

Conflict values and team relationships: conflict's contribution to team effectiveness and citizenship in China

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Summary

Although conflict has traditionally been considered destructive, especially in collectivist societies like China, recent studies indicate that valuing and approaching conflict can contribute to effective teamwork. A hundred and six pairs of employees and their leaders were recruited from State Owned Enterprises in Shanghai and Nanjing. Employees described their conflict values and relationships. Their immediate supervisors rated the effectiveness of their teams and the extent of their citizenship behavior. Results indicate that positive conflict attitudes and approaching conflict can contribute to strong relationships, which in turn strengthen team effectiveness and employee citizenship. Findings suggest that how conflict values affect relationships and outcomes are more differentiated than originally expected. Results were interpreted as supporting the traditional idea that relationships are critical for effective organization work in China but also challenging future research to understand the processes by which conflict has a positive contribution to work relationships. Copyright © 2003 John Wiley & Sons, Ltd.

Introduction

Effective teamwork, researchers have argued, is a foundation for successful organizations that serve customers and develop employee commitment (Cohen & Ledford, 1994; Hackman, 1990; Stewart & Barrick, 2000). However, research is needed to clarify the nature and antecedents of effective team relationships. The role of conflict is a particularly ambiguous issue (De Dreu, Weingart, & Kwon, 2000; Rubin, Pruitt, & Kim, 1994). The traditional assumption has been that, as conflict is destructive, team members should avoid conflict. But researchers have argued that conflict has a very positive face that can contribute substantially to organizational work (De Dreu & Van de Vliert, 1997). This exploratory

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study examines how conflict values may contribute to strong team relationships that promote employee performance. Specifically, it tests the extent to which positive attitudes and open approaches to handling conflict lead to strong interdependence and low levels of competitive interaction that in turn foster team effectiveness and employee organizational citizenship behavior.

Although conflict and other values are often considered underlying attitudes, values are more fully considered to be manifested in behavior as well as attitudes (Leung, 1997; Morris et al., 1998). This study measures positive values in two ways: attitudes that appreciate the usefulness of conflict and actions that emphasize approaching and openly discussing conflict. Attitudes that deplore conflict and actions to avoid dealing with it characterize negative values.

These conflict values are expected to affect relationship attitudes and behavior. This study measures relationship in terms of beliefs and interaction: specifically, resource interdependence (beliefs concerning the extent that people have abilities that can affect each other's goals) and competitive interaction in dealing with each other. Relationship attitudes and actions in turn are hypothesized to affect employee performance, which this study measures in two ways: team performance and the extra-role, organizational citizenship behavior of employees.

Conflict values

This study proposes that conflict values are an underlying antecedent for team performance. Traditionally, conflict has been considered a disruptive force (Walton, 1969). Employees who confront others directly run the risk of being considered immature and unproductive. The current emphasis on teamwork and relationships may seem to reinforce negative attitudes toward conflict. Employees are told to smooth over disagreements for they may appear to be trying to embarrass team members.

The risks of approaching conflict have been theorized to be particularly high in societies where relationships are highly valued, such as those in East Asia (Earley, 1989; Leung, 1997; Rahim & Blum, 1994; Triandis, 1990; Triandis, McCusker, & Hui, 1990). The strong sense of interdependence and high needs to preserve face make dealing with conflict directly unlikely. Hong Kong Chinese, for example, were found to favor compromise approaches to conflict whereas their British counterparts favored direct give-and-take collaboration (Kirkbride, Tang, & Westwood, 1991). Managers are advised to adjust the way they lead and work with East Asians (Trompenaars, 1993; Tung, 1991).

Yet researchers have begun to develop evidence that conflict can contribute to organizational work (De Dreu & Van de Vliert, 1997). Voicing minority views and heterogeneity of perspectives have been found to improve group problem solving (Gruenfeld, 1995; Maier, 1970; Peterson & Nemeth, 1996; Simons, Pelled, & Smith, 1999; Tetlock, Armor, & Peterson, 1994). Studies have shown the utility of conflict for strategic decision making through such means as devil's advocacy and challenging assumptions (Amason, 1996; Cosier, 1978; Eisenhardt & Bourgeois, 1988; Eisenhardt, Kahwajy, & Bourgeois, 1997; Mason & Mitroff, 1981; Schweiger, Sandberg, & Rechner, 1989). Studies indicate that approaching conflict to discuss it directly can be constructive whereas avoiding conflict is ineffectual (Barker, Tjosvold, & Andrews, 1988; Tjosvold, 1990). Conflict then may be useful for solving problems and task accomplishment, though perhaps at the expense of harming relationships (Amason, 1996).

Researchers have begun to develop evidence documenting the conditions under which conflict has a constructive impact. Recently, studies have found that the type of conflict impacts the extent to which it can have a constructive impact on teams. Task conflicts where team members disagree over issues like the best course of action can help the team challenge ineffective decisions and develop more adequate approaches, whereas relational conflict over how team members treat each other as individuals typically disrupt coordination, reduce commitment, and deteriorate performance (Jehn, 1995, 1997).

Overall, the thrust of emerging research is that conflict can be valued and that team members should openly approach conflict, especially over task issues, to improve their performance.

In addition to developing our empirical base for the positive role of conflict, research is needed to examine positive conflict values. Are they useful for helping teams use conflict productively? What are the mechanisms by which they effect teams? This study proposes that positive conflict values have a constructive impact by effecting how team members manage their conflicts, specifically, through their effect on team members' competitive interaction and interdependence.

Competitive interaction and interdependence

This study takes the perspective that, across task, relational, and other types of conflict, how the protagonists interact with each other and manage their conflicts very much impact its outcomes (Deutsch, 1973). A recent meta-analysis of the negotiation literature suggests the value of pro-social, cooperative orientation toward conflict, especially when protagonists are engaged and resist quick compliance (De Dreu et al., 2000). Relationships are proposed to mediate between positive conflict values and constructive outcomes (Kramer & Messick, 1995; Simons & Peterson, 2000).

This study examines the impact of conflict values on relationships in terms of competitive interaction and resource interdependence. Although conflict avoidance and cooperative relationships are often assumed to be reinforcing, avoiding conflict has been found to predict to competition. Trying to avoid conflict does not mean that conflict disappears. When surfaced, the conflict is handled in competitive, win-lose ways that very much undermine both task performance and relationships (Deutsch, 1973, 1980, 1990). Employees found project managers, for example, who wanted to avoid conflict were more competitive in dealing with their employees and were less effective leaders (Barker et al., 1988). Open approaches to discussing opposing views have been associated with stronger, more cooperative relationships, whereas avoiding complements competition (Tjosvold, Dann, & Wong, 1992; Tjosvold & McNeely, 1988). Negative conflict values then are expected to be antecedents of competitive interaction.

Conflict values may also affect resource interdependence. Considerable research has investigated the role of cooperative and competitive goal interdependence in conflict (Deutsch, 1973, 1980). Relatedly, studies have examined outcome interdependence, which is the extent that rewards depend upon others (Wageman, 1995; Wageman & Baker, 1997). Organizational researchers have also investigated task interdependence which involves the extent that individuals depend upon each other as they complete their tasks—for example, sequential and pooled work flow interdependence (Van de Ven, Delbecq, & Koenig, 1976; Wageman, 1995; Wageman & Baker, 1997).

However, little research has explored resource interdependence in conflict. Resource interdependence occurs when persons recognize that they have the abilities and resources to affect each other's outcomes (Lawler & Yoon, 1993, 1996; Thibaut & Kelley, 1969). Resource interdependence measures the extent that people feel dependent upon each other.

Avoiding conflict has traditionally been assumed to reinforce interdependence, especially among Asian and other collectivist people. Cross-cultural conflict management research has found that Asians tend to use avoiding and other accommodative approaches because, it is theorized, they want to protect their interdependence. Westerners, on the other hand, are prone to confront conflict directly despite harming their relationships (Graham, Kim, Lin, & Robinson, 1988; Kirkbride et al., 1991; Leung & Tjosvold, 1998; Tse, Francis, & Walls, 1994; Triandis, 1990; Triandis et al., 1990).

Considerable cross-cultural management and psychology indicate that Asians have a strong sense of interdependence as their identity is embedded in their relationships (Bond, Wan, Leung, & Giacalone, 1985; Ho, 1998; Hofstede, 1980). They are then highly sensitive to the possibility of losing social face

in public; they avoid conflict so that they and their conflict partners need not fear disrespect and alienation (Bond & Lee, 1981; Coccoft & Ting-Toomey, 1994; Ting-Toomey, 1988). However, the link between avoiding conflict and interdependence has been assumed rather than directly investigated (Morris et al., 1998).

Deutsch (1973) has argued that conflict management reinforces interdependence where people value each other's abilities and resources. Resolving conflicts directly and constructively, Deutsch theorized, not only helps people work effectively together but also leads them to appreciate each other's abilities and believe that they can rely upon them. Through managing conflict, they reaffirm that they have a strong, mutually beneficial relationship and will continue to work together. On the other hand, people who avoid conflict come to deny that they need to rely on others. In support of this reasoning, leaders and employees who discussed their conflicts openly and constructively were found to conclude that the other had valuable abilities useful to them (Tjosvold, Chun, & Law, 1998). More research is needed, however, to assess the contribution of open conflict management to interdependence.

Effective teamwork and citizenship

Researchers have increasingly argued that interpersonal relationships very much affect the outcomes of negotiation (Rubin et al., 1994; Simons & Peterson, 2000). This study theorized that competitive interaction and resource interdependence affects team effectiveness measured in terms of the extent that team members complete their tasks effectively. Substantial research, summarized in meta-analyses, indicates that competitive interaction disrupts work on joint tasks (Johnson & Johnson, 1989; Johnson, Maruyama, Johnson, Nelson, & Skon, 1981). Under a wide range of conditions, competitive interaction has been found to interfere with coordination, create interpersonal hostility, and result in ineffective teamwork.

Much less research has investigated the impact of resource interdependence on teamwork (De Dreu & Van de Vliert, 1997). Mutual dependence is expected to promote communication, exchange of resources, and emotional support that facilitate employee teamwork. Indirect support that appreciation of mutual dependence promotes effective teamwork is provided by studies showing that unequal power and dependence interrupts communication, perspective taking, and mutual influence (Tjosvold & Sagaria, 1978). More directly, Lawler and Yoon's (1996, 1993) experiments suggest that total power and mutual dependence between negotiators facilitate valued exchanges which in turn result in relational cohesion.

In addition to team effectiveness, competitive interaction and interdependence may also affect the organizational contributions of team members as measured by their organizational behavior citizenship (OCB). OCB identifies a range of actions by employees beyond the formal, in-role job requirements that in aggregate contribute to organizational functioning (Organ, 1988). OCB includes altruistic behaviors such as helping a fellow worker on an organizationally relevant task, and conscientiousness behaviors such as performing more than the minimum required in areas including attendance and taking initiatives in work related matters. In essence, OCB belongs to a broad class of member extra-role behaviors that contribute to the effect functioning of an organization. For example, Barnard (1938) suggested that 'it is clear that the *willingness* of persons to contribute effort to the cooperative system is indispensable' (p. 83, original emphasis). Barnard has taken willingness to indicate such qualities as 'loyalty, solidarity, *esprit de corps*, strength of organization' (p. 84). Katz (1964) argued that extra-role innovative and spontaneous activities are critical for effective organizational functioning, so essential that 'an organization which depends solely upon its blue-prints of prescribed behavior is a very fragile social system' (p. 132). Much like an organization, the effectiveness of a group depends not only on the prescribed behavior of its member, but also on the extra-role behavior such as OCB.

OCB was first conceptualized as an individual level construct in the sense that it is discretionary behavior on the part of individual employees. As discussed above, such individual behavior, in aggregate, would promote the effectiveness of the organization. We suggest that OCB may promote team effectiveness as well as organizational effectiveness. Consistent with this assumption, Podsakoff, Ahearne, and MacKenzie (1998) provided empirical support for the proposition that OCB is related to work group effectiveness. We argue that interdependence may promote OCB in a team context. As discussed above, resource interdependence occurs when persons recognize that they have the abilities and resources to affect each other's outcomes and that resource interdependence measures the extent that people feel dependent upon each other. Interdependence implies that team members know that they have information and ideas that they can apply to help their team accomplish its goals and that their team members also have the ability to affect their goals. As demonstrated by Lawler and Yoon (1993, 1996) experimentally, mutual dependence facilitates frequent exchange, positive feelings, and strong interpersonal relationships as participants reciprocate assistance with each other. This reciprocity and interpersonal cohesion generalize to a willingness to help team members and perform work behaviors that contribute to joint success even though such behaviors are not formally prescribed by roles. OCB is precisely these kind of work behaviors; OCB is related to overall efficiency and effectiveness yet it is not part of one's formal job. With resource interdependence, team members may be more motivated to perform OCB because they have been reciprocating mutual assistance.

Competitive interaction and resource interdependence may affect OCB through its effect on relationships. Low levels of competition and believing that they can depend upon each other, team members are expected to believe that their efforts to assist others will be appreciated and reciprocated. Previous studies have found that a strong leader-follower relationship induces organizational contributions as measured by OCB (Bennett & Liden, 1996; Setton, Bennett, & Liden, 1996; Smith, Organ, & Near, 1983; Tierney & Bauer, 1996—Paper presented at the Annual Conference of Management, Cincinnati). This study extends this research to test the extent that effective relationships among team members predict to organizational citizenship.

Based on the above research and reasoning, the present study's framework posits that conflict values impact relationship beliefs and interaction which in turn affect employee performance (Figure 1). Employees with positive attitudes who approach conflict openly are able to develop interdependence beliefs and low levels of competitive interaction. Team members with negative attitudes to conflict, who try to avoid conflict, interact competitively and have low levels of interdependence. Interdependence and low levels of competition are hypothesized to lead to team effectiveness and OCB.

The specific hypotheses are:

Hypothesis 1: Conflict values manifested in positive attitudes and approaching conflict promote high interdependence beliefs; conflict values manifested in negative attitudes and avoiding conflict promote competitive interaction.

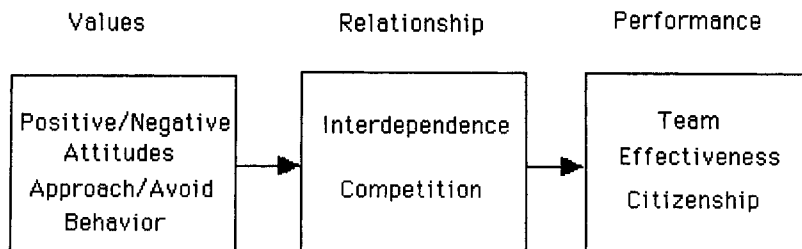


Figure 1. Hypothesized dynamics

Hypothesis 2: Conflict values of positive attitudes and approaching conflict promote team effectiveness and organizational citizenship behavior.

Hypothesis 3: High interdependence beliefs with low levels of competitive interaction facilitate team effectiveness and citizenship behavior.

Hypothesis 4: Positive conflict attitudes and approaching conflict behavior promote team effectiveness and organizational citizenship by inducing high levels of interdependence and low levels of competitive interaction.

Data to test these hypotheses were collected in China. North American findings on the value of conflict cannot be assumed to apply in other cultural settings (Adler, 1983). Although research has focused on differences between the West and the East, it is useful to test the generalizability of findings developed in North America to East Asia. Consistent findings in the East as well as the West could form the basis for a common framework for people with diverse cultural backgrounds in joint ventures and in other settings to deal with their conflicts (Cox, Lobel, & McLeod, 1991).

This study provides a rigorous test by collecting the data on conflict values and relationship attitudes and behavior from employees and data on the outcome measures of team effectiveness and extra-role performance from their leaders. This data collection should reduce the threat of common method variance as an alternative explanation of results.

Organizational Context

Chinese SOEs in the Midst of Reform

Cultural

This study provides a strong test of the positive conflict idea in that Chinese culture values interpersonal harmony, respect, and face giving (Ding, 1995—Paper presented at the 13th Annual Conference of the Association of Management, Vancouver, Canada; Ding, Goodall, & Warner, 2000; Jehn & Weldon, 1992—Paper presented at the Academy of Management, Las Vegas). Confucian's 'Doctrine of the Mean' emphasizes that harmony is 'most precious' in relationships among people and with the external world (Chan, 1963). Individuals are to adopt a harmonious approach, control their emotions, and avoid taking extreme positions in conflict.

SOE Reforms

Throughout the late 1990s when the data were being collected, SOEs were under pressure to transform themselves into more market-driven enterprises as state guarantees were being withdrawn. SOEs in Shanghai and Nanjing were among the leaders in this transformation and many were successful in part because they continued to enjoy state support and could network with foreign and other successful firms in the area. SOEs in the North had been much less successful due to underdeveloped infrastructures and less foreign direct investment in the region.

This Sample

Although general Chinese cultural values may be conflict negative, the particular sample could have made it more likely that positive conflict values would be found to be useful. The SOEs that

participated in this study generally appeared to have both incentives to reform and confidence to do so. Respondents may have been particularly oriented toward and accepting of using conflict to help them develop their teams and manage change. They could appreciate the pressures to develop more effective ways of working in order to participate in the reform but also had some confidence that they could be successful in the new environment. SOEs managers and employees in the North, for example, may have been more demoralized and sceptical and less open and accepting of using conflict to strengthen their teams and performance as they tried to reform themselves.

Method

Participants

This study was conducted among state-owned enterprises (SOEs) located in two major cities in the Chinese Mainland, namely, Shanghai and Nanjing. Shanghai is the largest industrial city in China with a population of 13 million. With its well-developed infrastructure and industrial bases, and relatively high per capita income and high educational levels, Shanghai has taken the lead in successfully transforming inefficient SOEs into market-oriented business entities. Nanjing, the capital city of Jiangsu province, has a population exceeding five million. The rapid economic growth in recent years has made the province one of the most prosperous regions in China. We selected these cities because their pace of economic reform has been faster than in the Chinese inland regions (Ding et al., 2000). They have a great many SOEs who are trying to reform and are interested in using teams.

Initially, a sample of 20 SOEs in each city were arbitrarily drawn from four industries, i.e., machinery, electronics, petrochemical, and textiles, in which SOEs dominate. Our research assistants and collaborators from local universities contacted these enterprises. Eventually, 10 large SOEs in Nanjing and 9 in Shanghai agreed to participate in this study. Questionnaires were distributed to carefully selected pairs of leaders and subordinates based on the criteria that they must have long-term team work relationship.

The teams were involved in various functional, ongoing projects rather than cross-functional, *ad hoc* projects. Teams averaged over eight members, with a range of 3 to 12. Employees typically belong to only one team. The leaders participating in the study were factory directors and department heads in various functional areas (average age, 48-year old; average organizational tenure, 21 years; and average years of working in the current post, 9.7 years). The subordinates who participated in the survey were workers and staff under the supervision of the leaders (average age, 38 years; average organizational tenure, 16 years; and average years of working in the current post nearly eight years).

The questionnaires for leaders and for subordinates were originally written in English, then translated into Chinese by two members of the research team who are native Chinese and received doctoral degrees from North American countries. To ensure conceptual consistency, the questionnaires were back-translated into English to check for possible deviation (Brislin, 1970). The questionnaires were pre-tested to make sure that respondents clearly understood every phrase, concept, and question. To prevent and eliminate potential concern for being involved in evaluating others, participants were assured that their responses would be held totally confidential. Only the researchers would have access to the responses and data would only be used for academic purposes.

Three weeks after the distribution of the questionnaires, our research assistants made follow-up phone calls. A total of 124 pairs of questionnaires were distributed and then collected, among which 18 pairs contained multiple missing items and were thus excluded, resulting in a response rate of 85 per cent. The analysis is based on responses of 106 pairs of leaders and subordinates.

Conflict values

Conflict values have both an attitude and a behavior component. Attitudes toward conflict were evaluations of the positive and negative utility of conflict. The scale was taken from a study on self-managing teams (Alper, Tjosvold, & Law, 2000). It had four items with a Cronbach alpha reliability of 0.62 (see Appendix).

Avoiding is the attempt to smooth over conflicts and minimize discussion of them whereas openness encourages direct discussion. The avoid–open approach scale was developed from a series of experimental studies (Tjosvold, 1985) and from a questionnaire study on project managers (Barker et al., 1988). The conflict avoidance scale had four items with a Cronbach alpha of 0.73.

Relationship

Relationship was measured by both attitudes toward interdependence and competitive interaction. Organizational researchers have focused on sequential and pooled workflow interdependence (Van de Ven et al., 1976). This study examines resource interdependence, which occurs when persons recognize that they have the abilities and resources to affect each other's outcomes (Lawler & Yoon, 1996; Thibaut & Kelley, 1969). Resource interdependence measures the extent of mutual dependence. Based on a previous measure (Tjosvold, Andrews, & Struthers, 1991), employees assessed on a 7-point Likert-type scale the extent that they needed the abilities of team members. This 5-item scale had a Cronbach alpha of 0.70.

Competitive interaction is discussing issues with an intent to accomplish one's goals at the expense of the other (Deutsch, 1973). The competitive interaction scale had four items and was taken from a questionnaire study on project managers (Barker et al., 1988). The scale had a Cronbach alpha of 0.73.

Team effectiveness and citizenship behavior

Team effectiveness was operationalized as the performance of the members on their assigned tasks. This measure was adopted from a job performance scale (Hui, Law, & Chen, 1999; Williams, 1988). The 5-item scale had a Cronbach alpha of 0.74.

Extra-role performance was operationalized as OCB and measured by an adaptation of the scale developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990). Three dimensions of OCB were used in the present study: (1) Altruism—discretionary behaviors that have the effect of helping a specific other person with an organizationally relevant task or problem (Cronbach alpha = 0.88); (2) Conscientiousness—discretionary behaviors on the part of the employee in the areas of attendance, obeying rules and regulations, taking breaks, and so forth (alpha = 0.76); and (3) Courtesy—discretionary behaviors aimed at preventing work-related problems from occurring (alpha = 0.73). Sample items are: Altruism, 'helps orient new employees even though it is not required as part of his/her job'; Conscientiousness, 'is one of my most conscientious employees'; and Courtesy, 'tries to avoid creating problems for co-workers.'

Two of the original five categories of OCB were not included: (1) Civic virtue—discretionary behaviors that indicate an employee's participation in or concern about the governance of the organization; and (2) Sportsmanship—employee behaviors that indicate a willingness to tolerate less than ideal circumstances without complaining. These two categories were omitted because company officials expressed concerns that the items would alert employees to changes. For example, a civic virtue item is 'provides constructive suggestions regarding changes that might be made in his/her department or company.' All sportsmanship items were negatively worded-items and were deemed too sensitive. An example item from sportsmanship is 'consumes a lot of time complaining about trivial matters.'

Results

We first examined the zero-order correlations. We included age, gender and organizational tenure as possible control variables because they have been included in OCB studies (e.g., Morrison, 1994; Hui et al., 2000). For example, Morrison (1994) included these three as control variables in her study on the role definitions of OCB. In the meta-analysis, Organ and Ryan (1995) suggested that there were good reasons to include gender and organizational tenure as control variables as they relate to specific forms of OCB—for example, older employees and those who may be more likely to be in a position to help new employees (altruism) since they have the experience to determine whether to divert time away from their own jobs to assist other employees and to offer the help that is necessary. Female employees may be more likely to perform altruistic and conscientious behaviors because they are usually more sympathetic than male. Female employees also suffer from a lower social status than males in organizations. Hence, they may be motivated to perform more OCB to gain credibility. The zero-order correlations among the variables (Table 1), however, suggest that in the most part, the control variables did not have significant relationships with the key dependent variables: team effectiveness and OCB. Only age and job tenure were related to altruism. Gender was not related to any categories of performance.

Zero-order correlations provide an initial examination of the hypotheses linking conflict values, relationships, and performance outcomes (Table 1). Consistent with Hypothesis 1, positive attitudes toward conflict correlated positively with interdependence ($r = 0.22$, $p < 0.05$) and negatively with competitive interaction with team members ($r = -0.41$, $p < 0.01$). Conflict avoidance correlated negatively with interdependence ($r = -0.20$, $p < 0.01$) and positively with competitive interaction ($r = 0.31$, $p < 0.01$). Consistent with Hypothesis 2, positive attitudes and avoiding conflicts related to some categories of group effectiveness and OCB. Consistent with Hypothesis 3, interdependence and competitive interaction related to some categories of group effectiveness and OCB. It appears that interdependence and competitive interaction had differential effects on team effectiveness and OCB.

To test the hypotheses more thoroughly, we used hierarchical multiple regression. Hypothesis 1 proposed that conflict values affect relationships among team members, and was tested by regressing the two relationship variables against the two measures of conflict values after controlling for the gender, age, and job tenure of team members. In other words, the three control variables were entered in step 1, and the two measures of conflict values were entered in step 2. Results of this analysis showed that the

Table 1. Correlations among variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Age	38.34	8.62										
2. Gender	1.36	0.48	−14									
3. Tenure	16.93	8.18	85 [†]	−13								
4. Attitude	3.69	0.56	−07	−03	03							
5. Avoid	2.81	0.80	−24*	12	−28 [†]	−35 [†]						
6. Interdependence	3.56	0.50	11	−22*	09	22	−20*					
7. Competition	2.35	0.77	−08	06	−13	−41 [†]	31 [†]	−08				
8. Team effectiveness	3.79	0.48	142	03	05	25 [†]	−19	21*	−23*			
9. Altruism	3.78	0.55	30 [†]	−20*	21*	17	−32	15	−21*	56 [†]		
10. Conscientious	3.70	0.61	11	04	05	23*	−10	12*	−22*	51 [†]	46 [†]	
11. Courteous	3.85	0.36	09	02	06	19	−27 [†]	24*	−15	51 [†]	62 [†]	53 [†]

* $p < 0.05$; [†] $p < 0.01$.

two value measures explained significant variance in interdependence ($\Delta R^2 = 0.063$, $\Delta F = 3.44$, $df = 5, 97$, $p < 0.05$). A closer examination of the coefficients indicated that attitudes towards conflict predicted interdependence of team members ($\beta = 0.19$, $p < 0.10$). Team members who had more positive attitude towards conflicts were more likely to interact interdependently with other team members. Attitudes towards conflicts also predicted competitive interaction ($\Delta R^2 = 0.21$, $\Delta F = 11.12$, $df = 2, 97$, $p < 0.01$). The coefficients indicated that positive attitudes towards conflicts related negatively to competitive interaction ($\beta = -0.36$, $p < 0.01$).

Hypothesis 2 concerning the effects of conflict values on the performance of team members was tested by hierarchical multiple regression, with the three control variables entered in step 1. In step 2, the two dimensions of conflict values were entered. Team effectiveness and the three categories of OCB were used as the dependent variables in four disparate hierarchical multiple regression equations involving the same independent variables in steps 1 and 2. Results of this analysis (Table 2) indicate that conflict values affected team effectiveness as well as OCB. The change in R^2 was significant across both team effectiveness and all three categories of OCB. A closer examination of the coefficients indicated that positive attitudes toward conflicts related significantly to task effectiveness ($\beta = 0.26$, $p < 0.05$) and conscientiousness ($\beta = 0.27$, $p < 0.05$). Avoiding conflicts related significantly to altruism ($\beta = -0.24$, $p < 0.05$) and courtesy ($\beta = -0.27$, $p < 0.05$).

Hypothesis 3 concerning the effects of team relationships on performance outcomes was examined using hierarchical multiple regression. The three control variables were entered in step 1, relationship with team members variables were entered in step 2, and the value variables were entered in step 3. Team effectiveness and the three categories of OCB were used as the dependent variables in separate hierarchical multiple regression equations. Table 3 reports results for this analysis. Consistent with Hypothesis 3, relationships in step 2 related significantly to team effectiveness ($\Delta R^2 = 0.11$, $\Delta F = 6.40$, $df = 2, 96$, $p < 0.01$), altruism ($\Delta R^2 = 0.05$, $\Delta F = 2.94$, $df = 2, 96$, $p < 0.05$), conscientiousness ($\Delta R^2 = 0.08$, $\Delta F = 4.07$, $df = 2, 96$, $p < 0.05$), and courtesy ($\Delta R^2 = 0.09$, $\Delta F = 4.82$, $df = 2, 97$, $p < 0.01$). Examination of the coefficients indicated that interdependence related significantly to team effectiveness ($\beta = 0.20$, $p < 0.05$) and courtesy ($\beta = 0.25$, $p < 0.05$). Competitive interaction, on the other hand, related significantly to task effectiveness ($\beta = -0.26$, $p < 0.01$), altruism ($\beta = -0.21$, $p < 0.05$) and conscientiousness ($\beta = -0.25$, $p < 0.01$).

Hypothesis 4 deals with the mediating effects of relationships with team members on the impact of conflict values on employee performance. Again, hierarchical multiple regression was employed, with the three control variables entered in step 1. In step 2, relationship with team members was entered, and conflict values in step 3. Team effectiveness and the three categories of OCB were used as the dependent variables in four disparate hierarchical multiple regression equations. Results of this analysis are also reported in Table 3.

As shown in Table 3, the change in R^2 for team effectiveness and OCB was non-significant after relationships were entered in step 2, except for altruism ($\Delta R^2 = 0.06$, $\Delta F = 3.3$, $df = 2, 94$, $p < 0.05$). An examination of the coefficients indicated that avoiding conflicts related significantly with altruism ($\beta = -0.21$, $p < 0.05$). Thus, except for altruism, results were in general consistent with Hypothesis 4.

Discussion

Results generally support recent arguments that conflict can contribute to effective teamwork. Indeed, results indicate a positive role for conflict in China, although harmony has traditionally been highly

Table 2. Effects of avoidance and attitude on effectiveness and OCB

Step	variable	Team effectiveness				Altruism				Conscientiousness				Courtesy			
		Beta	ΔR^2	ΔF	df	Beta	ΔR^2	ΔF	df	Beta	ΔR^2	ΔF	df	Beta	ΔR^2	ΔF	df
1	Controls		0.05	1.60	3, 98		0.12	4.27	3, 98		0.02	0.75	3, 98		0.01	0.41	3, 99
	Age	0.47*				0.46*				0.32				0.20			
	Gender	0.07				-0.13				0.07				0.07			
	Org. tenure	-0.39*				-0.27				-0.23				-0.18			
2	Values		0.10 [†]	5.85	2, 96		0.22 [†]	5.82	2, 96		0.07*	3.90	2, 96		0.10 [†]	5.61	2, 97
	Avoidance	-0.13				-0.24*				-0.02				-0.27*			
	Attitude	0.26*				0.14				0.27*				0.12			
		Total: 0.15				Total: 0.34				Total: 0.10				Total: 0.11			

Note: *Indicate $p < 0.05$; [†]Indicates $p < 0.01$.
Org. tenure indicates organizational tenure.

Table 3. Effects of avoidance, attitude, and interdependence and competition on performance

Step variable	Team effectiveness					Altruism					Conscientiousness					Courtesy				
	Beta	ΔR^2	ΔF	df		Beta	ΔR^2	ΔF	df		Beta	ΔR^2	ΔF	df		Beta	ΔR^2	ΔF	df	
1 Controls		0.05	1.59	3, 98			0.12*	4.27	3, 98			0.02	0.75	3, 98			0.01	0.41	3, 99	
Age	0.46*					0.47†					0.32					0.18				
Gender	0.10					-0.11					0.09					0.11				
Org. tenure	-0.40					-0.28					-0.25					-0.18				
2 Relationship		0.11†	6.40	2, 96			0.05*	2.94	2, 96			0.08*	4.07	2, 96			0.09†	4.82	2, 97	
Interdep.	0.15					0.03					0.07					0.20*				
Compet.	-0.17					-0.11					-0.18					-0.08				
3 Values		0.03	1.94	2, 94			0.06*	3.30	2, 94			0.03	1.38	2, 94			0.05	2.91	2, 95	
Avoidance	-0.09					-0.22*					0.02					-0.23*				
Attitude	0.17					0.09					0.19					0.06				
	Total: 0.19					Total: 0.22					Total: 0.12					Total: 0.15				

Note: *Indicate $p < 0.05$; †Indicates $p < 0.01$.

Interdep. indicates interdependence.

Compet. indicates competition.

Org. tenure indicates organizational tenure.

valued. Considering conflict as negative and avoiding it appear generally ineffective for promoting successful teamwork, even in such a collectivist society as China. In addition, results contribute to research on the conditions under which, and the mechanisms by which, conflict contributes to teamwork. Although findings provide overall support that conflict values impact team outcomes through affects on relationships, results suggest refinements in the proposed hypotheses.

In a challenge to the traditional idea that avoiding conflict and competition are opposites, results are consistent with recent studies suggesting that avoiding conflict complements competitive interaction. Team members intent on avoiding conflict also engage in competitive interaction. Findings support the theorizing that avoiding conflict does not eliminate conflict but only makes it more likely that team members deal with issues competitively (Barker et al., 1988; Deutsch, 1973). Open conflict management, on the other hand, offers the possibility of the resolution of issues that reduces competitive interaction within the team.

Consistent with previous research, competitive interaction was found to characterize teams that leaders considered ineffective. Studies have shown that team members engaged in trying to outdo one another do not utilize each other's ideas and resources, hide information, and block each other's efforts, thus creating distrust (Deutsch, 1973). Because of the lack of psychological support and disrupted communication and exchange, competitive interaction results in poor team performance (Johnson et al., 1981).

The analyses also support the theorizing that positive approaches to conflict contribute to employee performance by impacting resource interdependence beliefs among team members. Assuming that conflict is positive can contribute to resource interdependence that in turn helps team members reciprocate assistance and work together effectively. Positive conflict values also seem to encourage employee citizenship behavior.

However, results indicate that the effects of conflict values on interaction and outcomes are more differentiated and specific than hypothesized. Having a positive value on conflict was found to be a stronger predictor of low levels of competition than of interdependence. Avoiding conflict was found to be an antecedent of competitive interaction but not much of interdependence. Competitive interaction in turn predicted team effectiveness but not citizenship behavior. Interdependence correlated with conscientiousness and courtesy but not with team effectiveness.

Competitive interaction was expected to be an antecedent of low levels of OCB because team members felt a lack of support. However, competition was not found to predict low levels of citizenship behavior. OCB measures citizenship behavior directed for the benefit of the leader and other groups as well as team members. It appears that the lack of support in competitive interaction within the team was not so powerful as to generalize to withdrawing from helpful behaviors toward the organization as a whole.

Yet results suggest that strong interdependence within the team encouraged citizenship behavior. Employees who considered their team members able and resourceful were also observed by their leaders to be helpful citizens. Recognizing that their team members were resourceful and that they could depend upon them, employees may have developed general feelings of support for organizational members generally and that this goodwill led to citizenship behavior. These employees may have also strategized that their citizenship behavior would induce reciprocity by their able teammates from which they would derive considerable benefit. Future research is needed to explore and develop these propositions.

This study has proposed that values have their impact on effectiveness through relationships. However, a reversed causal ordering could be argued, namely, that relationships have their effects on outcomes that impact through conflict values. The approach taken here is consistent with the emerging understanding that values have their impact through interaction (Morris et al., 1998); future research could explore the possibility that values mediate between relationships and outcomes.

The study contributes to cross-cultural organizational behavior by developing the data in China. Theories developed in North America cannot be assumed to apply in such collectivist societies as China (Earley, 1989). However, results support the idea that values on the utility of conflict can be generalized at least to some extent to China. Even in China, negative conflict values were found to be antecedents of competitive interaction and ineffective teamwork. Findings that Chinese tend to avoid conflict compared to western managers have been interpreted that conflict is generally destructive in China compared with the West. Our results challenge this interpretation. Even if avoiding is more prevalent in Chinese organizations, our evidence suggests that valuing conflict can contribute to effective teamwork in China.

Relationships among employees are considered critical for effective work in China (Leung, 1997; Triandis, 1990; Triandis et al., 1990). This study further supports this argument by showing that measures of competitive interaction and interdependence can impact team effectiveness and citizenship behavior. Competitive interaction, as in the West, can disrupt team effectiveness. Feeling interdependent appears to encourage citizenship behavior.

Limitations

The sample and operations, of course, limit the results of this study. The data are self-reported and subject to biases, and may not accurately describe the relationships, although recent research suggests that self-reported data are not as limited as commonly expected (Spector, 1992). These data are also correlational and do not provide direct evidence of causal links between conflict values, relationships, and team effectiveness and OCB. However, employees completed measures of values and relationships and their leaders of team effectiveness and OCB. Developing different sources for the independent and dependent measures should reduce the possibilities of common method variance as an alternative explanation of the results. It should be noted though that Hypothesis 1, relating conflict values to interdependence and competitive interaction, is subject to common method variance.

Spector and Brannick (1995) have argued that the most effective way to overcome recall and other methodological weaknesses is to test ideas with different methods. It would be desirable to provide direct experimental verification of the role of conflict values on relationships and employee outcomes in East Asian organizational settings.

Results were interpreted as suggesting that positive conflict values may contribute to effective teamwork even in China. Appreciating and approaching conflict were found to predict to interdependence and low levels of competitive interaction; interdependence in turned predicted citizenship behavior and competitive interaction team ineffectiveness. These results support traditional ideas that relationships, especially in collectivist societies, are key to effective organizational work. However, these results challenge common assumptions that conflict is generally disruptive. Future research is needed to document the utility of positive conflict and the processes by which positive conflict values affect the dynamics and outcomes of teamwork.

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Appendix

Conflict attitudes

I would rather work with conflict on my job than avoid it.
I am more productive when we discuss our opposing views than by smoothing them over.
I like discussing various views with people on the job.
I am more able to make good decisions about my job with conflict.

Approach-avoid conflict

My team members and I discourage each other from speaking out our feelings and views.
We seek harmony even at the expense of open discussion.
We try to keep differences of opinion quiet.
We try to keep our differences from being expressed.

Interdependence

The information and ideas of my team members can affect whether I reach my goals.
My information and ideas can affect whether my team members reach their goals.
I can have an impact on how effective my team members are.
I can affect my team members' problem-solving and learning.
All things considered, I am highly pleased with the way my team discusses problems and conflicts.

Competitive interaction

Individual team members want others to make concessions but do not want to make concessions themselves.
Individual team members treat conflict as a win-lose contest.
Individual team members overstate their position to get their way.
Individual team members make it costly for others to maintain their view.

Team effectiveness

Team members always complete their duties specified in their job description.
Team members fulfil all responsibilities required by their job.
Team members often fail to perform essential duties.
Team members never neglect aspects of the job that they are obligated to perform.
Team members meet all the formal performance requirements of the job.

Altruism

Helps orient new employees even though it is not required as part of his/her job.
Is always ready to help or to lend a helping hand to those around him/her.

Willingly gives of his/her time to help others who have work-related problems.
Helps others with heavy work loads.
Helps fill in for others who are sick or absent.

Conscientiousness

Is one of my most conscientious employees.
Believes in giving an honest days work for an honest days pay.
Never takes long lunches or breaks.
Takes fewer breaks at work than other employees.
Is willing to work on a job/project until it is completed, even if it means coming in earlier or staying later than normal.

Courteous

Considers the impact of his/her actions on others.
Tries to avoid creating problems for co-workers.
Returns phone calls and responds to other messages and inquires for information promptly.
'Touches base' with other workers before initiating actions that might affect them.
Takes steps to try to prevent problems with co-workers.

Table 4. Effects of interdependence, competition and avoidance and attitude on performance

Step	variable	Team effectiveness				Altruism				Conscientiousness				Courtesy	
		Beta	ΔR^2	ΔF	df	Beta	ΔR^2	ΔF	df	Beta	ΔR^2	ΔF	df	Beta	ΔR^2
1	Controls		0.05	1.59	3, 98		0.12 [†]	4.27	3, 98		0.02	0.75	3, 98		0.01
	Age	0.46*				0.47 [†]				0.32				0.18	
	Gender	0.10				-0.11				0.09				0.11	
	Org. tenure	-0.40*				-0.28				-0.25				-0.18	
2	Values		0.11 [†]	5.85	2, 96		0.10 [†]	5.82	2, 96		0.07*	3.90	2, 96		0.10 [†]
	Avoidance	-0.09				-0.22*				0.02				-0.23*	
	Attitude	0.17				0.09				0.19				0.06	
3	Values		0.04	2.43	2, 94		0.01	0.61	2, 94		0.03	1.54	2, 94		0.04
	Interdep.	0.15				0.03				0.07				0.20*	
	Compet.	-0.17				-0.11				-0.18				-0.08	
		Total: 0.19				Total: 0.22				Total: 0.12				Total: 0.15	

Note: *Indicate $p < 0.05$; [†]Indicates $p < 0.01$.

Interdep. indicates interdependence.

Compet. indicates competition.

Org. tenure indicates organizational tenure.