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Educational Administration Quarterly 2008; 44; 359

DOI: 10.1177/0013161X08318957

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Managing Conflict in School Teams: The Impact of Task and Goal Interdependence on Conflict Management and Team Effectiveness

Anit Somech

Purpose: Although conflict has traditionally been considered destructive, recent studies have indicated that conflict management can contribute to effective teamwork. The present study explores conflict management as a team phenomenon in schools. The author examined how the contextual variables (task interdependence, goal interdependence) are related to team conflict management style (integrating vs. dominating) and school team effectiveness (team performance).

Research Design: Data were collected from 149 school teams (including team coordinators and team members) at 149 elementary schools.

Results: Hierarchical regression analyses demonstrate, as expected, a positive relation between conflict management of integrating and team performance and a negative relation between dominating and team performance. In addition, there are positive relations between the congruent low-low or high-high combinations of task and goal interdependence and integrating and positive relations between the incongruent low-high or high-low combinations of task and goal interdependence and team conflict management of dominating. Moreover, results indicate that the highest level of integrating is under the condition of high task interdependence and high goal interdependence, whereas the highest level of dominating is under the condition of high task interdependence and low goal interdependence. Finally, a team's conflict management was partially mediated by the combination of task and goal interdependence and team performance.

Conclusions: The present results provide additional empirical support for the notion that conflict management can be considered a team phenomenon. The study should serve to encourage educational administration researchers to focus more attention on characteristics of organizational and team context as related to team conflict management and team effectiveness.

Keywords: conflict management; task interdependence; goal interdependence; team; school

As schools adopt reforms and new strategies to manage the constraints and needs of students in modern society, many conclude that teamwork is necessary to ensure the attainment of school goals (Newmann, King, & Youngs, 2000). Teams play a central role in identifying students' needs, in planning and in developing policies at the class and school levels, and in implementing innovation in teaching and school design (e.g., B. Johnson, 2003; Jordan, 1999; Somech, 2004). This trend to team-based work has generated a plethora of new questions and challenges for educational administration researchers, and has also promoted a host of new management issues.

First, in applying teamwork in education one must recognize that in schools tasks are often structured for the individual, and teachers are isolated within their classrooms. The teacher's main socialization into the teaching profession has been characterized by an individualist approach: professional training, development, and promotion focus on specialization, and teachers are trained and develop their careers independently of their staff colleagues (Somech & Drach-Zahavy, 2007). In such a structure teachers learn to work alone, to rely mainly on their personal talents and skills, to cope by themselves with problems that arise in the classroom, and to develop their professional abilities independently. The transition to teamwork, which means working with others, might threaten teachers' sense of autonomy and might confront them with conflicts, which they could avoid before. Therefore, an effective teamwork model in schools must address questions such as, "How may teamwork be structured in schools so as to manage conflicts effectively?" or "How should cooperation be encouraged so as to promote team effectiveness?" Second, despite scholars' agreement that teamwork is the appropriate tool to improve teaching quality and innovation, and to produce a sense of satisfaction and commitment among teachers (e.g., B. Johnson, 2003; Jordan, 1999; Kruse & Louis, 1997; Somech & Drach-Zahavy, 2007), study of teamwork in the educational setting is still sparse.

Against this background, the main challenge of the present research was to develop an integrative model of effective teamwork in schools. The main argument is that conflict management is central to the team's effectiveness; accordingly, the purpose of the study was to examine how conflict management in school teams mediates the relationship between design variables and team effectiveness. This model is consistent with previous team effectiveness models (e.g., Campion, Papper, & Medsker, 1996; Kirkman & Rosen, 1999). These input-process-output models separate objective job characteristics from effectiveness and internal responses to these characteristics. All these models involve a three-stage process: (a) leaders take various actions to structure teamwork (inputs), (b) these actions affect workers'

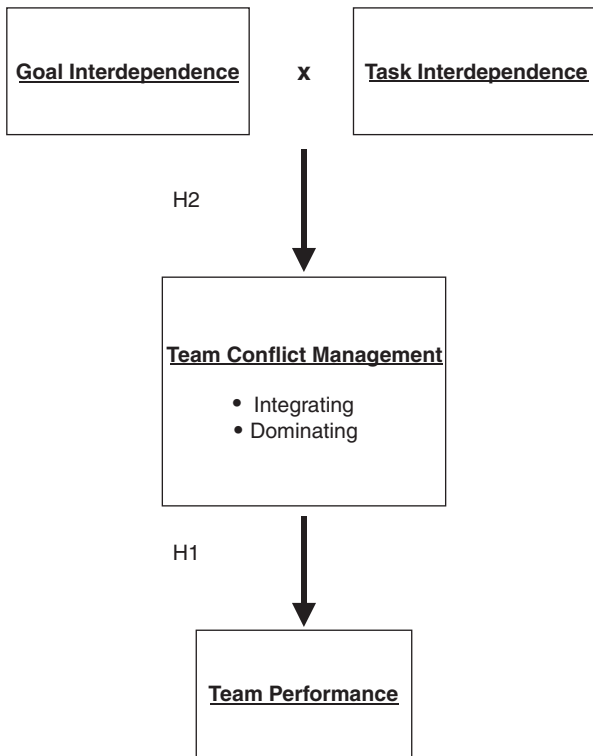


Figure 1. The Study Model

experiences (process), and (c) important outcomes result from workers' positive processes (outputs). Hackman and Morris (1975) noted that a team's task design is one of the most potent determinants of what constitutes an effective process for promoting performance. Specifically, the present model proposes that task interdependence and goal interdependence (input) are two complementary design dimensions that signal to team members the extent of their social interdependence (Victor & Blackburn, 1987). These interdependences determine how teams manage their conflict (process) in more constructive ways, such as integrating, or in more destructive ways, such as dominating, whereas team-conflict management style affects team effectiveness (output; see Figure 1).

THEORETICAL BACKGROUND AND HYPOTHESES

Conflict Management in School-Staff Teams and Team Effectiveness

Generally, group theories (e.g., McGrath, 1991) agree that conflict occurs naturally as the team strives for productive working relationships to accomplish an outcome. An intrateam conflict is defined as incompatible activities where team members, at least temporarily, interfere with and obstruct each other's behavior (Deutsch, 1973). Team members at school dispute about vague assignments, refusal to accept feedback, unfair distribution of work, incompatible goals, and personalities (Ayoko, Hartel, & Callan, 2004; Zornoza, Ripoll, & Peiro, 2002). Scholars have argued that functions and outcomes of team conflict can be positive or negative, destructive or constructive (e.g., De Dreu & Beersma, 2005; Tjosvold, Hui, & Yu, 2005). Some positive functions are determining important issues, creating new ideas, releasing tension, reevaluating and clarifying goals, and strengthening team members' ability to work together in the future. Negative functions may include prolonging and escalating conflict, inflexibility, hostility, and ultimately reducing team effectiveness (Jehn, 1995; Kuhn & Poole, 2000; M. Rahim, Magner, & Shapiro, 2000).

In addition to suggesting the potential of conflict for team effectiveness, scholars have argued that it is not simply the presence of conflict, but how people approach and manage their conflicts that greatly affects whether conflict is constructive or destructive (Lovelace, Shapiro, & Weingart, 2001; Tschannen-Moran, Uline, Woolfolk Hoy, & Mackley, 2000). For example, Dewey (1938/1961) suggests that learning to appreciate and make constructive use of participants' different perspectives and experiences helps to create a context where trust and respect are cultivated rather than depleted. Previous studies have suggested poorly managed conflict increases the stress and strain among team members (Kuhn & Poole, 2000). For example, Weiss, Cambone, and Wyeth (1992) showed that the transition to teamwork led to conflict and tension among teachers, which affected their sense of solidarity and work satisfaction at school.

However, the value of team conflict management for teams has received little empirical attention (Alper, Tjosvold, & Law, 2000). In team and organizational settings, conflict is commonly studied by the individual being taken as the unit of analysis. An individual's conflict style is a behavioral orientation and a general expectation about his or her approach to conflict. This conception of conflict style does not preclude the individual from changing styles or enacting behaviors not typically associated with a particular style,

but asserts that individuals choose (though often not consciously) a pattern of principles to guide them through episodes of conflict (M. A. Rahim, 1983; A. Rahim & Bonoma, 1979).

Recently researchers have extended conflict study to the team level of analysis (Kuhn & Poole, 2000; Sambamurthy & Poole, 1992). Put simply, teams may vary in how much they tend to display a certain conflict management pattern over others, and the incidence of these behaviors in teams may be meaningfully associated with team characteristics. For example, Kuhn and Poole (2000) concluded that 82% of the teams exhibited a stable style of conflict management. Their results suggest that a team might adopt a typical pattern for managing conflicts among its members. These findings propose that a higher level of aggregation—to the team level—is conceptually and practically meaningful. Conceptually, it represents an element of experience shared by team members at a given workplace. Practically, it allows examination of the team-level consequences of conflict management (Simons & Roberson, 2003).

Conflict management as a team feature may be understood to emerge from several sources. First, in the socioinfluence literature it is widely acknowledged that groups are powerful instruments of social influence (e.g., Salancik & Pfeffer, 1978) and have substantial effects on individuals' behavior. According to Hackman (1976) groups exert powerful effects on their members' informational states, their affective states, and their behaviors, resulting in uniformity of behavior within the group. Similar patterns of conflict management within a team may result in team members' exhibiting similar patterns in handling conflicts. Some influences that teams have result from the enforcement of group norms, which also serve to control group members' behavior to achieve predictability and uniformity of behavior (Ehrhart & Naumann, 2004; George & Bettenhausen, 1990). Second, theoretical justification for viewing conflict management at the group level of analysis is provided by Schneider's (1987) ASA (Attraction–Selection–Attrition) framework. Put simply, through ASA processes group members can be expected to display similar patterns of conflict management. The ASA framework suggests that similar people will be attracted to, selected by, and retained in a work setting (Schneider, 1987). This results in similarity in behavior within a setting. Although behaviors across groups are likely to vary, depending on the characteristics of the groups themselves, ASA processes result in relatively homogeneous behaviors within groups (George, 1990).

Most studies on conflict-management patterns at the individual level have adopted the *Dual Concern Model* originally proposed by Blake and Mouton (1964) and later adopted with some modifications by several scholars: Pruitt and Rubin (1986), M. A. Rahim (1983), and Thomas (1976). This

model basically postulates that the conflict-management mode employed by an individual emanates from two underlying motives: concern for self and concern for the other party. The first dimension explains the degree (high or low) to which a person attempts to satisfy his or her concerns. The second dimension explains the degree (high or low) to which a person wants to satisfy the concerns of others. Combination of these two dimensions results in five specific styles of handling interpersonal conflict: integrating, obliging, dominating, avoiding, and compromising.

Tjosvold (1999) took a somewhat different theoretical approach in his extensive research program. It rests on the fundamental assumption, advanced by Deutsch (1973), that individuals' perceptions about the ways their goals are related to those of their counterparts govern their approach and actual interactions in conflict situations. They communicate cooperative or competitive intentions to the other party accordingly. Ayoko and associates (2004) proposed a similar dichotomous typology of managing conflicts in work groups, focusing mainly on communication patterns that shape members' interactions in teams. The above typologies differ in their theoretical emphasis. The first (the dual concern model) stresses the motivational underpinnings of approaches to conflict management. Tjosvold underscores individuals' beliefs (cognitions) about the parties' goal structure and Ayoko highlights the communication tendencies. However, they all distinguish constructive from destructive orientations.

I follow Tjosvold's approach, and focus on two styles of team-conflict management: integrating and dominating. *Integrating* involves high concern for self and for the other party; it has also been described as a problem solving, collaborative, cooperative, solution oriented, win-win, or positive-sum style. Integrating involves active collaboration among team members, such as exchange of information and examination of differences, to reach a solution that satisfies the concerns of all parties. *Dominating* involves high concern for self and low concern for the other party; it is also called a competing, controlling, contending, win-lose, or zero-sum style. Dominating involves standing up for one's rights and/or defending a position that some team members believe to be the right one, and often ignoring the needs or expectations of the others (M. A. Rahim, 2001; M. Rahim et al., 2000).

Overall, studies that extended the integrating-dominating conflict approach to organizational settings (e.g., Kuhn & Poole, 2000; Tjosvold, 1999; Tjosvold et al., 2005; Tjosvold, Morishoma, & Belsheim, 1999) indicated that more cooperative conflict management styles, particularly problem-solving styles, like integrating, are likely to produce positive team and organizational outcomes, whereas competing styles frequently result in escalation of conflict and negative outcomes (e.g., Korabik, Baril, & Watson, 1993). For example, Alper

and colleagues (2000) showed that managing conflict for mutual benefit predicted the extent team members believed they could handle various conflicts and their supervisor's conclusions about their team's effectiveness.

According to Deutsch's (1973, 1980) theory of cooperation and competition, team members can emphasize their cooperative interests; recognizing that the success of one promotes the success of the others, and they tend to view conflict as a mutual problem that needs common consideration and solution. Similarly, Bottger and Yetton (1987) suggested that the integrating approach, which emphasizes knowledge, logical argument, and explanation, encourages team members to examine competing knowledge bases, and to explore alternatives. The dominating approach persuades team members to resolve opinion differences by "I-win-you-lose" dominance games, or to make some participants' reluctant to argue for their opinions (Tjosvold, Hui, Ding, & Hu, 2003). The emphasis on competitive interests leads to tough and closed-minded discussions. Competitive approaches frustrate communication and result in deadlock or imposed solutions. Studies have shown that team members engaged in trying to outdo one another do not utilize each other's ideas and resources, hide information, and block each other's efforts, thus creating distrust. Because of lack of psychological support and disrupted communication and exchange, competitive interaction results in poor team performance (D. W. Johnson, Maruyama, Johnson, Nelson, & Skon, 1981).

Accordingly, I hypothesized,

Hypothesis 1a: A team's integrating style of conflict management will be positively associated with team performance.

Hypothesis 1b: A team's dominating style of conflict management will be negatively associated with team performance

The Interactive Effect of Task Interdependence and Goal Interdependence

Design factors have a powerful impact on the preferred behavior of team members (Stanne, Johnson, & Johnson, 1999). This view implies that teams may differ in their reactions to conflict, depending on how they perceive their context (Van der Vegt, Van de Vliet, & Oosterhof, 2003). Although several factors may determine the team's salient conflict-management pattern, in this study I focused on task interdependence and goal interdependence in school teams. *Task interdependence* is defined as the extent to which an individual team member needs information, materials, and support from other team members to be able to carry out his or her job (Brass, 1981; Van der Vegt et al., 2003); *goal interdependence* is the extent to which group

members believe that they are assigned group goals or given group feedback (e.g., Saavedra, Earley, & Van Dyne, 1993). Several authors have argued that task and goal interdependence are independent dimensions of social interdependence and that their effects on team's behavior and effectiveness largely depend on how they are combined. For example, Victor and Blackburn (1987) stated that degree of task interdependence per se does not necessarily predict the level of team cooperation; rather, it is the combination of task interdependence and goal interdependence. These authors maintain that congruent low-low and high-high combinations of task and goal interdependence give consistent task cues, clarify performance settings, enhance cooperation among teams, and promote effectiveness; incongruent low-high and high-low combinations send confusing signals to teams, create much uncertainty, increase hostility and competition, and decrease effectiveness (Van der Veegt et al., 2003; Victor & Blackburn, 1987). In addition, several laboratory experiments (Saavedra et al., 1993), field studies (Van der Veegt et al., 2003), and a meta-analysis (Stanne et al., 1999) of team interdependence showed how team performance may differ depending on how task and goal interdependence are combined. Resorting to that research, I propose that the combination of interteam task and goal interdependence will distinctively predict the salient conflict-management style that the team will engage in.

For team members working under congruent conditions of *low task and low goal interdependence* little interaction is required, and team performance is pooled from the sum of its individuals' performances. Moreover, because their individual responsibilities are clear, the amount of experienced uncertainty is relatively low (cf. Hogg, 2000). An example is a grade-level team, such as a team of seventh-grade teachers or of eighth-grade teachers. Here each team member teaches a different subject and masters its unique resources, methods, and goals. Because little information exchange is required, to accomplish his or her task and goals, each teacher works in isolation from the others. Because team members are less likely to perceive other team members as competing over shared resources (low task interdependence), or as a potential threat to attaining their goals (low goal interdependence), a dominating style is less likely to be engaged for handling team conflict. Furthermore, under the condition of low-low interdependence, there is limited need and opportunity for interaction; still, the uncompetitive conditions may encourage team members to develop more integrating patterns for handling conflict within the team.

A different picture may emerge when team members work under the incongruent condition of *low task interdependence and high goal interdependence*. An example is a school where the principal assigns the team a shared goal of reducing student dropout, but each teacher in the team works

in isolation from the others to develop and execute the appropriate programs. This interdependence configuration constitutes a typical social dilemma (Kramer, 1991): Working cooperatively with others to attain joint goals (prescribed by the high goal interdependence) might expose them to exploitation attempts by their counterparts. Therefore, team members might choose a strategy of social loafing to benefit from the others' efforts (free riding; Van der Vegt et al., 2003). Experimental research has shown that in such a situation team members may benefit from others' cooperation and then not contribute anything in return (e.g., Erez & Somech, 1996). This interdependence situation creates uncertainty about other team members' intentions and goals. This formulation implies that the condition of low task and high goal interdependence might trigger interpersonal biases, distrust, and hostility, which might cause team members to apply the dominating style more and the integrating style less, in handling team conflict.

Team members working under incongruent conditions of *high task interdependence and low goal interdependence* have to interact and exchange information, resources, and material to perform their task, but each member is rewarded relatively independently. An example is a treatment team of psychologist, educational counselor, and other para-therapeutic professionals. These professional members have to interact to provide care for students. However, each team member is managed by a distinct chain of control and has distinctive objectives and a different payment system. Such a situation is inherently unstable and uncertain because it is difficult for team members to predict whether members of other teams will cooperate or not (Van der Vegt et al., 2003). Moreover, team members in this configuration are tempted to use power to behave competitively among themselves because individual interests prevail over collective interests. Research has shown that when organizational teams share scarce resources (high task interdependence), competitive strategies may be used to gain maximum resources and power (Saavedra et al., 1993; Stanne et al., 1999). Consequently, under the conditions of high task interdependence and low goal interdependence, an integrating style is less likely to be adopted for handling team conflict; a dominating style is more likely.

Team members working under congruent conditions of *high task interdependence and high goal interdependence* have to work together and need each other to achieve common team goals. Each member's contribution to the team's product is required, and resources and communication exchange and coordination are encouraged because the more team members cooperate, the more they can contribute to the attainment of common team goals (Van der Vegt et al., 2003). An example is a disciplinary team (e.g., a math team, an English team) where all team members are assigned joint goals for improving students' achievements in the relevant subject. Each team

member depends on feedback and information from his or her teammates to develop appropriate methods and programs for improving teaching in class, and attaining the shared goal. Morris and Steers (1980) assert that when team members perceive high task and goal interdependence they become more aware of the importance of their own contribution to their team. Social exchange principles and reciprocity norms (e.g., Blau, 1964) hold that the notion of fairness underlies the norm of reciprocity, in that people seek to balance their inputs and outcomes in relation to others (Flynn, 2003). They interpret fairness to mean that their teammates can be trusted to protect their interests; this in turn engenders an obligation to repay them through “positive,” beneficial actions (Organ, 1988). Therefore, I expect that under the conditions of high task interdependence and high goal interdependence, an integrating style is more likely to be adopted for handling team conflict, whereas a dominating style is less likely.

Hypothesis 2a: There will be a positive relationship between the incongruent low-high or high-low combinations of task and goal interdependence and team conflict management of dominating, and a negative relationship with team conflict management of integrating.

Hypothesis 2b: There will be a positive relationship between the congruent low-low or high-high combinations of task and goal interdependence and team conflict management of integrating, and a negative relationship with team conflict management of dominating.

As the above discussion indicates, the main argument of this article is that conflict-management style will mediate the relationship between the interactive effects of task interdependence and goal interdependence, and team performance. Team performance may emerge primarily through the effect of task interdependence and goal interdependence on the team’s conflict-management style. Therefore, I posit that the style that the team adopts for coping with conflicts serves as a vehicle whereby task or goal interdependence interactions enhance team performance.

Hypothesis 3: A team’s conflict-management style will mediate the interactive effect of task interdependence and goal interdependence on team performance.

METHOD

Sample

A total of 170 Jewish elementary schools in Israel were cluster sampled by district, according to the proportion of students in each district. At each

school, one disciplinary team was randomly selected. Disciplinary teams are the most common teams in schools. These teams group together teachers who teach the same subject, such as a math team or a language team, collaborating in the development and implementation of the subject matter. All teams were formed by administrative assignment, and had worked together for at least one year. Of the teams, 26% were math teams, 23% science teams, 27% literature teams, and 24% were language teams. The criterion for inclusion in the sample was that the team coordinator, and at least 80% of the team members, completed the questionnaire. In all, 149 teams from 149 schools made up the sample (88% response rate). Preassessment interviews were conducted with each school principal, from which it emerged that all team members interacted regularly to achieve shared goals on teaching issues and other school matters. They also depended on one another for knowledge and effort by means of several permanent structures such as scheduled staff meetings, "brown bag" lunch meetings, and joint refresher workshops. The mean number of students per school was 215.2.16 ($SD = 115.76$), and the mean number of teachers was 29.92 ($SD = 15.94$). The number of team members ranged from 3 to 8, with a mean of 4.40 ($SD = 1.6$).

The sample included 149 team coordinators. Coordinators serve as middle managers in schools and are responsible for translating school policies and objectives into team missions as related to their subject matter, and are responsible for the ongoing functioning of their teams. Coordinators work fairly autonomously in professional matters, and are accountable and report to the principal. All the coordinators were women, with a mean age of 41.33 ($SD = 9.31$). Their mean seniority at the school was 12.11 years ($SD = 9.77$), and in teaching, 17.31 years ($SD = 6.98$). Coordinators' mean education was 16.74 years ($SD = 3.01$); 15.5% of them held a professional certificate from a teaching college, 73.0% held bachelor's degrees, and the others held master's degrees. The team coordinators devoted an average of 20.32 ($SD = 5.75$) hours a week to classroom teaching. The research encompassed 923 teachers, all women. Their mean age was 36.81 ($SD = 6.27$). Mean seniority of team members at the school was 10.31 years ($SD = 9.01$). Mean education was 15.30 years ($SD = 4.22$); 25% held a professional certificate from a teaching college, 69% held bachelor's degrees, and the others held master's degrees.

Procedure

Prior to data collection several steps were taken to address ethical concerns and to ensure members' commitment to the study. First, the district supervisor's initial consent was obtained. Second, principals received a letter describing the aim of the research as a study of teamwork at school

and assuring them that our concern was not with specific teachers but with the team. This secured confidentiality and would foster the teachers' cooperation. Principals were encouraged to approach the researchers for any clarifications and questions. Next, research assistants visited each selected school, explained the purpose of the study as aimed toward understanding teamwork in schools, and distributed the questionnaires to all team members in the selected team. Written instructions attached briefly reiterated the study's purpose. To assure anonymity, teachers were asked to place their completed questionnaire in a sealed envelope. On request, principals were debriefed at the completion of the research.

Measures

Data were collected through the questionnaires completed by team coordinators and team members. Team coordinators completed the performance measure and administrative data concerning the team, and team members completed the measures of frequency of meetings, task and goal interdependence, and team conflict management.

Task interdependence. Task interdependence is defined as the extent to which an individual team member needs information, materials, and support from other team members to be able to carry out his or her job (Van der Vegt et al., 2003), and was measured on a five-item scale developed by Van der Vegt et al. (2003; e.g., "I have to work closely with my team members to do my work properly," "Members of my team depend on each other for information or materials needed to perform their tasks"). The respondents rated each statement on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). Internal consistency reliability for the task interdependence scale was .81.

Goal interdependence. Goal interdependence is defined as the degree to which group members believe that they are assigned group goals or receive group feedback (Saavedra et al., 1993) and was measured by a six-item scale developed by Van der Vegt et al. (2003; e.g., "We have number of explicitly goals we have to achieve as a team," "We receive regular feedback about our team functioning"). Respondents rated each statement on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). Internal consistency reliability for the task interdependence scale was .80.

Conflict Management Patterns. M. A. Rahim's (1983) organizational conflict inventory form C (ROCI-II), worded for the team level, was used to assess the typical interaction pattern a team enacts when its members deal

with oppositions and disagreements. The ROCI-II was originally designed to measure five orthogonal dimensions of conflict management patterns, but for the purpose of the present study I focused on two subscales: Integrating and Dominating. The Integrating scale (seven items) assesses the extent to which team members actively press for collaboration among parties to reach a solution that satisfies the concerns of all (e.g., "Team members collaborate to come up with decisions acceptable to us," "Team members try to bring all our concerns out in the open so that the issues can be resolved in the best possible way"). The Dominating scale (five items) assesses the extent to which team members take a win-lose orientation and use coercive behaviors to get others to conform to one's own position (e.g., "Team members are generally firm in pursuing their side of the issue," "Team members use their influence to get their ideas accepted"). Respondents rated each statement on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). Internal consistency reliability was .84 for the Integrating scale and .89 for the Dominating scale.

Team effectiveness. As with other work team research (Alper et al., 2000; Cohen & Ledford, 1994; Somech, 2006), obtaining objective work outcome measures proved impossible despite the willingness of the school to provide them. Schools did not collect team-level performance data. Therefore, I adapted an 18-item team effectiveness scale (RATE) developed by Tjosvold, Leung, and Johnson (2000; e.g., "Team members meet or exceed their performance requirements," "Team members adequately completes assigned duties"). Team coordinators rated each statement on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). Internal consistency reliability was .83.

Control variable. Team size and the level of intrateam relationship conflict were included as control variables because the literature has noted their effects on team process and outcomes. Moreover, previous research indicated that level of conflict might affect the team's choice of a particular conflict management strategy (e.g., Drach-Zahavy & Somech, 2002; Moye & Langfred, 2004). *Team size* was the total number of team members reported in the team coordinator's questionnaire. *Level of intrateam relationship conflict* refers to the extent to which team members experience incompatibilities, and includes affective components such as feeling tension and friction (Jehn & Mannix, 2001). I used Jehn and Mannix's (2001) three-item scale to measure the relationship conflict (e.g., "How much relationship tension is there in your work team?"). Internal consistency reliability was .82.

Confirmatory Factor Analysis (CFA)

Using CFA, I assessed the validity of the six constructs of level of conflict, two design factors (task interdependence, goal interdependence), two conflict management patterns (integrating, dominating), and team performance. Parameter estimates were made with the LISREL 8 computer package, using the maximum likelihood method. The six-factor model yielded an adequate overall fit (comparative fit index [CFI] = .96, root mean square error of approximation [RMSEA] = .02). The factor loading for each item on its corresponding construct was significant at the .01 level or better, demonstrating convergent validity. To validate the six-factor structure, I conducted a second CFA in which all items were allowed to load on one factor. The CFA yielded an unacceptable fit level with CFI = .49 and RMSEA = .16. Because I wanted to test a model in which the two conflict management patterns and two design factors were distinct factors, I tried a third CFA. I tested a four-factor structure that included the two patterns of conflict management as one factor, and the two design factors as one factor. This CFA yielded a worse fit (CFI = .78, RMSEA = .12) than the six-factor structure ($p < .001$). Hence, the fit of the six-factor model was better than the fit of the four- and one-factor models, demonstrating construct validity.

Level of Analysis

The unit of theory in the present study was the team. Therefore, team size and team performance were measured at the team level by a survey of the team coordinator. A team's conflict-management styles of integrating and dominating, task and goal interdependence, and level of conflict were an aggregate of individual team members' responses to the team level of analysis.

Aggregation is justified by theoretical and empirical arguments (Rousseau, 1985). Theoretically, Rousseau (1985) advocated the use of composition theories, which specify the functional similarities of constructs at different levels. For many reasons, team members are expected to share perceptions of work environment, team's task characteristics such as task and goal interdependence, or of cognitions and pattern of behaviors, such as conflict-management patterns. Members' frequent interaction and shared tasks, the clear delineation of team boundaries, and the long existence of most teams should allow team members to adopt the views of the collective, thereby creating shared norms (Janz, Colquitt, & Noe, 1997; Jehn, Chadwick, & Sherry, 1997).

Thus, it was critical to demonstrate high within-team agreement to justify using the team average as an indicator of a team-level variable (r_{wg} ; James, Demaree, & Wolf, 1993). A value of .70 or greater is suggested as a "good"

amount of within-group interrater agreement (James et al., 1993). Here, all scales exceeded this level. Values were .92, .90, .86, .84, and .84, respectively, for task interdependence, goal interdependence, team's conflict management of integrating and dominating, and level of conflict. Values are given in Table 1, in the column under r_{wg} . In addition, in team-level analyses the aggregation of individual responses into a team score treats team members as judges rating their environment. Therefore, team members must also be shown to "agree" before one can claim that a construct is a team-level variable (Bliese & Halverson, 1996). In this study, within-team agreement was estimated by two measures: the intraclass correlation 1 [ICC(1)], which provided an estimate of the reliability of an individual respondent's rating, and the ICC(2), which estimated the reliability of mean differences across teams (Bliese & Halverson, 1996). Values were ICC(1) = .09, ICC(2) = .66 for task interdependence; ICC(1) = .08, ICC(2) = .71 for goal interdependence; ICC(1) = .10, ICC(2) = .58 for conflict management of integrating; ICC(1) = .11, ICC(2) = .52 for conflict management of dominating; and ICC(1) = .12, ICC(2) = .64 for level of conflict. As indicated by James (1982), ICC(1) generally ranges from 0 to .50 with a median of .12. There are however no definite guidelines for determining acceptable values for ICC(2). All scales slightly exceeded the median score.

RESULTS

The hypotheses identified the team as the unit of analysis, so team-level variables were used in all analyses.

Preliminary analyses of *t* tests were performed to determine whether there were demographic differences among districts (e.g., socioeconomic status, teachers' education, seniority and age). The results revealed no significant differences ($p > .05$). Preliminary analyses of the team according to subject taught, in all study variables (team size, level of conflict, goal interdependence, task interdependence, conflict management, and performance), showed no significant differences. Accordingly, I treated the teams as one group, regardless of their district's affiliation or subject.

Table 1 presents the means, the standard deviations, and intercorrelations matrix for all key variables included in the analysis. The correlation pattern shown in the table revealed several insights. First, the correlation between task interdependence and goal interdependence ($r = .23, p < .01$) indicated that although the two dimensions had common variance, each contained a unique aspect of contextual interdependence. This finding, together with the insignificant correlations between team performance and task interdependence and goal interdependence ($p > .05$), might furnish initial support for the

TABLE 1
Descriptive Statistics, Reliabilities, and Intercorrelation
Matrix for the Study's Variables

	<i>M</i>	<i>SD</i>	r_{wg}	1	2	3	4	5	6	7
1. Team size	4.40	0.87		1.00	-.12	-.01	.14	.07	.06	.17*
2. Level of conflict	2.31	0.32	.84		1.00	-.06	-.31**	-.07	-.41**	-.19*
3. Task interdependence	3.94	0.69	.92			1.00	.23**	-.13	.04	.01
4. Goal interdependence	4.23	0.52	.90				1.00	-.05	.17*	.01
5. Dominating	2.61	0.58	.84					1.00	-.24**	-.19**
6. Integrating	4.33	0.33	.86						1.00	.21**
7. Team performance	3.89	0.42								1.00

NOTE: $N = 149$. The statistic r_{wg} represents reliability within groups averaged across all teams (James, Demaree, & Wolf, 1993).

* $p < .05$. ** $p < .01$.

argument that task and goal interdependence are independent dimensions of social interdependence, and that their effect on team's effectiveness largely depends on how they are combined. Second, regarding the two styles of team conflict management, integrating and dominating, the correlation of $-.24$ ($p < .01$) demonstrated relatively independent dimensions. The positive correlation between the integrating style of conflict management and team performance ($r = .21$, $p < .01$), and the negative correlation between the dominating style and team performance ($r = -.19$, $p < .01$), provided initial support for the study's model. Note that teams reported relatively low levels of dominating conflict management style ($M = 2.61$) as compared with the integrating style ($M = 4.33$). This finding might imply that overall, school-staff teams tend to employ more commonly the integrating than the dominating pattern. Level of conflict had a negative and significant correlation with goal interdependence ($r = -.31$, $p < .01$) but an insignificant relation with task interdependence ($p > .05$), and a significant correlation with conflict management of integrating ($r = -.41$, $p < .01$) but an insignificant relation with dominating ($p > .05$). These findings might imply that highly shared goals encourage team members to work together more effectively, and with less conflict, to attain the team goals. A lower level of conflict enables team members to develop more integrating team conflict management; or vice versa: employing a more integrating pattern of conflict management might decrease level of conflict. Although level of conflict served as a control variable in this study, these findings suggest that it is a salient feature of a team's conflict management.

To test the model for predicting *team performance*, a complete mediation can be demonstrated only by showing the following (Baron & Kenny, 1986).

a. The antecedent is related to the consequence. Support for this argument is provided by examining the relationship between the interactive effect of goal and task interdependence and team performance. To test this relationship, a hierarchical regression analysis was conducted. The control variables (level of conflict and team size) were entered in Step 1. The main effects of task interdependence and goal interdependence were entered in Step 2, and the second-order interactive effect of task interdependence and goal interdependence were entered in Step 3. In line with Kirk (1996), partial η^2 values are provided as indicators of effect sizes of the effects. Kirk also recommended thumb rules for estimating the effect sizes: Small, medium, and large effect sizes for an F -statistic have partial η^2 values of .01, .059, and .138, respectively. The results are presented in Table 2, in the column labeled "team performance."

As shown in Table 2, regarding prediction of team performance, the control variables accounted for 4% of the variance in team performance ($F = 4.33, p < .01$). The joint main effects of task interdependence and goal interdependence predictors accounted for a negligible percentage of the variance in team performance (.01, $p > .05$). Specifically, no significant relations were found between task interdependence and team performance ($b = .03, p > .05$, partial $\eta^2 = .001$), and between goal interdependence and team performance ($b = .01, p > .05$, partial $\eta^2 = .01$). The second-order interaction effect between task interdependence and goal interdependence, entered in Step 3, accounted for an additional 12% of the variance in team performance ($\Delta F = 7.91, p < .01$). Specifically, the interaction effect between task interdependence and goal interdependence on team performance was significant ($b = -.34, p < .01$, partial $\eta^2 = .061$). Therefore, the first condition was confirmed. I then plotted values respectively plus and minus one standard deviation from the means of task interdependence and goal interdependence (Aiken & West, 1991).

As shown in Figure 2, analysis of the simple effects revealed that when task interdependence was low, no difference in team performance was found between low and high goal interdependence ($t = 1.12, p > .05; M = 3.87, M = 3.93$, respectively); but when task interdependence was high, team performance was significantly higher with high goal interdependence than low ($t = 2.07, p < .01; M = 3.80, M = 4.31$, respectively; see Figure 2). The figure shows that the highest level of team performance was under the condition of high task and goal interdependence, whereas no differences were found among the other three conditions of goal and task interdependence (low-low, low-high, and high-low, respectively).

Note that the correlations between task interdependence and team performance, and between goal interdependence and team performance, were

TABLE 2
Results of Hierarchical Regression Analyses for Predicting Team Performance and Team Conflict Management

Step Variables	Team Performance				Team Conflict Management: Integrating				Team Conflict Management: Dominating						
	b	SE	ΔR^2	ΔF	df	b	SE	ΔR^2	ΔF	df	b	SE	ΔR^2	ΔF	df
Step 1: Control variable															
Level of conflict	-0.17**	.05	.04	4.33**	2	0.01	.02	.01	0.71	2	-0.05	.04	.01	1.36	2
Team size	0.15**	.06				-0.02	.03				0.05	.05			
Step 2: Main effects															
Level of conflict	-0.16**	.05	.01	0.11	4	0.01	.02	.04	3.12*	4	-0.05	.04	.02	1.14	4
Team size	0.15**	.06				-0.02	.03				0.05	.05			
Task interdependence	0.03	.07				0.02	.05				-0.08	.06			
Goal interdependence	0.01	.11				0.08*	.04				-0.02	.09			
Step 3: Interaction															
Level of conflict	-0.17**	.05	.12	7.91**	5	0.01	.02	.11	6.65**	5	-0.05	.04	.09	4.13**	5
Team size	0.15**	.06				-0.02	.03				0.05	.05			
Task interdependence	1.46*	.55				-0.08	.24				-0.03	.48			
Goal interdependence	1.25*	.49				0.08	.27				-0.02	.43			
Task interdependence × goal interdependence	-0.34**	.13				0.17*	.05				-0.15*	.11			

* $p < .05$. ** $p < .01$.

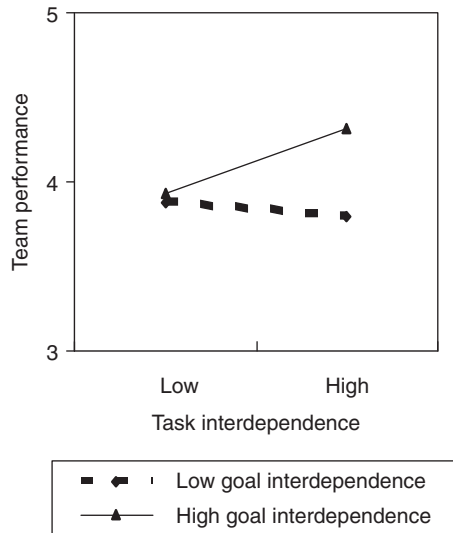


Figure 2. Interactive Effect of Task Interdependence and Goal Interdependence on Team Performance

insignificant, but the interaction effect of task and goal interdependence on team performance was significant. This strengthens the argument that only the combination of these two features affects team processes and outcomes.

b. The antecedent is related to the mediators. Support for this argument is provided by the relationship between the interactive effect of goal and task interdependence and team conflict management. For predicting the two conflict management patterns, integrating and dominating, two hierarchical regression analyses were conducted. The control variables of level of conflict and team size were entered in Step 1; the main effects of task interdependence and goal interdependence were entered in Step 2, and the second-order interactive effect of task interdependence and goal interdependence were entered in Step 3. The results are presented in Table 2, in the columns labeled “integrating,” and “dominating,” and in Figures 3 and 4.

As for the integrating pattern of conflict management, the control variable accounted for a negligible percentage of the variance in integrating (.01, $p > .05$). The main effects of task interdependence and goal interdependence predictors accounted for 4% ($\Delta F = 3.12$, $p < .05$) of the variance

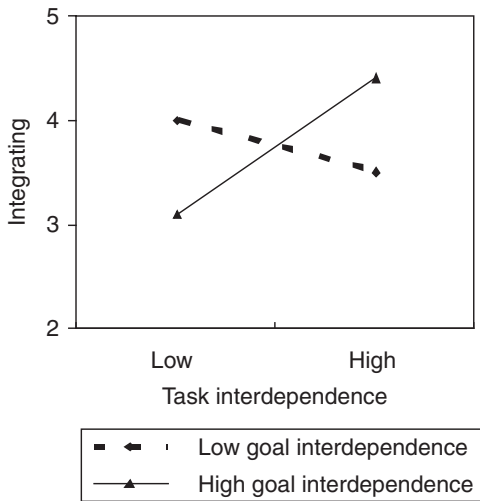


Figure 3. Interactive Effect of Task Interdependence and Goal Interdependence on Team Conflict Management of Integrating

in integrating. Specifically, only goal interdependence was positively and significantly associated with integrating ($b = .08, p < .05, \text{partial } \eta^2 = .016$). The second-order interaction effect between task interdependence and goal interdependence, entered in Step 3, accounted for an additional 11% of the variance in integrating ($\Delta F = 6.65, p < .01$). In line with Hypothesis 2, the interaction effect between task interdependence and goal interdependence on integrating was significant ($b = .17, p < .05, \text{partial } \eta^2 = .033$).

As expected in Hypothesis 2, positive relations appeared between the congruent low-low or high-high combinations of task and goal interdependence and integrating, and negative relations between the incongruent low-high or high-low combinations of task and goal interdependence and team-conflict management of integrating. As shown in Figure 3, teams exhibited higher levels of integrating conflict management style under the conditions of low task and goal interdependence ($M = 4.03$) and high task and goal interdependence ($M = 4.41$), as compared with the conditions of low task and high goal interdependence ($M = 3.04$) and high task and low goal interdependence ($M = 3.38$). Moreover, the figure shows that the highest level of integrating was under the condition of high task and goal interdependence.

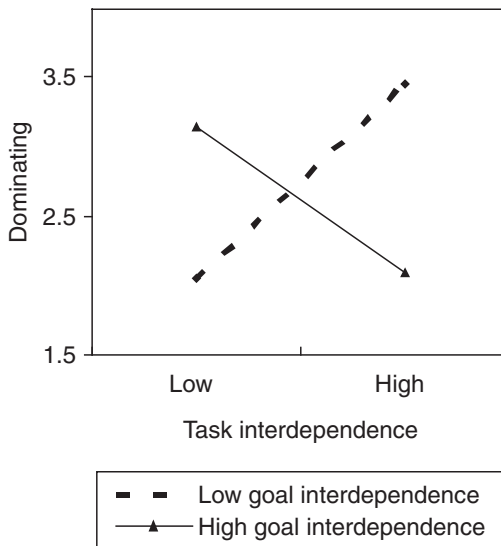


Figure 4. Interactive Effect of Task Interdependence and Goal Interdependence on Team Conflict Management of Dominating

Regarding prediction of the dominating pattern of conflict management, the results indicated that the control variable accounted for a negligible percentage of the variance in dominating (.01, $p > .05$). The main effects of task interdependence and goal interdependence predictors also accounted for a negligible percentage of the variance in dominating (.02, $p > .05$). Specifically, no significant relations were found between task interdependence and dominating ($b = -.03$, $p > .05$, partial $\eta^2 = .014$), and between goal interdependence and dominating ($b = -.02$, $p > .05$, partial $\eta^2 = .001$). The second-order interaction effect between task interdependence and goal interdependence, entered in Step 3, accounted for an additional 10% of the variance in dominating ($\Delta F = 4.13$, $p < .01$). In line with Hypothesis 2, the interaction effect between task interdependence and goal interdependence on dominating was significant ($b = -.15$, $p < .05$, partial $\eta^2 = .031$).

As expected in Hypothesis 2, negative relations emerged between the congruent low-low and high-high combinations of task and goal interdependence and dominating; positive relations emerged between the incongruent low-high and high-low combinations of task and goal interdependence and team conflict management of dominating. As shown in Figure 4, teams

TABLE 3
Results of Hierarchical Regression Analyses for Predicting
Conflict Management as a Mediator of Team Performance

Step Variables	Team Performance				
	b	SE	ΔR^2	ΔF	df
Step 1: Control variable			.04	4.33**	2
Level of conflict	-0.16**	.05			
Team size	0.15**	.06			
Step 2: Mediating variable			.16	10.41**	4
Level of conflict	-0.20**	.05			
Team size	0.16**	.06			
Integrating	0.49**	.19			
Dominating	-0.26**	.09			
Step 3: Main effects			.01	0.062	6
Level of conflict	-0.19**	.05			
Team size	0.16**	.06			
Integrating	0.50**	.19			
Dominating	-0.26**	.09			
Task interdependence	0.01	.07			
Goal interdependence	-0.03	.11			
Step 4: Interaction			.05	8.36**	7
Level of conflict	-0.19**	.05			
Team size	0.16**	.06			
Integrating	0.51**	.19			
Dominating	-0.26**	.09			
Task interdependence	0.17**	.09			
Goal interdependence	0.25**	.13			
Task interdependence \times goal interdependence	-0.17**	.09			

* $p < .05$. ** $p < .01$.

exhibited higher levels of dominating conflict management style under the conditions of low task and high goal interdependence ($M = 3.15$) and high task and low goal interdependence ($M = 3.51$), as compared with low task and goal interdependence ($M = 2.05$) and high task and goal interdependence ($M = 2.10$). Moreover, the figure shows that the highest level of dominating was under the condition of high task interdependence and low goal interdependence.

c. The relation between the antecedent and the consequence is eliminated when the mediator is controlled (Baron & Kenny, 1986). To confirm this condition, I conducted a hierarchical regression analysis to control for

the team conflict management of integrating and dominating. The control variables were in the first step. The team conflict management of integrating and dominating was entered in Step 2, the main effects of task interdependence and goal interdependence were entered in Step 3, and the interaction of task interdependence and goal interdependence in Step 4. The results are presented in Table 3, which shows that the mediators (integrating, dominating) remained significant ($b = .49, p < .01$, partial $\eta^2 = .046$; $b = -.26, p < .01$, partial $\eta^2 = .050$; respectively; supporting Hypotheses 1a and 1b). However, the interaction effect of task interdependence and goal interdependence also remain significant ($b = -.17, p < .05$, partial $\eta^2 = .033$). Nevertheless, the percentage of variance explained by the interdependence variable dropped from 12% (Model 3 in Table 2) to 5% (Model 4 in Table 3). Taken together, the results suggest that the relationship between the interaction effect of task and goal interdependence and team performance is mediated by team conflict management, but there is also a direct association (Hypothesis 3). Specifically, these findings indicate that the configuration of task and goal interdependence affects a team's conflict management style, which in turn affects team performance. But they also show that there is a direct link between teamwork structure (task and goal interdependence) and team performance.

DISCUSSION

The education system's central goals are to improve the effectiveness of teaching and to respond to students' needs. There is general consensus that to realize these goals it is not enough to develop the professional skills of each teacher as an individual; a systemic change toward teamwork is necessary. Teams play a central role in identifying the needs of students, planning and developing policies at the class and school levels, and implementing innovation in teaching and school design (B. Johnson, 2003; Wineburg, 1997). The findings of the present study highlighted the importance of structural and process arrangements within the team to promote school-staff team effectiveness, thereby contributing to the educational administration literature in several respects.

First, the present results provided additional empirical support for the notion that conflict management can be explored as a team phenomenon (Kuhn & Poole, 2000). This notion asserts that teams differ in their tendency to resolve conflicts by following certain patterns rather than others. This is important because, despite repeated calls in the educational administration literature for more attention to social context (e.g., Dimmock & Walker,

1998), most research on conflict management so far has focused on it as an individual phenomenon (e.g., Farmer & Roth, 1998; Oetzel, 1999). Such an investigation, particularly of individual characteristics, such as attitudes, values, and dispositions that determine conflict management style, seems to fall short of fully capturing the conflict-management phenomenon. Individuals who exhibit a certain pattern of conflict management do not do so in a vacuum, and the team context most likely acts to affect their choices (George & Jones, 1997). The present study, which chose to address the conflict-management issue by investigating it as a context-related phenomenon, has contributed to the literature by shifting the focus to how the team as a whole behaves and to what is considered the standard mode of behavior in the team.

Second, this study supports the notion that conflict should not be experienced as a destructive process that teams should avoid or minimize, but as a necessary and positive aspect of team development, which should be handled accordingly (Uline, Tschannen-Moran, & Perez, 2003). This is important because previous research has indicated that most educators are concerned about the potentially destructive outcomes of conflict in schools, and consequently, teachers and administrators are often uncomfortable with any level of conflict and prefer isolation to the tensions involved in joint work (e.g., Weiss et al., 1992). Therefore, school-staff teams that wish to reap the benefits of constructive conflict will need to understand common responses to conflict and support teammates in devising conflict strategies that lead to constructive outcomes, which include high quality of decisions and improved team functioning (Uline et al., 2003).

The present results indicated that school-staff teams that learned to appreciate and make constructive use of the different perspectives and experiences, namely to use an integrating conflict management style, may promote team effectiveness (M. A. Rahim et al., 2000). By entering into the debate, team members gain an opportunity to shape the final decisions in a way that accommodates the interests of all parties. By contrast, the present findings suggest that the dominating pattern of handling team conflicts might be a destructive form of resolution, which may hamper team functioning and reduce team performance. Handling conflicts through a win-lose solution apparently leads to a conflict aftermath, where the losing counterparts in the team keep struggling to improve the solution. This state of continuous conflict can hinder team performance.

Third, the findings of this study emphasize the importance of structural arrangements within the team, which encourage team members to develop constructive ways to handle conflicts and to promote team effectiveness. Specifically, the results demonstrate that school-staff teams develop the highest levels of integrating conflict management style under the condition of high task

and goal interdependence, which in turn promotes team performance. Where tasks are assigned to the whole team rather than individuals, so that team members have to rely on each other for information, materials, and support (high task interdependence), and likewise, where goals are set for the team and not for the individual (high goal interdependence), there a collaborative strategy develops to manage conflicts, to reach a solution that satisfies the concerns of all parties, and to attain a higher level of team performance (M. A. Rahim, 2001).

These findings are especially important for schools, which are now in a process of change toward tightening the loose structure. A significant example is the Standards-Based Movement, which results in greater goal interdependence by assigning goals to both the individual teacher and the grade-level team. But the success of this process will no doubt be limited as long as there is no fit between goal and task interdependence. As long as teachers' main task is to work independently in class (low task interdependence), with minimal interactions and interdependence with other teachers, the demand for shared goals (high goal interdependence) might foster destructive conflict management solutions, such as dominating, which in turn might adversely affect team performance.

So having few incentives to invest their efforts and energy in the team, teachers are largely indifferent to the concerns and interests of others in the team. This assertion might be further supported by the finding that indicated that although there was a positive link between low task-low goal interdependence and team's conflict management of integrating, this condition did not contribute to team performance. As expected, because team members working under low task and goal interdependence do not perceive their teammates as competing over shared resources or goals, teachers can resolve conflicts in more integrating ways. But this condition, which causes teachers to act as "closed systems" in a loosely coupled organization (Weick, 1976) with little awareness of the activities of others in the team, did not contribute to team effectiveness. To sum up, a basic requirement for turning schools into team-based organizations, opening up opportunities for constructive debate and disagreement, is to create a high goal and task interdependence environment (Bono & Judge, 2003; Vesey, 1996; Wineburg, 1997). Further studies should explore other structural and process factors that might affect those relations. For example, several studies (e.g., Drach-Zahavy & Somech, 2002) suggest that the structural variables of frequency of meetings and team composition in terms of heterogeneity have an essential impact on teamwork. Others (e.g., West, 2002) suggest that process variables, such as participation or team support, affect team members' interactions and effectiveness.

Finally, the results of this study are of course limited by its operations. The data are largely self-reported and subject to bias. For example, respondents

might figure out what the researchers are trying to prove and respond in ways that confirm their hypotheses, or they might have some implicit theories about the relationships among variables, and thus respond in ways that bear out those theories. Still, recent research suggests that self-reported data are not as limited as commonly believed, and that people often accurately perceive their social environment (Alper, et al., 1998). Common method variance may not have been a serious problem with the data, because I ran an independent rating of performance by coordinators and conflict management styles by team members. However, I have no data to show that the perceptual measures of team conflict management and team performance are predictors of "objective" measures; therefore, future research should use other methods, such as observations, for evaluating team conflict management and team performance (Lovelace et al., 2001).

The cross-sectional design of this study raises the issue of causality. It is difficult to determine the nature of the relationship between team processes of conflict management and team effectiveness. Are these different team conflict-management styles determinants or consequences of team effectiveness? The data could not provide direct evidence of causal links between the work design variables of task and goal interdependence and conflict management. It may well be that teams generating constructive conflict management style will perceive their goals as more dependent. Moreover, although level of conflict served as a control variable in this study, it might be argued that the chief value of team conflict mediation strategies is to reduce level of conflict. Longitudinal studies that employ other methods, such as observations, are clearly required to explore the nature of these relationships further. Such studies will promote our understanding of the mechanism that might explain the advantage of the integrating over the dominating conflict management style for team performance through the mediating effect of conflict level.

Moreover, considering conflict management at the team level raises some questions regarding the process of adopting and maintaining a particular stylistic choice, which might be more than a simple formulaic combination of individual styles (Kuhn & Poole, 2000). I suggest that further research address these questions and examine their implications for team performance. For example, what are the likely outcomes when the majority of the team engages in a dominating style? Can a powerful minority reverse such a potentially destructive strategic choice?

Finally, the generalizability of the present findings should be examined in other gender compositions because the present sample included only women. Further research should try to explore whether other team composition measures such as age, tenure, or education might also affect team conflict management or outcomes.

PRACTICAL IMPLICATIONS

In addition to developing theoretical understanding, continued support for the hypotheses can carry important practical implications for administrators in helping schools to develop effective teamwork and stimulate team and school effectiveness. Given the individualistic nature of teachers' jobs on one hand, and the benefits of teamwork on the other, the assimilation of teamwork in schools requires a systemic change (Klein & Sorra, 1996). The present findings and recent research suggest that teams are more willing to exhibit a cooperative style when they believe that their interests and resources are aligned (Edmondson, Roberto, & Watkins, 2003). At first, administrative arrangements to encourage collaboration in team should involve the principal's active effort in imposing procedures at meetings, keeping records, and enforcement to ensure that meetings do take place. Yet, although grouping teachers into teams is an essential step, it is not sufficient to overcome potential barriers to cooperation. Moving toward teamwork requires principals to redesign their teachers' work environment. High task and goal interdependence are potentially critical for producing symmetrical interests and cooperative conflict management patterns. Common goals and tasks designed for the team as a whole will help their members realize that their goal is to help each other to attain actual needs, and not to try to defeat or outdo each other (Chen, Lui, & Tjosvold, 2005; D. W. Johnson & Johnson, 1996).

Furthermore, the findings of this study might encourage administrators to recognize that conflict that is handled effectively might be a necessary antecedent to teamwork and team effectiveness. Too often educators feel they must present a united front in the face of students, parents, or the community. Administrators might encourage teams to debate essential issues, to see controversy as a normal, indeed necessary dynamic within the team, but also to help teams to develop more integrating patterns for managing conflicts. To maximize the benefits of conflict, teams should find ways of legitimate critique and controversy within the team. Teams can be trained to directly express their ideas, positions, and feelings, coupled with learning how to listen, to react, and to integrate different points of views. Certain specific administrative tools and roles can help maintain a constructive level of controversy. For example, constructive argumentation can be institutionalized through the routine designation of the devil's advocate, or no important decisions are to be finalized before antithetical points of view are fully aired (Uline et al., 2003). All these strategies may help teams to recognize that seeking to resolve the conflict for mutual benefit is a means to promote team effectiveness.

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Anit Somech is the head of the Educational Administration Department at the University of Haifa, Israel. Her current research interests include participative leadership, team work, and organizational citizenship behavior at the individual, team, and organizational levels.