



## The influence of intra-team conflict on work teams' affective climate: A longitudinal study

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We analysed whether relationship conflict mediates the link between task conflict and shared affect at the team level of analysis. Moreover, we tested the hypothesis that the relationship between these two types of intra-team conflict would be moderated by team members' interaction. The sample was composed of 156 bank branches. Data were gathered at two points in time. Two affect dimensions (tension and enthusiasm) were measured. The results obtained supported our hypotheses. Relationship conflict fully mediated the relationship between task conflict and team affect. Team members' interaction about team issues moderated the relationship between task conflict and relationship conflict, so that when team members' interaction was low, the relationship enhanced, whereas when team members' interaction was high, the relationship weakened.

Affect is an integral and inseparable part of organizational life (Ashforth & Humphrey, 1995). Work team members' affective experiences and states have been an area of growing interest in the organizational research, and they are implicit in numerous organizational and psychological theories. Researchers have described a variety of different kinds of affective experiences and have shown their important role in work teams' processes and outcomes (Ashkanasy, Härtel, & Zerbe, 2000; Brief & Weiss, 2002; Fisher & Ashkanasy, 2000; Muchinsky, 2000). Most of the research about the role of affect has been carried out at the individual level. However, recent developments in the study of affect have highlighted a number of interesting issues with regard to the role of affective experiences as a team-level phenomenon and the factors that contribute to the configuration of these experiences (Barsade, 2002; Barsade, Ward, Turner, & Sonnenfeld, 2000; Bartel & Saavedra, 2000).

Conflict that takes place in teams due to discrepancies among team members has been strongly associated with affect experienced by the members (Thomas, 1976). There are two different types of conflict, depending on the source of the discrepancy,

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task-related disagreement (task conflict) and personal disputes among members (relationship conflict). Recent studies show that these two different kinds of conflict play differential roles in the development of work teams' processes and outcomes (Amason, 1996; De Dreu & Weingart, 2003; Jehn, 1995; Simons & Peterson, 2000). The aim of the present study is to analyse the relationships between these two kinds of intra-team conflict and work teams' affective climate. Moreover, research on intragroup conflict has mainly treated task conflict and relationship conflict as independent constructs. However, recent theorizing on this framework has pointed out that the two types of conflict are strongly related. This study also examines potential mechanisms through which these two types of conflict are linked. Next, we review the main contributions to the affective climate concept and we provide a theoretical rationale for the hypotheses tested.

### **Shared affect in work teams**

During the last decade, a new approach that considers affect as a collective property of work teams has emerged in the research on work affect. Several authors have pointed out that group members can develop shared affect. George (1990) proposed the concept of *group affective tone*, and she defined it as 'consistent or homogeneous affective reactions within a group' (p. 77). In a study with a sample of sales teams, George showed that work-groups<sup>1</sup> could develop affective tones when a degree of consistency or homogeneity in the affective reactions among members occurred, so that, 'when members of a group experience similar levels of positive/negative mood at work, then the group has a positive/negative affective tone' (George, 1995, p. 781). In Sessa's (1996) study on group emotion and conflict, the existence of affective tone in 30 teams of nurses was demonstrated. The results showed that shared affect is exhibited by team members through a series of vocal cues, facial expressions and body movements and, therefore, it can be observed by the other members of the team. Across short-term meetings of 70 very diverse work-groups, Bartel and Saavedra (2000) also showed that work-group mood could be recognized by members of the work-group and reliably measured. They also showed that group mood could be rated by observers external to the work-group. Likewise, Barsade (2002), in a study that examined the influence of emotional contagion on team dynamics, found a strong convergence of group members' moods. As Barsade indicated, work-group members come to develop mutually shared moods and emotions in the course of executing their tasks. Other contributions, such as the studies by Totterdell and colleagues, found significant convergence of team members' affect in different professional samples (Totterdell, 2000; Totterdell, Kellet, Teuchmann, & Briner, 1998). Thus, group affect studies show that 'shared emotions occur in organizational work teams and that these emotions can be recognized and measured' (Barsade, 2002, p. 5).

Authors have proposed different mechanisms and processes to explain collective or shared affect. George (1990, 1996) suggested several complementary processes supporting the existence of group affective tone: Schneider's (1987) attraction-selection-attrition (ASA) framework; social interaction, socialization processes and

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<sup>1</sup> In this study, we make no distinction between groups and teams, using the two terms interchangeably. The terms *group* and *team* are used to refer to a distinguishable set of individuals who are embedded in a larger social system (organization) and share specified and valued objectives. These individuals interact dynamically and interdependently to perform organizational tasks (West, 1996).

social influence (Fisher, 1986); and, finally, the similarity in group tasks and outcomes for team members. All of them will produce some degree of similarity in affective reactions within groups. Emotional comparison and emotional contagion are important processes of influence that promote affective consistency within groups as well (Barsade, 2002; Bartel & Saavedra, 2000; Hatfield, Cacioppo, & Rapson, 1994). Kelly and Barsade (2001) indicated other processes and mechanisms, such as vicarious affect, behavioural entrainment, interaction synchrony, intentional affective induction, affective influence or affective impression management, to explain how the affective experiences group members bring with them to the group that are communicated to other group members and form group affect. Moreover, there are a number of factors in the affective context in which the group is behaving, such as the group's emotional history and the group's mood regulation norms, that may amplify or constrain team members' shared affective experiences. Finally, convergence in members' affective experiences is also positively associated with task and social interdependence and membership stability (Bartel & Saavedra, 2000).

Nowadays, the *affective climate* concept has begun to be used to refer shared affective experiences in a work team. González-Romá, Peiró, Subirats and Mañas (2000) used this construct to describe 'shared affective responses by a work team's members' (p. 98). Using a two-wave panel data design, these authors tested the validity of the concept in a sample of 33 health care work teams. They used the *affect* concept because it is a broad term that traditionally includes other concepts, such as mood, emotions, sentiments or dispositional affect. Similarly, Pirola-Merlo, Härtel, Mann, and Hirst (2002) stated that George's (1990) affective tone and affective climate are comparable concepts, since both describe group members' shared affective experiences.

Affective climate has been shown to have an important influence on team processes and outcomes, such as absenteeism and prosocial behaviour (George, 1990), organizational spontaneity (George & Brief, 1992) and team performance (Barsade *et al.*, 2000; George, 1995; Kelly, 2003; Kelly & Barsade, 2001). Therefore, it is especially interesting to study those elements that influence affective climate, because more in-depth knowledge about these antecedents will allow us to design effective interventions for improving affective climates and promoting desirable team outcomes.

We define team affective climate as moods shared by team members. Moods, when compared with emotions, are weaker and more diffuse affective reactions, and they can be characterized as relatively enduring. They do not usually have a clear antecedent (Forgas, 1992), and their effects are more subtle and pervasive. This is the case because they are unrelated to the original source of the mood. While not denying the relevance of emotions in the workplace, we focus on mood because of the more broad-ranging effects that moods have been shown to have and because they capture more of the day-to-day feelings people experience on the job (Barsade, 2002; George & Jones, 1997). Affective climate is described using affective dimensions or facets. In the affect literature, different facets have been proposed (Daniels, Brough, Guppy, Peters-Bean, & Weatherstone, 1997; Sevastos, Smith, & Cordery, 1992; Warr, 1990b). We considered two facets or dimensions of affect suggested by Warr (1990b): tension-calmness and enthusiasm-depression. These facets can be located within a more general conceptual framework; the circumplex model of affect (see Figure 1; Bartel & Saavedra, 2000; Segura & González-Romá, 2003; Warr, 1990a; Weiss & Copranzano, 1996; Yik, Russell, & Barrett, 1999). This model locates specific affects in the conceptual space defined by two orthogonal primary dimensions: pleasantness (pleasure-displeasure) and arousal (low activation-high activation).

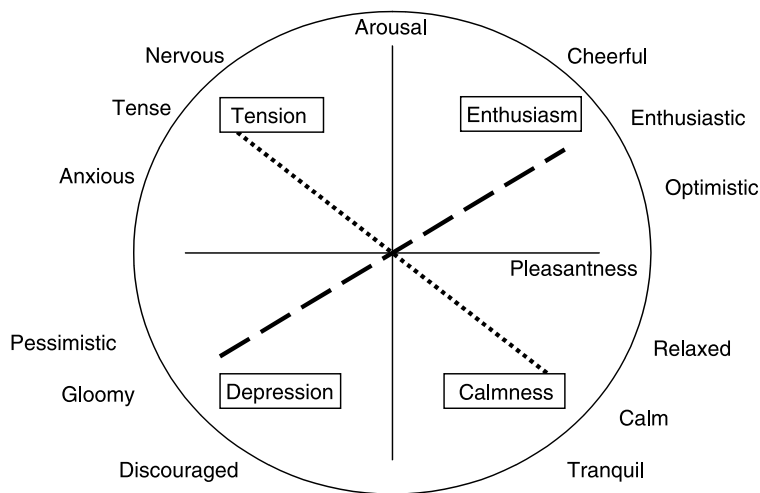


Figure 1. The circumplex model of affect.

### **Conflict as an antecedent of affective climate**

Conflicts are often strongly associated with people's affective experiences (Gayle & Preiss, 1998; Thomas, 1976). Conflict is a phenomenon that is present in organizational life, and it is central to understanding relationships in work teams (Tjosvold, 1998). Conflict originates in a wide variety of ways and contexts, when work team members who work together over time show disagreement about their preferences and positions (McGrath, 1984; Zornoza, Ripoll, & Peiró, 2002). There are two main types of conflict, task conflict and relationship conflict, and they differ with regard to the object of disagreement. Relationship conflict is a perception of personal animosities and incompatibility (Barsade *et al.*, 2000; Eisenhardt, Kahwajy, & Bourgeois, 1997; Jehn, 1994). Task conflict is a perception of disagreements among members about the content of their decisions, tasks, objectives and procedures.

Scholars have related both kinds of conflict to employees' affect. Most studies are cross-sectional, and they consider employees' affective experiences at the *individual* level of analysis. With regard to relationship conflict, these studies show that strong empirical support exists for its impact on affective reactions in the workplace. In general, all the studies point out that relationship conflict is negatively associated with employees' attitudinal responses, such as satisfaction and commitment (De Dreu & Weingart, 2003; Gladstein, 1984; Janssen, Van de Vliert, & Veenstra, 1999; Jehn, 1995; Jehn & Chatman, 2000), employees' psychological well-being (Medina, Munduate, Dorado, Martínez, & Guerra, 2005) and affective acceptance of group decisions (Simons & Peterson, 2000). Furthermore, relationship conflict increases group members' stress and anxiety (Jehn & Mannix, 2001; Staw, Sandelands, & Dutton, 1981) and employees' job tension (Medina *et al.*, 2005).

The results obtained in previous research on the influence of task conflict on affective responses in the workplace are contradictory. There is some evidence showing that high levels of task conflict lead to reduced employee satisfaction and commitment to the team and generate tension and unhappiness (e.g. Amason, 1996; Amason & Sapienza, 1997; Baron, 1990; Jehn, 1995, 1997; Jehn & Mannix, 2001; Surra & Longstreth, 1990). However, some researchers have not found any effect of task conflict

on affective variables, such as employees' satisfaction and psychological well-being (Medina *et al.*, 2005). A number of researchers have even found that task conflict is associated with team members' positive affect, and that it can lead to increased satisfaction with the group's decisions and a desire to stay in the group (Amason, 1996; Korsgaard, Schweiger, & Sapienza, 1995; Peterson, 1997; Simons & Peterson, 2000). De Dreu and Weingart (2003) tried to clarify this issue by conducting a meta-analysis of research on the association between relationship conflict, task conflict and team member satisfaction. They concluded that relationship conflict has a stronger association with team member satisfaction than task conflict. Although both types of conflict appear to harm satisfaction, relationship conflict has a more negative effect than task conflict does.

Recently, a number of scholars have offered a possible explanation for these results (Amason, 1996; Amason & Schweiger, 1997; Friedman, Tidd, Currall, & Tsai, 2000; Janssen *et al.*, 1999; Jehn, 1997). They argue that task conflict may turn into relationship conflict through a misinterpretation of task conflict behaviour over time, due to the dynamic nature of conflict. Relationship conflict seems to occur in teams when disagreement on task-related issues is perceived as personal criticism. Group members constantly interpret the behaviour of other members, and they infer intentions. When this attribution process points towards personal attack (Jehn, 1997) or hidden agendas (Amason, 1996; Amason & Sapienza, 1997; Eisenhardt & Bourgeois, 1988), task conflict triggers relationship conflict through a process of biased information processing and self-fulfilling prophecy. In fact, as García-Prieto, Bellard, and Schneider (2003) argue, the most important component of the conflict processes is the appraisal of the conflict issues. Thus, the offended team members may respond to what they perceive as personally motivated criticism with personal attacks of their own and, by doing so, trigger more relationship conflict. Amason and Schweiger pointed out that the propensity to mistake cognitive (task) disagreement for personal animosity is especially high in cases where the issues are serious and there is a potential for great personal gain or loss. For instance, it is likely that the criticism and debate necessary for task conflict could be interpreted as a strategy to enhance one's own power or influence at the expense of others (Janssen *et al.*, 1999). Thus, as teams engage in task conflict, they may inadvertently trigger relationship conflict. Since the transformation goes unnoticed (Amason, 1996), it might appear that task conflict negatively influences team members' affect. Actually, however, it would be the inadvertently triggered relationship conflict that produces the negative effect on employees' affective experiences.

Therefore, the idea that the influence of task conflict on team processes and outcomes is mediated by relationship conflict is a plausible one. At the individual level, there is some empirical evidence to suggest that the relationship between task conflict and employees' affective experiences is mediated by relationship conflict. Friedman *et al.* (2000) developed a cross-sectional study with 82 members of a clinical medical department. Their results showed that task conflict did not have a direct relationship with stress felt by department employees; instead, task conflict's influence was indirect through its effect on relationship conflict. Medina *et al.* (2005), in another cross-sectional study, found that relationship conflict fully mediated the relationship between task conflict and employees' satisfaction and psychological well-being, and it partially mediated the relationship between task conflict and employees' tension.

Thus, there are theoretical and empirical arguments that support the mediation hypothesis at the individual level, that is, that the relationship between task conflict and employees' affective responses is mediated by relationship conflict.

Considering that task conflict, relationship conflict and affect at the individual level are constructs that are isomorphic with their corresponding counterparts at the team level, and that the relationships between constructs at both levels can be specified by consensus composition models, the purpose of our study is to test the mediation hypothesis at the team level. Composition models specify the functional relationships among constructs operationalized at different levels of analysis (James, 1982; Chan, 1998). The direct consensus model 'uses within-group consensus of the lower level units as the functional relationship to specify how the construct conceptualized and operationalized at the lower level is functionally isomorphic to another form of the construct at the higher level' (Chan, 1998, p.237). In this model, within-group agreement in individual-level constructs (i.e. team members' affect) is used to justify aggregation of lower level scores to represent constructs at the higher level (i.e. team affect). Thus, in these models within-group agreement is a *prerequisite* for arguing that a higher level construct can be operationalized, and that it exists. Items that contain personal pronouns like 'I' and, therefore, direct respondents' attention to their individual experiences, if aggregated to the team level, represent direct consensus composition (Klein, Conn, Smith, & Sorra, 2001). The referent-shift consensus model is very similar to the direct consensus model, but in the former the referent for the team-level construct has shifted from an individual's report of his/her experiences to an individual's perception of a particular team phenomenon. Items that contain terms like 'We', 'My work-team' and 'The members of my work-team' direct respondents' attention to team-level phenomena, and if aggregated to the team level, represent referent-shift consensus composition (Klein *et al.*, 2001). In the present study, in order to obtain a team-level measure of the affect (i.e. a measure of affective climate), we used a direct consensus composition model, whereas to obtain a team-level measure of task and relational conflict, we followed a referent-shift composition model.

Empirical research on the relationship between intra-team conflict and shared affect at the team level is still scarce. However, some studies seem to suggest that the mediation hypothesis is a plausible one. Jehn and Mannix (2001) examined the occurrence of different kinds of conflict during the developmental stages of high performance teams. In these teams, task conflict was greater during the middle periods of team life. However, in the final weeks, the teams experienced an increase in relationship conflict and a decrease in task conflict. This dynamic pattern is congruent with the aforementioned idea suggested by some researchers that task conflict turns into relational conflict over time (Amason; 1996; Amason & Schweiger, 1997; Friedman *et al.*, 2000; Janssen *et al.*, 1999; Jehn, 1997). Sessa (1996), in a cross-sectional study with 30 work teams of nurses, showed that relationship conflict was negatively associated with teams' affective tone, whereas task conflict was not associated with it. Taken together, these results are congruent with the idea that task conflict leads to relationship conflict over time, due to the dynamic nature of conflict, and relationship conflict, rather than task conflict, is the type of conflict that is directly related to shared affect.

In the present study, we tested the general hypothesis that the relationship between task conflict and affective climate is mediated by relationship conflict, so that task conflict is positively related to relationship conflict, which, in-turn, is negatively related to team enthusiasm and positively related to team tension. Taking into account the two facets of affective climate considered, our specific hypotheses are the following:

*Hypothesis 1:* Relationship conflict will mediate the positive relationship between task conflict and team tension.

*Hypothesis 2:* Relationship conflict will mediate the negative relationship between task conflict and team enthusiasm.

**Task and relationship conflict: The moderator role of team members' interaction**

If relationship conflict plays a mediator role in the relationship between task conflict and affective climate, it would be important to consider the boundary conditions that influence the relationship between these two types of conflict. A recent meta-analysis (De Dreu & Weingart, 2003) estimated that around 27% of the variance in relationship conflict may be 'predicted' by task conflict. Across 11 studies, Simons and Peterson (2000) found correlations between both kinds of conflict that ranged from .34 to .88. These results suggest that the relationship between the two types of conflict may depend on boundary conditions. However, with the exception of a few studies (e.g. Amason & Sapienza, 1997; Simons & Peterson, 2000), there has been little attention paid to the boundary conditions that constrain the relationship between task and relationship conflict.

An argument offered to explain why task conflict and relationship conflict are consistently correlated is that task conflict leads to relationship conflict through a process of misattribution. As we mentioned above, the relationship conflict seems to occur in teams when disagreement on task-related issues is perceived as personal criticism. Differences of opinion about work-related issues among people may be taken personally, turning task conflict into relationship conflict. Simons and Peterson (2000) argued that contextual factors should play a moderating role through their impact on the misattribution process. One of these contextual factors is social interaction among team members. In work teams, social interaction is structured to a great degree by the workflow that stems from task interdependence. This implies that team members must interact and coordinate with each other to carry out their tasks. Interaction among team members about team issues, such as team goals, rules and methods, provides the opportunity to constructively handle task-related disagreements, to unambiguously clarify team members' perspectives on task-related issues and, as a result, to avoid the misattribution process through which task conflict becomes relationship conflict. Yang and Mossholder (2004) drew attention in the same direction, proposing that when there is social interaction among team members, task conflict is less likely to evolve into relationship conflict. They argued that social interactions allow team members to establish a shared knowledge of team objectives, rules and relationship patterns providing an interpretative structure useful for avoiding the misattribution of task conflict. Some empirical findings seem to support this hypothesis. Lovelace, Shapiro, and Weingart (2001) showed that collaborative communication occurring during intragroup task disagreements increased members' concern and care about the other group members. This would make it difficult for task disagreement to be perceived as personal conflict. Thus, we suggest the following hypothesis:

*Hypothesis 3:* Social interaction among team members will moderate the relationship between task conflict and relationship conflict, so that when social interaction is high, the relationship will be weakened, and when social interaction is low, the relationship will be enhanced.

In summary, research on the relationship between team conflict and shared affect in teams has been scarce. Our study extends previous investigations and deals with the

roles played by the two kinds of conflict in the explanation of shared affect by examining the mediator role of relationship conflict at the team level. This study also examines a potential moderator of the relationship between the two types of conflict. Empirical research on the boundary conditions that influence this relationship is still scarce, and new efforts are needed in order to reach a better understanding of it.

## Method

### ***Design, procedure and sample***

The study sample composed of branches of three savings banks that operated in the same region of Spain. Saving banks are financial entities that combine their financial activity with an intense social activity. They are constituted as private foundations that have financial criteria but with a social end. Thus, they return an important percentage of their benefits to society by means of funding and developing projects in the areas of culture and arts, education, human capital and employment, nature conservation, and social services, among others. In the three savings banks, the branches had the same structure and similar sizes, and they performed the same functions. Typically, a bank branch is composed of a branch manager, one or two internal auditors (depending on branch size) and a small number of administrative personnel who perform administrative and teller tasks. Our bank met the criteria established by Kozlowski and Bell (2003) about what defines a work team. First, members of each branch perform organizationally relevant tasks and share common goals and work processes. Second, the functional relationships among branch members and their nearness promote team members' social interaction. Third, branch members exhibit task interdependence. Team members must coordinate with each other to carry out their tasks. Finally, they are embedded in a larger organizational context (the savings bank), which establishes boundaries and influences their exchanges with other units within and outside the entity.

Personnel managers from the three banks were contacted by the researchers and asked for their collaboration on the study. Once they agreed to collaborate, the personnel managers informed the branch managers that a study on team climate carried out by a university research team was going to take place in their organization, and they were asked to collaborate in the data gathering phase. Once branch managers had been informed about the investigation, a group of trained questionnaire administrators hired by the research team contacted every branch manager involved, in order to arrange for the administration of questionnaires in his/her branch. Generally, participants filled out the questionnaires during collective administration sessions held in their own bank branch during working hours. In every collective administration session, a questionnaire administrator explained how to fill out the questionnaires and guaranteed confidentiality and anonymity of responses. When a branch member could not participate in a collective session, the set of questionnaires was personally delivered to him or her and collected a few days later by the corresponding questionnaire administrator.

Once data were gathered, we used Box's *M* test to test whether data gathered from the three savings banks could be combined and analysed together. Box's *M* statistic tests the null hypothesis that the covariance matrix among the study variables is equal across the groups involved. According to the results we obtained ( $M = 107.95$ ,  $p > .05$ ), this null hypothesis could not be rejected. Therefore, data gathered from the three savings banks were combined and analysed together.



Data were gathered at two points in time separated by six months. At Time 1 (May 2002), 193 teams with 1088 members were contacted. Team managers were not included in the study sample. The response rate was 95.1%. Mean team size was 5.64 ( $SD = 1.83$ ), and the range was between 2 and 14 members, without counting the team manager. Team size was based on the actual number of team members. Fifty-four per cent were male. Regarding age, 41% were between 25 and 35 years of age. Forty-six per cent had a university degree. At Time 2 (November 2002), 190 out of the original 193 teams agreed to participate further. Nine hundred fifty four of the 1088 team members responded to the questionnaires, which represented a response rate of 87.7%. Mean team size was 5.63 ( $SD = 1.97$ ), and the range was between 2 and 14 members. Fifty-five per cent of the respondents were men. Forty per cent were between 25 and 35 years of age. Regarding academic level, 41.5% had at least a university degree. In order to guarantee that the composition of the teams did not vary much between Time 1 and Time 2, we also disregarded teams with a stability rate lower than 50%. The stability rate was computed as the rate of common subjects between Time 1 and Time 2. The average stability rate among teams was 86.5% between the two data collection periods. In addition, teams that had fewer than three members at Time 1 or Time 2 were eliminated. Finally, the longitudinal sample composed of 156 teams (724 respondents at Time 1 and 686 at Time 2). Average team size was 5.88 ( $SD = 1.77$ ) at Time 1 and 5.83 ( $SD = 1.89$ ) at Time 2, and the range was between 4 and 14 team members at both times. Regarding team tenure, 54% of the team members at Time 1 and 63% at Time 2 had been in their teams between 3 and 5 years.

## Measures

### Affective climate

Team members' affective job responses were measured by the Affective Well-being Scale constructed by Segura and González-Romá (2003). The scale measures two affective dimensions, tension-calmness and enthusiasm-depression. The items were preceded by the following request 'Please, indicate to what degree your job has made you feel like each of the adjectives listed below in the past few weeks'. Respondents answered using a five-point scale (1. *Not at all*, 5. *Very much*). The tension-calmness dimension was assessed through the adjectives tense, jittery, anxious, calm, tranquil and relaxed. Responses to the last three items were reverse-scored, so that high scores indicated tension. The enthusiasm-depression dimension was tapped by cheerful, enthusiastic, optimistic, pessimistic, gloomy and discouraged. The last three items were again reverse-scored, so that high scores indicated enthusiasm.

In order to meaningfully aggregate individual responses to the team level, sufficient agreement within groups had to be demonstrated. Prior to aggregating, first we assessed within-team agreement in the two affective dimensions by means of the Average Deviation index ( $AD_{Mad}$ ),  $AD$  henceforth) (see Burke & Dunlap, 2002; Burke, Finkelstein, & Dusig, 1999; Dunlap, Burke, & Smith-Crowe, 2003). Then, we estimated the relative consistency of responses among team members by computing the intra-class correlation coefficient ICC(1) (Bliese, 2000). Finally, we estimated the reliability of the aggregate scores by means of the ICC(2) (Bliese, 2000).

The  $AD$  index is based on the calculation of the average absolute deviation for each scale item. This index has several advantages when compared with the inter-rater agreement index ( $r_{wg}$ ), developed by James, Demaree, and Wolf (1984). First, it is not necessary to model the random or null response distribution. The  $AD$  index only requires an *a priori* specification of a null response range of inter-rater agreement. Second, the  $AD$

index provides estimates of inter-rater agreement in the metric of the original response scale. Finally, Burke and Dunlap (2002) derived, and *justified*, a practical upper-limit criterion of  $c/6$  (where  $c$  is the number of response categories in the response scale) for interpreting  $AD$  values. In spite of these differences between the  $AD$  and the  $r_{wg}$  indices, for Likert-type response scales with five options Burke *et al.* (1999) obtained correlations between the  $AD$  and the  $r_{wg}$  that ranged between  $-.90$  and  $-.92$ .

To interpret the  $AD$  values, we followed Burke and Dunlap's (2002) criterion of  $AD < c/6$  (see Burke & Dunlap, 2002, for its justification). In the present case,  $c = 5$  and  $c/6 = .83$ . Notice that the  $AD$  index shows its highest value when the group considered is polarized. Under these circumstances, and when  $c = 5$ , the maximum  $AD$  value equals 2. At Time 1, the average  $AD$  values obtained for the enthusiasm-depression and tension-calmness scales were  $.58$  ( $SD = 0.23$ ) and  $.60$  ( $SD = 0.20$ ), respectively. At Time 2, the average  $AD$  values were  $.55$  ( $SD = 0.24$ ) and  $.58$  ( $SD = 0.20$ ), respectively. These values were below the upper-limit criterion of  $.83$ . Therefore, we concluded that the level of within-team agreement in our sample of work teams was sufficient to aggregate team members' affect scores.

The ICC(1) values obtained at Time 1 were  $.19$  for enthusiasm-depression and  $.27$  for tension-calmness. The ICC(1) values obtained at Time 2 were  $.19$  and  $.17$ , respectively. These values are similar to, or even greater than, those obtained by other researchers. For example, Bliese (2000) reported that, using U.S. Army data from numerous deployment and garrison environments, ICC(1) values of between  $.05$  and  $.20$  were obtained. Therefore, we concluded that the level of consistency of responses among team members across the affect scales was adequate. The ICC(1) can also be interpreted as the proportion of total variance that can be explained by team membership. For instance, at Time 1 the proportion of variance in individual scores on enthusiasm-depression that is related to team membership equals  $.19$ .

The ICC(2) values obtained at Time 1 were  $.52$  for enthusiasm-depression and  $.64$  for tension-calmness. The ICC(2) values obtained at Time 2 were  $.51$  and  $.50$ , respectively. These values are moderate but higher than those obtained by other researchers (e.g. Schneider, Salvaggio & Subirats, 2002; Schneider, White, & Paul, 1998), and they indicate that the team means were reliable enough.

We also carried out a one-way analysis of variance (ANOVA) to ascertain whether there was statistically significant between-team discrimination on the two affect scales. The observed  $F$  values were statistically significant at Time 1 (tension-calmness:  $F(155, 567) = 2.75, p < .01$  and enthusiasm-depression:  $F(155, 567) = 2.11, p < .01$ ) and at Time 2 (tension-calmness:  $F(155, 527) = 1.99, p < .01$  and enthusiasm-depression:  $F(155, 529) = 2.05, p < .01$ ). These results show adequate between-teams discrimination on average affect scores, and they support the validity of the aggregate affective climate measures (Chan, 1998).

Internal consistency reliability was estimated at the team level. As Sirotnik (1980) has pointed out, when using aggregate variables, one should investigate the measurement properties of these variables at the aggregate level. Cronbach's  $\alpha$ -coefficients were  $.94$  and  $.93$  for tension-calmness, at Time 1 and Time 2, respectively, and  $.95$  for enthusiasm-depression, at both points in time.

#### *Task conflict*

Task conflict in work teams was measured by means of six items. Three items were taken from Shah and Jehn's (1993) scale: 'How frequently do members of your work

team disagree about who should do what?', 'How frequently do members of your work team disagree about the way to complete a team task?' and 'How frequently are there conflicts about the delegation of tasks within your work team?'. One item was selected from Jehn's (1995) scale ('How frequently do people in your work team disagree about opinions?'), and the other two were elaborated by the authors ('How frequently are there conflicts because of different points of view about work content in your work team?', 'How frequently do members of your work team disagree about the tasks that your team has to carry out?'). Items were responded using a five-point Likert response scale (1. *Never*, 5. *Quite frequently*). To test our hypotheses, we had to aggregate work team members' scores on the Task Conflict Scale at the team level.

The average *AD* values for task conflict were .40 (*SD* = 0.21) at Time 1 and .39 (*SD* = 0.18) at Time 2. These values are below upper-limit criterion of .83 established by Burke and Dunlap (2002) for the five-point Likert-type scale used in this study. Thus, we concluded that team members' scores on this scale showed a sufficient level of within-team agreement for aggregation at the team level. The ICC(1) values obtained for this scale were .28 at Time 1 and .30 at Time 2. Therefore, we concluded that the level of consistency of responses among team members on this scale was adequate. The ICC(2) values obtained for the task conflict scale were .64 at Time 1 and .66 at Time 2. These values indicated that the team means were reliable enough. Finally, the one-way ANOVA results obtained at both times ( $F(155, 568) = 2.80, p < .01$  at Time 1;  $F(155, 530) = 2.91, p < .01$  at Time 2) indicated an adequate between-team differentiation in average task conflict, and they supported the validity of this measure. The  $\alpha$ -coefficients were .94 at Time 1 and .95 at Time 2.

#### *Relationship conflict*

Relationship conflict was measured with four items, adapted from Jehn's (1995) Intragroup Conflict Scale. Examples of the four items are the following: 'How frequently are there personal conflicts in your work team?', 'How frequently are personality conflicts evident in your work team?' This scale was responded using a five-point Likert response scale (1. *Never*, 5. *Quite frequently*). To test the hypotheses of the study, we had to aggregate team members' scores on the relationship conflict scale at the work team level. Thus, within-team agreement had to be demonstrated. The average *AD* values for relationship conflict were .43 (*SD* = 0.26) at Time 1 and .41 (*SD* = 0.25) at Time 2. These values are below the upper-limit criterion of .83 established by Burke and Dunlap (2002) for the five-point Likert-type scale used in this study. We concluded that team members' scores on this scale could be aggregated at the team level. The ICC(1) for this scale showed the following values: .32 at Time 1 and .28 at Time 2. Therefore, the level of consistency of responses among team members on this scale was adequate. The ICC(2) values obtained for the relationship conflict scale were .69 at Time 1 and .63 at Time 2. These values indicated that the team means were reliable enough. Finally, the one-way ANOVA results indicated an adequate level of between-team differentiation at both times ( $F(155, 568) = 3.21, p < .01$  at Time 1;  $F(155, 530) = 2.71, p < .01$  at Time 2), supporting the validity of this aggregate measure. The  $\alpha$ -coefficients were .94 at Time 1 and .95 at Time 2.

Given the high correlations between task and relationship conflict at both Time 1 and Time 2 ( $r = .78, p < .01$  at Time 1 and  $r = .81, p < .01$  at Time 2), we conducted a confirmatory factor analysis to ascertain whether the team conflict items measured two discriminable correlated factors (see Table 1). The analysis was conducted separately for

Time 1 and Time 2. The item covariance matrix was the input matrix, and the model parameters were estimated by means of maximum likelihood methods. Considering that the item distributions departed from normality, we computed the chi-squared fit statistic corrected for non-normality. In order to assess model fit, we computed an absolute measure of fit (the Standardized Root Mean Square Residual, SRMR) and a relative one (the Non-Normed Fit Index, NNFI). The hypothesized two-factor model showed an acceptable fit to data both at Time 1 ( $\chi^2 = 95.7$ ,  $df = 34$ ,  $p < .01$ ;  $SRMR = .05$ ;  $NNFI = .93$ ) and at Time 2 ( $\chi^2 = 96.4$ ,  $df = 34$ ,  $p < .01$ ;  $SRMR = .04$ ;  $NNFI = .94$ ). We compared the fit of the two-factor model with the fit of an alternative one-factor model that posited that the two conflict factors were not discriminable. The fit of the one-factor model was not adequate at Time 1 ( $\chi^2 = 111.7$ ,  $df = 35$ ,  $p < .01$ ;  $SRMR = .08$ ;  $NNFI = .86$ ) or at Time 2 ( $\chi^2 = 135.3$ ,  $df = 35$ ,  $p < .01$ ;  $SRMR = .06$ ;  $NNFI = .88$ ). The difference between the chi-squared statistics of the two models at both times was statistically significant (Time 1:  $\Delta\chi^2 = 16$ ,  $df = 1$ ,  $p < .01$ ; Time 2:  $\Delta\chi^2 = 38.9$ ,  $df = 1$ ,  $p < .01$ ), providing support for the two-factor model. These results confirmed that the team conflict items measured two discriminable, but correlated, factors.

#### *Teams members' interaction*

This variable was measured at Time 1 by means of a 7-item scale whose items asked team members to describe how frequently they talked about the work-unit's goals, work planning and functioning with the members of their team (e.g. 'How often do you talk about your team's goals with your teammates?'). Team members answered using a 5-point scale (1. Never, 5. Quite frequently). The average *AD* value was .58 ( $SD = 0.17$ ). These values are below the upper-limit criterion of .83 established by Burke and Dunlap (2002) for the 5-point Likert-type scale used in this study. Therefore, we concluded that team members' scores on this scale could be aggregated at the team level. The ICC(1) for this scale was .14, and the ICC(2) equals .43. Finally, the one-way ANOVA results indicated an adequate level of between-team differentiation ( $F(155, 567) = 1.74$ ,  $p < .01$ ), supporting the validity of this aggregate measure. Cronbach's  $\alpha$  was .88.

#### *Control variables*

Team size and team tenure at Time 1 were control variables in this study because the literature has shown that they may influence team members' affective reactions and intragroup conflict (George, 1996; Gladstein, 1984; Jehn, 1995; Kelly, 2003). We measured these control variables by asking team managers 'How many people are members of the team that you manage?' (team size) and 'How long have your current team members been working together in this team?' (team tenure).

#### **Analysis**

The mediator role of relationship conflict on the relationship between task conflict and affective climate (Hypotheses 1 and 2) was tested by means of hierarchical regression analysis following Baron and Kenny's (1986) procedure. First, the mediator variable (relationship conflict) was regressed on the predictor variable (task conflict). Second, the dependent variable (affective climate) was regressed on the predictor variable. Finally, the dependent variable was regressed on the predictor and the mediator variables. A series of regression analyses was run for each dimension of affective climate

**Table 1.** Factor loading estimates yielded by the confirmatory factor analysis of conflict items

Items	Time 1		Time 2	
	Factor 1	Factor 2	Factor 1	Factor 2
<b>Task conflict</b>				
How often do people on your team disagree about opinions?	.74		.77	
How often do members of your team disagree about the content of the work?	.83		.89	
How often do members of your team disagree about what tasks should be performed?	.84		.86	
How often do members of your team disagree about who should do what?	.88		.85	
How frequently do members of your team disagree about the way to complete a group task?	.88		.89	
How much conflict is there about the delegation of tasks within your team?	.90		.91	
<b>Relationship conflict</b>				
How much friction is there among members of your team?		.93		.94
How much are personality conflicts evident on your team?		.94		.95
How much tension is there among members of your team?		.86		.86
How much emotional conflict is there among members of your team?		.90		.90

Note. All factor loading estimates are statistically significant ( $p < .01$ ).

as the outcome variable (enthusiasm–depression climate and calmness–tension climate). Mediation is demonstrated when the following requirements are met: (1) the predictor variable is related to the mediator in the first regression equation; (2) the predictor variable is related to the dependent variable in the second regression equation; (3) the mediator is related to the dependent variable in the third regression equation; and (4) the relationship between the predictor variable and the dependent variable is weaker in the third regression equation than in the second one. If this relationship becomes non-significant in the third regression equation, then mediation is full or complete; if the predictor variable–dependent variable relationship in the third regression equation is still statistically significant, but significantly lower than the same relationship in the second regression equation, then mediation is only partial. In order to capture the dynamic processes involved in the study hypotheses, in the regression analyses we used task conflict (the predictor variable) at Time 1, and relationship conflict (the mediator variable) and the affective climate variables (the dependent variables) at Time 2.

The moderator role of team members' interaction on the relationship between the two types of conflict (Hypothesis 3) was estimated by a series of hierarchical multiple regression analyses (Cohen & Cohen, 1983). The independent and moderator variables and the interaction term were entered into the regression equation in four successive steps. In Step 1, the control variables (team size and team tenure) were entered as a set. In Steps 2 and 3, the independent (task conflict at Time 1) and moderator variables (team members' interaction at Time 1) were successively entered

into the regression equation. Finally, in Step 4, the interaction term was entered into the equation.

To prevent the problems associated with multicollinearity, all the variables were standardized (Sivasubramaniam, Murry, Avolio, & Jung, 2002). When evaluating the significance of the expected relationships, we used one-tailed tests, which are suitable for directional hypotheses (Erickson & Nosanchuk, 1977; Wonnacott & Wonnacott, 1984).

## Results

Means, standard deviations, correlations and reliability estimates at both measurement times are provided in Table 2. Task conflict and relationship conflict correlated negatively with enthusiasm climate and positively with tension climate at the work team level. This was observed at Time 1, at Time 2, and in the cross-lagged correlations. Because some of the correlations among the study variables were substantial (i.e. greater than .50), we assessed multicollinearity in our data. We examined the tolerance index and the variance inflation factor (VIF) of each predictor in the regression models. All the tolerance values were equal to or greater than .45, and the FIV values were less than 3 (Guo, Chumlea, & Cockram, 1996; Pelled, Eisenhardt, & Xin, 1999). These results indicated that multicollinearity was not a serious problem.

Regarding the Hypotheses 1 and 2, the results obtained when relationship conflict at Time 2 was regressed on task conflict at Time 1 showed that task conflict at Time 1 significantly predicted relationship conflict at Time 2, once team tenure, team size and relationship conflict at Time 1 were controlled for (see Table 4, Step 3,  $\beta = 0.33$ ,  $p < .01$ ).

When tension climate at Time 2 was regressed on task conflict at Time 1, the latter was positively related to the former (see Table 3, Step 3,  $\beta = 0.13$ ,  $p < .05$ ), once team tenure, team size and tension climate at Time 1 were controlled for. When relationship conflict at Time 2 was entered into the regression equation, it showed a significant relationship with tension climate at Time 2 (see Table 3, Step 4,  $\beta = 0.31$ ,  $p < .01$ ), and the relationship between task conflict at Time 1 and tension climate at Time 2 became non-significant (see Table 3, Step 4,  $\beta = -0.07$ , *ns*). These results showed that when shared tension was the dependent variable, relationship conflict fully mediated the relationship between task conflict and tension climate. Consequently, we concluded that Hypothesis 1 was supported.

When teams' enthusiasm climate was regressed on task conflict at Time 1, the latter variable showed a significant relationship with the former (see Table 3, Step 3,  $\beta = -0.17$ ,  $p < .05$ ). When relationship conflict at Time 2 was entered into the regression equation, it showed a significant relationship with enthusiasm climate at Time 2 (see Table 3, Step 4,  $\beta = -0.37$ ,  $p < .01$ ), and the relationship between task conflict at Time 1 and enthusiasm climate at Time 2 became non-significant (see Table 3, Step 4,  $\beta = 0.06$ , *ns*). These results revealed that when shared enthusiasm was the dependent variable, relationship conflict fully mediated the relationship between task conflict and enthusiasm climate. Therefore, we concluded that Hypothesis 2 was supported.

To rule out the possibility that task conflict was the mediator between relationship conflict and affective climate, task conflict at Time 2 was regressed on relationship conflict at Time 1. The results obtained showed that the relationship between the latter variable and the former was non-significant ( $\beta = 0.08$ , *ns*). This result ruled out the

**Table 2.** Descriptive statistics, correlations and Cronbach's  $\alpha$ -coefficients for the team-level study variables

	M	SD	1	2	3	4	5	6	7	8	9
Time 1											
1. Task conflict	2.22	.48	.89								
2. Relationship conflict	1.77	.55	.78**	.89							
3. Tension climate	3.32	.59	.38**	.41**	.90						
4. Enthusiasm climate	3.61	.54	-.59**	-.63**	-.59**	.92					
5. Team members' interaction	3.44	.44	-.18*	-.29**	-.20*	-.40**	.88				
Time 2											
6. Task conflict	2.22	.48	.70**	.60**	.18*	-.46**	-.16*	.92			
7. Relationship conflict	1.79	.55	.69**	.72**	.22**	-.44**	-.20*	.81**	.91		
8. Tension climate	3.18	.53	.32**	.34**	.63**	-.46**	-.15	.36**	.35**	.90	
9. Enthusiasm climate	3.62	.54	-.53**	-.59**	-.37**	.69**	.26**	-.59**	-.57**	-.56**	.92

Note. \* $p < .05$ ; \*\* $p < .01$ ; one-tailed. Numbers in the diagonal are Cronbach's  $\alpha$ -coefficients.

**Table 3.** Hierarchical regression analysis results with relationship conflict as the mediator variable

Predictors	Step 1	Step 2	Step 3	Step 4
<b>Tension climate</b>				
Team tenure T1	.01	-.03	-.03	-.06
Team size T1	.18*	.06	.05	.03
Tension climate T1		.63**	.58**	.60**
Task conflict T1			.13*	.07
Relationship conflict T2				.31**
R <sup>2</sup>	.03	.42**	.43**	.48**
ΔR <sup>2</sup>		.38**	.01*	.05**
<b>Enthusiasm climate</b>				
Team tenure T1	-.01	.03	.04	.07
Team size T1	-.16*	-.07	-.06	-.04
Enthusiasm climate T1		.68**	.59**	.58**
Task conflict T1			-.17*	.06
Relationship conflict T2				-.37**
R <sup>2</sup>	.02	.48**	.50**	.57**
ΔR <sup>2</sup>		.46**	.02*	.08**

Note. All the regression coefficients reported in the table are standardized regression coefficients. \* $p < .05$ ; \*\* $p < .01$ ; one-tailed.

possibility that task conflict was the mediator and relationship conflict the predictor variable<sup>2</sup>.

The results of the hierarchical regression analysis carried out to test the moderator effect of team members' interaction on the relationship between task conflict and relationship conflict (Hypothesis 3) showed that the regression coefficient for the interaction term was statistically significant (see Table 4, Step 5,  $\beta = -0.12$ ,  $p < .05$ ). Moreover, the interaction term accounted for a significant proportion of the explained variance.

To interpret the interaction, we examined its functional form following the procedure described by Schoonhoven (1981) (see also Pelled *et al.*, 1999). This procedure is appropriate for interactions involving two continuous variables and it avoids the loss of information associated with median split procedures. The procedure involves two steps. First, we took a partial derivative to determine whether the moderated relationship was monotonic or non-monotonic (see Schoonhoven, 1981, pp. 376-377). This means ascertaining whether the investigated relationship changes its

<sup>2</sup> One of the reviewers raised the issue that the fact that our measure of relationship conflict was obtained at Time 2 could have favoured the concurrent relationship between relationship conflict and affective team climate in the regression analyses. The choice of relationship conflict at Time 2 in the mediation analyses, instead of the same measure at Time 1, was based on a number of theoretical arguments and empirical evidence (presented in the introduction section) congruent with the idea that task conflict leads to relationship conflict over time, and that relationship conflict, rather than task conflict, is the type of conflict that is directly related to shared affect. According to this rationale, relational conflict is closer in time to affective responses than task conflict is. Thus, the use of task conflict at Time 1 and relational conflict at Time 2 in the prediction of affective climate at Time 2 was congruent with this rationale. Moreover, we found that the sequential order between the two types of conflict is as follows: task conflict  $\rightarrow$  relationship conflict. Thus, it seemed reasonable to maintain the time order between both types of conflict in the regression analyses. Notwithstanding, we reran the regression analyses conducted to test the mediation hypothesis using the Time 1 measures of both types of conflict. The results obtained showed that (full) mediation was supported in the case of enthusiasm climate, but not in the case of tension climate. These results are available on request from the authors.

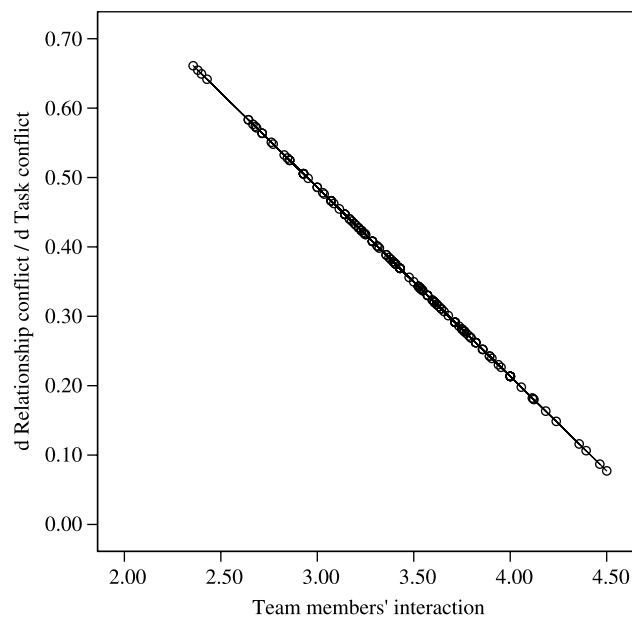


**Table 4.** Results of the moderator hierarchical regression analysis with relationship conflict at Time 2 as the dependent variable, and team members' interaction as the moderator

Predictors	Step 1	Step 2	Step 3	Step 4	Step 5
Team tenure T1	.16*	.06	.04	.04	.05
Team size T1	.13	.06	.04	.05	.06
Relationship conflict T1		.67**	.41**	.38**	.33**
Task conflict T1			.33**	.33**	.35**
TMI T1				-.01	.01
Task conflict T1 × TMI					-.12*
R <sup>2</sup>	.05*	.47**	.51**	.51**	.53**
ΔR <sup>2</sup>		.42**	.04**	.00	.02*

Note. \* $p < .05$ ; \*\* $p < .01$ ; one-tailed. TMI: Team members' interaction at Time 1. All the regression coefficients reported in the table are standardized regression coefficients.

sign over the range of the moderator variable. If the sign changes, then the moderated relationship is non-monotonic, whereas if it does not change, then the moderated relationship is monotonic. Second, we plotted the partial derivative (i.e. the relationship between the dependent variable and the predictor; Y axis) over the range of the moderator variable (X axis). This plot showed how the relationship between relationship conflict at Time 2 and task conflict at Time 1 (Y axis) changed over the range of team members' interaction at Time 1 (X axis) (see Figure 2).



Note. Y axis: partial derivative: relationship between the dependent variable and the predictor. X axis: moderator variable.

**Figure 2.** Moderating effect of team members' interaction on the relationship between task and relationship conflict.

The results of this analysis revealed that the relationship between task conflict and relationship conflict was monotonic over the range of team members' interaction observed in the study sample (i.e. the relationship between the two types of conflict did not change its (positive) sign over the range of the moderator variable). Figure 2 shows that the aforementioned relationship was stronger for low levels of team member interaction than for high levels of team member interaction. Therefore, Hypothesis 3 was supported.

## Discussion

To date, research on the relationship between team conflict and shared affect in teams has been scarce, and there is a lack of clarity about the roles played by task and relationship conflict. Some authors have proposed and shown that, at the individual level of analysis, relationship conflict mediates the relationship between task conflict and employees' affective reactions. In the present study, we tested this mediation hypothesis at the team level of analysis. Furthermore, considering that research on the boundary conditions that constrain the relationship between task and relationship conflict has been scarce, we investigated the role of team members' interaction as a potential mediator of that relationship.

The results obtained in this study clearly supported the mediation hypotheses (Hypothesis 1 and 2), so that relationship conflict fully mediates the relationship between task conflict and teams' affective climate. This result is coherent with other studies carried out at the individual level. These studies supported the mediator role of relationship conflict in the relationship between task conflict and stress (Friedman *et al.*, 2000), employee satisfaction, psychological well-being and job tension (Medina *et al.*, 2005). Taken together, the results found both at the individual and team levels of analysis suggest a multi-level homologous model of the relationships between both types of conflict and affective responses, which should be tested in future studies.

As we mentioned before, the results reported by previous research carried out at the individual level on the influence of task conflict on employees' affective responses are contradictory. One contribution of our study is that it sheds light on this issue, but at the team level of analysis. Our results clearly show that team task conflict is not directly related to affective climate; this relationship is fully mediated by relationship conflict. Another contribution of our study is that it shows that the two types of conflict are not reciprocally related. The analysis of our longitudinal data clearly showed that task conflict is an antecedent of relationship conflict. This finding is congruent with the idea that task conflict triggers relationship conflict through a process of biased information processing (Amason, 1996; Amason & Sapienza, 1997; Eisenhardt & Bourgeois, 1988; Jehn, 1997).

Our results also support the moderating role of team members' interaction about team issues in the relationships between the two types of intra-team conflict, and they show that team members' interaction weakens this relationship (Hypothesis 3). These findings support the idea that in teams in which there is a high level of interaction among team members about team issues, task-related disagreements can be constructively handled, and the differing perspectives that team members may have can be clarified. These processes keep task conflict from escalating into relationship conflict. Likewise, our results point in the same direction as Yang and Mossholder's (2004) proposal, supporting the idea that the presence of positive interactions within the team would decrease the relationship between task and relationship conflict.

Our results show the key role that contextual factors play in the relationship between task and relationship conflict. Previous research has highlighted the role of other relevant contextual factors. Simons and Peterson (2000) showed that the likelihood that task conflict will become relationship conflict is diminished when there is trust among group members. Amason and Sapienza (1997) showed that open discussion among team members will seldom lead to relationship conflict when participants are oriented cooperatively. Future research should pay attention to other contextual factors, so that we can improve our understanding of the links between the two types of intra-team conflict.

The results of our study have several practical implications. In a certain sense, task conflict is an unavoidable experience in work teams. Nowadays, many existing teams are composed of diverse members in terms of sex, age, race, functional background and education. This diversity fosters differing views on team matters, which may develop into task conflict. Team managers have the responsibility of managing task conflict in a functional way, so that it does not evolve into relationship conflict. Therefore, they will have to pay special attention to those events or situations that make task conflict degenerate into relationship conflict. For instance, unfair distribution of power and rewards in teams could cause envy among team members. Likewise, developing competitive environments, where conflict can be interpreted as an attempt to gain influence at the expense of others, or situations where there is the potential for great personal gain or loss, should be avoided (Amason & Schweiger, 1997; Janssen *et al.*, 1999). On the other hand, team managers must develop open-minded environments where feedback and criticism can be produced in a positive way. As several authors have pointed out (Jehn & Mannix, 2001; Simons & Peterson, 2000), developing high levels of respect, cohesiveness and trust among team members can also contribute to keeping members from interpreting and experiencing task conflict personally. Helping team members to take up a problem-solving stance may contribute to showing an interest in others' positions and working through their differences (Van de Vliert, Nauta, Giebels, & Janssen, 1999).

Specifically, our results suggest that team managers should consider promoting interaction among team members as a way of openly discussing team issues. In this way, they could prevent task conflict from evolving into relationship conflict. Besides, providing training in interpersonal communication could help team members to frame task disagreements as challenges to the whole team rather than to specific individuals (Lovelace *et al.*, 2001).

Our study has a number of limitations. First, as the respondents assessed the independent and criterion variables themselves, common method variance might be an alternative explanation for the results. However, there are some arguments against this potential limitation. Spector (1987) has shown that studies using properly developed, standardized instruments are resistant to method variance. Further, both task conflict and relationship conflict were differentially related to both affective climate facets. These results would be unlikely to occur as a consequence of common method effects (Friedman *et al.*, 2000). Second, the sample of teams used in the present study is relatively homogeneous. It only includes bank branches. This restricts the generalizability of our results. However, taken together with previous findings, they show that affective team climates are a general phenomenon observed in different types of teams, including teams composed of top managers (Barsade *et al.*, 2000), salespeople (George, 1990), clinical doctors (Friedman *et al.*, 2000), hotel employees (Medina *et al.*, 2005) and bank employees. Finally, due to the non-experimental nature of our study, we cannot infer causal relationships among the study variables. However, the two-wave

panel design used here allows us to be more confident about the plausibility of the hypothesized causal sequence than if we had used a cross-sectional design.

In conclusion, the study of affect as a collective phenomenon in work teams is relatively recent. Our study contributes to the literature on the topic by showing that the influence of team task conflict on teams' affective climate is mediated by team relationship conflict. We have also shown that interaction among team members is a boundary condition of the link between task and relationship conflict.

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