiveness (input factors)}, \textit{processes related to team effectiveness (process factors)} and \textit{indicators of management teams’ results (output factors)}. The scales in \textit{effect} are identified and presented in the book “Effektive ledergrupper” (Bang & Midelfart, 2012) and are a result of a comprehensive review of international team research since 1970 and from the authors’ own research on Scandinavian management teams.

Each scale in the survey consists of 2-7 questions on a 7-point Likert scale. In total, the respondents answered 124 questions. However, this study examines only the measures of task conflict (4 questions), relationship conflict (4 questions), task performance (i.e. outcome from management meetings and decision quality, measured though 8 questions) and team member satisfaction (5 questions). Reliability of measures was estimated at individual levels by Cronbach’s alpha.

A complete overview of the items for each dimension with ICC and Cronbach’s alpha values is presented in Appendix A.

\textit{Task conflict (TC)} was operationalized as the degree to which team members have distinct disagreements and different opinions concerning tasks during discussions. The TC scale is built on the TC measurement scale from the work of Jehn (1995), with some adjustments. TC was measured as a continuous variable with four items on a seven point
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Likert scale, with the value of 7, indicating “totally agree,” as the highest level of TC, 1 as “totally disagree”, and 4 as “neither agree nor disagree”. Estimated reliability of TC was .71 (Cronbach's alpha). The mean score of TC was used as the MT’s amount of perceived task conflict ($M=4.66$, $SD=0.70$).

Relationship conflict (RC) was operationalized as the degree of personal friction and interpersonal conflict within the MT, and the RC measure was also based on Jehn (1995). RC was measured as a continuous variable with four items on the same seven point Likert scale. A value of 7 on the RC scale indicates the highest level of relationship conflict. RC had a Cronbach’s alpha on .90. The mean score of RC was used as the MTs amount of perceived relationship conflict ($M=5.33$, $SD=1.11$).

Team member satisfaction (SAT) was operationalized as the degree to which individual team members experience learning, well-being and motivation within the MT (Wageman, Hackman & Lehman, 2005, s. 376). The SAT-scale was based on theories and research on management teams performed by Hackman (2002) and Wageman and colleges (2008). SAT was measured as a continuous variable with five items on a seven point Likert scale, with the value 7 indicating the highest level of team member satisfaction in the MT. SAT had a Cronbach's alpha of .87. The mean score of SAT was used as the MT’s amount of perceived team member satisfaction ($M=5.46$, $SD=0.77$).

Task performance (TP) was operationalized as the MTs ability to deliver performance results, which contribute to both an increased added value to the organization and decision quality. The TP scale was merged into one scale from the scales “General Task Performance” and “Decision Quality”, and constructed and adjusted according to the theory and research on management teams by Hackman (2002), and Wageman and collegues (2008). TP was measured as a continuous variable with eight items on a seven point Likert scale with the value of 7 indicating the highest level of task performance in the MT. TP had a Cronbach's alpha of .90. The mean score of TP was used as the MT’s mean level of task performance ($M=5.27$, $SD=0.69$).

Reliability is an estimate of "true score variance" - i.e. the amount of variance in an observed indicator that is explained by variance in a latent construct. A Cronbach's alpha value of .71 (TC) indicates that 71% of the variability in the scores represents the construct of interest, and 29% is considered as random measurement error. All scales had satisfying alpha values (ranging from .71 to .90), meeting commonly used criteria for acceptable reliability (Nunally, 1978; Kline 2000).
Possible confounding variables. In the analyses, two possible confounding variables were controlled for: management team size (MTS) and level of management (LOM). Team size may in itself be a source of confrontations, large group effects and logistical issues (Katzenbach & Smith, 1993). Large teams may have greater likelihood of fostering negative group effects like social loafing or free rider-effects (Cornes & Sandler, 1996; Karau & Williams, 1993). Such negative group effects may harm team performance. Large MTs may also face more challenges with creating an effectiveness climate with collective engagement than small MTs. In the present sample, there was substantial variability in management team size - MTS ranging from 2 to 23 team members, calling for the effect of team size to be controlled for. MTS was measured simply as the number of team members in each management team ($M=7.06$, $SD=3.91$).

Additionally, level of management (LOM) was used as a control variable. Some authors have suggested that higher level management teams differ from lower level management teams in longer decision making processes (Floyd & Lane, 2000). Presumably, members of a top management team may be more motivated to make effective and good decisions in light of their pivotal role in the organization. For instance, Hambrick (1994) highlights how the role of top management teams is different to lower level MTs with regard to their higher-level responsibilities in context of accountability of the key-decision making processes. Thus, differences in responsibility and position through level of management may have an effect on team outcomes, which needs to be controlled for. LOM was measured as a quasi-continuous variable on a three point scale with items involving 1 as top management teams, value 2 as level 2 of management and value 3 as level 3 or lower of management team.

Main Analysis

Aggregation. This study focused on investigating the phenomena of conflict, performance and satisfaction on a team level. It is conceptually meaningful to view team effects on a group level when both performance and conflict “...is established when a group is formed” and…”emerge as a product of members’ interactions” (Hackman & Katz, 2012, p.1227). Thus, team performance as a product of team members’ interactions, is conceptually meaningful to investigate on an aggregated level. To be able to investigate such effects on group level, data were aggregated following guidelines and recommendations for aggregating lower level data to higher level data from the work of Biemann, Cole and Voelpel (2011).
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For meaningful analyses of aggregated data, two conditions must be satisfied: There must be substantial variability in aggregated scores, and management team members must show substantial agreement in perceptions of team characteristics.

To examine agreement among team members, inter-rater agreement based measures such as rwg and ICC (intra-class correlations) were calculated and compared to threshold values. All of the rwg values were in the range of .74-.86 with a mean of .81, which exceeds the recommended value of 0.70 (Zohar, 2000). There are no standard levels of ICC (1) and ICC (2), but together with the high mean level of rwg, one may assume that data may be appropriately aggregated to a higher level.

Statistical analyses. The assumptions of normality and linearity were examined for all measures, and for structural equation models, multivariate normality was examined by Mahalanobis distances. Mahalanobis distance is based on a chi-square distribution and provides indications of which cases may be multivariate outliers. Tabachnick and Fidell (2013) propose a critical value of Mahalanobis distance to be 13.82, when the analysis has two or more independent variables. In the estimated model there were four independent variables. The maximum Mahalanobis distance was 129.12 followed by three other teams with very high values. These teams were excluded. Nine more teams had values above 13.82. However, concerning the model fit indexes provided later in the SEM-analysis, an elimination of these cases was not found to improve the model or the estimates. Therefore, these possible outliers were not removed from analyses. Four additional teams were removed from data; two teams could not be considered management teams, and two teams had missing data on one or more measures. The final sample comprised 208 management teams with no missing data. To examine the proposed hypotheses, ordinary multiple regression analyses were performed in SPSS and structural equation modeling was performed in AMOS.

Results

Descriptive Statistics

Descriptive statistics with means, standard deviations, scale reliabilities, rwg and zero-correlations among all study variables are provided in table 1. Hypothesis 1, predicting a positive association between task conflict and relationship conflict, was fully supported. As presented in table 1, task conflict is positively and significantly correlated with relationship conflict ($r=.21$, $p \leq .05$). Task conflict is unrelated to task performance ($r=.05$, n. s) and team member satisfaction ($r=.11$, n. s). Relationship conflict is negatively correlated to both team
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Member satisfaction (r = -.61, p ≤ .01) and task performance (r = -.60, p ≤ .01), which is consistent with prior findings (de Wit, et al., 2012). Team member satisfaction is also positively correlated with task performance (r = .81, p ≤ .01).

Table 1.
Rwg. Scale reliabilities (Cronbach’s alpha), standard deviations, means and zero-order correlations (n = 208).

<table>
<thead>
<tr>
<th>Variables</th>
<th>rwg</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Management team size</td>
<td>-</td>
<td>-</td>
<td>7.06</td>
<td>3.91</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Level of management</td>
<td>-</td>
<td>-</td>
<td>2.08</td>
<td>0.81</td>
<td>-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Task conflict</td>
<td>.76</td>
<td>.71</td>
<td>4.66</td>
<td>0.7</td>
<td>-.06</td>
<td>-.01</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Relationship conflict</td>
<td>.74</td>
<td>.90</td>
<td>5.33</td>
<td>1.11</td>
<td>.28</td>
<td>.14</td>
<td>.21</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Task performance</td>
<td>.81</td>
<td>.88</td>
<td>5.27</td>
<td>0.69</td>
<td>-.43</td>
<td>.16</td>
<td>.05</td>
<td>-.60</td>
<td>-</td>
</tr>
<tr>
<td>6. Team member satisfaction</td>
<td>.86</td>
<td>.87</td>
<td>5.46</td>
<td>0.77</td>
<td>-.30</td>
<td>.07</td>
<td>.11</td>
<td>-.61</td>
<td>.81</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01

Examination of mediated effects through regression analysis. To investigate H2 and H3, predicting that the association between task conflict and task performance and task conflict and team member satisfaction is mediated by relationship conflict, Baron and Kenny’s (1986) steps for mediation was followed, as illustrated in figure 1.

First, the independent variable (X) must correlate with the outcome variables (Y). Secondly, the independent variable (X) must be significantly related to mediator (M). Thirdly, the mediator must be significantly related to the dependent variable (Y), when controlling for the independent variable (X). Finally the relationship of X and Y (coefficient "c") must disappear (complete mediation) or be substantially diminished (partial mediation) when controlling for the mediator.

Due to possible suppressor effects, the first step in Baron and Kenny’s (1986) approach has been criticized. This step assumes a significant association between the main predictor variable (task conflict) and the criterion variable (team outcomes). In the present data, this was obviously not the case (see table 1). A suppression effect is evident when causal paths have opposite effects (opposite signs of regression coefficients) on an outcome variable, and main effects are thereby "masked". According to Conger (1974), a suppressor variable increases the predictive value of another value by its inclusion in a regression equation. By
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including the suppressor or masking variable (relationship conflict) into the analysis, the part of task conflict that actually is positively related to task performance and team member satisfaction, is made visible. For a more comprehensive explanation, see Maassen and Bakker, 2001.

When relationship conflict was held constant, task conflict was found positively related to both task performance and team member satisfaction - indicating both a suppressor effect of relationship conflict, and a mediated effect of task conflict through relationship conflict.

Figure 1.
Generic mediation model being examined (on the basis of Baron & Kenny, 1986).

Results from ordinary regression analyses examining the mediated effect of task conflict on team performance and team member satisfaction are shown below.

Figure 2.
The mediated effect of task conflict on task performance
Mediated effect of TC through RC = -.13
The mediated effect of task conflict on team member satisfaction
Mediated effect of TC through RC = -.14

Table 2.

*Relationship conflict as a mediator of the relationship between task conflict and team outcomes (standardized regression coefficients, n= 208)*

<table>
<thead>
<tr>
<th></th>
<th>Task performance</th>
<th>Team member satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main effect of task conflict on team outcomes</td>
<td>0.05</td>
<td>0.11</td>
</tr>
<tr>
<td>The effect of task conflict on team outcomes when controlling for relationship conflict</td>
<td><strong>0.18</strong></td>
<td><strong>0.25</strong></td>
</tr>
</tbody>
</table>

**Note.** Statistically significant (p<.01) coefficients in bold.

The indirect (mediated) effect may be estimated by the product of coefficients a and b in figure 1, or by the change in coefficient c when the unconditioned effect of a causal variable is controlled for the mediator. For example, the indirect effect of TC on SAT in figure 2, may be estimated as .21 * .66 = .11 - .25 = -.14.

Significance tests of mediated effects, estimated from ordinary linear regression analyses, are disputed. The "Sobel test" has been extensively used, but has been criticized, as it requires strong assumptions, which often are not satisfied. At present, a bootstrap approach is commonly preferred. A SPSS-macro written by Preacher and Hayes (Preacher & Hayes, 2004) was applied to perform bootstrap tests of mediated effects.
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Table 3.

Estimates of indirect effects of task conflict on team outcomes

(standardized regression coefficients).

<table>
<thead>
<tr>
<th>Indirect effect of TC on TP</th>
<th>Estimate</th>
<th>SE</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect effect of TC on SAT</td>
<td>-0.14</td>
<td>0.05</td>
<td>-0.24</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

95% CI

Note. Standard errors and confidence intervals estimated by 1000 bootstrap replications.

As evident from table 3, both indirect effects were statistically significant at p<.05 level. However, there are some problems with the classical approach of Baron and Kenny (1986). The strategy does not take into account possible confounding variables that may have an influential power on the outcome variable, nor measurement errors in variables. Measurement error in mediating and outcome variables may lead to biased estimates of mediated effects. By examining the same relationships through a SEM-analysis (structural equation modeling), one is able to examine theory and accuracy of measurement in a joint analysis (Fornell & Yi, 1992). In addition, it enables the possibility of obtaining explicit estimates of error variance that may lead to more accurate results (Little, et al., 2007), and include other variables that may have an impact on the outcome variables.

The research hypotheses were therefore investigated in a secondary analysis using structural equation modeling, including possible confounding variables. Results from SEM are sensible to small sample sizes. However, this sample of 208 management teams met the criteria of having a sample size of 5 observations per 1 free parameter (Bentler & Chao, 1987), and the general aim of having sample sizes above 200 observations when using SEM analysis.

**Examination of mediation effects using SEM.** In figure 4, results from a structural equation model are presented. In the model, the relationships among 6 variables are estimated. The variables are: Task conflict (TC), relationship conflict (RC), team member satisfaction (SAT), task performance (TP), management team size (MTS), and level of management team (LOM). To allow for measurement errors in the mediator and outcome variables, these were modeled as single indicators of latent variables (LRC, LTP and LSAT), with error variance fixed as variance*(1-reliability). Reliabilities were estimated by Cronbach’s alphas. The
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correlations between TC and MTS/LOM were close to zero (see table 1), and were fixed at zero in the model.

For the full model presented in figure 4, with only two parameters fixed at zero, model fit will necessarily be close to perfect, and of marginal interest. For the simplified model presented in figure 5, such measures may provide useful information.

Model fit. $\chi^2$, the chi-square is the minimum estimate of discrepancy, and represents the difference between the observed covariance and model covariance matrixes. However, the chi-square value may be influenced by sample size, alternative indexes of model fit are commonly applied: RMSEA is root mean square residuals of approximation. The RMSEA is the square root of the mean of the covariance residuals and should approach zero for good fitting models, and be less than 0.08 (Browne & Cudeck, 1993) for models with acceptable fit. According to Stieger (1990), a value less than 0.05 indicates good fit. In contrast to the chi-square estimate, the comparative fit index (CFI) is together with RMSEA not that sensitive to sample size (Fan, Thompson & Wang, 1999). The CFI and TLI compares the target model to the independence model (if the model comprised uncorrelated variables), and should have values larger than .90 for good fitting models.
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Figure 4.
SE-model with latent and manifest variables. Effects are estimated by standardized regression coefficients (R^2 in bold).

Table 4.  
Results from fitting the SE model in figure 4. Standard errors and confidence intervals are estimated from 1000 bootstrap replications.

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>SE</th>
<th>Low</th>
<th>High</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect effect of TC on TP</td>
<td>-0.15</td>
<td>0.06</td>
<td>-0.27</td>
<td>-0.05</td>
<td>0.002</td>
</tr>
<tr>
<td>Indirect effect of TC on SAT</td>
<td>-0.17</td>
<td>0.07</td>
<td>-0.31</td>
<td>-0.06</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Note. Model fit: chi-square=.88, df=2, TLI=1, CFI=1, RMSEA=0.

All of the three hypotheses (H1, H2 and H3) were supported by results from the analyses. However, the SEM-analysis showed higher standardized effects than the primary multiple regression analysis in SPSS. For instance, the estimated indirect effect of task conflict on team member satisfaction (SAT) was higher than in the first regression analysis (B= -0.17 vs. -0.14), and the direct effect of task conflict on team member satisfaction, when controlling for relationship conflict was also higher (B= 0.28 vs. 0.25). The SEM-analysis shows that 55% of the variance in latent task performance (LTP) and 56% of the variance in latent team member satisfaction (LSAT) is explained. As shown in figure 4, level of management team (LOM) had a non-significant effect on both LTP and LSAT. Management team size (MTS) had a significant effect on LTP (B= -0.26, p≤.01), but not on LSAT (B= -0.10, n. s.). Management team size is significantly negative related to task performance in contrast to level of management, which was found unrelated to all outcome variables.

Possible confounding variables. Team size was not significantly associated with level of management (r= -.19, n. s), nor task conflict (r= -.06, n. s), but was significantly and positively related to relationship conflict (r=.28, p ≤ .01), which implies that an increase in team size is associated with an increase in level of relationship conflict. Furthermore, team size was also found to be negatively associated with both task performance and team member satisfaction. In contrast to team size, level of management was not significantly associated with any variables.
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A simpler model. Results from fitting the SE model in figure 4, showed that a much simpler model could be fitted. Results from a model with simpler interpretation, with all weak effects from the first model fixed to zero, is presented in figure 5 and table 5. The fit of the simplified model presented in figure 5, was excellent (see table 4). The estimated direct effect of task conflict on task performance was $B=.19$ ($p \leq .01$), the direct effect of task performance on team member satisfaction was $B=.29$ ($p \leq .01$), and the indirect effects of task conflict on task performance was $B= -.16$ ($p \leq .01$), and on team member satisfaction $B= -.18$ ($p \leq .01$).

![Figure 5.](image)

Simplified SE-model with latent and manifest variables. Effects are estimated by standardized regression coefficients ($R^2$ in bold).

Table 5.

Results from fitting the SE model in figure 5. Standard errors and confidence intervals are estimated from 1000 bootstrap replications.
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**Discussion**

In this study, comprising 208 management teams, the main aim has been to investigate whether task conflict influences task performance and team member satisfaction through relationship conflict. Furthermore, the possibility of a unique effect of task conflict on task performance and team member satisfaction while controlling for relationship conflict has also been investigated.

A positive and significant relationship between task conflict and relationship conflict was found; whenever task conflict is present, there is also a tendency for relationship to co-occur (and vice versa). The tendency of having relationship conflict accompanying task conflicts, have been explained by type of topics (cool and hot topics), misattribution, misinterpretation, information asymmetry, and type of feedback. These mechanisms suggest that task conflict may trigger negative and emotional effects activated through the “hot system” that may lead to relationship conflict. Hypothesis 2 and 3 investigated if the effect of task conflict on task performance and team member satisfaction could be explained through the fact that task conflict elicits relationship conflict, and that this effect masks the potentially positive effect of task conflict on team outcomes. Both hypotheses were supported. When controlling for the effect of task conflict on team outcome variables, relationship conflict was found to have both a significantly negative effect on task performance and on team member satisfaction. This implies that the negative effect or the association between relationship conflict and task performance and team member satisfaction was not “caused” by task conflict.

Moreover, task conflict was found to have a significant negative indirect effect on task performance and team member satisfaction through its effect on relationship conflict. However, task conflict was found to have a significant *positive direct effect* on both task performance and team member satisfaction, when controlling for relationship conflict. This

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<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>SE</th>
<th>Low</th>
<th>High</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect effect of TC on TP</td>
<td>-0.16</td>
<td>0.06</td>
<td>-0.28</td>
<td>-0.05</td>
<td>0.002</td>
</tr>
<tr>
<td>Indirect effect of TC on SAT</td>
<td>-0.18</td>
<td>0.07</td>
<td>-0.31</td>
<td>-0.06</td>
<td>0.002</td>
</tr>
</tbody>
</table>

*Note. Model fit: chi-square=7.58, df=6, TLI=.99, CFI=.996, RMSEA=0.036.*
imply that task conflict may be positive for the management teams’ task performance and their members’ level of satisfaction if team members are able to diminish or eliminate relationship conflict, which often follows from task conflict. The fact that the (indirect) effect of engaging in task conflict is negative, indicates that the real problem is not task conflict itself, but rather the effect of co-occurrence with relationship conflict during the task conflicts. The direct positive effect of task conflict on task performance rather suggests that the unique contribution of task conflict is constructive and positive when the effect is isolated from relationship conflict. Thus, the answer to the question of whether task conflict is beneficial to task performance or not, is two-sided and depends on the presence of relationship conflict.

The control variables had different impacts. Management team size was, as expected, found to be negatively associated with task performance, but not with team member satisfaction. Level of management team was not found to have a significant impact on any of the outcome variables. The insignificant relationship between level of management and task performance and team member satisfaction indicates that the effect of the two conflict types on performance and satisfaction is not affected by level of management teams. Team size may negatively influence task performance, but not necessarily affect team members’ feelings of satisfaction.

**How can Management Teams Benefit from Task Conflicts?**

Task conflict may be positive for task performance if a management team is able to either avoid relationship conflict or deal successfully with relationship conflict when it occurs. Management teams may benefit from task conflicts if they for instance are able to maintain or establish the “right proportion” of task conflict and relationship conflict. Jehn and Mannix (2001) found such an optimal “conflict-profile” in their study and they also found that this profile was able to predict high team performance. The most successful teams among their participants were actually allowed to have moderate levels of task conflict at the midpoint phase as long as they had low levels of relationship conflict. Management teams that are capable of discussing task without having too much interpersonal tension and negative emotions occurring, may perceive their teams as having constructive and positive team processes and group experiences. Despite disagreement among team members in a task conflict situation, team members may feel satisfaction with having constructive task conflicts, which may lead to better foundation for decision making. Furthermore, they may additionally feel satisfied with the low levels of negative emotions and relationship conflicts, as a sign of good team functioning.
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Highly satisfied and performing management teams may have more tolerance to other team members while they are discussing different viewpoints and in this way be less motivated to feed into a potential relationship conflict. Guerra, Martines, Munduate, and Medina (2005) support this thought and highlight the detrimental effect of low individual well-being in the work place. They showed that individuals under work-related stress with low levels of well-being may more easily engage in conflict with colleagues, due to performance, than highly satisfied team members. Instead of detrimental effects from dissatisfied team members (e.g. anger, disgust, and fear) that may affect their self-esteem and require extra cognitive resources to cope with the task conflict, positive effects from high levels of team member satisfaction may rather provide beliefs and positive motivation to cope with the relationship conflict or preventing relationship conflict to occur.

Therefore, an association between task conflict, relationship conflict and team outcomes can be understood as a reversed relationship as illustrated in Figure 6. Hackman (2012) highlights the importance of considering the relationship between especially group behaviour and group performance as conditions (which are dynamic) and not causes. Management teams may benefit from having task conflicts if or in situations when the teams are able to maintain or establish the right conflict profile. This may lay a proper foundation for creating constructive team processes and group experiences. Positive effects of good task performance and levels of team members’ satisfaction may cause less relationship conflict, which may in turn provide more space for task discussion involvement. Such teams may be management teams that are capable of preventing or reducing the occurrence of negative emotions during task discussions.
The relationship between task conflict, relationship conflict and team outcomes

Creating optimal conditions for task conflict engagement. As we have seen, a management team engaging in extensive task discussions cannot ignore the likelihood of getting relationship conflict alongside the task conflict. Management teams with an unbalanced conflict profile (e.g. domination of relationship conflict) cannot solely rely on positive effects from their team outcomes to create better conditions for having constructive task conflicts. Task conflict processes such as intellectual consideration and utilization of each other’s input (Korsgård, Sweiger, & Sapeinza, 1995) may be beneficial to their task performance and member satisfaction if the communication processes throughout the task conflict emphasizes constructive feedback and verbal approaches that prevent negative emotions to occur.

Shared mental models may be one factor that may increase the possibility for management teams to benefit from having high levels of task conflict with low levels of relationship conflict. Management teams may act proactively (e.g. in forefront of team engagement) or reactively (e.g. during or after team engagement) with establishing or readjusting the teams’ shared mental models.

Since shared mental models help the team describe, predict and explain events in its environment (Mathieu, et al., 2000), clarifications around different models may be important to reduce potential relationship conflicts. Different models that a team may benefit from sharing could involve task or job roles, team member models, and team interaction. For instance, team routines of how feedback is provided may be crucial to potential relationship conflict.

Feedback from a team member may be perceived as destructive even when the content is justified because of the way the feedback is provided. Typically, this may be evident if the feedback is loaded with sarcasm or simply with a specific tone (Sessa, 1996) that may evoke negative emotions in the other team member that makes him or her activate the hot system.

Shared mental models may reduce the likelihood of creating person conflicts because the team members’ interaction is led by norms or rules they have established together. Such shared mental models may reduce the possibility of having misinterpretations and occurrence of negative emotions during task discussions.
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Others have highlighted the importance of establishing positive independence among team members in task conflicts. Positive independence is team members’ perceptions of attainment of one’s own and of others’ goals. Establishment of positive independence goals in the team may be another element that could make the team interaction among team members more “robust” in task conflict situations. According to Tjosvold (1991), team members have positive independence as long as they need each other’s contributions to accomplish joint performance. Team members may therefore benefit from task conflict engagement as long as they perceive that the parties involved stand or fall together (Janssen, et al., 1999).

Stimulation of task conflict in management teams, without creating optimal conditions for task conflict engagement, may neither be beneficial to or productive for a management team’s results nor member satisfaction. To benefit from task conflict and prevent the negative effect from relationship conflict from occurring, management teams could work with creating (better) conditions for team member interaction and task conflict engagement through a safe team environment. Scholars have suggested that teams which enhance team psychological safety (Bradley, Klotz, Postlethwaite & Hamdani, 2012; Simons & Peterson, 2000) and focus specifically on collaborative discussion styles (de Wit, et al., 2012) through behavioral integration (Hambrick, 1994), may “buffer” the negative effects of relationship conflict (e.g. negative emotions) in the team.

Management teams which provide team psychological safety (i.e. safety of interpersonal risk-taking) and behavioral integration, may be better suited for conflict engagement when they have team trust, meet on a regularly basis, empathize collaboration and make decisions in plenary. For instance, teams that have high psychological safety are assumed to encourage more rigorous task discussions and diminish potential dysfunctional person conflicts from disagreements (Bradley et al. 2012).

Lovelace and colleagues (2001) support this argument in their study of production teams. They found that the effect of task conflict on the production teams’ outcome was depending on how freely team members felt they could express their task-related doubts and how collaboratively these doubts were expressed. Teams that are behaviorally integrated and have high team psychology safety may be more tolerant either when relationship conflicts occur in the task conflict or simply that the dysfunctional conflict does not cause as much pain as in teams with low team psychological safety. Future research may examine a potential mediated – moderation relationship in management teams between behavioral integration and
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Team psychological safety in task conflict situations. This could shed light on whether this association may provide a positive effect on management teams’ outcomes.

Limitations

There is a number of limitations of the study. First, due to the use of self-reports and a cross-sectional approach, there are some difficulties with regard to causality. For instance, this study could not show that task conflict caused relationship conflict. Some of the relationships may be reciprocal and causal over time. Future research in more controlled settings may support these results.

Secondly, the likelihood of having common-method variance is high, because all the variables in the survey were obtained from the same source and measured at the same time and because the same participants answered all questions. For instance, this may create artificial correlations among variables. Thirdly, task performance was measured through self-report, which implies the teams’ experience of achieved task performance and not real objective measures of task performance. The results are not able to show that the perceptual measures of task performance are predictors of objective or “real” measures of task performance. Fourthly, one may also benefit from controlling for other possible covariates, such as gender, tenure, level of experience and diversity in future studies. Since the sample of this study was restricted to include management teams only, the results from this study cannot be generalized to other populations.

Conclusion

In conclusion, it is necessary to include relationship conflict and its influential and detrimental power in the context of engaging management teams in task conflicts in order to create positive team outcomes. The supported mediation effects explain two important things; that relationship conflict is the main source of task conflict being negatively associated with task performance and team member satisfaction. The second important point is that task conflict can be positively associated with task performance and team member satisfaction when levels of relationship are low. These study findings suggest that a negative (indirect) effect of task conflict on task performance and team member satisfaction should be discussed in light of the presence of relationship conflict and negative emotions that may be provoked in a task conflict situation. Management teams may benefit from task conflict if they are capable of establishing and/or maintaining an optimal conflict profile or creating better conditions for
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team member interaction and team conflict engagement, which may reduce or prevent relationship conflict.
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References


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Reaping the benefits of task conflict in teams: the critical role of team psychological safety climate. *Journal of Applied Psychology, 97*(1), 151. DOI: http://dx.doi.org/10.1037/a0024200


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Rouse, W. B., & Morris, N. M. (1986). On looking into the black box: Prospects and limits in the search for mental models. *Psychological bulletin, 100*(3), 349.DOI: http://dx.doi.org/10.1037/0033-2909.100.3.349


THE RELATIONSHIP BETWEEN TASK CONFLICT, TASK PERFORMANCE, AND TEAM MEMBER SATISFACTION IN MANAGEMENT TEAMS: THE MEDIATING ROLE OF RELATIONSHIP CONFLICT


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Appendix A

Table 1.
\textit{Summary of survey scales and items}

<table>
<thead>
<tr>
<th>Items</th>
<th>SD</th>
<th>ICC(1)</th>
<th>ICC(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task conflict</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. There are rarely explicit conflicting opinions during management team discussions.</td>
<td>0.70</td>
<td>.38</td>
<td>.71</td>
</tr>
<tr>
<td>2. We often have different views and ideas on the topics we discuss in the management team.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Management team meetings frequently include a healthy exchange of opinions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. In our management team we often challenge each other’s opinions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship conflict</td>
<td>1.11</td>
<td>.69</td>
<td>.90</td>
</tr>
<tr>
<td>1. There is not much friction among members of the management team.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. There are members of the management team who do not work well together.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. There are personal conflicts between some members of the management team.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. There are some negative tensions among members of the management team.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team member satisfaction</td>
<td>0.77</td>
<td>.57</td>
<td>.87</td>
</tr>
<tr>
<td>1. I develop my professional competencies by participating in this management team.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Working in this management team contributes to my learning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I really enjoy working together with my management team colleagues.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Being part of this management team has had little impact on my development as a leader.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I get a lot of energy from our management team meetings.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task performance</td>
<td>0.69</td>
<td>.52</td>
<td>.90</td>
</tr>
<tr>
<td>1. Our management team is very successful in its efforts.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Our management team does not perform well as a team (-).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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3. You are given useful input when you bring up an issue in the management team.
4. We receive positive feedback on our performance as a management team.
5. It is difficult to see what added value the management team contributes to our organization.
6. We implement the decisions made by the management team.
7. We monitor whether decisions made by the management team are implemented.
8. There are management team members who are not entirely committed to the decisions we have made.
9. Members of the management team frequently have a different understanding of the decisions we have made.
10. Too often someone in the management team re-argues the decisions we have made.