

COWORKERS' RELATIONSHIP QUALITY AND INTERPERSONAL EMOTIONS IN TEAM-MEMBER DYADS IN CHINA: THE MODERATING ROLE OF COOPERATIVE TEAM GOALS

ABSTRACT

This study investigated the origins of discrete interpersonal emotions in team-member dyads using two independent samples from an education institute and a telecommunication services company in China. Results across both studies showed that the quality of team members' dyadic relationships positively relates to interpersonal admiration, sympathy, and envy, and negatively relates to interpersonal contempt. Furthermore, teams' cooperative goals moderate these dyad-level linkages. The association of relationship quality with interpersonal emotions is particularly pronounced in teams with less cooperative goals but buffered in teams with more cooperative goals. Finally, on the individual level of analysis, envy and contempt are inversely associated with team members' work performance, objectively measured. These findings provide new insights about key antecedents and crucial moderators in the development of interpersonal emotions in Chinese work teams and reiterate the relevance of these emotions for tangible performance outcomes.

KEYWORDS

cooperative team goals, emotions in organizations, relationship quality, work teams

Running title: Interpersonal Emotions

INTRODUCTION

Organizations and work teams abound with emotions, and these emotions can influence key performance outcomes (Ashkanasy, 2003; Cole, Walter, & Bruch, 2008; Li, Ahlstrom, & Ashkanasy, 2010). Contemporary research has defined emotions as complex, multifaceted states that reflect intense affective experiences directed toward a clearly specified target (Frijda, 1993). In work teams, for example, a member may experience specific emotions toward teammate A that differ from the emotions toward teammate B. Research has demonstrated that such *interpersonal emotions* critically shape members' interaction and cooperation (Cuddy, Fiske, & Glick, 2007; Roseman, 2001). Individuals' affective attachment to their coworkers therefore represents a key driving force of their performance outcomes (Seers, Petty, & Cashman, 1995; Tse, Lam, Lawrence, & Huang, 2013).

The extant literature provides little knowledge about the dyadic and group-based sources of interpersonal emotions within work teams. Previous research has mainly examined individual characteristics (e.g., personality traits, emotional abilities, and psychological states) as antecedents of interpersonal emotions in work teams (Lourdes & Extremera, 2014), ignoring interpersonal factors. Importantly, however, interpersonal emotions between teammates originate – by definition – within the dyadic relationship between an individual and a specific coworker (Berscheid & Ammazalorso, 2001; Elfenbein, 2008), and this dyadic relationship, in turn, is embedded within the context of the team as a whole (Lam, Van der Vegt, Walter, & Huang, 2011; Lawler & Thye, 2006). Consequently, dyadic and team-level features should be vital elements in the development of interpersonal emotions.

The few studies addressing this issue have typically used an episodic approach, for example focusing on interpersonal conflicts (Spector, 1998) or injustice experiences (Weiss, Suckow, & Cropanzano, 1999) that arouse interpersonal emotional reactions. It is not just specific interaction episodes, however, that determine how people respond emotionally toward each other. Scholars have noted that an emotion-eliciting stimulus ‘can also be a stable feature of the work environment’ (Elfenbein, 2007: 320). More specifically, the affect theory of social exchange suggests that dyadic relations are a crucial setting in which discrete interpersonal emotions ‘happen to people’ (Lawler & Thye, 2006: 301; see also Lawler, 2001). Dyadic work relations, in particular, involve social exchanges between employees that reflect the quality of the actor-partner relationship (for example, based on a sense of trust and reciprocity within the dyad), with tangible consequences for individuals’ behavioral and affective reactions (Shore, Coyle-Shapiro, Chen, & Tetrick, 2009).

Thus, we draw on the affect theory of social exchange to examine the quality of a team member’s dyadic relations (i.e., the extent to which an actor perceives the relationship with a specific coworker as mutually trusting, supportive, and based on reciprocity; Blau, 1964; Settoon & Mossholder, 2002) that can shape a member’s emotions toward a teammate. In particular, we focus on two types of interpersonal emotions: contacting emotions (e.g., admiration and sympathy) and distancing emotions (e.g., envy and contempt), reflecting how individuals are either drawn closer to or pushed away from their coworkers during on-going workplace interactions (Melwani & Barsade, 2011; Menon & Thompson, 2010; Roseman, 2001).

Consistent with other recent emotion theories (e.g., Elfenbein, 2007; Manstead & Fischer, 2001), the affect theory of social exchange further emphasizes that dyadic relationship quality, by itself, is not sufficient to fully explicate an individual’s emotional reactions toward others (Lawler, 2001). Relational exchange processes are typically embedded within a larger social context, and characteristics of this context may shape the emotional meaning and significance of a specific

interpersonal relation (Lawler & Thye, 2006). In work teams, for example, the way team goals are structured is an important factor that influences members' interactions and reactions toward each other (Tjosvold, 1988). In particular, we focus on the role of cooperative team goals, defined as an emergent team-level construct that reflects members' shared belief that their goal achievements are interdependent (such that one team member can only reach his or her individual goals when others achieve theirs as well; Deutsch, 1949; Johnson & Johnson, 1989; Wong, Tjosvold, Yu, 2005).

Research has shown that cooperative team goals may set strong norms for cooperation and harmony within the team as a whole (Tjosvold, Yu, & Hui, 2004) and, thus, may override the salience of relationship quality within a single dyad inside the team (Lam et al., 2011). Accordingly, we cast cooperative team goals as a contextual, cross-level moderator that shapes the role of dyadic relationship quality for interpersonal emotions in team-member dyads.

We examine these ideas across two independent studies conducted in China. Study 1 uses a time-lagged sample of undergraduate students working in project teams, whereas Study 2 employs cross-sectional data from company work teams. Study 2 also investigates the role of interpersonal emotions for employees' objective work performance, highlighting the practical relevance of understanding the development of such emotions.

Taken together, the present research aims to contribute to the literature on emotions in organizations in several ways. First, we offer new insights into the origins of team members' interpersonal emotions, focusing on dyadic relationship quality as a key emotion trigger that prior work has largely overlooked. With team-based structures permeating modern organizations and direct, dyadic member relations representing a key feature of teamwork (Kozlowski & Ilgen, 2006), such relational aspects are critical to fully understand the development of interpersonal emotions in today's workplace. Second, this study addresses scholars' repeated calls for a greater contextualization of emotion research (e.g., Elfenbein, 2007; Gooty, Gavin, & Ashkanasy, 2009)

by investigating cooperative team goals as a moderator. Integrating dyadic (relationship quality) and structural (cooperative team goals) sources of interpersonal emotions in work teams, we offer a novel, more comprehensive approach to understanding how specific interpersonal emotions emerge within team member dyads. Finally, given that relational concerns (*guanxi*) are a core element of work and social life in China (Chen, Chen, & Huang, 2013; Leung, 2012; Xin & Pearce, 1996), this research broadens the literature on emotions in Chinese organizations (cf. Li et al., 2010). We would expect that dyadic relationship quality and mutual cooperative interdependence play a particularly salient role in shaping interpersonal emotions in China.

THEORETICAL BACKGROUND AND HYPOTHESES

Dyadic Relationship Quality and Interpersonal Emotions

Interpersonal emotions represent feeling states that are directed toward another individual (Frijda, 1993). This type of feelings has been categorized into ‘contacting’ emotions that bring people closer toward each other and entail feelings of attachment, versus ‘distancing’ emotions that drive people away from each other and entail feelings of distinctiveness and contrast (Melwani & Barsade, 2011; Menon & Thompson, 2010; Roseman, 2001). In this study, we consider two discrete contacting emotions: admiration (i.e., appreciation of the target) and sympathy (i.e., compassion for the target), and two discrete distancing emotions: envy (i.e., having a blind desire for what the target has) and contempt (i.e., devaluing and looking down upon the target; Fischer & Roseman, 2007; Lazarus, 1991). We focus on these specific emotions because previous studies have illustrated them as fundamental reactions toward individuals’ social perceptions (e.g., Cuddy et al., 2007), indicating the possible relevance of dyadic social relations for these feeling states. In addition, these emotions have been associated with important interpersonal and intergroup behaviors (e.g., helping and harming, Cuddy et al., 2007), potentially facilitating or disrupting

members' cooperation with their teammates and, thus, shaping their performance outcomes (Alexander, Brewer, & Hermann, 1999; Weiner, 1986).

The affect theory of social exchange provides a useful framework for understanding the role of dyadic relationship quality for discrete interpersonal emotions (Lawler & Thye, 1999; 2006). On a general level, social exchange theory argues that individuals tend to reciprocate the positive or negative outcomes they receive in dyadic relations (Blau, 1964; Gouldner, 1960). This can refer to tangible resources (e.g., goods or rewards) but also to immaterial aspects (e.g., goodwill and attitudes; Cropanzano & Mitchell, 2005). Specifying this notion, the affect theory of social exchange suggests that dyadic social exchanges can trigger attribution processes that crucially shape an actor's views and evaluations of a dyadic partner (Lawler, 2001; Lawler & Thye, 2006). Eventually, these attributions give rise to discrete interpersonal emotions, such as the ones examined in the present research (Lawler & Thye, 2006; Weiner, 1986).

High-quality relations with a fellow teammate, for example, are based on perceptions of positive, favorable interpersonal exchanges (e.g., a fair, reciprocal distribution of resource investments and outcomes between the interaction partners; Shore et al., 2009), and they are therefore likely to lead a focal team member to process information about the target in favorable ways (Baumeister & Leary, 1995) – triggering perceptions of the target as friendly, sincere (Cuddy et al., 2007), deserving of positive outcomes, and undeserving of negative outcomes (Laham, 2009, Weiner, 1986). More specifically, research has shown that individuals in a high-quality relationship are likely to attribute an interaction partner's successes to internal aspects, such as the partner's hard work, efforts, and abilities (Feather, 1999; Lawler & Thye, 2006). In contrast, individuals are likely to attribute an interaction partner's negative outcomes to external factors beyond the partner's control in high-quality relations, such as bad luck or situational difficulties (Feather, 1999; Laham, 2009; Lazarus, 1991). Importantly, these favorable attributions closely map onto the two

contacting emotions examined in the present research. As Cuddy et al. (2007) noted, admiration is based on the perception that others deserve their positive outcomes, whereas sympathy is based on the perception that a target's negative outcomes are undeserved and beyond the target's control. Consequently, the attributional tendencies described above are likely to guide individuals to more frequently experience interpersonal admiration and sympathy toward the respective target in high-quality relations. Hence, we hypothesize,

Hypothesis 1: In team member dyads, the actor's perceived relationship quality with the target will be positively related to the actor's admiration of the target.

Hypothesis 2: In team member dyads, the actor's perceived relationship quality with the target will be positively related to the actor's sympathy toward the target.

Whereas these hypotheses predict similar associations between dyadic relationship quality and admiration and sympathy as distinct contacting emotions, we expect the role of relationship quality to differ markedly for the two distancing emotions examined in this study (i.e., envy and contempt). In particular, we expect envy to occur more frequently in high- rather than low-quality relations. This prediction may appear counter-intuitive on first glance, as envy is often seen as a negative interpersonal emotion that 'involves coveting another's superior outcome and comprises feelings of injustice and inferiority' (Cuddy et al. 2007: 634). Recent research, however, has depicted envy as more complex and ambiguous (Tai, Narayanan, & Mcallister, 2010). In particular, envying a target's achievements implies that these achievements are favorably recognized and acknowledged (Cuddy et al., 2007). As such, it is clear that envy also comprises positive perceptions and assessments, which as outlined above, are more likely to occur within high-quality interpersonal relations (Mussweiler & Ruter, 2003).

Moreover, scholars have emphasized that envy – by its very nature – is an emotion that results from social comparison processes, such that envy 'follow[s] from workers' comparisons of

desired outcomes relative to those of their coworkers' (Greenberg, Ashton-James, & Ashkanasy, 2007: 33; see also Menon & Thompson, 2010; Vecchio, 2005). A broad body of research suggests that such social comparisons occur more frequently within high-quality social relations (e.g., Marsh, 1987; Mussweiler & Ruter, 2003). Specifically, actors have been shown to perceive other individuals as more salient comparison targets to the extent that these others are seen as psychologically proximal (and thus, relatively similar) to the actor (Festinger 1954; Salovey & Rodin, 1984; Tesser, Millar, & Morre, 1988). Logically, then, individuals strive for social equity with others that are psychologically close, potentially developing a desire for these target's positive outcomes (Pritchard, 1969; Smith & Kim, 2007). As noted before, high-quality interpersonal relations are based on mutual trust, supportiveness, and reciprocity (Blau, 1964; Settoon & Mossholder, 2002) and, consequently, an actor is likely to perceive psychological closeness to a target within such relations (Tesser, 1988). While acknowledging the target's achievements and viewing these achievements in a positive light, the actor therefore is likely to frequently compare him- or herself with the target and yearn for similarly favorable outcomes, thus developing envy toward the target.

Within low-quality interpersonal relations, by contrast, an actor is less likely to recognize, acknowledge, and appreciate a target's successes (Laham, 2009; Lawler, 2001; 1995; Settoon & Mossholder, 2002). Moreover, the actor is likely to perceive the target as rather distal and dissimilar in this situation, with the target therefore appearing less salient for the actor's social comparison processes (Tesser et al., 1988). Consequently, within low-quality dyadic relations, we expect that there is less opportunity for interpersonal envy to arise. Hence, we hypothesize:

Hypothesis 3: In team member dyads, the actor's perceived relationship quality with the target will be positively related to the actor's envy toward the target.

In contrast to envy, we expect interpersonal contempt to occur less frequently within high-quality relationships and more frequently within low-quality relationships. Low-quality relations, in particular, are characterized by social exchanges that suffer from a lack of mutual trust, support, and reciprocity (Setton & Mossholder, 2002). Accordingly, such unfavorable relations are likely to negatively color the processing of information about the target (Lawler, 2001). Therefore, in a low-quality relationship, an individual is likely to develop unfavorable perceptions of and attributions towards the target.

More specifically, research suggests that individuals tend to emphasize an interaction partner's failures and shortcomings in low-quality relations (Lawler & Thye, 2006; Weiner, 1986) and to attribute such misfortunes to internal, controllable factors (e.g., a lack of ability, motivation, or effort), thus blaming the target him- or herself for these negative outcomes (Roseman, 2001; Frijda, 1993). These unfavorable perceptions and attributions closely map onto the conceptual meaning of interpersonal contempt. Such contempt arises when a target's negative attributes and outcomes are perceived as 'onset controllable' and, thus, within the target's own responsibility (Cuddy et al., 2007: 634), such that the target is perceived as deserving of his or her failures and misfortunes (Melwani & Barsade, 2011). Consequently, the attributional tendencies within low-quality interpersonal relations are likely to induce contempt, a feeling unlikely to be experienced in the context of a high-quality interpersonal relationship.

Hypothesis 4: In team member dyads, the actor's perceived relationship quality with the target will be negatively related to the actor's contempt toward the target.

The Moderating Role of Cooperative Team Goals

The affect theory of social exchange further emphasizes that the context within which dyadic relations are embedded can decisively influence the development of interpersonal emotions (Lawler

& Thye, 1999; see also Elfenbein, 2007). Lawler and Thye (1999: 224), for instance, have suggested that ‘emotions are socially constructed... in the context of the various social roles, memberships, identities or categories that individuals occupy’. Accordingly, overarching task structures and interdependencies within a team may shape the role of dyadic relations for individuals’ interpersonal perceptions and attributions and the associated emotional reactions (Lawler, 2001). Hence, we consider cooperative team goals and the resulting team-level outcome interdependencies (Deutsch, 1949; Johnson & Johnson, 1989) as a potential contextual boundary condition of the linkage between dyadic relationship quality and interpersonal emotions within work teams.

Research has shown that cooperative team goals generate a focus on common outcomes, motivating members to achieve team goals (Tjosvold et al., 2004). Given a shared interest, cooperative goals are likely to trigger members’ identification with the team as a whole (Deutsch, 1949; Johnson & Johnson, 1989). Research has demonstrated that such shared group identification can activate broad egalitarian and cooperative norms within the overall team, soften perceived distinctiveness in the team, and diminish differences in individuals’ emotional reactions toward specific teammates (Lawler & Yoon, 1998). Thus, the potential relevance of dyadic relationship quality for the development of discrete interpersonal emotions should be less pronounced with highly cooperative team goals. Theorists have argued that ‘the salience of contextual influences of group goals is greater than the salience of interpersonal processes’ (Hogg & Hardie, 1992: 42; see also Hogg, 1991). Hence, we expect that cooperative team goals will serve as an important moderating factor, weakening the associations between dyadic relationship quality and interpersonal emotions.

With shared team processes and goals taking precedence over dyadic relations, members will focus their attention on their team’s overall outcomes and, thus, will be less attentive towards

specific social exchanges in their dyadic relations with other teammates. Therefore, individual team members' perceived positive or negative outcomes and the associated attributions should become less salient as a basis for discrete interpersonal emotions. Under the influence of cooperative goals, team members are likely to identify with their team as a whole and to view their team in a positive light (Lawler & Yoon, 1998). Under this condition, positive dyadic relationship quality may do little to further increase experiences of interpersonal admiration, sympathy, and envy toward individual teammates. Similarly, unfavorable dyadic relationship quality is less likely to promote feelings of interpersonal contempt in this situation. All in all, we propose that cooperative team goals will buffer the positive linkage between dyadic relationship quality and interpersonal admiration, sympathy, and envy as well as the negative linkage between relationship quality and interpersonal contempt.

With less cooperative goals, in contrast, team members should focus on common outcomes to a limited extent because different members' goal achievement is largely independent (Johnson & Johnson, 1989). Also, a strong sense of identification with the overall team is less likely to develop (Tjosvold et al., 2004). Under this circumstance, team members' interpersonal emotions should, to a large extent, derive from evaluations of dyadic relationship quality and from the perceptual and attributional tendencies triggered within such relations (Lawler, 2001; Lawler & Thye, 2006).

Hypothesis 5: In team member dyads, the actor's perceived relationship quality with the target will be more strongly positively related to the actor's admiration (5a), sympathy (5b), and envy (5c) toward the target in teams with less cooperative goals than in teams with more cooperative goals.

Hypothesis 6: In team member dyads, the actor's perceived relationship quality with the target will be more strongly negatively related to the actor's contempt toward the target in teams with less cooperative goals than in teams with more cooperative goals.

Interpersonal Emotions and Individual Task Performance

Theorists have noted that emotions serve adaptive functions to guide individuals' behavior (e.g., Frijda, 1993; George, 2011). More specifically, a team member's contacting and distancing emotions at work may provide salient signals for the potential value of social interactions with other members (Lawler & Thye, 2006), shaping the members' behavior toward his or her teammates and, thus, influencing the social resources the individual can utilize for task accomplishment. We expect that a team member's task performance will benefit if he or she, on average, experiences more contacting emotions (admiration and sympathy) toward fellow teammates, whereas task performance should decline for members that, on average, experience more distancing interpersonal emotions (envy and contempt).

As noted before, a member who frequently experiences admiration toward his or her teammates acknowledges others' successes and positive outcomes and attributes these benefits towards teammates' competencies, knowledge, and efforts (Cuddy et al., 2007). As such, the member is likely to closely associate with fellow teammates to benefit from their superior qualities (Sweetman, Spears, Livingstone, & Manstead, 2013). Further, when frequently experiencing interpersonal sympathy, a member recognizes other teammates' failures and negative outcomes while, at the same time, acknowledging that these problems are undeserved and beyond targets' control (Feather & Sherman, 2002). Again, the member is likely to closely associate with fellow teammates in this situation, in an effort to help others' to overcome their misfortunes and improve their outcomes (Cuddy et al., 2007). Consistent with this reasoning, research has shown that contacting emotions facilitate approach behavior (Cacioppo & Gardner, 1999), prompting individuals to actively cooperate with others in a friendly and productive manner (Alexander et al., 1999; Cuddy et al., 2007).

Hence, although admiration and sympathy constitute discrete contacting emotions, we argue they are both likely to increase a focal member's social resources within his or her work team. By maintaining and extending positive interactions with fellow teammates (Côté, 2005), a member should be able to draw upon others' knowledge, advice, and tangible help if needed. This may create unique performance potentials by building an enduring pool of social resources that can promote a member's task accomplishment (Fredrickson, 2001).

Hypothesis 7: A team member's average level of admiration (7a) and sympathy (7b) toward teammates will be positively related to his or her individual task performance.

The role of distancing emotions, namely envy and contempt, for individual task performance may be more ambiguous. On the one hand, theorists have suggested that negative emotions may provide distinct benefits in some situations, for example, aiding individuals' creative performance by strengthening their task persistence (de Dreu, Baas, & Nijstad, 2008). Envy, in particular, may enhance individuals' work motivation so as to reduce perceived self-other performance discrepancies (Schaubroeck & Lam, 2004). Also, contempt may trigger perceptions of strength and superiority, thus motivating individuals' sustained work efforts to affirm and maintain their social status (Keltner & Haidt, 1999).

On the other hand, research has linked negative affective experiences with detrimental performance outcomes (e.g., Kaplan et al., 2009; Staw & Barsade, 1993). We believe these dysfunctional consequences will be particularly pronounced for distancing emotions within a team context. After all, both envy and contempt may provide salient signals that deter close interactions and trigger a tendency to avoid other teammates (Cacioppo & Gardner, 1999). A member frequently experiencing envy is likely to feel inferior to his or her teammates, triggering defensive behaviors and withdrawal tendencies to avoid further threats to one's self-image (Cuddy et al., 2007; Vecchio, 2005). Similarly, a member experiencing contempt toward teammates emphasizes

other's failures and blames teammates themselves for these unfavorable outcomes (Frijda, 1993). The member is likely, then, to distance him- or herself from other team members and to exclude them from social interactions (Melwani & Barsade, 2011). Consequently, both envy and contempt are likely to isolate a member within his or her team (Melwani & Barsade, 2011; Vecchio, 2005). Research has shown that distancing interpersonal emotions can hamper cooperation and create substantial conflict among team members (Cuddy et al., 2007; Lazarus, 1991).

Consistent with this argumentation, we suggest that frequent experiences of interpersonal envy and contempt will diminish the pool of social resources available to a focal team member, as the respective member is less likely to benefit from others' knowledge, information, and tangible help when performing his or her tasks. Rather, the focal member may devote substantial resources towards avoiding and/or dealing with unpleasant interactions and conflicts with other teammates (Lazarus, 1991; Pugh, 2002). As such, he or she is likely to be distracted from core job tasks, potentially deteriorating his or her performance outcomes (Frijda, 1986).

Hypothesis 8: A team members' average level of envy (8a) and contempt (8b) toward teammates will be negatively related to his or her individual task performance.

METHOD

We tested the hypotheses in two independent studies conducted in China. In Study 1, we collected temporally lagged data from student project teams. In Study 2, we collected cross-sectional data from work teams in a telecommunication services company. We note that some of the survey data were also used in previous research (Lam et al., 2011; Tse et al., 2013).

Study 1 – Sample and Procedures

We collected survey data from a sample of undergraduate (second- and third-year) students in an education institute in Macau, China, to test Hypotheses 1 to 6. As a part of their course

requirements, participants worked for 3 months in teams of 3 to 7 members to complete a team project that required intense member interaction (viz., preparing a business plan). After 1.5 months (Time 1), we collected data on relationship quality and the control variables. One month later (Time 2), we measured cooperative team goals and interpersonal emotions. We distributed paper-and-pencil surveys to 154 students in 32 teams. Participants returned completed surveys directly to the researchers, and confidentiality was assured.

To measure relationship quality and interpersonal emotions, we collected data at the dyadic level of analysis, using a round-robin design in which each member provided ratings on all other members of the team (Warner, Kenny, & Stoto, 1979). Cooperative team goals were measured at the individual level and then aggregated to the team level of analysis using a referent-shift consensus composition model (Chan, 1998; Tjosvold et al., 2004). The final data set comprised 141 students (555 dyadic relations) within 30 teams (92% response rate). Respondents' mean age was 20 years; 77% were female; and average dyadic tenure (i.e., the time two members forming a dyad had known each other) was 19 months.

Study 2 – Sample and Procedures

Study 2 was designed to constructively replicate Study 1 and to extend the study by examining the role of interpersonal emotions for individual task performance (Hypotheses 7 and 8). We collected cross-sectional survey data from teams of 4 to 5 sales associates in one of the biggest telecommunication services companies in China. Individual participants' job duties included both sales tasks and office support. To fulfill these duties, each team member had to navigate multiple interpersonal relations with teammates and to closely coordinate job tasks and responsibilities.

We distributed paper-and-pencil surveys to 132 sales associates within 31 teams. Participants directly returned the completed surveys to the researchers. Confidentiality was assured.

Dyadic relationship quality, interpersonal emotions, and cooperative team goals were measured with the same instruments as in Study 1. Further, we drew on company records to obtain objective performance data for each participant. The final data set contained 128 individuals (408 dyadic relations) across 31 teams (97% effective response rate). Respondents' mean age was 25 years ($SD=5.2$ years), and their mean organizational tenure was 1.6 years; 44% of the respondents were female, and 44% had high-school level education or above. Average dyadic tenure (i.e., the time two members forming a dyad had worked together) was 5 months.

Measures

All survey measures were translated to Chinese using a double-blind back-translation procedure. Following previous research using round robin designs that require respondents to rate items with regard to multiple other individuals (e.g., De Jong, Van der Vegt, & Mollenman, 2007; Venkataramani & Dalal, 2007), we used shortened measures for our study variables to ameliorate survey fatigue. All of these measures were validated in a pilot study in an organization operating cosmetic chain stores in Hong Kong, China. In the pilot study, we randomly paired respondents within work teams and asked them to complete measures of relationship quality (Graen & Uhl-Bien, 1995), cooperative team goals (Tjosvold et al., 2004), interpersonal emotions (Eisenberg et al., 1989; Fiske, Cuddy, Glick, & Xu, 2002; Parrott & Smith, 1993), and positive and negative affectivity (used as control variables; Watson, Clark, Tellegen, 1988). A total of 238 usable questionnaires were returned (89% response rate); 95% of the respondents were female, and 95% had a high school education or above. Mean age and organizational tenure were 25.5 and 2.7 years, respectively. We used two criteria to select items for the current study. First, we conducted a confirmatory factor analysis (CFA) to examine the factor structure of the measures, and we only retained items if they had relatively high (i.e., > 0.70) and statistically significant loadings on their

intended factor. Second, we omitted one cooperative team goals item ('our team members want each other to succeed') based on face validity concerns in the present main studies' context. This item seemed unsuitable for the student teams in Study 1 because students' overall class grade was based on a forced ranking system, such that students may not have wanted each other to be particularly successful within the class as a whole. The resulting, shortened measures are described in more detail below. In the pilot study, Cronbach's alphas for all of these shortened measures were above 0.75. The correlation coefficients between the shortened measures used in the main study and the full version measures were all greater than 0.92 ($p < 0.001$).

Relationship quality. Following previous research that has studied dyadic relations between team members (e.g., Anderson & Williams, 1996; Sherony & Green, 2002), we adapted items from Graen and Uhl-Bien's (1995) leader-member exchange measure, such that respondents independently assessed their relationship quality with each of their teammates. Based on the pilot study, five items were chosen for this measure (sample item: 'How would you characterize your working relationship with this team member?'; 1 = *extremely ineffective*; 5 = *extremely effective*). Cronbach's alpha was 0.91 in both Study 1 and Study 2.

Interpersonal emotions. We used emotional adjectives to capture discrete interpersonal emotions (e.g., Feather & Sherman, 2002; Weiss et al., 1999; 1 = *never*; 5 = *always*). Based on the pilot study, we measured admiration with 3 items from Fiske et al. (2002; sample item: 'admiring'; $\alpha = 0.91/0.86$ in Studies 1 and 2, respectively), sympathy with 3 items from Eisenberg et al. (1989; sample item: 'sympathetic'; $\alpha = 0.90/0.88$), envy with 3 items from Parrott and Smith (1993) and Fiske et al. (2002; sample item: 'jealous' $\alpha = 0.82/0.70$), and contempt with 3 items from Fiske et

al. (2002; sample item: ‘disgusted’; $\alpha = 0.91/0.87$). Participants independently assessed their feelings with regard to each of their teammates on these items.

Cooperative team goals. Cooperative team goals were measured using three items from Tjosvold and colleagues’ (2004) scale. The items were ‘Our team members’ goals go together’; ‘Our team members “swim or sink” together’; and ‘Our team members seek compatible goals’ (1 = *strongly disagree*; 5 = *strongly agree*). Cronbach’s alpha was 0.88 in Study 1 and 0.87 in Study 2. As indicated before, cooperative goals were conceptualized as a team-level variable, so we aggregated individuals’ responses to the team level. There was significant between-team variance in members’ ratings of cooperative team goals (Study 1: $F_{29, 136} = 9.11, p < 0.001$; Study 2: $F_{30, 127} = 7.58, p < 0.001$) and interrater reliability and agreement surpassed common standards ($ICC_1 = 0.62/0.62$, $ICC_2 = 0.89/0.87$, median $r_{wg(j)} = 0.95/0.87$), indicating that aggregation to the team level was justified (Hofmann, 2008).

Individual task performance. We obtained individual monthly sales records (number of telecommunication services packages sold) for all respondents in Study 2 during the month in which we conducted the survey. Comparable information on individual members’ task performance was not available in Study 1 since the students received a team grade for the project.

Control variables. We controlled for actors’ and targets’ gender and age, dyadic tenure, and team size (Richter, West, van Dick, & Dawson, 2006). Moreover, we included actors’ positive and negative affectivity (i.e., the stable tendency to experience positive vs. negative emotions) as covariates to avoid biasing effects from individuals’ affective dispositions. Based on the pilot study,

we used four items from Watson et al. (1988) to measure both positive (sample item: ‘enthusiastic’; $\alpha = 0.86/0.78$ in Studies 1 and 2) and negative affectivity (sample item: ‘nervous’; $\alpha = 0.75/0.70$).

Statistical Analyses

The round-robin design used in this research required that each member of a team rate and be rated by every other member. Therefore, the present data have a complex, nested structure, with individuals nested both within dyadic relationships and within teams. Hence, we employed Kenny and colleagues’ social relations model (using the MLwiN computer package; Goldstein et al., 1998) to test Hypotheses 1 to 6 (Kenny, 1994; Snijders & Kenny, 1999). This analytical approach regards each individual both as an actor and as a target and provides random estimates that indicate how much of the variance in a dependent variable (i.e., interpersonal emotions) is explained by characteristics of the actor, the target, the actor-target dyad, and the team. Furthermore, it provides fixed estimates comparable to unstandardized regression coefficients. We first calculated “null models” for each of the four discrete interpersonal emotions that did not contain any predictor variables and were used as a reference for subsequent analyses. These null models also provided an overview of how the variance in interpersonal emotions was partitioned across levels of analysis. Next, we added the control variables, main effects, and two-way interaction terms to examine our hypotheses. We tested for a decrease in log-likelihood between each of these models by means of a chi-square difference test, evaluating the significance of improvements in model fit. Finally, we used the SPSS mixed model procedure to examine Hypotheses 7 and 8 at the individual level of analysis while allowing for random intercepts to control for possible team-level effects (Bickel, 2007). All predictor variables were standardized prior to the analyses (Aiken & West, 1991).

RESULTS

Descriptive Statistics and Confirmatory Factor Analyses

Table 1 presents descriptive statistics and bivariate correlations for all measures across both Studies 1 and 2. We first conducted confirmatory factor analyses to evaluate the discriminant validity of the four interpersonal emotion measures. Results suggested that the hypothesized four-factor model (Study 1: CFI = 0.98, TLI = 0.97, RMSEA = 0.07, $\chi^2 = 163.04$, $df = 48$; Study 2: CFI = 0.96, TLI = 0.95, RMSEA = 0.07, $\chi^2 = 138.18$, $df = 48$) yielded a good fit to the data and provided better fit than a one-factor model (Study 1: CFI = 0.40, TLI = 0.26, RMSEA = 0.30, $\Delta\chi^2 = 2646.08$, $\Delta df = 6$, $p < 0.001$; Study 2: CFI = 0.35, TLI = 0.21, RMSEA = 0.27, $\Delta\chi^2 = 1459.28$, $\Delta df = 6$, $p < 0.001$).

Additional confirmatory factor analyses examined the discriminant validity of all six focal variables in our model (i.e., relationship quality, four interpersonal emotions, and cooperative goals). Results showed that the hypothesized six-factor model (Study 1: CFI = 0.97, TLI = 0.96, RMSEA = 0.06, $\chi^2 = 311.79$, $df = 109$; Study 2: CFI = 0.95, TLI = 0.93, RMSEA = 0.07, $\chi^2 = 294.71$, $df = 109$) yielded a good fit to the data and provided substantially better fit than an alternative one-factor model (Study 1: CFI = 0.39, TLI = 0.32, RMSEA = 0.23, $\Delta\chi^2 = 4579.85$, $\Delta df = 15$, $p < 0.001$; Study 2: CFI = 0.42, TLI = 0.35, RMSEA = 0.20, $\Delta\chi^2 = 2610.14$, $\Delta df = 15$, $p < 0.001$). Overall, these findings supported the discriminant validity of our study variables.

Variance Partitioning

Table 2 shows the partitioning of variance in interpersonal emotions between the actor, target, dyad, and team levels. These findings indicate that, across both of our studies, a substantial portion (ranging from 35% to 61%) of the variance in interpersonal emotions directed toward another teammate depended on characteristics of the dyadic relation between actor and target. Hence, our conceptual focus on the dyadic level of analysis appears substantively meaningful.

----- INSERT TABLES 1, 2, AND 3 ABOUT HERE -----

Tests of Hypotheses

Table 3 (Model 1) presents the results for Hypotheses 1 to 4, which predicted specific associations between perceptions of dyadic relationship quality and interpersonal emotions. Across both studies, such relationship quality was positively associated with actors' admiration (Study 1: $B = 0.36, p < 0.001$; Study 2: $B = 0.29, p < 0.001$), sympathy (Study 1: $B = 0.21, p < 0.001$; Study 2: $B = 0.21, p < 0.001$), and envy (Study 1: $B = 0.14, p < 0.001$; Study 2: $B = 0.13, p < 0.001$) and negatively associated with actors' contempt toward the target ($B = -0.07, p < 0.05$; Study 2: $B = -0.13, p < 0.001$), even after accounting for the control variables. Hypotheses 1, 2, 3, and 4 were therefore supported.

Table 3 (Model 2) presents the results for Hypotheses 5 and 6, which predicted that associations between relationship quality and interpersonal emotions are stronger in teams with less rather than more cooperative goals. As shown, the cross-level interaction coefficients of relationship quality and cooperative team goals were significant for all interpersonal emotions in both Study 1 (admiration: $B = -0.08, p < 0.01$; sympathy: $B = -0.09, p < 0.01$; envy: $B = -0.07, p < 0.05$; contempt: $B = 0.09, p < 0.01$) and Study 2 (admiration: $B = -0.07, p < 0.05$; sympathy: $B = -0.09, p < 0.01$; envy: $B = -0.11, p < 0.001$; contempt: $B = 0.06, p < 0.05$). Figure 1 shows these interactions and the results of the simple-slopes analyses for Study 1 (Aiken & West, 1991).^[1] As shown, relationship quality was more strongly positively associated with interpersonal admiration, sympathy, and envy in teams with less rather than more cooperative goals, supporting Hypotheses 5a, 5b, and 5c. Further, dyadic relationship quality was more strongly negatively associated with contempt under conditions of less rather than more cooperative goals, supporting Hypothesis 6.

----- INSERT FIGURE 1 and TABLE 4 ABOUT HERE -----

We tested Hypotheses 7 and 8 in Study 2, which predicted an individual team member's average levels of contacting and distancing emotions to relate with his or her performance. First,

we aggregated the participants' dyadic ratings of interpersonal emotions to the individual level. There was significant between-person variance in interpersonal emotions, including admiration ($F_{127, 407} = 6.46, p < 0.001$), sympathy ($F_{127, 407} = 5.39, p < 0.001$), envy ($F_{127, 407} = 3.22, p < 0.001$), and contempt ($F_{127, 407} = 2.57, p < 0.001$). Further, both intraclass correlation coefficients (admiration: $ICC_1 = 0.52, ICC_2 = 0.70$; sympathy: $ICC_1 = 0.47, ICC_2 = 0.51$; envy: $ICC_1 = 0.24, ICC_2 = 0.76$; contempt: $ICC_1 = 0.31, ICC_2 = 0.70$) and within-individual agreement indices (admiration: median $r_{wg(j)} = 0.94$; sympathy: median $r_{wg(j)} = 0.97$; envy: median $r_{wg(j)} = 0.96$; contempt: median $r_{wg(j)} = 0.98$; cf. Bliese, 2000) supported aggregation to the individual level of analysis.

We regressed individuals' objective sales records on all four of these individual-level emotions at the same time, controlling for team size and respondents' age, gender (0 = *male*, 1 = *female*), and organizational tenure. As shown in Table 4, both envy ($B = -0.23, p < 0.01$) and contempt ($B = -0.12, p < 0.05$) were negatively related to sales performance, whereas there were no significant relationships for admiration ($B = -0.02, ns$) and sympathy ($B = 0.07, ns$). Hence, Hypothesis 7 was rejected whereas Hypothesis 8 was supported.

DISCUSSION

Using data from two independent samples, the present studies demonstrate the role of dyadic relationship quality for the development of four discrete interpersonal emotions between team members (i.e., admiration, sympathy, envy, and contempt). Furthermore, we uncovered cooperative team goals as an important contextual moderator, such that the role of relationship quality for interpersonal emotions was more pronounced in teams with less cooperative goals and buffered in teams with more cooperative goals. Finally, at the individual level of analysis, Study 2 found

negative relationships between distancing interpersonal emotions (viz., envy and contempt) and objective task performance.

Theoretical Implications

These results contribute to a better understanding of the origins of interpersonal emotions in the workplace by focusing on individuals' evaluations of dyadic relationship quality as a key explanatory variable. Previous studies on this issue have tended to focus (explicitly or implicitly) on appraisals of particular interaction episodes or incidents (e.g., Spector, 1998; Weiss & Cropanzano, 1996). By contrast, this research illustrates that interpersonal emotions may develop in the context of one's ongoing interpersonal relationships within a work team (cf. Elfenbein, 2007; Lawler & Thye, 2006). As such, beyond specific incidents or events giving rise to interpersonal emotions, such feelings also may emerge in the course of team members' day-to-day social interactions.

Second, this study contributes to the emotion literature by providing evidence that experiences of interpersonal emotions in dyadic relationships depend on contextual factors (Lawler & Thye, 1999; Manstead & Fischer, 2001). Cooperative team goals, in particular, can influence team members' emotions toward others, to the point of overriding the consequences of dyadic relationship quality assessments. These findings show that the combination of relational and structural elements within teams is an important origin of interpersonal emotions. Hence, the current study responds to calls for a greater contextualization of organizational behavior research in general and research on emotions in organizations in particular (Gooty et al., 2009; Johns, 2006). It is interesting to note, in this respect, that our studies have shown cooperative team goals to neutralize the potential role of dyadic relationship quality assessments for a diverse set of both contacting and distancing interpersonal emotions. As such, it appears that interpersonal

emotionality is generally less pronounced in teams with more cooperative goals. One may speculate that such contexts emphasize collective team processes and outcomes over dyadic aspects, as the teams' overall performance is critical for individual members' goal attainment (Tjosvold et al., 2004). Hence, emotionality in such teams may be more strongly focused on the team as a whole (e.g., team affective tone; Cole et al., 2008) rather than dyadic member relations. Clearly, this notion extends beyond the present studies' focus, and future research is needed to examine its viability.

Third, the present study focused on discrete interpersonal emotions rather than global positive or negative affect. We found similar associations between relationship quality and the two positive, contacting emotions (admiration and sympathy), but different associations for the two negative, distancing emotions (envy and contempt). This pattern of results is in line with the notion that negative emotions are more diverse (e.g., envy contains both positive and negative sentiments whereas contempt is clearly hostile; Tai et al., 2010; Melwani & Barsade, 2011) than positive ones and may even act "in opposition to one another" (Mayer, Gaschke, Braverman, & Evans, 1992: 120). Also, it illustrates the value of focusing on discrete rather than global interpersonal emotions to gain a finer-grained understanding of emotional experiences in organizations (Gooty et al., 2009).

Fourth, drawing on objective performance outcomes in a real-world setting, the present research corroborates previous work on the performance consequences of emotions in teams and organizations (e.g., Cole et al., 2008; Kaplan et al., 2009). Notably, our findings of relevant performance linkages for envy and contempt, but not for admiration and sympathy, support the notion that negative emotions may have more powerful consequences than positive ones (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Scholars have linked envy and contempt, for example, to various psychological and physiological outcomes, such as depression, withdrawal cognitions, and anger as well as reduced learning intentions and deteriorated health (e.g., Fischer &

Roseman, 2007; Melwani & Barsade, 2011; Vecchio, 2005). These adverse effects may distract individuals from core task pursuit and debilitate an individual's performance potentials (Menon & Thompson, 2010; Tai et al., 2012). The roles of admiration and sympathy, in contrast, may be more indirect, as we have theorized these contacting emotions to strengthen individual performance by triggering positive social behaviors that invite others' cooperation and helping (Sweetman et al., 2013; Weiner, 1986). Given our non-significant findings for admiration and sympathy, we encourage future research to further explore the performance consequences of these discrete contacting emotions by examining potential indirect, mediated relationships. Further, such work may also consider alternative performance dimensions (e.g., organizational citizenship, counterproductive behaviors, and creative performance), rather than exclusively focusing on core task performance (cf. Borman & Motowidlo, 1997; George, 2011; de Dreu et al., 2008).

Finally, our findings also contribute to emotion research in China. Most of the existing studies on this issue have investigated the impacts of emotions on employees' well-being, job attitudes, and behavior (Li et al., 2010) and have examined how specific cultural aspects (e.g., strong collectivism) may shape employees' emotional experiences and expressions (Suh, Diener, Oishi, & Triandis, 1998). Importantly, scholars have distinguished two elements of collectivism, including a concern for relationships with specific others, on the one hand, and a concern for relationships with the group as a whole, on the other (Brewer & Chen, 2007). The present findings illustrate the interplay of such specific (i.e., dyadic relations) and group-based (i.e., cooperative team goals) factors as emotional antecedents, with relational features losing their relevance for interpersonal emotions when group-based features become salient. We encourage future research to further examine the role of cultural aspects for interpersonal emotion emergence in teams, focusing on the potential dominance of group-based features in the context of Chinese collectivistic values, in particular.

Practical Implications

From a practical perspective, the results of our two studies suggest that managers could take active steps to facilitate contacting emotions (i.e., interpersonal admiration and sympathy) by encouraging high-quality relationships between team members. To do that, managers may consider deep-level variables in team composition, such as team members' agreeableness, extraversion, and emotional stability, which have been shown to facilitate high quality relationships between team members in prior studies (Bell, 2007).

Even in well-composed teams, however, it may not be possible to maintain high-quality relationships at all times, given that teamwork is often rife with potentials for conflict and disagreement (Levine & Moreland, 1990). Further, as shown in our research, even high-quality relationships may generate distancing emotions such as envy that may damage task performance. Our research findings suggest the usefulness of cooperative team goals to address this issue. Managers may achieve this by setting collective targets for the team as a whole, giving feedback and rewards based on the team's overall performance, and articulating a common vision that emphasizes team members' collective identity (cf. DeShon, Kozlowski, Schmidt, Milner, & Wiechmann, 2004). Stressing such cooperative goals may allow managers to prevent distancing emotions among their team members, even when members have less-than-optimal relationship quality.

We believe these practical implications are particularly important for Chinese management. The Chinese society is highly relational-oriented, such that individuals tend to strongly appreciate and value interpersonal relationships (Leung, 2012). This study shows that a singular focus on high-quality relations could be misguided even in a Chinese context, since high-quality relations may diminish contempt but may enhance envy between team members. The use of cooperative

goals appears critical to prevent both kinds of negative emotions arising from interpersonal relations.

Limitations and Future Research Directions

The present study has some potential limitations associated with its research design. First, following much of the existing research on coworker dyads (e.g., De Jong et al., 2007; Venkataramani & Dalal, 2007), we captured our key variables through shortened measures to minimize survey fatigue. We acknowledge that this may raise concerns about measurement validity. At the same time, we note that (a) all items were adapted from well-established scales, (b) we based our choice of items on an independent pilot study, and (c) confirmatory factor analyses in both of our focal studies supported the convergent and discriminant validity of the shortened measures. Moreover, the constructive replication of key results across two samples provides greater confidence in our findings and mitigates possible measurement concerns. Nevertheless, further replication using the full measures may be beneficial in future research.

Second, the present use of self-report measures may introduce the possibility of common-method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2012). However, several strengths of our research design (e.g., temporally lagged design in Study 1; use of aggregated data for cooperative team goals; constructive replication of key findings; objective measurement of sales performance) alleviate such concerns. And third, the present findings preclude causal conclusions, given our studies' correlational nature. Future work based on experimental or longitudinal data is required to fully address this concern.

Beyond addressing limitations, the present study suggests several interesting directions for future inquiry. Scholars might build on our findings to develop a more complete model of the emergence of interpersonal emotions in work teams. For example, we did not capture some of the

mechanisms theorized to underlie the associations between relationship quality and interpersonal emotions (e.g., actor's attributions, perceived deservingness of the target's outcomes).

Incorporating these mechanisms could contribute to a more nuanced understanding of the respective linkages. Similarly, future work could include additional moderating variables that may shape the role of relationship quality. For example, actors' trait anger (Douglas & Martinko, 2001) or trait hostility (Judge, Scott, & Ilies, 2006) may negatively color their general perceptions of others, thus overriding the potential influence of specific relationship quality appraisals.

Further, whereas we have concentrated on the moderating role of teams' cooperative goals, some studies have cast cooperation and competition as distinct variables with differential effects. For example, Tjosvold, Johnson, Johnson, and Sun (2003) suggested that competition may exist even within a generally cooperative context. Therefore, future research may benefit from simultaneously examining how both cooperative and competitive team goals affect members' interpersonal emotions.

Moreover, future research could examine the role of relationship quality for emotions other than the ones examined in the present investigation. Such work could, for example, concentrate on self-focused emotions (e.g., pride, shame) rather than interpersonal emotions (e.g., admiration, contempt). This might offer new insights into the multilevel nature of emotions within work teams (Ashkanasy, 2003). As illustrated in this study, dyadic relationships play an important role for interpersonal (i.e., other-focused) emotions. Self-focused emotions, however, may reflect individuals' affective reactions towards their overall pattern of social relations within the team (Kang, Shaver, Sue, Min, & Jing, 2003). Hence, whereas a dyadic perspective appears justified to examine interpersonal emotions, an individual-level perspective may be required to understand the role of coworker relations for self-focused emotions. This might point towards a theoretically

intriguing lack of multilevel homology (Chen, Bliese, & Mathieu, 2005) in the emergence of different types of emotions.

CONCLUSION

In sum, this study demonstrates important antecedents, contingency factors, and consequences of interpersonal emotions in work teams, outlining both *why* and *under which circumstances* specific, discrete interpersonal emotions are likely to occur in team-member dyads and illustrating how such feelings relate with employees' task performance. We hope our findings will stimulate further research on this issue, helping organizations to design effective interventions that facilitate team members' favorable interactions, promote contacting and reduce distancing emotions between teammates, and, eventually, improve team members' performance outcomes.

NOTES

[1] As indicated by the largely equivalent pattern of interaction coefficients across both studies in Table 3, the respective interaction plots and simple slopes analyses in Study 2 were similar to those in Study 1. To conserve space, we therefore have omitted this information for Study 2. The respective findings are available from the first author.

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Table 1. Means, standard deviations, and intercorrelations of measures

		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>												
		<i>Study</i>	<i>Study</i>	<i>Study</i>	<i>Study</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>
	<i>Variable</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>2</i>												
1	Gender	.77	.42	.44	.50	-	-.17***	.08	.09*	.01	.08	.02	.03	.00	-.10*	.02	.02
2	Age	19.77	1.32	25.24	5.15	-.09	-	.00	-.15**	.08	-.04	-.25***	-.05	.01	.09*	.03	.04
3	Positive affectivity	2.87	.78	3.02	.75	-.14**	.19***	-	-.16***	-.05	-.05	.19***	.15***	.28***	.06	.09*	-.10*
4	Negative affectivity	3.23	.82	2.36	.73	.05	-.02	.07	-	.12**	-.06	-.01	-.04	.04	.18***	.13**	.23***
5	Dyadic tenure	19.37	26.23	5.07	8.24	-.01	.16**	.07	.09	-	-.20***	.07	.26***	.04	.05	.02	.00
6	Team size	5.39	.78	7.82	5.42	.05	-.15**	-.07	.02	-.01	-	-.23***	-.07	-.10*	-.14**	-.07	-.10*
7	Cooperative goals	3.64	.46	3.93	.58	-.11*	.00	.14**	-.26***	.10	-.18***	-	.24***	.13**	-.05	.13**	-.22***
8	Relationship quality	2.97	.87	3.05	.92	-.12*	-.08	.23***	-.10*	.17**	-.09	.38***	-	.44***	.24***	.23***	-.12**
9	Admiration	2.57	.97	2.83	1.02	-.09	.13*	.47***	-.05	.06	-.09	.29***	.43***	-	.38***	.48***	-.12**
10	Sympathy	1.97	.85	1.65	.79	-.15**	.03	.05	.17*	.12*	-.04	-.04	.18***	.12*	-	.33***	.24***
11	Envy	1.85	.78	1.65	.67	-.10*	.06	.08	.15**	.02	.06	-.10	.12*	.20***	.30***	-	.12**
12	Contempt	1.61	.78	1.37	.66	.02	.06	-.01	.24***	.11*	.12*	-.30***	-.22***	.00	.19***	.30***	-
13	Task performance			34.72	22.77	.11*	.04	.11*	-.04	.20***	-.10*	.41***	.09	.05	-.05	-.15**	-.17**

Note. Correlations for Study 1 appear above the diagonal ($N = 555$ dyads); correlations for Study 2 appear below the diagonal ($N = 408$ dyads). For correlations including work performance, $N = 128$ individuals.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2. Variance partitioning for actors' interpersonal emotions toward targets

Source of variance	Admiration				Sympathy				Envy				Contempt			
	Study 1		Study 2		Study 1		Study 2		Study 1		Study 2		Study 1		Study 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Team variance	.02 (2%)	.03	.16 (15%)	.08	.03 (5%)	.03	.00 (0%)	.00	.02 (2%)	.02	.06 (14%)	.03	.00 (0%)	.00	.03 (7%)	.03
Actor variance	.41 (44%)	.07	.51 (49%)	.09	.32 (44%)	.06	.36 (57%)	.06	.26 (42%)	.05	.12 (27%)	.03	.23 (37%)	.04	.11 (26%)	.03
Target variance	.13 (14%)	.03	.02 (2%)	.03	.03 (4%)	.02	.02 (4%)	.02	.05 (9%)	.02	.02 (5%)	.02	.08 (13%)	.02	.03 (6%)	.02
Dyadic variance	.38 (40%)	.03	.36 (35%)	.04	.35 (47%)	.03	.24 (39%)	.03	.29 (47%)	.02	.24 (54%)	.03	.31 (50%)	.03	.26 (61%)	.03
Deviance	1347.51		992.45		1245.71		822.26		1128.53		747.96		1186.67		758.99	

Note. Study 1: $N = 141$ individuals in 555 dyads within 30 teams. Study 2: $N = 128$ individuals in 408 dyads within 31 teams.

Table 3. Quality of social relationships and actors' interpersonal emotions toward targets

Step and variables	Study 1															
	Admiration				Sympathy				Envy				Contempt			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Control variables																
Actor's gender	-.07	.13	-.08	.13	-.22	.13	-.24	.13	.04	.12	.03	.12	.04	.11	.05	.11
Actor's age	.03	.05	.03	.05	.07	.04	.07	.04	.05	.04	.05	.04	.01	.04	.01	.04
Actor's positive affectivity	.30***	.07	.30***	.07	.08	.07	.09	.07	.04	.06	.04	.06	-.01	.06	-.01	.06
Actor's negative affectivity	.13	.07	.13	.07	.25***	.07	.25***	.06	.15**	.06	.15**	.06	.22***	.06	.22***	.06
Target's gender	-.12	.10	-.14	.10	.17*	.08	.15	.08	-.05	.08	-.06	.08	.07	.09	.08	.09
Target's age	-.02	.04	-.01	.04	.02	.03	.03	.03	-.03	.03	-.02	.03	.04	.03	.04	.03
Dyadic tenure	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Team size	-.06	.07	-.07	.07	-.09	.08	-.10	.08	-.06	.06	-.08	.06	-.10	.06	-.09	.06
Main effects																
Relationship quality	.36***	.04	.36***	.03	.21***	.03	.21***	.03	.14***	.03	.14***	.03	-.07*	.03	-.07*	.03
Cooperative goals	.00	.05	.00	.05	-.06	.06	-.07	.06	-.06	.05	-.06	.04	-.14**	.05	-.14**	.05
Δχ²(10)	136.03***				60.55***				33.40***				36.62***			
Two-way interaction																
Relationship quality * Cooperative goals			-.08**	.03			-.09**	.03			-.07*	.03			.09**	.03
Δχ²(1)	5.93*				8.46**				5.49*				9.58**			

Step and variables	Admiration				Sympathy				Envy				Contempt			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Control variables																
Actor's gender	.04	.13	.05	.12	-.21	.12	-.21	.12	-.14	.09	-.13	.09	-.06	.08	-.06	.11
Actor's age	.02	.01	.01	.01	.00	.01	.00	.01	.01	.01	.00	.01	.00	.01	.00	.04
Actor's positive affectivity	.50***	.09	.53***	.09	-.04	.08	-.02	.08	.01	.07	.04	.07	.03	.06	.02	.06
Actor's negative affectivity	-.02	.09	-.02	.09	.19*	.09	.19*	.08	.09	.06	.10	.07	.14	.06	.14	.06
Target's gender	-.09	.07	-.09	.07	.09	.06	.10	.06	-.04	.06	-.04	.06	-.15*	.06	-.15*	.09
Target's age	.00	.01	.00	.01	.00	.01	.00	.01	.00	.01	-.01	.01	.00	.01	.00	.03
Dyadic tenure	.00	.01	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.01	.00
Team size	.00	.01	.00	.01	.00	.01	.00	.01	.01	.01	.01	.01	.01	.01	.01	.06
Main effects																
Relationship quality	.29***	.05	.28***	.05	.21***	.04	.18***	.04	.13***	.04	.11***	.04	-.13***	.04	-.12***	.03
Cooperative goals	.13	.07	.12*	.07	-.08	.07	-.09	.06	-.11	.06	-.12*	.06	-.13**	.05	-.13**	.05
Δχ²(10)	95.84***				45.35***				23.58*				52.34***			
Two-way interaction																
Relationship quality * Cooperative goals			-.07*	.04			-.09**	.03			-.11***	.03			.06*	.03
Δχ²(1)	3.91*				9.22**				12.91***				3.90*			

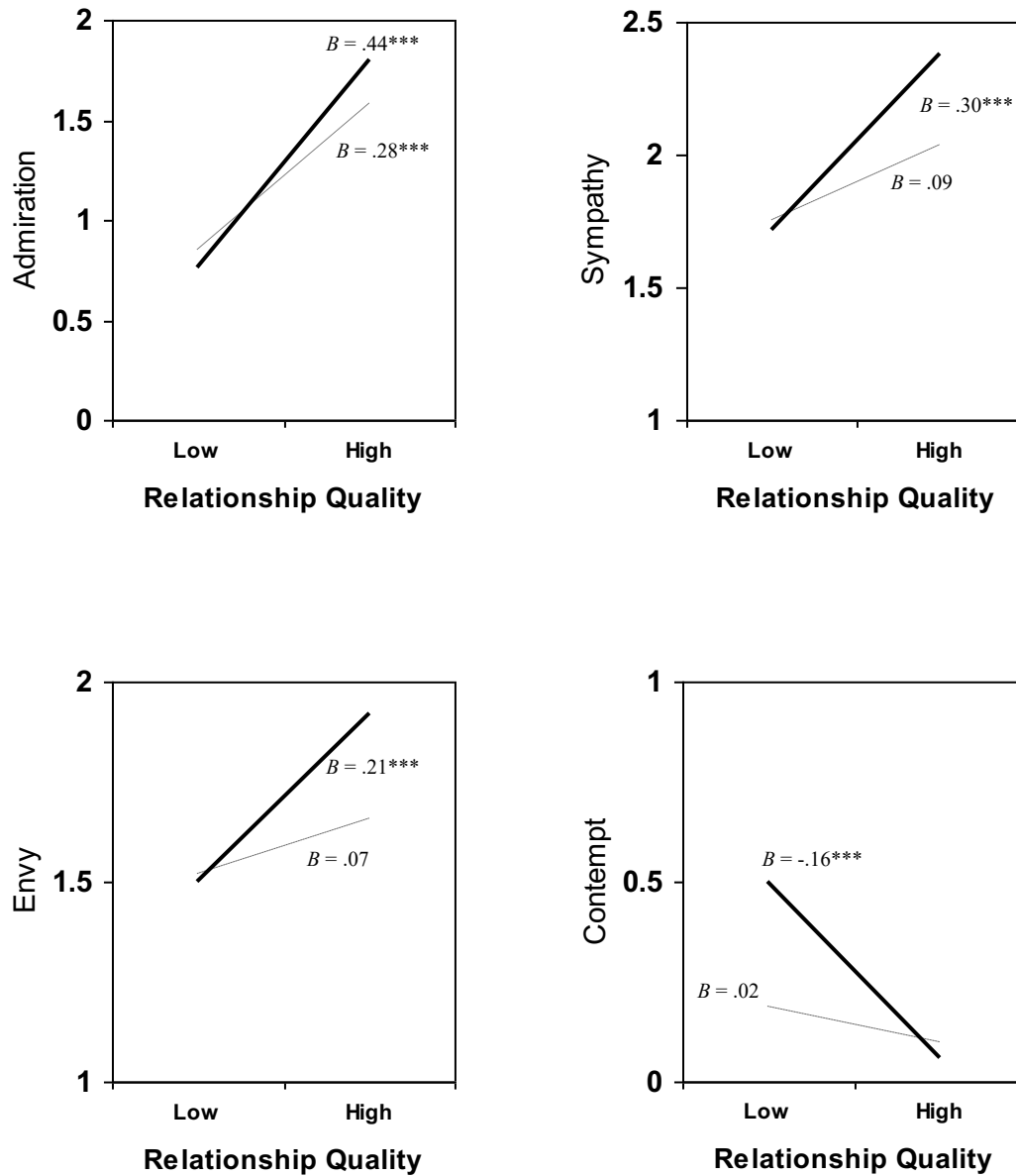
Note. Study 1: $N = 555$ dyads. Study 2: $N = 408$ dyads. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4. Multilevel analysis for individual task performance (Study 2)

	Individual Task Performance			
	Model 1		Model 2	
Variables entered	B	SE	B	SE
Control variables				
Team size	-.12	.14	-.13	.13
Age	.08	.07	.06	.07
Gender	-.05	.08	-.05	.07
Organizational tenure	.27**	.10	.26**	.10
$\Delta\chi^2$ (4)	24.04***			
Main effects				
Admiration			-.02	.08
Sympathy			.07	.08
Envy			-.23**	.09
Contempt			-.12*	.06
$\Delta\chi^2$ (4)			9.26 ⁺	

Note. [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$. $N = 128$ individuals.

Figure 1. Two-way interaction of relationship quality and cooperative team goals with interpersonal emotions (Study 1)



Note. Solid lines indicate less cooperative team goals (-1 SD); dashed lines indicate more cooperative team goals (+1 SD).