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OPEN-MINDED DISCUSSION IN INTERDEPARTMENTAL  
COLLABORATION: CONTRIBUTION OF GOAL INTERDEPENDENCE AND  
SOCIAL MOTIVES

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MPHIL

LINGNAN UNIVERSITY

2014

OPEN-MINDED DISCUSSION IN INTERDEPARTMENTAL  
COLLABORATION: CONTRIBUTION OF GOAL INTERDEPENDENCE AND  
SOCIAL MOTIVES

by  
LU Jiewei Antonia

A thesis  
submitted in partial fulfillment  
of the requirements for the Degree of  
Master of Philosophy in Business  
(Management)

Lingnan University

2014

## ABSTRACT

### Open-Minded Discussion in Interdepartmental Collaboration: Contribution of Goal Interdependence and Social Motives

by

Lu Jiewei Antonia

Master of Philosophy

Combining theories of social motives, goal interdependence, and conflict management, this study theorized a model in which interdepartmental goal interdependence affects conflict outcomes between different departments through open-minded discussion dynamics adopted by employees from different departments in the organization. This study also proposes that social motives moderate the link between interdepartmental goal interdependence and open-minded discussion.

A sample of 133 employees from different business organizations in China were interviewed to recall a critical incident when they had a conflict with their coworker from different departments. SEM results and other analysis results support the hypotheses that cooperative interdepartmental goal interdependence and competitive goal interdependence are antecedents to employees engaging in open-minded discussion in the context of interdepartmental collaboration, and that open-minded discussion in turn influences conflict outcomes, i.e. task accomplishment, relationship strengthening, and future collaboration. Results further suggest that employee's prosocial motive moderates the relationship between competitive goal interdependence and open-minded discussion, and that proself motive moderates the relationship between cooperative goal interdependence and open-minded discussion.

Findings also suggest that practitioners promote effective interdepartmental collaboration by strengthening their prosocial motive when perceiving competitive goal and proself motive when perceiving cooperative goal, setting cooperative interdepartmental goal interdependence, and handling conflict through open-minded discussion. The study contributes to conflict management literature as well as the goal interdependence theory in the organizational behavior literatures.

*Key words:* Open-minded discussion, interdepartmental goal interdependence, social motives, conflict management

## DECLARATION

I declare that this is an original work based primarily on my own research, and I warrant that all citations of previous research, published or unpublished, have been duly acknowledged.

---

Lu Jiewei Antonia

Date: \_\_\_\_\_

CERTIFICATE OF APPROVAL OF THESIS

OPEN-MINDED DISCUSSION IN INTERDEPARTMENTAL COLLABORATION:  
CONTRIBUTION OF GOAL INTERDEPENDENCE  
AND SOCIAL MOTIVES

by  
Lu Jiewei Antonia

Master of Philosophy

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## CHAPTER I INTRODUCTION

In contemporary knowledge economy, organizations are increasingly adopting organic and flexible team-based structures instead of traditional organization structure (Sundstrom, 1999), which makes departments interdependent and undermines traditional power relations (Pfeffer, 1997). Inter-functional entities or departments in an organization are increasing their collaboration in operating interdependently, being able to achieve their own goals, and participating in fulfilling the organization's ultimate goal (Ruekert & Walker, 1987). As a result, members with distinct backgrounds, skills, resources and capabilities from different departments are organized around inter-functional or interdepartmental teams. Practitioners and researchers have realized that the effective collaboration between departments within organizations has become the key factor as well as the critical challenge to meet rising market competition and customer expectations (Carmeli & Gittell, 2009; van Knippenberg, 2003).

One factor that could favor the development of good and positive relationships between different functional structures of an organization was conflict (Barclay, 1991). Conflicts between departments are rising more frequently within organizations nowadays, which are attributed to the increasing strains produced by resource and workflow interdependence between departments and differences in their short-term objectives and their desires for autonomy (Barclay, 1991; Dutton & Walton, 1966; Gresham, Hafer, & Markowski, 2006; Lovelace, Shapiro, & Weingart, 2001; Nauta & Sanders, 2001; Van De Ven & Ferry, 1980). Substantial literature and practice have documented and indicated the potential harm as well as the considerable value of conflict in decision-making, team management, and organizational process

(Deutsch, 1973, 1980; Tjosvold, 2008). However, conflict itself does not automatically decide the quality of results in organizational process; instead the useful functions of conflicts begin with the employee's personal awareness and acknowledgment of the value of conflict and improvement in conflict management skills (Rahim, 2011).

This thesis includes a literature review that examines effective conflict management dynamics within the context of interdepartmental conflict in organizations. The literature review investigates the effects of interdepartmental goal relationships and social motives on interdepartmental conflict management in organizations. This chapter develops the background information related to the topic, the purpose statement, the research questions and the significance of the study.

### **Background of the Study**

Organizations are faced with the challenge of coordination problems caused by the division of goals and tasks over different departments. Inter-functional entities or departments in an organization are increasing their collaboration in operating interdependently to achieve their own goals and fulfill the organization's ultimate goal (Ruekert & Walker, 1987). Accordingly with the proceeding professional specialization and workforce diversification in the interdepartmental teams, organizations face the challenges of growing conflicts between departments. Further studies about interdepartmental conflict management are needed in order to improve effective collaboration between departments within organizations.

Researchers have employed a multitude of mechanisms to manage conflict effectively and productively in business setting (Montoya-Weiss, Massey, & Song,

2001; Rahim, 1983, 1992; Ruble & Thomas, 1976; Simons, & Peterson, 2000; Stewart, & Barrick, 2000). A central conflict management mechanism is the open-minded discussion of conflicting perspectives for mutual benefits, a concept developed by Johnson, Johnson, and Tjosvold (2000). Open-minded discussion through displaying the value of intellectual opposition is demonstrated as an effective way to promote productive conflict management within teams and departments in the West (De Dreu & Gelfand, 2008; Johnson, Johnson, & Tjosvold, 2000; Tetlock, Armor, & Peterson, 1994). A yet unexamined issue has to do with how open-minded discussion dynamics contribute to effective collaboration between departments within organizations in a collectivistic eastern culture like China.

Employees in China, as in other countries, often feel helpless in an escalating conflict when they make decisions and solve problems; the harder they try, the hotter the conflict gets (Tjosvold & Sun, 2003; Tjosvold, 2008). Yet researchers have found that Chinese employees tend to avoid aggressive ways of handling conflicts and smooth over them to try to maintain relationships (Ding, 1995; Leung, 1997). Chinese people are considered to be collectivistic and group oriented where maintaining relationships is highly valued (Boisot & Child, 1996). However, direct discussion may help to resolve conflict in China (Tjosvold & Sun, 2003). More research should help people confront their stereotypes, move away from blaming conflict itself, and adopt more useful ways to manage their conflicts constructively (Deutsch, 1973, 1980; Tjosvold, 2008).

Although Western-based research cannot be assumed to apply in a collectivistic culture like China (Hofstede, 1993), it may guide theorizing about conflict in China. The individualistic culture of the West is theorized to result in accepting open, direct

discussion of opposing views (Tjosvold & Sun, 2003). Western research suggests that dealing with issues directly and openly promotes productive conflict management (De Dreu & Van de Vliert, 1997; Rubin, Pruitt, & Kim, 1994; Simons, Pelled, & Smith, 1999). Through open-minded discussion, protagonists make their ideas public, challenge the weaknesses in each other's arguments, and lay the groundwork to incorporate the best of each other's position to create integrative solutions (Pruitt & Syna, 1989). Open, direct discussion induces an epistemic curiosity that leads to a search for more information and an understanding of the opposing views (Berlyne, 1963). Specifically, discussants, confronted with an opposing position, begin to doubt the adequacy of their own perspective. Feeling uncertain that their present views are complete and accurate, they are motivated to search the arguments of opposing positions. They have been found, for instance, to show more interest in learning, to ask more questions, to demonstrate more understanding, and to incorporate elements of the opposing position into their decision (Tjosvold, 1982; Tjosvold & Deemer, 1980).

Numerous empirical studies conducted in both Western and Eastern countries provide robust support to the generalization of goal interdependence theory. The theory of goal interdependence (Deutsch, 1973, 1980, 1990) holds the belief that when people emphasize their cooperative rather than competitive or independent goals they express their opposing views openly and constructively (Tjosvold, 2008). Experimental and field studies indicate that strong, cooperative relationships are a vital foundation for the open and constructive discussion of conflict (Tjosvold, 2008; Tjosvold, Leung & Johnson, 2006). Decision-makers who emphasize making a decision for mutual benefit and cooperative goals are able to incorporate opposing ideas

and information into making high-quality decisions, whereas trying to outdo and win the discussion lead to closed-mindedness (Deutsch, 1973; Johnson & Johnson, 2005; Tjosvold, 1998, 2008). Emphasizing cooperative interdependence contributes substantially to making controversy constructive. Examinations of goal interdependence in conflict management have been conducted almost exclusively at the individual level with little consideration of goal interdependence at the group level.

Most studies have underlined the importance of cooperative goals and identified different ways to foster cooperative goals. However, departments within organizations often aim at different organizational goals, which may well be competitively or independently related (Blake & Mouton, 1970; Chen & Tjosvold, 2012; Hayward & Boeker, 1998; John, 1991; Nauta, De Dreu, & Vaart, 2002; Porter & Roberts, 1983). Interdepartmental goal incompatibility is very prevalent in organizations and can very much reduce overall organizational effectiveness (Nauta, De Dreu, & Vaart, 2002). Little research has identified conditions under which the negative effect of competitive or independent goal interdependences on productive conflict outcomes between departments can be attenuated.

Most researchers have examined open-minded discussion from the perspective of interpersonal interaction, with very few examining the joint role of interdepartmental interdependence and interpersonal interdependence. Furthermore, most researchers have not studied prosocial motive and proself motive in the open-minded discussion dynamics. This study uses Deutsch's (1973) theory of cooperation and competition and Pruitt and Rubin's (1986) theory of social motive to answer this question. It not only contributes to cooperation and competition literature but also adds value to social motive literature as well. Besides, it also has important implica-

tions for practitioners to build an atmosphere of open-minded discussion in organizations.

Recently, researchers have used social motive theory to explain the relationship between employees and their organizations and employee behaviors. Meanwhile, studies have illustrated the need for more contextual analyses of value orientation processes (Ethier & Deaux, 1994; Stryker, 2000), including competitive vs. cooperative intergroup interdependence as an important context (Ashmore, Deaux, & McLaughlin-Volpe, 2004). And given the potential costs of competitive and independent goals between departments, managing the goals between different departments in organizations requires further exploration. Thus, social motives should be appropriate as an individual characteristic to moderate the cognitive process of goal interdependence, which can help to make the outcomes of interdepartmental conflict productive.

### **Purpose of the Study**

This study contributes to our understanding of conflict management by investigating the contribution of open-minded discussion dynamic to effective collaboration among employees from different departments within organizations. Specifically, this study argues that open-minded discussion between employees from different departments within organizations will result in productive interdepartmental conflict outcomes, such as organizational task accomplishment, relationship strengthening, and their confidence in working together in the future.

This study uses the theory of goal interdependence (Deutsch, 1973, 1980, 1990) to analyze the nature of relationships between departments in organizations. I exam-



ine the proposition, derived from the theory of goal interdependence, that open-minded discussion dynamic between employees from different departments within organizations is influenced by how employees perceived the goal relationship (i.e. cooperative goal interdependence, competitive goal interdependence, and independent goal interdependence) between departments.

Moreover, another aim of this study is to explore the moderating role of social motives in interdepartmental conflict management. Given the prevalence and costs of perceived competitive and independent goals between departments, it is important for organizations to manage the competitive and independent goals of different departments. However, little research has identified conditions under which the negative effect of competitive or independent goal interdependences on productive conflict outcomes between departments can be attenuated. This study argues that a key motivator in helping employees from different departments engage in open-minded discussion of controversy when they perceive different types of interdepartmental goals, is the motives individuals have when making decisions. I investigate whether social motives (i.e. prosocial/proself motive) can moderate the effect of departmental goal interdependence (i.e. cooperative, competitive and independent goal interdependence) on open-minded discussion dynamics so that it enhances productive conflict outcomes. The moderating effects of prosocial/proself motive on departmental goal interdependence has not been empirically tested, a gap in extant research that this study addresses.

In doing so, I answered calls from both the social motives and the conflict management literatures and connect research on social motives and conflict management. The combined consideration of goal interdependence and social motives may

improve our theoretical understanding of conflict management processes in organizations and may result in stronger practical tools to stimulate interdepartmental collaboration.

### **Research Questions**

The first research question of this study is: In an interdepartmental conflict setting, how do open-minded discussion dynamics between individuals from different departments in the same organization affect the outcomes of interdepartmental conflict?

The second research question of this study is: In an interdepartmental conflict setting, how does an individual's perception of cooperative interdepartmental goal interdependence affect the way that the individual deals the conflict with coworkers from other departments?

The third research question of this study is: In an interdepartmental conflict setting, how does an individual's perception of competitive interdepartmental goal interdependence affect the way that the individual deals the conflict with coworkers from other departments?

The fourth research question of this study is: In an interdepartmental conflict setting, does an individual's prosocial/proself motive influence the relationship between cooperative goal interdependence between departments and open-minded discussion dynamics?

The fifth research question of this study is: In an interdepartmental conflict setting, does an individual's prosocial/proself motive influence the relationship be-

tween competitive goal interdependence between departments and open-minded discussion dynamics?

### **Significance of the Study**

The present study contributes to the goal interdependence and dual concern literature. Both Goal Interdependence Theory and Dual Concern Theory see social motives as the key motivational factor to problem-solving behavior especially conflict resolution and outcomes besides the influence of cognitive and emotional factors (De Dreu, Weingart, & Kwon, 2000; Deutsch, 1973; Tjosvold, 1998). However, neither theories provide sufficient methodological grounds for the effects of social motives on whether or not individual can reach integrative agreements, therefore more empirical evidence should be achieved to better support the social motives arguments. This study attempts to remedy this gap in the extant literature by empirically investigating the moderating effects of social motives (prosocial/proself motive) on cooperative, competitive and independent interdepartmental interdependences.

This study enriches research on social motives. Social motives have been investigated as the main factor that influences employees' interpersonal behavior in organizations. Research has shown that social motives usually work as the mechanism or the antecedent promoting organizations to benefit from increasing employees' helping behavior, job performance, organizational commitment, and employee relationship development within the organization (Adler, 1983; Edwards & Peccei, 2010; Mael & Ashforth, 1995; Rousseau, 1998). In the present study, prosocial and proself motives work as a specific individual characteristic hypothesized to be a moderator of the cognitive process of goal interdependence.

The current study also contributes to the conflict management literature. On the one hand, previous studies have documented that open-minded discussion of controversial issues can facilitate solving problems within teams and departments (Amazon, 1996; Cosier & Schwenk, 1990; De Dreu & Gelfand, 2008; Hempel, Zhang, & Tjosvold, 2009; Johnson, Johnson, & Tjosvold, 2000; Mason & Mitroff, 1981; Schweiger, Sandberg, & Rechner, 1989; Tetlock, Armor, & Peterson, 1994; Tjosvold, 2008). This study contributes to our understanding of conflict management by investigating the contribution of open-minded discussion dynamics to effective collaboration among employees from different departments within organizations.

On the other hand, examinations of goal interdependence (Deutsch, 1973) in conflict management have been conducted almost exclusively at the individual level and have included less consideration of goal interdependence at the group level. The study reported here is concerned with substantive or task-based conflict, that is, conflict associated with performing a task such as decision making as opposed to conflict associated with dispositions or personality differences (Barclay, 1991). Besides, the unit of analysis is the interdepartmental dyad as opposed to the interpersonal dyad. In addition, previous studies have focused on identifying different ways to foster cooperative goals. Few studies have considered attenuating the negative effects of competitive or independent goal interdependence, even though the perceived competitive or independent goals between departments are prevalent in organizations (Blake & Mouton, 1979; Chen & Tjosvold, 2012; Hayward & Boeker, 1998; John, 1991; Nauta et al., 2002; Porter & Roberts, 1983). This study examines the contextual effects of social motives on the two negative goal interdependences.

In addition to enhancing the theoretical understanding, this study has important

practical implications for effective collaboration between departments in organizations. This study could provide insights and assistance for managers to identify important foundations for effective interdepartmental interaction; meanwhile, it could provide employees an effective way to manage conflicts productively with coworkers from other departments in organizations.

## **CHAPTER II LITERATURE REVIEW**

The first chapter of the thesis includes the background information related to the topic, a purpose statement, the research questions, and the significance of this study. This chapter reviews the literature to develop the study's hypotheses. The literature review first introduces previous research on conflict and conflict management, followed by a discussion of the influence of open-minded discussion of controversy upon conflict management between departments. Next the literature review presents goal interdependence theory, which builds the main theoretical framework of this study. After discussing goal interdependence theory, the review delves into a discussion of social motives and their effects on the relationship between interdepartmental goal interdependence and open-minded discussion of controversy. Finally this chapter develops the overall theoretical framework and the hypotheses based on the literature review.

### **Conflict Management**

Conflict has captured a tremendous amount of attention from both academic scholars and practitioners, as they found increasing conflict in and among organizations (Amason, 1996; Amason, Thompson, Hochwarter, & Harrison, 1995; Cronin & Weingart, 2007; Gibson & Callister, 2010; Jameson, 1999; Morris-Conley & Kern, 2003; Li, Chun, Ashkanasy, & Ahlstrom, 2012; Pondy, 1992; Schotter & Beamish, 2011; Shelton & Darling, 2004; Wall & Callister, 1995). Researchers have noted numerous studies of conflict bringing about positive results (Amason, 1996; Amason & Schweiger, 1997; Rahim, 2011; Simons & Peterson, 2000); however, other studies have demonstrated the opposite effects (De Dreu & Weingart, 2003; Jehn, 1995;

Jehn & Mannix, 2001; Tepper, Moss, & Duffy, 2011). Substantial literature and practice have documented and indicated the potential harm as well as the numerous value of conflict in decision-making, team management, and organizational process. However, conflict itself does not automatically decide the quality of results in organizational process; instead the useful functions of conflicts begin with the employee's personal awareness and acknowledgment of the value of conflict and improving conflict management skills (Rahim, 2011). Research indicates that high performance employees know how to manage conflict so that conflict makes a positive contribution, while less effective employees avoid conflict or allow it to produce negative consequences that in turn produce poor work performance (Amason, Thompson, Hochwarter, & Harrison, 1995; Desivilya, Somech, & Lidgoster, 2010; Lester, Parnell, & Carraher, 2010; Zhang, Cao, & Tjosvold, 2011).

### **Definition of conflict**

Despite the great deal of conflict management research in the past few decades, researchers have not reached a general agreement on the definition of conflict (De Dreu & Gelfand, 2008; Tjosvold, 2006). Failure to agree on the definition of conflict contributes to the difficulty of studying conflict management.

Many researchers conceptualized conflict as a process model of antecedents, processes and outcomes (Wall & Callister, 1995). Pondy's (1967) definition of conflict as a dynamic process between two or more individuals, incorporated five stages of conflict: latent conflict, perceived conflict, felt conflict, manifest conflict, and the conflict aftermath. Similarly, Thomas (1976) defined conflict as a process including perceptions, emotions, behaviors, and outcomes. According to Putnam and Poole

(1987), conflict is “the interaction of interdependent people who perceive opposition of goals, aims, and values, and who see the other party as potentially interfering with the realization of these goals” (p. 552). Wall and Callister (1995) represents a synthesis of prior definitions, arguing that “conflict is a process in which one party perceives that its interests are being opposed or negatively affected by another party”. All in all, these representative models emphasized the stages of conflict, increasing the complexity and difficulty of understanding conflict phenomena and dealing with conflict effectively.

This study adopts Deutsch’s (1973, p.10) definition of conflict as "an action that is incompatible with another action that prevents, obstructs, interferes, injures, or in some way makes the latter less likely or less effective" from a social psychological perspective. This definition not only addresses the flaws in the aforementioned process models by clearly refining conceptualizations and focusing more on the interactive process. It also distinguishes competition and conflict clearly, which helps to understand the potential value and positive aspect of conflict. Confusing conflict with competition induces negative conceptions of conflict. Conflict is different from competition, in which situation one party is sure to win and the other party loses. With this definition, competition implies opposing goal attainments between two interaction parties, whereas conflict can occur both in cooperative or competitive contexts.

### **Conflict management studies**

Essentially, conflict has no direct relationship to positive or negative outcomes. Conflict management research suggested that conflict can be a benefit or a detriment,



which depends largely on the type of conflict and how it is managed (Amason, 1996; Jehn, 1995; Jehn & Mannix, 2001; Simons, Pelled, & Smith, 1999). Researchers have identified several different types of conflict, which resulted in a proliferation of terminology with significant conceptual overlap (Dirks & Parks, 2003). In particular, one distinguishable type of conflict (e.g., interpersonal, relational, affective, and emotional conflict) induced negative results, whereas another distinguishable type of conflict (e.g., task, debate, substantive, and cognitive conflict) promoted positive outcomes (Amason & Schweiger, 1997; Dirks & Parks, 2003; Simons & Peterson, 2000). They argue that there is consistency in conflict style across types of conflict and these types very much influence conflict management styles (Sternberg & Soriano, 1984). However, De Dreu and Weingart's (2003) meta-analysis found the same significant relationship between both types of conflict and conflict outcomes, and concluded that both types of conflict were disruptive and the classification was not so useful.

This study follows Deutsch (1949, 1973, 1980) and others who are among the mainstream conflict management researchers. They proposed that conflict is neutral in nature and conflict can have destructive or productive outcomes (Barki & Hartwick, 2001; Cosar, 1956; King, Hebl, & Beal, 2009; Morgan & Hunt, 1994; Weitz & Jap, 1995). Researchers have noted numerous studies of conflict bringing positive outcomes (Amason, 1996; Amason & Schweiger, 1997; Rahim, 2011; Simons & Peterson, 2000); however, other studies have demonstrated negative results (De Dreu & Weingart, 2003; Jehn, 1995; Jehn & Mannix, 2001; Tepper, Moss, & Duffy, 2011). Researchers have employed a multitude of mechanisms to manage conflict effectively and productively in business setting (Montoya-Weiss, Massey, & Song,

2001; Rahim, 1983, 1992; Ruble & Thomas, 1976; Simons, & Peterson, 2000; Stewart, & Barrick, 2000). A central conflict management mechanism is the open-minded discussion of conflicting perspectives for mutual benefits, a concept developed by Johnson, Johnson, and Tjosvold (2000). Open-minded discussion through displaying the value of intellectual opposition is demonstrated as an effective way to promote productive conflict management within teams and departments (De Dreu & Gelfand, 2008; Johnson, Johnson, & Tjosvold, 2000; Tetlock, Armor, & Peterson, 1994).

### **Open-minded discussion and interdepartmental conflict management**

Inter-unit collaborating teams and individuals generally encounter key problems such as mutual task dependence, ambiguities about roles and rules, allocation of common resources, communication obstacles based on different functional backgrounds, special reward system for inter-unit collaboration, differentiation and specialization in knowledge and skills, diversification in personal abilities and traits, and so on (Walton & Dutton, 1969). Differences in mutual perceptions of interdependence may lead to inter-unit conflict due to difficulties and differences in coordinative behaviors that result (McCann & Ferry, 1979). Such interdepartmental conflicts may include interfering with another department, exaggerating a department's needs to influence another department, withholding information from another department, distorting information, aggression directed against counterparty departments, and other behavioral responses alike (Walton, Dutton, & Cafferty, 1969). Concomitantly, employees in interdepartmental collaboration not only have to face up to the interdepartmental conflict, but also need to find out solutions for their individual conflict with others. Such a process has become a critical issue to be ad-

dressed in organizations and interdepartmental collaborating teams.

Numerous studies suggest that dealing with controversies directly and openly promotes productive conflict management (De Dreu & Van de Vliert, 1997; Rubin, Pruitt, & Kim, 1994; Simons, Pelled, & Smith, 1999). Open-minded discussion of controversies involves deliberate discussions aimed at creative problem solving, which can be contrasted to debate (a competitive process where one view “wins” over the other), concurrence seeking (which suppresses disagreement and consideration of alternatives), or various individualistic processes. Controversies are more likely to be constructive when they are discussed in an open-minded way, while close-minded discussion of differences and controversies may very often lead to hostility and impasses (Johnson, Johnson, & Tjosvold, 2000; Tjosvold, 1998).

Through open-minded discussion, protagonists make their ideas public, challenge the weaknesses in each other’s arguments, and lay the groundwork to incorporate the best of each other’s position to create integrative solutions (Pruitt & Syna, 1989). Open, direct discussion induces an epistemic curiosity that leads to a search for more information and an understanding of the opposing view (Berlyne, 1963). Specifically, discussants, confronted with an opposing position, begin to doubt the adequacy of their own perspective. Feeling uncertain that their present views are complete and accurate, they are motivated to search the arguments of opposing positions. They have been found, for instance, to show more interest in learning, to ask more questions, to demonstrate more understanding, and to incorporate elements of the opposing position into their decision (Tjosvold, 1982; Tjosvold & Deemer, 1980).

Open-minded discussion of controversies and differences is an effective way to capitalize on the potential positive outcomes of conflict (De Dreu & Gelfand, 2008; Tetlock, Armor, & Peterson, 1994). Open-minded discussion leads to high task accomplishment, high job satisfaction, good job performance, employee relationship development, high confidence for future collaboration and so on (Almost, 2006; De Dreu & Weingart, 2003; Tjosvold, 1998; Tjosvold, Hui, & Yu, 2003; Chen & Tjosvold, 2007).

Normally, task accomplishment, relationship strengthening, and the confidence for future collaboration describe the results and outcomes of conflict management (Das & Teng, 1998; DeChurch & Marks, 2001; Jehn & Mannix, 2001; Mohamed, Taylor, & Hassan, 2006; Netemeyer, Boles, & McMurrian, 1996; Tjosvold, 1998; Chen & Tjosvold, 2007). Thus I propose the three outcomes would be especially salient in this study's context. This study argues that open-minded discussion can help employees from different departments in organizations manage conflicts productively so that they can collaborate effectively.

The open-minded discussion dynamics lead to quality solutions that employees from different departments accept and implement that bring organizational task accomplishment and strengthen their relationship and confidence in working together in the future. Based on the literature review and reasoning above, we propose that:

*Hypothesis 1a. Employees from different departments are more likely to complete tasks to the extent that they engage in open-minded discussion.*

*Hypothesis 1b. Employees from different departments are more likely to strengthen their relationship to the extent that they engage in open-minded dis-*

*cussion.*

*Hypothesis 1c. Employees from different departments are more likely to develop confidence in working together in the future to the extent that they engage in open-minded discussion.*

### **Goal Interdependence Theory**

Defining conflict as incompatible activities where one person's actions are interfering or obstructing another's, Deutsch's (1949, 1973) theory of cooperation and competition proposed that people's belief regarding goal interdependence affects their expectations, interaction, and outcomes as they deal with conflict (Deutsch, 1949, 1973, 1980; Johnson & Johnson, 1989).

Protagonists who perceive their goals to be cooperative, positively related where they believe that as one moves toward goal attainment the others do too are prepared to engage in open-minded discussions; they express their various views directly, try to understand each other, and combine their ideas to solve the underlying problem for mutual benefit (Deutsch, 1973; Tjosvold, 1989, 2008). With the emphasis on shared rewards resulting from the cooperative conflict management, people integrate their ideas, think about their positions from the perspectives of each other and arrive at mutually beneficial solutions to solve their problems constructively and productively (De Dreu, Evers, Beersma, Kluwer & Nauta, 2001).

Antagonists who perceive goals to be negatively related and incompatible believe that others' goal attainment will prevent them from reaching their own goals (Deutsch, 1973; Tjosvold, 1989, 2008). In belief that the more others can get, the less likely they will achieve what they would like to get, individuals will pursue win-

lose rewards, withhold information and ideas to increase their competence, and even actively interferes with others' effective actions to accomplish their goals. Without effective exchange and integration of opposing ideas, and with goals be competitively related, the two parties show mutual hostility and the interaction ends in a deadlock or solutions imposed to achieve the interests favorable to only one party (Deutsch, 1973; Johnson et al, 1981). A competitive context, compared to a cooperative one, has been shown to increase defensive adherence to one's own point of view (Deutsch, 1973; Tjosvold & Johnson, 1978), thus leading to less effort to take the perspective of others'.

When goals are perceived to be unrelated, people believe that their success will not be influenced by others' attainment of goals. Therefore, they have no incentive to work with others or to use their abilities to assist the other party, and show indifference to others' interests. Generally, independence has been found to have similar, though not as strong, effects on interaction and productivity as competition (Deutsch, 1973; Johnson et al, 1981).

### **Interdepartmental goal interdependence and open-minded discussion**

In previous studies, goal interdependence refers to the goal relationship between the people in interaction. The theory of goal interdependence (Deutsch, 1949, 1973, 1980) holds the belief that the way people's goals are perceived to be structured determines how they interact, and these interaction patterns in turn determine outcomes (Deutsch, 1973; Johnson & Johnson, 1989; Stanne, Johnson, & Johnson, 1999). Following goal interdependence theory, this study suggests that how employees from different departments perceive their own department's goals related with

other departments' goals affect their attitudes and actual interactions in conflict. Members of different departments in organizations receive rewards for achieving tasks and responsibilities different from other departments (Hall, 1972). They usually take their own department's goal as their own goal. To a certain extent, the interpersonal goal interdependence between employees from different departments will be influenced by interdepartmental goal interdependence in a concrete conflict, and will be the same kind of goal relationship with interdepartmental goal interdependence, although this may not be the case in some situations because of the influence of personal attributes and other factors.

Anecdotal and research evidence suggests the prevalence of interdepartmental rivalry within organizations (Alderfer & Smith, 1982; Blake, Shepard, & Mouton, 1964; Lancioni, Schau, & Smith, 2005). One of the main sources of interdepartmental problems and conflicts comes from the perceived interdepartmental differences, especially when they are biased (Brown et al., 1986; Hogg & Terry, 2000; Ruyter & Wetzels, 2000; Tajfel & Turner, 1979). In many organizations, members of different departments believe that they have different goals (Brown, Condor, Mathews, Wade, & Williams, 1986; Nauta, De Dreu, & Van Der Vaart, 2002; Ruyter & Wetzels, 2000). Interdepartmental coordination is particularly problematic because the goals of different departments not only tend to be different, but can also be perceived as incompatible or independent (Blake & Mouton, 1979; Chen & Tjosvold, 2012; Hayward & Boeker, 1998; John, 1991; Nauta, De Dreu, & Van Der Vaart, 2002; Porter & Roberts, 1983). Employees usually have greater commitment to their own department's success than to the other departments' success, which leads to a higher concern for increasing their own resources at the expense of other

departments in the struggle over finite organizational resources (Mohrman, Cohen, & Mohrman, 1995; Pache & Santos, 2010).

Recently theorists from West have joined Asian ones in arguing that the collaboration between organizational members greatly depends on the nature of their relationships (Gersick, Bartunek, & Dutton, 2000; Kostova & Roth, 2003). The present study proposes that the nature of goal relationships among departments affects productive cross-functional collaboration. Whether in competition or cooperation, people are expected to develop their own views. However, goal interdependence appears to affect willingness to engage in direct controversial discussions. Experimental and field studies indicate that strong, cooperative relationships are a vital foundation for the open and constructive discussion of conflict (Tjosvold, 2008; Tjosvold, Leung & Johnson, 2006). Decision-makers who emphasize making a decision for mutual benefit and cooperative goals are able to incorporate opposing ideas and information into making high-quality decisions, whereas trying to outdo and win the discussion lead to closed-mindedness (Deutsch, 1973; Johnson & Johnson, 2005; Tjosvold, 1998, 2008). Emphasizing cooperative interdependence contributes substantially to promoting open-minded discussion.

Studies have documented that to the extent that protagonists believe that their goals are cooperative, rather than competitive (i.e. win-lose) or independent, they are able to productively discuss their conflicts (Johnson, Johnson, & Tjosvold, 2006). This study uses goal interdependence theory (Deutsch, 1949, 1973, 1980) to analyze the nature of effective relationships between departments. Following goal interdependence theory, this study suggests that how employees from different departments perceive their own department's goals related with other departments'



goals affect their attitudes and actual interactions in conflict.

Specifically, when employees from different departments perceive their interdepartmental goals to be cooperative, they are confident and willing to listen to each other's views, and express their feelings, concerns, and even opposing ideas fully. With the emphasis on positively related interdepartmental goals and shared rewards between departments, people integrate their views to solve their problems constructively and productively (De Dreu, Evers, Beersma, Kluwer & Nauta, 2001).

With the perception of interdepartmental goals to be competitive, protagonists are apt to be close-minded in their determination to win and outdo each other. They are suspicious because if they identify and share issues and mistakes other interdepartmental counterparties may use this knowledge against them to obstruct the goal progress so that they can "win" (Deutsch, 1973; Johnson & Johnson, 1989; Stanne et al., 1999). Also, they have been found to reject the opposing position and the person arguing it, to refuse to incorporate other ideas into their own decision making, and to fail to reach an agreement. These patterns in turn frustrate productivity and disrupt relationships.

Studies show that independent goals have similar effects on interaction as competitive goals (Deutsch, 1973; Johnson & Johnson, 1989). When employees from different departments perceive their respective goals to be independent, they tend to work for their own department's goals independently, without caring about other department's goals. With independently related interdepartmental goals, employees from different departments do not communicate with each other and share little resources in problem-solving and conflict resolution process.

These arguments lead to the second sets of propositions in this study:

*Hypothesis 2a. Employees from different departments are more likely to engage in open-minded discussion to the extent that they perceive cooperative goal relationship between departments.*

*Hypothesis 2b. Employees from different departments are less likely to engage in open-minded discussion to the extent that they perceive competitive goal relationship between departments.*

### **Open-minded discussion as mediator**

A review of the literature offers strong support for the first two sets of hypotheses. If the first two hypotheses are taken to be logical premises, they suggest a third set of hypotheses as a conclusion. That is to say, if interdepartmental goal interdependence affects open-minded discussion of controversy and open-minded discussion of controversy affects conflict outcomes, then open-minded discussion of controversy is a mediating (intervening) construct. Interdepartmental goal interdependence has only indirect effects on conflict outcomes. Specifically, in the context of conflict among employees from different department within organization, interdepartmental goal interdependence between employees from different departments affects open-minded discussion of controversy that in turn affects task accomplishment, employee relationship development, and confidence for future cooperation. Therefore, this study proposes that the open-minded discussion of controversy mediates the influence of interdepartmental goal interdependence on conflict outcomes.

These considerations are captured in the following hypothesis:

*Hypothesis 3. The relationship between interdepartmental goal interdependence and conflict outcomes is mediated by the open-minded discussion of controversy dynamics between employees from different departments.*

### **Social Motives**

Building on the seminal work of Blake and Mouton (1964), Pruitt and Rubin (1986) proposed their Dual Concern Theory. It posits that in a conflict of interests, how disputants behave depends on their perceptions of (a) the importance of their goals and (b) the importance of the relationship with the other disputant (Blake & Mouton, 1964; Johnson & Johnson, 2005; Rahim, 1983; Thomas, 1976). It postulates two kinds of concern, other-concern and self-concern, each ranging in strength from weak to strong. Other-concern is closely related to the concept of social motive discussed earlier, with proself employees having weak other-concern and prosocial employees having strong other-concern (Pruitt, 1998). Strong rather than weak other-concern (i.e., a prosocial rather than proself motive) emerges when employees are instructed to cooperate than compete (Pruitt & Lewis, 1975), have a positive rather than neutral mood (Carnevale & Isen, 1986), or expect cooperative future interaction with the opposing employee (Ben-Yoav & Pruitt, 1984a, 1984b).

Both Goal Interdependence Theory and Dual Concern Theory see social motives as the key to problem-solving behavior and outcomes (De Dreu, Weingart, & Kwon, 2000). Employees have different social motives (Deutsch, 1973; Tjosvold, 1984, 1998). Social motives refer to preferences for outcomes to self and other, such that prosocial and proself employees differ in attaching a positive, zero, or negative weight to other's outcomes (De Dreu & Boles, 1998; Van Lange, 1999). In the case

of proself motive, employees try to maximize their own outcomes, with no extra effort to care for the outcomes obtained by their opposing party. In contrast, employees with a prosocial motive try to maximize not only their own outcomes but also others' based on their collaboration relationship.

### **Social motives in open-minded discussion**

Members of decision-making groups, close relationships, or other collectivities often face conflict and have to resort to negotiation and discussion — the communication between parties with perceived divergent interests to reach agreement on the distribution of scarce resources, work procedures, the interpretation of facts, or some commonly held opinion or belief (Pruitt, 1998). Among the key factors determining whether negotiation proceeds in a cooperative and constructive or, instead, in a competitive and destructive fashion is the negotiators' social motivation — their preferences for a distribution of outcomes between oneself and the interdependent other(s) (McClintock, 1976). Many different social motives have been identified, including cooperation, altruism, individualism, and competition. In conflict, social dilemma, and negotiation research, these social motives are usually grouped into prosocial motivation, comprising cooperation and pure altruism, and proself motivation, comprising individualism and pure competition (e.g., De Dreu, Weingart, & Kwon, 2000; Liebrand, Jansen, Rijken, & Suhre, 1986; Van Lange, 1999; Van Lange & Kuhlman, 1994; Weingart, Bennett, & Brett, 1993). However, prosocial motivation is not an opposite construct of proself motivation, as those with high proself motivation may also have high prosocial motivation.

Both Batson (1987) and Grant (2008b) define prosocial motive as "the desire to

expend effort to benefit other people". Prosocial motive has been conceptualized in both trait-like and state-like terms (Grant, 2008b). As a relatively enduring individual difference, prosocial motive is reflected in the personality trait of agreeableness (Graziano, Habashi, Sheese, & Tobin, 2008), dispositions toward empathy and helpfulness (Penner, Dovidio, Piliavin, & Schroeder, 2005), and values of concern for others (De Dreu, 2006; Meglino & Korsgaard, 2004; Perry & Hondeghem, 2009; Schwartz, 1999). As a more temporary psychological state, prosocial motive involves a momentary focus on the goal of protecting and promoting the welfare of other people, which is typically prompted by contact with others who need help (Batson, 1987; Grant, 2007). Likewise, we define proself motive as "the desire to achieve the most benefit for oneself". Previous work has compared proself motive with prosocial one, but few studies have defined proself motive very clearly. Compared to prosocial motive, one way to examine proself motive is a trait approach measuring proself motive as a relatively stable individual disposition labelled proself personality, while the other is a behavioral approach showing intra-individual variability in employee's proself behavior over time and showing that proself behaviors are related to workplace factors and organizational variables (Grant, 2007, 2008a, 2008b). Here, we follow the latter approaches when studying prosocial/proself motive.

Various origins of prosocial and proself motives have been identified. First, individual differences, such as different social values (McClintock, 1972), propensity to trust (Yamagishi, 1986), and machiavellianism (Christie & Geis, 1970), determine the tendency to adopt a prosocial versus proself orientation. Second, social motives derive from characteristics of the situation (Chen, Chen, & Meindl, 1998; Dawes,

Van de Kragt, & Orbell, 1988; Deutsch, 1973). Social motives can, for example, be induced by instructions or incentives from superiors or third parties: Interaction partners can be instructed to be concerned with the other's welfare and to see the other as a "partner" instead of as an "opponent" (see, e.g., O'Connor & Carnevale, 1997; Pruitt & Lewis, 1975; Weingart et al., 1993), or their payment can be made contingent on personal or collective performance (see, e.g., Beersma & De Dreu, 1999, 2002, 2005; De Dreu, Giebels, & Van de Vliert, 1998; Schulz & Pruitt, 1978; Weingart et al., 1993, for an overview of all the different manipulations and measures of social motives, see De Dreu et al., 2000).

A recent meta-analysis showed no differences between the various ways in which social motives were manipulated, suggesting that these and other ways to measure or manipulate social motives are, in the context of negotiation or discussion, functionally equivalent (De Dreu et al., 2000). In general, group members with a prosocial motive care about their personal outcomes as well as about the needs and interests of other group members. They perceive the group situation as a cooperative game, in which harmony, fairness, and collective success are important, cooperation is seen as morally appropriate, and independent and competitive thinking is considered immoral (Kelley & Thibaut, 1978; Liebrand et al., 1986; Van Lange, 1999; Van Lange & Liebrand, 1991; Van Lange, Van Vugt, Meertens, & Ruiters, 1998). Group members with a proself motive care about their personal outcomes and tend to be indifferent about the interests and needs of others. They more often tend to perceive the group situation as a competitive game, in which power, independence, and personal success are key, in which cooperation is seen as weak, and independent and competitive thinking is considered as strong and smart (for reviews, see De Dreu &

Carnevale, 2003; McClintock, 1976; Pruitt, 1998; Tjosvold, 1998; Van Lange, 1999).

### **Social motives as moderators**

Recently, researchers have used dual concern theory to explain the relationship between employees and their organizations and employee behaviors. Meanwhile, studies have illustrated the need for more contextual analyses of social motivation processes (De Dreu, Weingart, & Kwon, 2000), including competitive vs. cooperative intergroup interdependence as an important context (Ashmore et al., 2004). Given the potential costs of competitive and independent goals between departments, it is important for organizations to manage the goal relationship between different departments. However, little research has identified conditions under which the negative effects of competitive or independent goal interdependence on productive conflict outcomes between departments are attenuated. This study argues that a key motivator in helping employees from different departments engage in open-minded discussion of controversy when they perceive different interdepartmental goal relationship, is the social motivation they have related to their partners.

In the context of interdepartmental conflict, prosocial individuals compared with proself ones have been shown to engage in different behaviors. On the one hand, prosocial discussants, however, tend to engage in all-benefited behavior, attempting to find a solution that is beneficial to all of the parties involved. Rather than forcing their counterparts to give in and claim value for themselves, these discussants aim to create value (Pruitt & Carnevale, 1993) by, for example, engaging in information exchange about preferences and priorities and logrolling (trading losses on less important issues for gains on more important issues). Prosocial discussants,

therefore, reach integrative “win–win” agreements, providing high joint gain more than proself negotiators, and negotiations and discussions between prosocially motivated individuals less often lead to impasses (Ben-Yoav & Pruitt, 1984; Carnevale & Lawler, 1986; De Dreu et al., 1998, 2000; Weingart et al., 1993). Accordingly, we propose the constructive role of prosocial motive in the interdepartmental collaboration process. More specifically, we expect that for employees who have strong prosocial motive, the positive relationship between cooperative interdepartmental goal interdependence and open-minded discussion of controversy dynamics will be stronger compared to employees who have weak prosocial motive. Also, for those who have strong prosocial motive, the negative relationship between competitive interdepartmental goal interdependence and open-minded discussion dynamics will be weaker compared to employees who have weak prosocial motive.

*Hypothesis 4a. An employee’s prosocial motive moderates the relationship between cooperative interdepartmental goal interdependence and open-minded discussion of controversy dynamics, such that the positive relationship between cooperative interdepartmental goal interdependence and open-minded discussion is stronger when employees have high prosocial motive.*

*Hypothesis 4b. An employee’s prosocial motive moderates the relationship between competitive interdepartmental goal interdependence and open-minded discussion of controversy dynamics, such that the negative relationship between competitive interdepartmental goal interdependence and open-minded discussion is weaker when employees have high prosocial motive.*

On the other hand, proself discussants tend to primarily engage in self-benefited behaviors, which are aimed at claiming value for oneself (Pruitt & Carne-



vale, 1993) and characterized by trying to force one's counterparts to yield to one's wishes, for example, by using persuasive arguments, threats, bluffs, and positional commitments (De Dreu et al., 2000). Therefore, those discussants with proself motives strive for their respective success, even more seriously when their interests go against each other's, at the expense of their counterparty's benefits, which often lead to impasses (Ben-Yoav & Pruitt, 1984; Carnevale & Lawler, 1986; De Dreu et al., 1998, 2000; Weingart et al., 1993). Thus we expect that proself motive will worsen the discussion dynamics in competitive relationships. That is, for those employees who have high proself motive, the negative relationship between competitive interdepartmental goal interdependence and open-minded discussion dynamics will be stronger compared to those who have low proself motive. On the contrary, when the parties involved in the discussion perceive their departmental relationship to be cooperatively related, the more they want to achieve for their own department, the more they tend to help their coworker's department. The secret lies in their awareness of the way to gains: In order to maximize the benefits for their own departments, they should also and at the same time try their best to promote the benefits of the coworker from another department; and to help the counterparty department is the best way to help their own department achieve the most success. Therefore, I hypothesize the positive role of proself motive in interdepartmental collaboration process on the basis of cooperative relationships between the interdepartmental counterparties.

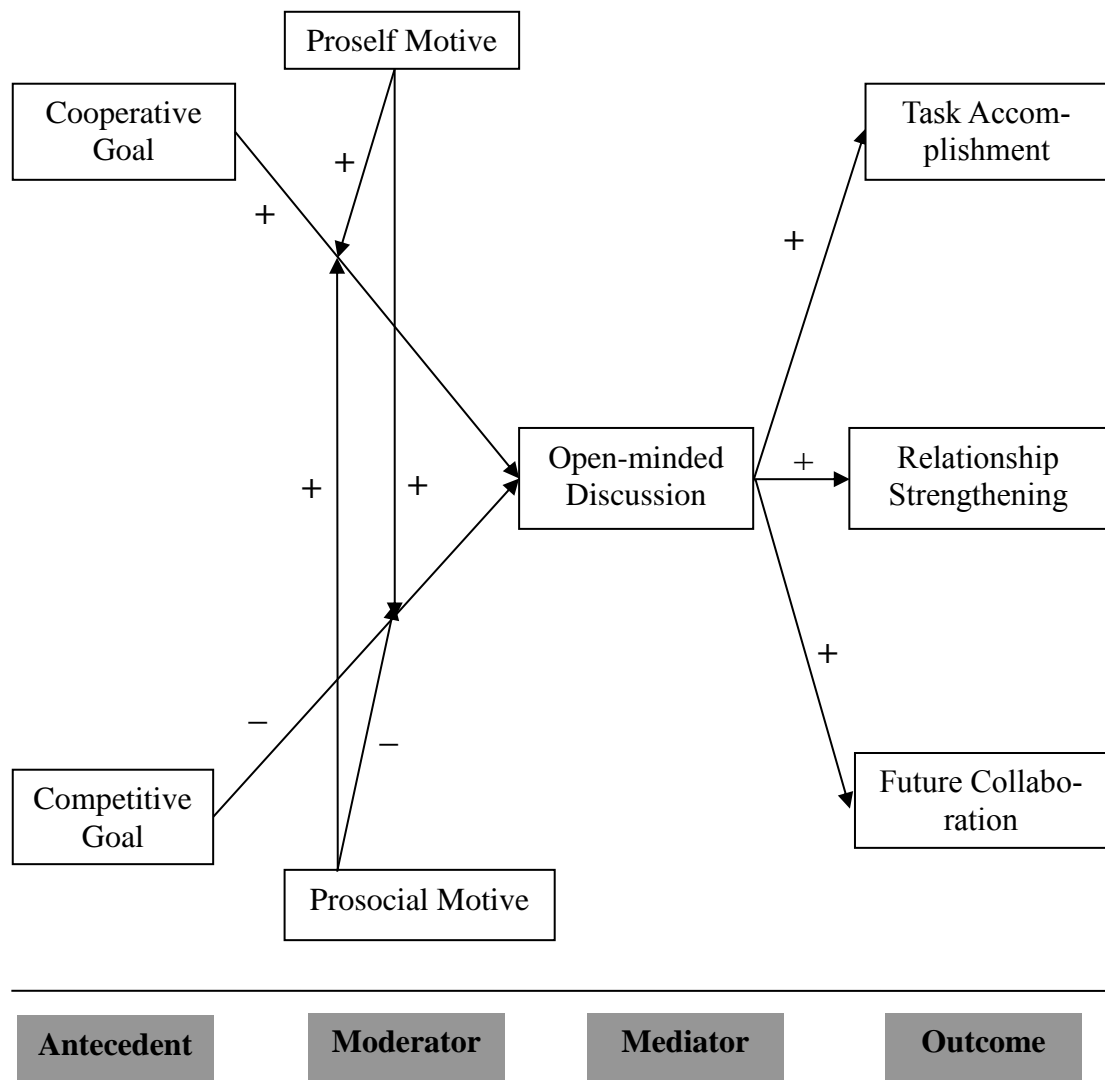
*Hypothesis 5a. An employee's proself motive moderates the relationship between cooperative interdepartmental goal interdependence and open-minded discussion of controversy dynamics, such that the positive relationship between*

*cooperative interdepartmental goal interdependence and open-minded discussion is stronger when employees have high proself motive.*

*Hypothesis 5b. An employee's proself motive moderates the relationship between competitive interdepartmental goal interdependence and open-minded discussion of controversy dynamics, such that the negative relationship between competitive interdepartmental goal interdependence and open-minded discussion is stronger when employees have high proself motive.*

Figure 1 presents the hypothesized conceptual model of this study. The study proposes that interdepartmental goal interdependence affects employees from different department engaging in open-minded discussion of controversy upon conflict between departments, which in turn affects the conflict outcomes (e.g. task accomplishment, relationship strengthening and future collaboration). This model also posits that employees' social motives moderate the relationship between interdepartmental goal interdependence and open-minded discussion of controversy.

**Figure 1 Hypothesized Conceptual Model in this Study**



## **CHAPTER III METHODOLOGY**

Based on the review of the literature and research hypotheses reported in the preceding chapter, the present chapter begins with the research design overview. A description of the sample, the research procedure, and the measurement instruments are also included in this chapter. The chapter concludes with a discussion on the data collection and data analysis methods.

### **Design Overview**

#### **Translation procedure**

Questionnaires originally written in English were translated into Chinese and then were checked by being retranslated into English to ensure conceptual consistency. To complete this translation-retranslation process, we will invite two bilingual researchers who had studied in universities using English and Chinese as the main teaching language and thus who are sufficiently educated in both languages as suggested by Bracken and Barona (1991). The original questionnaire will first be translated into Chinese by one researcher and translated back into English by another independent researcher as recommended by Brislin (1970), Chapman & Carter (1979), and Douglas & Craig (2007). The translator and re-translator will meet with the English-speaking/Chinese-speaking, monolingual researchers to examine the divergences in the translation. After considering their suggestions, some necessary modifications will be made and the Chinese version of the questionnaire will be settled.

#### **Pilot study**

The preliminary questionnaire was pre-tested to make sure that every question is stated appropriately so that respondents could clearly understand every concept and question without ambiguities. In June 2013, a pilot study was conducted among 14 employees introduced through my personal network. A sample of 14 valid responses were obtained, coded, and analyzed. Reliability test was performed to examine the internal consistency of the scales. From Table 1, although there were only 14 data points, Cronbach's Alpha for all measures above .7 indicates satisfactory internal consistency reliability (Nunnally & Bernstein, 1994). Specific alpha statistics for each scale and Means, standard deviations, correlations for the pilot study appear in Table 1 & 2.

In the pilot study, I used 7-point Likert scales to measure interviewees' degree of agreement with each statement. However, according to the interviewees, 7-point Likert scales could be confusing and might result in subjects clustering in the middle instead of going across the scale, and using 5-point Likert could get better response and higher response rate. These reasons directed me to revise the scale into 5-point Likert scale.

Based on the feedbacks from pilot study, the unsuitable details in the survey were reorganized and rephrased for clarity and suitability. A few questions and items were also revised and the final version of the instruments was settled based on other feedbacks and results from the pilot test.

## **Procedure**

The majority of the participants for the interviews were recruited from Shanghai, Beijing and Guangdong Province in Mainland China through my personal net-

works among which are my previous colleagues, business partners, classmates, relatives and friends. Other interviewees were acquaintances of the people in my networks through connection and invitation. The rest few were invited through distributing questionnaires with economic rewards.

**Table 1 Alpha Statistics for All Measures**

| <b>Measures</b>            | <b>Number of Items</b> | <b>Alpha</b> |
|----------------------------|------------------------|--------------|
| Cooperative goal           | 4                      | .71          |
| Competitive goal           | 4                      | .66          |
| Independent goal           | 4                      | .84          |
| Prosocial motive           | 4                      | .95          |
| Proself motive             | 4                      | .91          |
| Concern for self           | 2                      | .90          |
| Concern for others         | 2                      | .86          |
| Open-minded discussion     | 5                      | .90          |
| Task accomplishment        | 3                      | .95          |
| Relationship strengthening | 4                      | .98          |
| Future collaboration       | 3                      | .93          |

Participants were recruited to take part in the interviews using questionnaires. Critical Incident Technique (CIT) was used to develop the interview structure, as it is considered to be a particularly useful method when studying complex interpersonal phenomenon such as interpersonal conflict (Walker & Truly, 1992). Also, this method could help to moderate the errors when persons need to summarise across incidents to provide response in most surveys (Schwartz, 1999).

All participants were informed of criteria to be eligible to take part in the study: (1) at least 18 years of age; (2) have no problem understanding and answering

**Table 2 Means, Standard Deviations, and Correlations for Study Variables**

| Variables                      | M    | SD   | 1    | 2     | 3    | 4     | 5   | 6   | 7   | 8     | 9     | 10   | 11 |
|--------------------------------|------|------|------|-------|------|-------|-----|-----|-----|-------|-------|------|----|
| 1. Cooperative goal            | 4.93 | 1.13 | 1    |       |      |       |     |     |     |       |       |      |    |
| 2. Competitive goal            | 2.41 | 1.02 | -.03 | 1     |      |       |     |     |     |       |       |      |    |
| 3. Independent goal            | 2.52 | 1.36 | .10  | .39   | 1    |       |     |     |     |       |       |      |    |
| 4. Prosocial motive            | 4.66 | 1.67 | .29  | -.25  | -.19 | 1     |     |     |     |       |       |      |    |
| 5. Proself motive              | 5.07 | 1.60 | .55* | -.05  | .37  | .60*  | 1   |     |     |       |       |      |    |
| 6. Concern for others          | 4.21 | 1.14 | .28  | -.17  | -.12 | .75** | .46 | 1   |     |       |       |      |    |
| 7. Concern for self            | 5.07 | 1.58 | .07  | .08   | .30  | -.17  | .24 | .31 | 1   |       |       |      |    |
| 8. Open-minded discussion      | 4.66 | 1.43 | .59* | -.14  | .12  | .20   | .23 | .36 | .31 | 1     |       |      |    |
| 9. Task accomplishment         | 4.52 | 1.53 | .50  | -.04  | .54  | .34   | .51 | .51 | .32 | .68*  | 1     |      |    |
| 10. Relationship strengthening | 4.41 | 1.64 | .55  | -.10  | .46  | .34   | .50 | .39 | .21 | .80** | .93** | 1    |    |
| 11. Future collaboration       | 4.33 | 1.70 | .31  | -.61* | .04  | .24   | .19 | .18 | .24 | .85** | .46   | .67* | 1  |

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ ;  $N = 14$  cases for all variables; Coefficient alphas appear on the diagonal for multi-item scales.

questionnaires in Simplified Chinese; (3) have interdepartmental collaboration experience; (4) have about 30 minutes for the interview on the questionnaire. They were assured confidentiality of their responses and were informed that results would only be used for research purposes and not be released to the third party like their employer.

Each respondent was asked to describe in detail a recent incident in which they open-mindedly or do not open-mindedly discuss different views with a person from another group or department in their company (“We are studying when employees from different departments work together. Please recall and describe a concrete situation recently when you worked with another employee from a different department and had disagreement or even conflict. We define conflict as incompatible activities, so it does not have to be a war against each other. It can involve aspects such as different working habits, project-related activities taken part in together, gossiping about things and people, and so on. The situation may have turned out to be successful or unsuccessful.”). Interviewees first described the setting, what occurred, and the consequences. After describing the incident in details, the interviewees were required to indicate their degree of agreement with each statement using 5-point Likert scales according to the recalled incidents, where “1 = strongly disagree” and “5 = strongly agree”. Depending on the interview settings and logistical factors, some participants were given the option of filling out questionnaires in WORD document or through online platform at a later date with the addition of detailed explanation and illustration verbally or in written form when returning completed surveys.

### **Participants**

Among the 133 respondents, 32 people were interviewed in Shanghai, 16 in Bei-



jing, 17 in Guangdong, 9 in Shandong and the rest from other areas in China. Interviewees were from over 30 different organizations and thus were not nested within some particular organizations. Therefore the sample could represent the population where the cases were drawn.

Of the participants, 48.9% (65) were male; females comprised the remaining 51.1% (68). They consisted of 29 people at the age of 21-25 years old (21.8%), 32.3% (43) between 26 and 30 years old, 38.3% (51) within 31-40, and 7.5% (10) above 41 years old. With respect to education level, 3.1% (4) reported having a degree lower than university, 74.4% (99) of participants had a bachelor degree, 21.8% (29) held postgraduate degrees, and .8% (1) held doctoral degree. Most of them came from departments such as finance (13.5%), accountancy (5.3%), human resources (23.3%), and administration (21.8%). Regarding the years having worked in current organization, 11.3% (15) worked for less than 1 year, 30.8% (41) of the participants worked for 1 year to 3 years, 24.1% (32) worked for 3 years to 5 years, and 33.9% (45) worked for over 5 years. Of all the participants, 30.1% (40) were from state-owned organizations and 11.3% (15) from joint ventures, while 43.6% (58) and 11.3% (15) were from privately owned organizations and foreign-invested organizations, respectively. Table 3 provides the current sample's demographic data.\

### **Scales**

Several scales are adopted or adapted from the extant literature to measure the different concepts in this study. A full list of the items used in each of the measures discussed below is included in Appendix I.

**Table 3 Demographic Characteristics of Interviewees**

| Variable        | Category                  | Code | Number of Participants | Percentage |
|-----------------|---------------------------|------|------------------------|------------|
| Gender          | Male                      | 1    | 65                     | 48.9%      |
|                 | Female                    | 2    | 68                     | 51.1%      |
| Age             | 21-25                     | 1    | 29                     | 21.8%      |
|                 | 26-30                     | 2    | 43                     | 32.3%      |
|                 | 31-40                     | 3    | 51                     | 38.3%      |
|                 | 41-50                     | 4    | 10                     | 7.5%       |
| Education level | Secondary education       | 1    | 1                      | .8%        |
|                 | Tertiary education        | 2    | 3                      | 2.3%       |
|                 | Bachelor                  | 3    | 99                     | 74.4%      |
|                 | Postgraduate              | 4    | 29                     | 21.8%      |
|                 | Doctoral degree and above | 5    | 1                      | .8%        |
| Department      | Finance                   | 1    | 18                     | 13.5%      |
|                 | Accountancy               | 2    | 7                      | 5.3%       |
|                 | Human Resources           | 3    | 31                     | 23.3%      |
|                 | Law service               | 4    | 2                      | 1.5%       |
|                 | Administration            | 5    | 29                     | 21.8%      |
|                 | Other                     | 6    | 46                     | 34.6%      |
| Tenure          | Less than 1 year          | 1    | 15                     | 11.3%      |
|                 | 1-3 years                 | 2    | 41                     | 30.8%      |
|                 | 3-5 years                 | 3    | 32                     | 24.1%      |
|                 | Over 5 years              | 4    | 45                     | 33.9%      |
| Company type    | State-owned               | 1    | 40                     | 30.1%      |
|                 | Joint venture             | 2    | 15                     | 11.3%      |
|                 | Private-owned             | 3    | 58                     | 43.6%      |
|                 | Foreign-invested          | 4    | 15                     | 11.3%      |
|                 | other                     | 5    | 5                      | 3.8%       |

Note: N = 133 cases for all variables.

## **Perceived goal interdependence**

This study adopted widely used scales developed from Deutsch's (1949, 1973) cooperation and competition theory by 5-point Likert Scale to measure different kinds of interdepartmental goal interdependence. Variables for perceived goals interdependency indicate how the participants construe the relationship between their goals and those of their partners in the incident of conflict. The items for cooperative goals with a Cronbach's alpha .91 measured the extent the interviewees assumed compatibility in their interdepartmental goals with their partner's department. A sample item for cooperative goal is "In this incident, the goals of the interdepartmental coworker and I went together". Items for competitive interdepartmental goal with a Cronbach's alpha .91 measured how much the participants assumed their interdepartmental goals with their counterparts' to be competitive, with an example item "In this incident, the interdepartmental coworker and I structured things in a way that favored his/her/my own departmental goal rather than the goal of another party". A set of four items with a Cronbach's alpha .78 respectively measure the perception of independent interdepartmental goals, tasks and benefits between the participants and their partners, with one sample item "In this incident, the interdepartmental coworker and I were 'pursuing our own thing' without regard to the needs of the other".

## **Social motives**

This study adapted a four-item scale for prosocial motive from Grant (2008a, b). A sample item was "In this incident, I cared about benefiting the interdepartmental coworker through the discussion". The scale had a Cronbach's alpha .76. The scale for proself motive was adapted from Grant (2008a, b) and Belschak & Hartog (2010) with

the sample item “In this incident, I cared about benefiting myself through the discussion”. The scale had a Cronbach’s alpha .78.

### **Dual concerns**

Though Dual Concern Theory is established, not many researchers have worked on developing a suitable scale to measure it. In this study, the scale was adapted from Sorenson et al. (1999). An example item for concern for self is “In this incident, it would be extremely important that I got the outcome I desired”. A sample item for concern for others is “In this incident, it would be very important that the interdepartmental coworker got what he/she wanted”. The scales respectively had a Cronbach’s alpha .71 and .74.

### **Open-minded discussion**

Interviewees responded to a series of questions using 5-point scales to code the open-mindedness of the discussion of the incident (Tjosvold et al., 1986; Tjosvold, 2002). With 5 items adapted from previous study (Tjosvold et al., 1986; Tjosvold, 2002), the interviewees rated the extent they expressed their own views freely, considered the other’s views open-mindedly, understood each other’s concerns, worked together for the benefit of both, used the other’s ideas and communicated respect for the other as a person. Then they rated the extent that the other engaged in these behaviors. For example, “In this incident, the interdepartmental coworker and I expressed our own views directly to each other”. The scale had a Cronbach’s alpha .80.

### **Task accomplishment**

A three-item scale was adapted from Tjosvold et al. (2008) to measure the extent

that their interaction with others helped solve the problem effectively and efficiently. A sample item is “Because of this interaction, the interdepartmental coworker and I made progress on the task”. The scale had a Cronbach’s alpha .87.

### **Relationship strengthening**

A four-item scale was developed to measure the extent that the interviewee improved his/her relationship with the other employee. A sample item is “Because of this incident, the relationship between the interdepartmental coworker and I was strengthened”. The scale had a Cronbach’s alpha .89.

### **Future collaboration**

A three-item scale was adapted from Tjosvold et al. (2008) to measure the extent that their interaction with the partner contributed to their interaction and confidence to cooperate successfully in the future. A sample item is “Because of this incident, I hope to work again with the interdepartmental coworker in the future”. The scale had a Cronbach’s alpha .93.

### **Control variables**

The organizational theory literature (e.g., James & Jones, 1974) leads to incorporating three levels of antecedents to conflict, namely overall organizational/departmental/interdepartmental levels. Organizational factors were listed as organizational structure, specialization, formalization, centralization of authority, organization size, sub-optimizing incentives, and organizational climate. Departmental level factors include task-related frustration, feelings of good fellowship, and most importantly, departmental demographic profile. Departmental demographic profile is a

combination of four demographic characteristics in a department that may heighten the prospect of conflict between departments -- the department members' average age, tenure in their job, tenure in the organization, and level of education (Barclay, 1991). Departments whose members on average have more job experience, life experience, and education may be better prepared to cope with purchasing situations in more constructive and cooperative ways. In addition, they may be able to recognize situations ripe for conflict and may be experienced enough to defuse them. Corwin (1969) found that experience and age within school systems reduced inter-individual conflict, and Thomas, Walton & Dutton (1972) found tenure and age negatively related to three indicators of interdepartmental conflict. On the interdepartmental level, the key factors that play an important role in interdepartmental conflict situations are jurisdictional ambiguities of the responsibility for particular decisions or actions, task interdependence of assistance/information/compliance/other coordinative acts in the performance of their respective tasks communication barriers that may make conflict-managing dialogue more difficult, diversity in departmental perspectives such as differing goals or perceptions of reality related to decision making (Thomas, Walton, & Dutton, 1972; Walton & Dutton, 1969).

Based on the aforementioned factors and the theoretical concerns and practical considerations in this study, I controlled for contextual factors that could be expected to influence interdepartmental conflict interaction between involved partners, such as age, gender, education background, position in the organization, tenure in the organization, company nature.

**Table 4 Alpha Statistics for All Measures**

| <b>Measures</b>            | <b>Number of Items</b> | <b>Alpha</b> |
|----------------------------|------------------------|--------------|
| Cooperative goal           | 6                      | .91          |
| Competitive goal           | 6                      | .91          |
| Independent goal           | 6                      | .78          |
| Prosocial motive           | 4                      | .76          |
| Proself motive             | 4                      | .78          |
| Concern for others         | 4                      | .71          |
| Concern for self           | 4                      | .74          |
| Open-minded discussion     | 5                      | .80          |
| Task accomplishment        | 3                      | .87          |
| Relationship strengthening | 4                      | .89          |
| Future collaboration       | 3                      | .93          |

**Table 5 Means, Standard Deviations, and Correlations for Model Variables**

| <b>Variables</b>               | <b>M</b> | <b>SD</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>9</b> | <b>10</b> | <b>11</b> |
|--------------------------------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|
| 1. Cooperative goal            | 4.93     | 1.13      | 1        |          |          |          |          |          |          |          |          |           |           |
| 2. Competitive goal            | 2.41     | 1.02      | -.79**   | 1        |          |          |          |          |          |          |          |           |           |
| 3. Independent goal            | 2.52     | 1.36      | -.57**   | .67**    | 1        |          |          |          |          |          |          |           |           |
| 4. Prosocial motive            | 4.66     | 1.67      | .40**    | -.30**   | -.25**   | 1        |          |          |          |          |          |           |           |
| 5. Proself motive              | 5.07     | 1.60      | .05      | .06      | .13      | .29**    | 1        |          |          |          |          |           |           |
| 6. Concern for others          | 4.21     | 1.14      | .54**    | -.41**   | -.31**   | .35**    | -.05     | 1        |          |          |          |           |           |
| 7. Concern for self            | 5.07     | 1.58      | .05      | .10      | .14      | .15      | .50**    | .14      | 1        |          |          |           |           |
| 8. Open-minded discussion      | 4.66     | 1.43      | .51**    | -.51**   | -.35**   | .34**    | -.02     | .41**    | -.04     | 1        |          |           |           |
| 9. Task accomplishment         | 4.52     | 1.53      | .60**    | -.49**   | -.36**   | .40**    | .19*     | .50**    | .15      | .58**    | 1        |           |           |
| 10. Relationship strengthening | 4.41     | 1.64      | .58**    | -.54**   | -.38**   | .35**    | .11      | .52**    | .13      | .63**    | .76**    | 1         |           |
| 11. Future collaboration       | 4.33     | 1.70      | .58**    | -.53**   | -.38**   | .34**    | .12      | .49**    | .08      | .68**    | .66**    | .81**     | 1         |

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ ;  $N = 133$  cases for all variables; Coefficient alphas appear on the diagonal for multi-item scales.



## **Data Analysis**

Both qualitative and quantitative analysis methods were used in the study. The results for the qualitative data from the participants' narrative accounts on those critical incidents are presented in the next chapter as case illustrations. For the quantitative data, Harman's one-factor test was first used to test whether common method variance can explain the research findings in the present study. Confirmatory Factor Analysis (CFA) was then applied to test the reliability and validity of the proposed measurement model. After that, Structural Equation Modeling (SEM) was employed to further test the causal relationships among goal interdependence, prosocial/proself motive, open-minded discussion, and the three outcome variables. Finally, Ping (1995) procedures in SEM were conducted to test the moderating effect of prosocial motive and proself motive.

### **Assessing the effects of common method variance**

Since all the data were self-reported and collected through the same measures, there is a potential problem for the occurrence of common method variance. In order to assess the possibility of common method variance presence, this study conducted Harman's one-factor test, one of the most widely used techniques to address the issue of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff & Organ, 1986). All multiple-item measures were entered into an exploratory factor analysis (EFA), using principal components factor analysis with varimax rotation to perform Harman's test. The EFA results showed that 11 principal components with eigenvalues greater than 1 were extracted and these accounted for 71.82% of the variance, and the first emerging factor accounted for 32.37% of the variance. If com-

mon method variance exists, all item measures will be found in a single general factor, which accounted for over 50% of the variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff & Organ, 1986). Based on the analysis, there is no single factor that explained a substantial amount of the variance, suggesting that common method variance does not pose a significant threat to measurement validity in this study.

### **Testing the measurement model**

As suggested by Anderson and Gerbing (1988), this study employed the two-step modeling method with the advantage of separating measurement issues from the estimation of causal effects among constructs (Kline, 1998). In the first step, a series of Confirmatory Factor Analyses (CFA) by using AMOS 20.0 was conducted to determine whether the measurement component of the hypothesized model fit the data. Given an acceptable measurement model, the structural component of the hypothesized model was evaluated in the second step.

It is absolutely necessary to establish convergent and discriminant validity, as well as reliability, when conducting a CFA. If the factors do not demonstrate adequate validity and reliability, moving on to test a causal model will be useless. There are a few useful measures for establishing validity and reliability: Composite Reliability (CR), Average Variance Extracted (AVE), Shared Variance (SV). The thresholds for these values are listed in Table 6.

**Table 6 Threshold for Acceptable Reliability and Validity**

(McDonald, 1999; Fornell & Larcker, 1981)

| <b>Factor Loading</b> | <b>Reliability</b> | <b>Convergent Validity</b> | <b>Discriminant Validity</b> |
|-----------------------|--------------------|----------------------------|------------------------------|
| > .4                  | CR > .6            | CR > AVE > .5              | AVE > SV                     |

While SV is calculated by squared correlation, AVE and CR are calculated as:

$$AVE = \frac{\sum[\lambda_i^2]}{\sum[\lambda_i^2] + \sum[\text{Var}(\epsilon_i)]},$$

$$CR = \frac{[\sum\lambda_i]^2}{[\sum\lambda_i]^2 + \sum[\text{Var}(\epsilon_i)]},$$

where  $\lambda_i$  is the loading of each measurement item on its corresponding construct (standardized factor loadings/regression weights in AMOS) and  $\epsilon_i$  is the error measurement (variance in AMOS). The rule says that AVE of each construct should be much larger than the squared correlation of the specific construct with any of the other constructs. The value of AVE for each construct should be at least .5 (Fornell & Larcker, 1981).

The very first measurement model of this study contained 7 exogenous latent variables (concern for other/self, prosocial/proself motive, cooperative goal, competitive goal, and independent goal), and 4 endogenous latent variables (open-minded discussion, task accomplishment, relationship strengthening, and future collaboration). On the one hand, with the 49 items completely included, not all numbers for Factor Loadings, CR, AVE, SV can reach the thresholds. On the other hand, with all of the 49 items, the CFA result does not show good fit to the data, with a CFI, an IFI, a RMSEA, and a  $\chi^2/d.f.$  ratio of .86, .87, .06, and 1.54 respectively. Therefore it brings about the need to revise the structure of the items adopted in the scales.

Centering on the threshold principles, several intensive tests are conducted to find out which items should be left in the measurement. Through 7-step AVE analysis, I find that items 3/6/10/12/21/25/39/46 should be deleted and construct 3 “Independent

I find that items 3/6/10/12/21/25/39/46 should be deleted and construct 3 “Independent Goal” also needs to be deleted to reach the requirements for acceptable reliability and validity. As “Concern for others/self” is previously measured to ensure as many constructs as possible in this study and they do not relate to my hypotheses, I also do not adopt the data for the two constructs in the final analysis. Therefore, 8 factors with 27 items are included in the following analysis.

In the 27-item measurement model, the item loading (see Table 7) varied between .4 and .95, which is an acceptable result for the construct structures. All of the CRs are larger than AVEs, and all the AVEs surpass .5 as shown in Table 7 & Table 8 below, which indicates that the model has an acceptable reliability and construct validity. Only AVE for “Cooperative goal” is smaller than the SV between it and “Competitive goal”, which indicates that the two constructs may need to be combined. However, the CFA table (see explanation of M1 in the following chapter) result further supported that “Cooperative goal” and “Competitive goal” cannot be combined into a single construct.

To test the validity of the proposed measurement model, this study compares alternative models in AMOS20.0 combining the factors with significant correlations or correlation index higher than .6 in accordance with Table 8. Then based on the original 8-factor measurement model labeled  $M_0$ , we combine  $x_1$  and  $x_2$  ( $r = -.79$ ,  $p < .005$ ) into one factor in the 7-factor model  $M_1$ ,  $x_1/x_3$  ( $r = .27$ ,  $p < .005$ ) into one factor in the 7-factor model  $M_2$ ,  $x_1/x_7$  ( $r = .62$ ,  $p < .005$ ) in  $M_3$ ,  $x_1/x_8$  ( $r = .68$ ,  $p < .005$ ) in  $M_4$ ,  $x_7/x_8$  ( $r = .77$ ,  $p < .005$ ) in  $M_5$ . In order to more clearly differentiate competitive goal and prosocial motive,  $x_2/x_4$  are combined into  $M_6$ . Then factors in closely related layers are combined into one factor, with  $x_3/x_4$  into one factor in the 7-factor model  $M_7$ ,  $x_1/$

x2/x3/x4 into one in the 5-factor model M<sub>8</sub>, x5/x6/x7/x8 into one in the 5-factor model M<sub>9</sub>. Finally all factors are combined into a one-factor model M<sub>10</sub>.

**Table 7 Factor Loadings**

| <b>Factor</b>                         | <b>Item</b> | <b>Factor Loadings</b> | <b>AVE</b> | <b>CR</b> |
|---------------------------------------|-------------|------------------------|------------|-----------|
| 1. Cooperative goal<br>(x1)           | item1       | .75                    | .63        | .67       |
|                                       | item2       | .87                    |            |           |
|                                       | item4       | .87                    |            |           |
|                                       | item5       | .86                    |            |           |
| 2. Competitive goal<br>(x2)           | item7       | .82                    | .56        | .61       |
|                                       | item8       | .79                    |            |           |
|                                       | item9       | .83                    |            |           |
|                                       | item11      | .76                    |            |           |
| 3. Prosocial motive<br>(x3)           | item19      | .63                    | .59        | .66       |
|                                       | item20      | .84                    |            |           |
|                                       | item22      | .68                    |            |           |
| 4. Proself motive<br>(x4)             | item23      | .64                    | .61        | .68       |
|                                       | item24      | .93                    |            |           |
|                                       | item26      | .63                    |            |           |
| 5. Open-minded discussion<br>(x5)     | item35      | .40                    | .65        | .71       |
|                                       | item36      | .73                    |            |           |
|                                       | item37      | .91                    |            |           |
|                                       | item38      | .82                    |            |           |
| 6. Task accomplishment<br>(x6)        | item40      | .79                    | .75        | .78       |
|                                       | item41      | .82                    |            |           |
|                                       | item42      | .87                    |            |           |
| 7. Relationship strengthening<br>(x7) | item43      | .93                    | .84        | .85       |
|                                       | item44      | .92                    |            |           |
|                                       | item45      | .89                    |            |           |
| 8. Future collaboration<br>(x8)       | item47      | .90                    | .79        | .81       |
|                                       | item48      | .88                    |            |           |
|                                       | item49      | .93                    |            |           |

**Table 8 Correlation Table (Covariance in AMOS)**

| Factor                        | 1      | 2      | 3     | 4    | 5     | 6     | 7     | 8 |
|-------------------------------|--------|--------|-------|------|-------|-------|-------|---|
| 1. Cooperative goal           | 1      |        |       |      |       |       |       |   |
| 2. Competitive goal           | .79*** | 1      |       |      |       |       |       |   |
| 3. Prosocial motive           | .27*** | .19*** | 1     |      |       |       |       |   |
| 4. Proself motive             | .03    | .07    | .08*  | 1    |       |       |       |   |
| 5. Open-minded discussion     | .18*** | .16*** | .07** | -.01 | 1     |       |       |   |
| 6. Task accomplishment        | .44*** | .33*** | .17** | .06  | .11** | 1     |       |   |
| 7. Relationship strengthening | .62*** | .50*** | .22** | .03  | .16** | .46** | 1     |   |
| 8. Future collaboration       | .68*** | .55*** | .23** | .05  | .21** | .47** | .77** | 1 |

Note: \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .005$ ; N = 133 cases for all variables.

**Table 9 AVE Analysis**

| Factor                        | 1          | 2          | 3          | 4          | 5          | 6          | 7          | 8          |
|-------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1. Cooperative goal           | <b>.63</b> |            |            |            |            |            |            |            |
| 2. Competitive goal           | .72        | <b>.56</b> |            |            |            |            |            |            |
| 3. Prosocial motive           | .23        | .12        | <b>.59</b> |            |            |            |            |            |
| 4. Proself motive             | .00        | .01        | .05        | <b>.61</b> |            |            |            |            |
| 5. Open-minded discussion     | .49        | .42        | .19        | .00        | <b>.65</b> |            |            |            |
| 6. Task accomplishment        | .52        | .32        | .23        | .02        | .50        | <b>.75</b> |            |            |
| 7. Relationship strengthening | .50        | .36        | .18        | .00        | .46        | .70        | <b>.84</b> |            |
| 8. Future collaboration       | .46        | .33        | .15        | .01        | .61        | .55        | .71        | <b>.79</b> |

Note: The results of AVE are in bold; the remaining numbers are SV (squared correlations).

CFA results are shown in Table 10. Hu and Bentler (1999) suggest that Comparative Fit Index (CFI) values above .95, Incremental Fit Index (IFI) values above .95 and

Root Mean Square Error of Approximation (RMSEA) values of .06 or less are indicative of excellent model fit. Moreover, Kline (1998) suggested that a  $\chi^2/d.f.$  ratio of smaller than two or three is indicative of good model fit. All fit statistics suggest that the baseline 8-factor Model ( $M_0$ ) shows good fit to the data, with a CFI, an IFI, a RMSEA, and a  $\chi^2/d.f.$  ratio of .95, .95, .06, and 1.43 respectively. The chi-square tests were all significant for the 10 alternative models. However, these model fit statistics suggest that the 10 alternative models fit the data poorly or not as well as baseline model  $M_0$ . Therefore, the results suggested that the proposed 8 factors were distinct measures of the constructs in the study, despite some relatively high and significant correlations over .6. These results suggest that respondents distinguished the 8 constructs.

### **Testing the structural model**

In line with the two-step modeling, the structural component of the hypothesized model was assessed in the second step. Overall goodness-of-fit indices suggested that the proposed model ( $M_0$ ) fits the data well. The  $\chi^2$  and  $d.f.$  of the hypothesized model were 422.6 and 296, with a  $\chi^2/d.f.$  ratio of 1.43. And CFI, IFI, and RMSEA of the proposed model ( $M_0$ ) were .95, .95, and .06 respectively. The CFI, which ranges from 0 to 1, indicates the improvement in fit of the hypothesized model over a model of no relationship among the variables after adjusting for sample size (Hu & Bentler, 1999); values equal to or greater than .95 suggest excellent fit, indicating that approximately 95% of the covariation in the data is reproduced by the hypothesized model. The RMSEA is a measure of lack of fit per degrees of freedom, controlling for sample size

### **Table 10 Confirmatory Factor Analyses**

two or three (Kline, 1998), the results of the fit statistics suggest that the proposed 8-factor mediation model  $M_0$  fits the data well.

**Table 10 Confirmatory Factor Analyses**

| <b>Models</b>   | <b><i>d.f.</i></b> | <b><math>\chi^2</math></b> | <b><math>\Delta \chi^2</math></b> | <b><math>\chi^2/df</math></b> | <b>CFI</b> | <b>IFI</b> | <b>RMS<br/>EA</b> |
|---|--------------------|----------------------------|-----------------------------------|-------------------------------|------------|------------|-------------------|
| Baseline 8-factor Model ( $M_0$ )   | 296                | 422.6                      | -                                 | 1.43                          | .95        | .95        | .06               |
| Combined Cooperative Goal/ Competitive Goal ( $M_1$ )   | 303                | 472.6                      | 50 <sup>***</sup>                 | 1.56                          | .93        | .94        | .07               |
| Combined Cooperative Goal/Prosocial Motive ( $M_2$ )  | 303                | 584.3                      | 161.7 <sup>**</sup><br>*          | 1.93                          | .90        | .90        | .08               |
| Combined Cooperative Goal/ Relationship Strengthening ( $M_3$ )   | 303                | 630.8                      | 208.2 <sup>***</sup>              | 2.08                          | .87        | .88        | .09               |
| Combined Cooperative Goal/Future Collaboration ( $M_4$ )  | 303                | 646.2                      | 223.6 <sup>***</sup>              | 2.13                          | .87        | .87        | .09               |
| Combined Relationship Strengthening/Future Collaboration ( $M_5$ )  | 303                | 526.5                      | 103.9 <sup>***</sup>              | 1.74                          | .91        | .92        | .08               |
| Combined Competitive Goal/Proself Motive ( $M_6$ )  | 303                | 628.0                      | 207.3 <sup>***</sup>              | 2.07                          | .88        | .88        | .09               |
| Combined Prosocial Motive/Proself Motive ( $M_7$ )  | 303                | 535.0                      | 112.4 <sup>***</sup>              | 1.77                          | .91        | .91        | .08               |
| Combined Cooperative Goal/ Competitive Goal/Prosocial Motive/Proself Motive ( $M_8$ )                         | 314                | 675.9                      | 253.3 <sup>***</sup>              | 2.15                          | .86        | .86        | .09               |
| Combined Open-minded Discussion/Task Accomplishment/Relationship Strengthening/Future Collaboration ( $M_9$ ) | 314                | 676.7                      | 254.1 <sup>***</sup>              | 2.16                          | .86        | .86        | .09               |
| One factor solution ( $M_{10}$ )  | 324                | 1175.<br>1                 | 752.5 <sup>**</sup><br>*          | 3.63                          | .67        | .67        | .14               |

Note: \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .005$ ;  $N = 133$  cases for all variables.



## Testing the hypotheses

Gender and age status may affect the application of different conflict-handling style (Brewer, Mitchell, & Weber, 2002; Pelled, 1996; Pelled, Eisenhardt, & Xin, 1999; Valentine, 2001). Thus, I first tested whether the gender of participants influenced specific actions they took to manage conflict. The participants were divided into two groups according to gender (i.e. female and male) and then I tested the differences of their responses.

Then all the participants were divided into four groups according to their age status (i.e. below 25 years old, between 26 and 30 years old, between 31 and 40 years old, and above 41 years old) and their differences of responses were tested to find out whether the age status of participants influenced specific actions they took to manage conflict.

After that, the relationships of open-minded discussion with the three outcomes (i.e. open-minded discussion and task accomplishment; *Hypothesis 1a*), goal interdependence with open-minded discussion (i.e. cooperative goal and open-minded discussion; *Hypothesis 2a*), and the relationships among other variables were established through a series of correlational analysis to make the initial hypothesis testing.

Structural Equation Modeling (SEM) was employed by using AMOS 20.0 in the next step to further explore the underlying causal relationships among goal interdependence (i.e. cooperative/competitive goal), prosocial/proself motive, open-minded discussion, and three outcomes (i.e. task accomplishment/relationship strengthening/future collaboration).

A nested model test commonly adopted in the structural equation modeling analysis was conducted where fully mediated model (Hypothesis 3, the proposed model  $M_o$ ), partially mediated model ( $M_a$ ), non-mediated model ( $M_b$ ), and another alternative model ( $M_c$ ) were compared. The partially mediated model ( $M_a$ ) holds that goal interdependence not only impacts outcomes through open-minded discussion but also influences conflict outcomes directly, while the fully mediated model ( $M_o$ ) proposes that goal interdependence impacts outcomes fully through open-minded discussion, that is to say, open-minded discussion mediates the relationship between goal interdependence and conflict outcomes. The non-mediated model ( $M_b$ ) implies that goal interdependence has direct effects on conflict outcomes without open-minded discussion. In the third alternative model ( $M_c$ ), both goal interdependence and open-minded discussion work as antecedents that impacts conflict outcomes directly, omitting the path from goal interdependence to open-minded discussion.

Finally, Ping (1995) procedures in SEM were conducted to test the moderating effect. Computing the interaction terms following Ping (1995) procedures was performed respectively in SEM to test for possible moderating effects of prosocial motive on the relationships between interdepartmental goal interdependence (i.e. cooperative goal/competitive goal) and open-minded discussion as proposed in Hypothesis 4a/4b, as well as proself motive on the relationships between interdepartmental goal interdependence and open-minded discussion as Hypothesis 5a/5b. After that, procedures suggested by Aiken and West (1991) and Dawson and Richter (2006) were used to plot a figure in order to determine the shape of the significant interactions.

## **Summary**

This chapter described the research design and methodology employed in this thesis. Interviews administered to a sample of one hundred and thirty three employees who worked in various Chinese organizations in Shanghai, Beijing, and Guangdong Province in Mainland China during the summer of 2013 provided the dataset for this non-experimental field study. Interviewees were first required to recall a detailed incident in which they had a conflict with their coworkers from another department, and then rated specific questions on 5-point Likert-type scale based on the recalled incidents. Scales included goal interdependence (i.e. cooperative goal and competitive goal), social motives (i.e. prosocial motive and proself motive), and three outcomes (i.e. task accomplishment, relationship strengthening and future collaboration). All of the measures used in this research demonstrated acceptable reliability.

Confirmatory Factor Analysis (CFA), Correlation Analyses, Structural Equation Modeling (SEM), and Ping (1995) procedures were used to analyze the quantitative data. For the qualitative data, some specific typical cases were summarized to understand the conditions that led to specific actions taken to manage conflict in work setting. The next chapter reports on the results of hypothesis testing.

## **CHAPTER IV RESULTS**

The previous chapter described the research design and methodology employed in this study. Chapter IV reports the procedures employed in order to prepare the data for analysis, the performance of the measures utilized, the testing of the hypotheses, and the post hoc analyses conducted. Specifically, it describes the sample difference analysis, correlational analysis, structural equation modeling analysis, and other results. Finally, it presents four representative cases to illustrate the hypotheses proposed in this study.

### **Data Screening**

The sample participants in this study included 133 employees who worked in various Chinese organizations mostly in Shanghai, Beijing and Guangdong Province in Mainland China. All the participants were recruited from my personal network and were chosen to represent diverse regions, business types, department kinds, gender, age, and education level in Chinese organizations. Participants were informed of criteria to be eligible to participate in the study: (1) participants must be at least 18 years of age; (2) participants should have no problem understanding and answering questionnaires in Simplified Chinese; (3) participants should have interdepartmental collaboration experience; (4) participants should have about 30 minutes for the interview on the questionnaire.

In order to ensure data quality, I checked all the answers in the questionnaires handed in by the participants to make sure of no missing data. Through data screening procedures in EXCEL2010, all of the standard deviations of the 133 answers for each item are larger than .5, which means that the participants did not fill in the answers in

an unserious way like choosing the same answer consecutively and therefore they were fully engaged. Among all the 133 participants, 32 people were interviewed in Shanghai, 16 in Beijing, 17 in Guangdong, 9 in Shandong and the rest from other areas in Mainland China. The participants were from over 30 different organizations. Among the 30+ organizations, most of the organizations offered 1 to 5 participants. Only 2 organizations offered more than 6 participants. Thus the participants were not nested within some particular organizations. And the sample could represent the population from which the cases were drawn.

### **Sample Difference Analysis**

#### **Influence of region**

Among all the 133 participants, 32 people were interviewed in Shanghai, 16 in Beijing, 17 in Guangdong, 9 in Shandong and the rest from other parts of Mainland China. Four major regions may stand for different cultural backgrounds, economic development, and working environments. Thus I conducted one-way analysis of variance (One-Way ANOVA) in SPSS 20.0 to examine whether there was any difference of study variables in terms of the four different interview sites.

The results (Table 11) indicate that there are no significant effects of the regional factor on most of the study variables. However, there is a significant effect of region on the outcome variable future collaboration ( $p = .04 < .05$ ). To further analyze the main effects of regional factor on future collaboration, this study conducted post hoc tests using Turkey HSD or Scheffe. Because the group sizes for the age variable are not the same, Turkey cannot be used and only Scheffe can be employed in the test.

According to the test result in Table 12, the region for participants to join the study does not have significant effects on participants' ratings, with all *p* values larger than .05. Therefore, regional differences can be ignored in the study. Because I did not hypothesize regional differences and the results do not indicate any significant difference among regions, I merged the data from four sets of samples together.

**Table 11 Results of Regional Difference Analysis**

| <b>Dependent Variable</b>  | <b><i>d.f.</i></b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b> |
|----------------------------|--------------------|--------------------|----------|-------------|
| Cooperative goal           | 4                  | .85                | .82      | .51         |
| Competitive goal           | 4                  | .93                | .91      | .46         |
| Prosocial motive           | 4                  | .48                | .96      | .44         |
| Proself motive             | 4                  | .30                | .54      | .71         |
| Open-minded discussion     | 4                  | .68                | 1.46     | .22         |
| Task accomplishment        | 4                  | 1.17               | 1.99     | .10         |
| Relationship strengthening | 4                  | .56                | .66      | .62         |
| Future collaboration       | 4                  | 2.68               | 2.56     | .04         |

### **Influence of gender**

Gender and age status may affect the application of different conflict-handling style (Brewer, Mitchell, & Weber, 2002; Pelled, 1996; Pelled, Eisenhardt, & Xin, 1999; Valentine, 2001). Thus, I was first interested in testing whether the gender of participants influenced specific actions they took to manage conflict. Of the participants, 48.9% (65) were male; females comprised the remaining 51.1% (68). The participants were divided into two groups according to gender (i.e. female and male) and then were tested on the differences of their responses.

**Table 12 Post-Hoc Test of Regional Difference on Future Collaboration**

| <b>(I) Re-<br/>gion</b> | <b>(J) Region</b> | <b>Mean Difference (I-J)</b> | <b>Std. Error</b> | <b>Sig.</b> |
|-------------------------|-------------------|------------------------------|-------------------|-------------|
| Shanghai                | Beijing           | -0.18                        | 0.31              | 0.99        |
|                         | Guandong          | -0.93                        | 0.30              | 0.06        |
|                         | Shandong          | -0.10                        | 0.38              | 0.10        |
|                         | other             | -0.38                        | 0.22              | 0.57        |
| Beijing                 | Shanghai          | 0.18                         | 0.31              | 0.99        |
|                         | Guandong          | -0.76                        | 0.35              | 0.34        |
|                         | Shandong          | 0.07                         | 0.42              | 1.00        |
|                         | other             | -0.21                        | 0.29              | 0.97        |
| Guandong                | Shanghai          | 0.93                         | 0.30              | 0.06        |
|                         | Beijing           | 0.76                         | 0.35              | 0.34        |
|                         | Shandong          | 0.83                         | 0.42              | 0.42        |
|                         | other             | 0.55                         | 0.28              | 0.43        |
| Shandong                | Shanghai          | 0.10                         | 0.38              | 0.10        |
|                         | Beijing           | -0.07                        | 0.42              | 1.00        |
|                         | Guandong          | -0.83                        | 0.42              | 0.42        |
|                         | other             | -0.28                        | 0.36              | 0.97        |
| other                   | Shanghai          | 0.38                         | 0.22              | 0.57        |
|                         | Beijing           | 0.21                         | 0.29              | 0.97        |
|                         | Guandong          | -0.55                        | 0.28              | 0.43        |
|                         | Shandong          | 0.28                         | 0.36              | 0.97        |

I conducted one-way analysis of variance by SPSS 20.0 to exam whether the effect of gender significantly existed in the responses from interviewees. As shown in Table 13, the results did not show significant differences in goal interdependence (i.e. cooperative goal/competitive goal), social motives (i.e. prosocial motive/proself motive), open-minded discussion, and three outcomes (i.e. task accomplishment/relationship strengthening/future collaboration).

**Table 13 Results of Gender Difference Analysis**

| <b>Dependent Variable</b>  | <b><i>d.f.</i></b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b> |
|----------------------------|--------------------|--------------------|----------|-------------|
| Cooperative goal           | 1                  | 1.48               | 1.45     | .23         |
| Competitive goal           | 1                  | .45                | .43      | .51         |
| Prosocial motive           | 1                  | .96                | 1.92     | .17         |
| Proself motive             | 1                  | .20                | .35      | .55         |
| Open-minded discussion     | 1                  | .01                | .03      | .87         |
| Task accomplishment        | 1                  | .05                | .09      | .77         |
| Relationship strengthening | 1                  | .09                | .10      | .75         |
| Future collaboration       | 1                  | .94                | .87      | .35         |

### **Influence of age**

Pelled (1996) also indicated that age status may affect the application of different conflict-handling style. Therefore perception of goal interdependencies, social motives, open-minded discussion and conflict outcomes may differ across participants with different age status. I divided all the participants into four groups according to their age status (i.e. 21~25 years old, 26~30, 31~40, and above 41 years old) and tested the differences of their responses to identify whether the age status of participants influenced specific actions they took to manage conflict. The participants consisted of 29 people at the age of 21~25 years old (21.8%), 32.3% (43 participants) between 26~30 years old, 38.3% (51 participants) within 31~40, and 7.5% (10 participants) above 41 years old.

Results (Table 14) indicate that there are no significant effects of age on participants' ratings to perception of cooperative goal interdependence, social motives, open-



mindful discussion, task accomplishment, relationship strengthening, and future collaboration. However, there are significant effects of the age factor on the perception of competitive goal interdependence ( $p = .04 < .05$ ) and future collaboration ( $p = .04 < .05$ ).

**Table 14 Results of Age Difference Analysis**

| <b>Dependent Variable</b>  | <b><i>d.f.</i></b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b> |
|----------------------------|--------------------|--------------------|----------|-------------|
| Cooperative goal           | 3                  | 1.93               | 1.92     | .13         |
| Competitive goal           | 3                  | 2.84               | 2.91     | .04         |
| Prosocial motive           | 3                  | .69                | 1.38     | .25         |
| Proself motive             | 3                  | .22                | .40      | .76         |
| Open-minded discussion     | 3                  | .66                | 1.40     | .25         |
| Task accomplishment        | 3                  | .92                | 1.53     | .21         |
| Relationship strengthening | 3                  | 1.71               | 2.07     | .11         |
| Future collaboration       | 3                  | 2.87               | 2.76     | .04         |

The post hoc test results (Table 15) suggested that participants of 21~25 years old are not different from those aged between 26~30 years old and those between 31~40 years old. Yet there is a significant difference between participants who are 21~25 years old and those above 41 years old on the ratings ( $p = .04 < .05$ ). Participants aged over 41 years old reported a significant higher perception of competitive goal interdependence.

Table 15 also indicated that participants aged within 31~40 years old are not different from those between 21~25 years old and those between 26~30 years old. Yet there is a significant difference between participants who are 31~40 years old and

those above 41 years old on the responses ( $p = .04 < .05$ ). Participants aged over 31~40 years old reported a significant higher level of future collaboration compared with those above 41 years old.

### **Influence of additional factors**

Table 17 presents the correlations of all the variables in this study. It was noticed that a few demographic variables were associated with the conflict outcomes: Age was correlated with cooperative goal ( $r = -.20, p < .05$ ) and with competitive goal ( $r = .19, p < .05$ ); Department ( $r = -.22, p < .05$ ) was correlated with proself motive ( $r = .17, p < .05$ ). The effect of age difference analysis was investigated earlier. Therefore I may assume that proself motive may differ across participants from different departments respectively. The results (see Table 16) indicate that there is no significant effect of the department factor on participants' ratings of proself motive.

### **Correlational Analysis**

An initial examination of the correlation table (Table 17) illustrated the descriptive statistics and the correlation coefficients for each of the variables in the present study. In general, the directions of these correlations supported previous research, and the hypotheses proposed in the present study.

### **Hypothesis testing**

A correlation analysis of predictor (open-minded discussion) and outcome variables (task accomplishment, relationship strengthening and future collaboration) was performed to test the first three hypotheses (1a, 1b, and 1c) of the study. The association between the measures of open-minded discussion and task accomplishment was

found to be significant and positive ( $r = .62, p < .01$ ), supporting H1a. Correlations between open-minded discussion and relationship strengthening ( $r = .60, p < .01$ ), and

**Table 15 Post-Hoc Test of Age Difference**

| Dependent Variable   | (I) Age | (J) Age | Mean Difference (I-J) | Std. Error | Sig. |
|----------------------|---------|---------|-----------------------|------------|------|
| Competitive goal     | 21-25   | 26-30   | -0.32                 | 0.24       | 0.61 |
|                      |         | 31-40   | -0.27                 | 0.23       | 0.71 |
|                      |         | >= 41   | -1.07*                | 0.36       | 0.04 |
|                      | 26-30   | 21-25   | 0.32                  | 0.24       | 0.61 |
|                      |         | 31-40   | 0.05                  | 0.21       | 1.00 |
|                      |         | >= 41   | -0.75                 | 0.35       | 0.21 |
|                      | 31-40   | 21-25   | 0.27                  | 0.23       | 0.71 |
|                      |         | 26-30   | -0.05                 | 0.21       | 1.00 |
|                      |         | >= 41   | -0.80                 | 0.34       | 0.15 |
|                      | >= 41   | 21-25   | 1.07*                 | 0.36       | 0.04 |
|                      |         | 26-30   | 0.75                  | 0.35       | 0.21 |
|                      |         | 31-40   | 0.80                  | 0.34       | 0.15 |
| Future collaboration | 21-25   | 26-30   | 0.12                  | 0.25       | 0.97 |
|                      |         | 31-40   | -0.06                 | 0.24       | 1.00 |
|                      |         | >= 41   | 0.94                  | 0.37       | 0.11 |
|                      | 26-30   | 21-25   | -0.12                 | 0.25       | 0.97 |
|                      |         | 31-40   | -0.18                 | 0.21       | 0.86 |
|                      |         | >= 41   | 0.82                  | 0.36       | 0.17 |
|                      | 31-40   | 21-25   | 0.06                  | 0.24       | 1.00 |
|                      |         | 26-30   | 0.18                  | 0.21       | 0.86 |
|                      |         | >= 41   | 1.00                  | 0.35       | 0.04 |
|                      | >= 41   | 21-25   | -0.94                 | 0.37       | 0.11 |
|                      |         | 26-30   | -0.82                 | 0.36       | 0.17 |
|                      |         | 31-40   | -1.00                 | 0.35       | 0.04 |

Note: \*  $p < .05$ .

**Table 16 Results of Department Difference Analysis**

| <b>Variable</b> | <b><i>d.f.</i></b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b> |
|-----------------|--------------------|--------------------|----------|-------------|
| Proself motive  | 5                  | .80                | 1.47     | .21         |

future collaboration ( $r = .68, p < .01$ ) are also positive and significant. Therefore H1b and H1c are also supported in the correlational analysis.

Hypotheses 2 also called for bivariate correlation analyses as initial tests. Hypothesis 2a proposed that cooperative goal was positively related to open-minded discussion. Result was consistent with and thus supported this hypothesis, with a positive and significant correlation between cooperative goal and open-minded discussion ( $r = .57, p < .01$ ). Hypothesis 2b posited that competitive goal was negatively related to open-minded discussion, with the supporting evidence of a significant and negative correlation between them ( $r = -.53, p < .01$ ). Therefore, both H2a and H2b are supported in the correlational analysis.

### **Structural Equation Modeling Analysis**

In order to further explore the relationship among prosocial/proself motive, open-minded discussion, goal interdependence and conflict outcomes, we conducted a nested model test commonly adopted in the structural equation modeling analysis by using AMOS 20.0 statistical software. This test was to determine whether partially mediated model ( $M_a$ ), or two other alternative models ( $M_b$  and  $M_c$ ) resulted in an improvement in model fit, compared to fully mediated model (the proposed model  $M_0$ ).

**Table 17 Means, Standard Deviations, and Correlations for All Variables**

| Variables                      | Mean | SD   | 1      | 2      | 3      | 4      | 5      | 6      | 7    | 8      | 9      | 10    | 11   | 12    | 13    | 14    | 15 |
|--------------------------------|------|------|--------|--------|--------|--------|--------|--------|------|--------|--------|-------|------|-------|-------|-------|----|
| 1. Region                      | 3.32 | 1.69 | 1      |        |        |        |        |        |      |        |        |       |      |       |       |       |    |
| 2. Gender                      | 1.51 | .50  | .09    | 1      |        |        |        |        |      |        |        |       |      |       |       |       |    |
| 3. Age                         | 2.32 | .90  | .36**  | -.24** | 1      |        |        |        |      |        |        |       |      |       |       |       |    |
| 4. Education level             | 4.20 | .51  | -.19*  | -.10   | -.04   | 1      |        |        |      |        |        |       |      |       |       |       |    |
| 5. Company type                | 2.47 | 1.15 | -.16   | .26**  | -.24** | -.24** | 1      |        |      |        |        |       |      |       |       |       |    |
| 6. Tenure                      | 2.80 | 1.03 | .44**  | -.11   | .67**  | -.04   | -.28** | 1      |      |        |        |       |      |       |       |       |    |
| 7. Department                  | 4.17 | 1.81 | -.26** | -.15   | -.06   | .01    | .10    | -.29** | 1    |        |        |       |      |       |       |       |    |
| 8. Cooperative goal            | 3.43 | 1.01 | -.14   | -.10   | -.20*  | .04    | .07    | -.12   | .09  | 1      |        |       |      |       |       |       |    |
| 9. Competitive goal            | 2.52 | 1.01 | .10    | .06    | .19*   | -.04   | -.09   | .09    | -.08 | -.77** | 1      |       |      |       |       |       |    |
| 10. Prosocial motive           | 3.88 | .71  | 0      | -.12   | .07    | .05    | -.06   | .07    | .10  | .38**  | -.30** | 1     |      |       |       |       |    |
| 11. Proself motive             | 3.85 | .74  | -.01   | .05    | -.07   | .08    | .00    | .04    | .17* | .10    | .06    | .25** | 1    |       |       |       |    |
| 12. Open-minded discussion     | 4.04 | .69  | .13    | -.01   | -.07   | -.07   | -.02   | .07    | -.08 | .57**  | -.53** | .35** | -.06 | 1     |       |       |    |
| 13. Task accomplishment        | 4.00 | .78  | -.06   | -.03   | -.17   | .02    | -.04   | -.07   | .06  | .62**  | -.49** | .37** | .17* | .62** | 1     |       |    |
| 14. Relationship strengthening | 3.87 | .92  | -.01   | .03    | -.16   | .07    | .02    | -.04   | .07  | .63**  | -.56** | .33** | .07  | .60** | .75** | 1     |    |
| 15. Future collaboration       | 3.62 | 1.04 | .12    | -.08   | -.10   | .01    | -.03   | .03    | -.01 | .61**  | -.52** | .32** | .12  | .68** | .66** | .79** | 1  |

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ ;  $N = 133$  cases for all variables.

### Model comparison

Table 18 presents model fit statistics for the fully mediated model (the proposed model  $M_0$ ), partially mediated model ( $M_a$ ), non-mediated model ( $M_b$ ), and the alternative no-mediator model ( $M_c$ ). The overall goodness-of-fit indices suggested that the proposed fully mediated model ( $M_0$ ) fits the data very well. The Model  $\chi^2$  and *d.f.* of the hypothesized model were 460.3 and 184, with a  $\chi^2/d.f.$  ratio of 2.50. The CFI, IFI, and RMSEA of the proposed model ( $M_0$ ) were .93, .93, and .08 respectively. The CFI, which ranges from 0 to 1, indicates the improvement in fit of the hypothesized model over a model of no relationship among the variables after adjusting for sample size (Hu & Bentler, 1999); values equal to or greater than .90 suggest good fit, indicating that approximately 90% of the covariation in the data is reproduced by the hypothesized model. The RMSEA is a measure of lack of fit per degrees of freedom, controlling for sample size (Ullman & Bentler, 2003); values less than 0.08 indicate good model fit. Moreover, given the usually critical IFI value of .90 (Bentler & Bonett, 1980), and a  $\chi^2/d.f.$  ratio of less than two or three (Kline, 1998), the results of the fit statistics suggest that the fully mediated model fits the data well.

The partially mediated model ( $M_a$ ) is distinguished from the fully mediated model ( $M_0$ ) by adding the direct paths from antecedent variables to the outcome variables, indicating that goal interdependence not only impacts outcomes through open-minded discussion but also influences conflict outcomes directly, while the fully mediated model ( $M_0$ ) proposes that goal interdependence impacts outcomes fully through open-minded discussion, that is to say, open-minded discussion mediates the

relationship between goal interdependence and conflict outcomes. As shown in the Table 8, the partially mediated model ( $M_a$ ) resulted in non-significant chi-square value and very slight deterioration in overall model fit ( $\chi^2 = 447$ ,  $d.f. = 178$ ,  $\chi^2/d.f. = 2051$ ,  $p > .05$ ; IFI = .88, CFI = .89, RMSEA = .11). If there is no significant difference between two nested models, this implies that the more parsimonious model explains the data equally well compared to the more complex model and is preferred (Rigdon, 1999). Therefore, the partially mediated model ( $M_a$ ) appears to be less suitable than the original conceptual model ( $M_0$ ).

Two sets of goodness of fit statistics ( $\chi^2$ ,  $d.f.$ ,  $\chi^2/d.f.$  ratio,  $p$  value; IFI, CFI; RMSEA) were also examined for other two alternative models ( $M_b$  and  $M_c$ ). In the alternative model  $M_b$ , both goal interdependence and open-minded discussion work as antecedents that impact conflict outcomes directly, omitting the path from goal interdependence to open-minded discussion. In the alternative model  $M_c$ , goal interdependence impacts open-minded discussion and conflict outcomes directly, omitting the path from open-minded discussion to conflict outcomes. The results (Table 18) indicated that although  $M_b$  and  $M_c$  resulted in significant chi-square values, the values for CFI, IFI, RMSEA, and  $\chi^2/d.f.$  were not as good as the hypothesized model ( $M_0$ ). If the difference between two nested SEM models is significant, this implies that the model with more paths explains the data better (Rigdon, 1999). Thus the two alternative models ( $M_b$  and  $M_c$ ) did not significantly improve the model.

To further show the significant effect of the mediator, this study conducted the Sobel Test using the Aroian version (1944/1947) suggested in Baron and Kenny (1986) because it does not make the unnecessary assumption that the products of standard errors are vanishingly small. A variable may be considered a mediator to

the extent to which it carries the influence of a given independent variable (IV) to a given dependent variable (DV). Generally speaking, mediation can be said to occur when (1) the IV significantly affects the mediator, (2) the IV significantly affects the DV in the absence of the mediator, (3) the mediator has a significant unique effect on the DV, and (4) the effect of the IV on the DV shrinks upon the addition of the mediator to the model. These criteria can be used to informally judge whether or not mediation is occurring, but MacKinnon & Dwyer (1993) and MacKinnon, Warsi, & Dwyer (1995) have popularized statistically based methods by which mediation may be formally assessed. All of the calculations (Table 19) indicated that all the critical ratios are less than .005, which means all of the indirect effects are significant via the mediator, therefore further supporting the mediating role of open-minded discussion.

**Table 18 Results of Model Comparison Analyses**

| <b>Model</b>                                  | $\chi^2$ | <i>d.f.</i> | $\Delta\chi^2$ | $\chi^2/d.f.$ | IFI | CFI | RMSEA |
|---|----------|-------------|----------------|---------------|-----|-----|-------|
| 1. Partially mediated model (M <sub>a</sub> ) | 447.0    | 178         | -              | 2.51          | .88 | .89 | .11   |
| 2. Fully mediated model (M <sub>0</sub> )     | 460.3    | 184         | 13.3           | 2.50          | .93 | .93 | .08   |
| 3. Non-mediated model (M <sub>b</sub> )       | 516.7    | 180         | 69.7***        | 2.87          | .86 | .86 | .12   |
| 4. The alternative model (M <sub>c</sub> )    | 490.4    | 181         | 42.6***        | 2.71          | .87 | .87 | .11   |

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .005$ ; N = 133.

Overall, both the fit statistics and the results of Sobel Test show that the hy-



pothesized fully mediated model  $M_0$  fits the data best. Hypothesis 3 suggests that open-minded discussion mediates the relationship between goal interdependence and conflict outcomes. Therefore, Hypothesis 3 is supported.

**Table 19 Results of Sobel Test**

| IV               | DV                         | Mediator               | Critical Ratio |
|------------------|----------------------------|------------------------|----------------|
| Cooperative goal | Task accomplishment        | Open-minded discussion | .000           |
|                  | Relationship strengthening |                        | .000           |
|                  | Future collaboration       |                        | .002           |
| Competitive goal | Task accomplishment        | Open-minded discussion | .000           |
|                  | Relationship strengthening |                        | .000           |
|                  | Future collaboration       |                        | .001           |

### Structural equation modeling analysis for the hypothesized model

I conducted the path estimates of the fully mediated model to reveal the findings more specifically (Figure 2). Generally, the findings on path estimates provide reasonable support for the present study.

Supporting Hypotheses 1a, 1b, and 1c that states the effects of open-minded discussion on the outcome variables, open-minded discussion was significantly positively related to task accomplishment ( $\beta = .82, p < .001$ ), relationship strengthening ( $\beta = .84, p < .001$ ), and future collaboration ( $\beta = .86, p < .001$ ). The results indicate that open-minded discussion is likely to lead to high task accomplishment, relationship strengthening, and future collaboration.

The results indicate that cooperative goal has positive and significant effects on open-minded discussion ( $\beta = .68, p < .01$ ), supporting Hypothesis 2a. A signifi-

cant and negative correlation was found between competitive goal and open-minded discussion ( $\beta = -.19, p < .05$ ), indicating that Hypothesis 2b had initial support.

### **Moderating effect**

An insignificant and positive path coefficient was found between prosocial motive and open-minded discussion ( $\beta = .16, ns$ ). This finding suggests that prosocial motive had no main effect on open-minded discussion and thus may be a moderator. Besides, an insignificant and negative path coefficient was found between proself motive and open-minded discussion ( $\beta = -.07, ns$ ). This indicates that proself motive also had no main effect on open-minded discussion and thus may be a moderator.

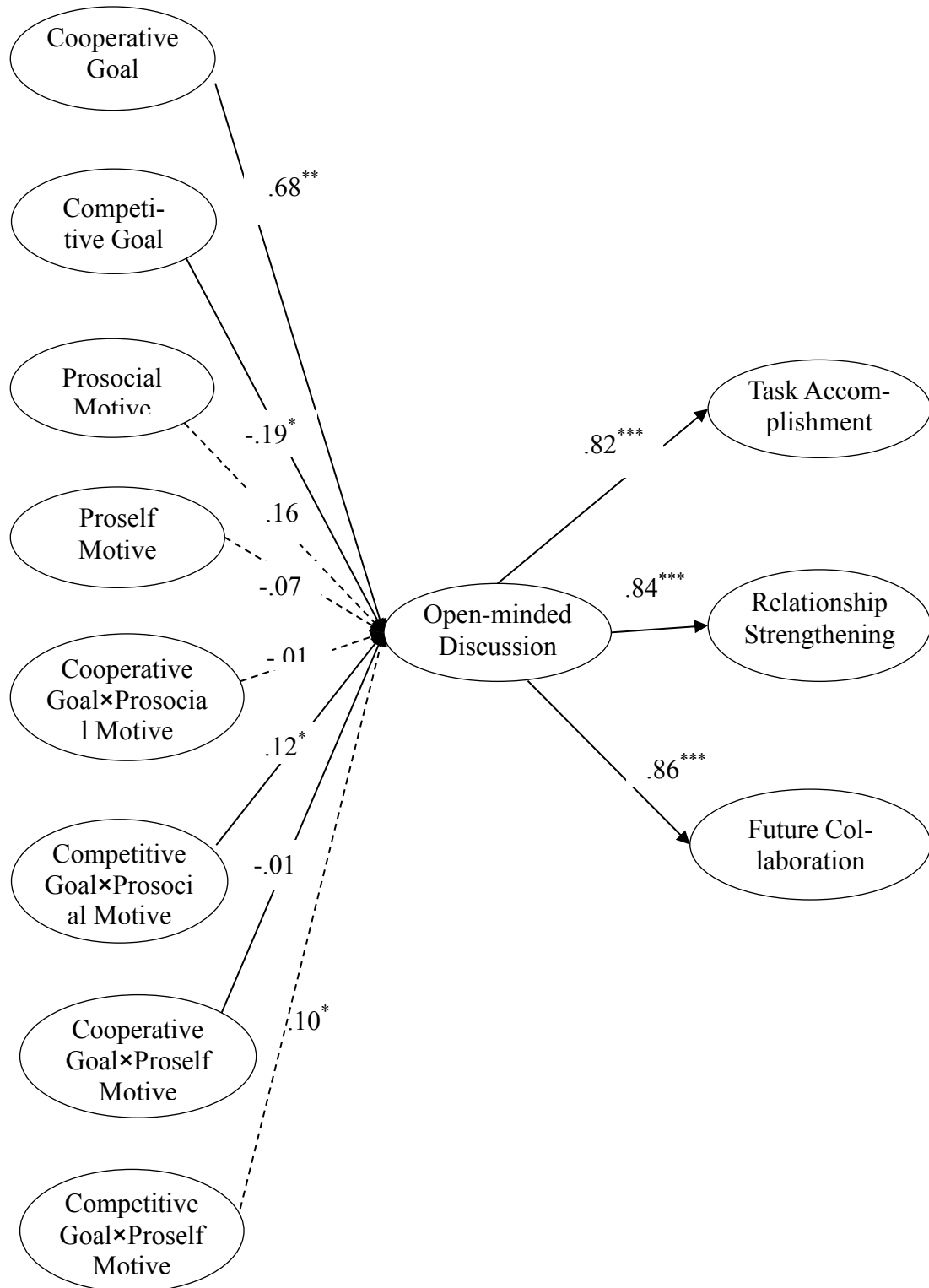
Hypothesis 4a proposed that the relationship between cooperative goal and open-minded discussion is moderated by prosocial motive, such that employees who have strong pro-social motive will be more likely to engage in open-minded discussion than employees whose prosocial motive is low. To test Hypothesis 4a that predicts an interactive effect of prosocial motive and cooperative goal, I followed Ping (1995) method of indicant product analysis approach in SEM to compute the interaction term. As shown in Figure 2, the interaction of prosocial motive with cooperative goal was not significant in predicting open-minded discussion ( $\beta = -.01, ns$ ). Thus Hypothesis 4a was not supported in this study.

Hypothesis 4b predicted that the relationship between competitive goal and open-minded discussion is moderated by prosocial motive, such that employees who have strong prosocial motive will be more likely to engage in open-minded discussion than employees whose prosocial motive is low. Similarly, Ping (1995) procedures in SEM in computing the interaction term was used to test Hypothesis 4b

which predicts an interactive effect of prosocial motive and competitive goal. As shown in Figure 2, the interaction of prosocial motive and competitive goal was significant in predicting open-minded discussion ( $\beta = .12, p < .05$ ), and thus the first part of Hypothesis 4b was initially supported.

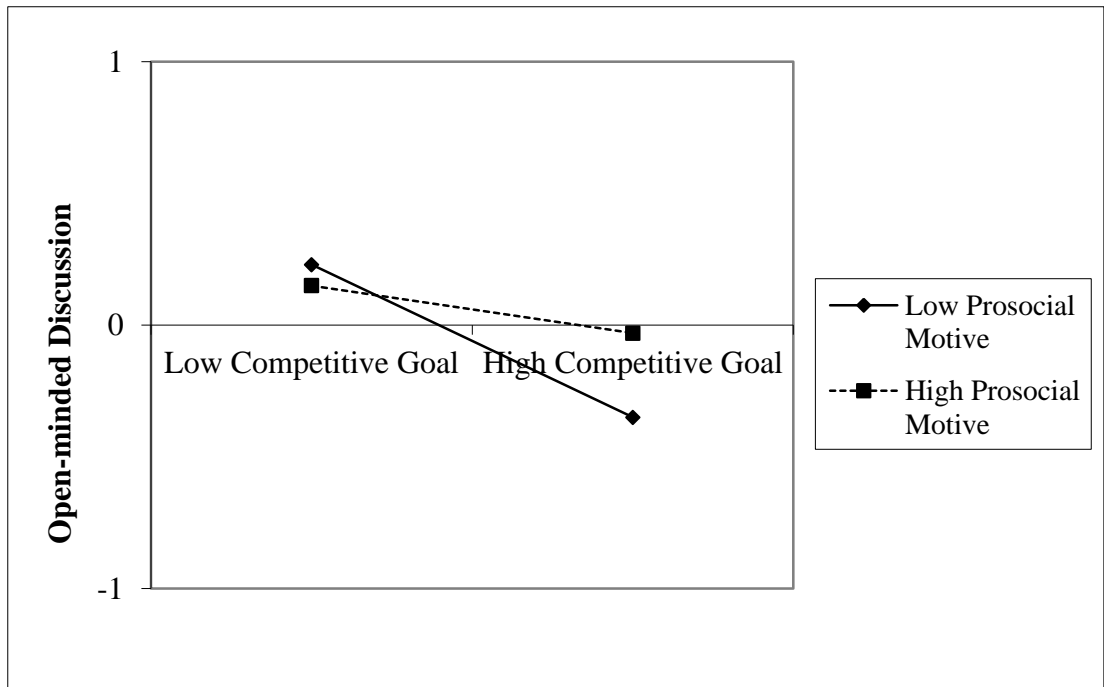
To determine the shape of the significant interactions, I plotted them using procedures suggested by Aiken and West (1991), Dawson (2014), and Dawson and Richter (2006). Figure 3 depicts the interaction of prosocial motive with competitive goal in predicting open-minded discussion. For employees who have low prosocial motive, the perception of competitive interdepartmental goal was significantly and negatively associated with employees from different departments engaging in open-minded discussion (simple slope =  $-.35, t = 1.98, p < .05$ ); while for employees who have high prosocial motive, the perception of competitive interdepartmental goal was not significantly associated with employees from different departments engaging in open-minded discussion (simple slope =  $-.14, t = .62, ns$ ). As shown, the existence of prosocial motive weakens the negative effect of competitive goal interdependence on open-minded discussion. Therefore the interaction is significant and the pattern is consistent with Hypothesis 4b.

**Figure 2 Path Estimates for the Hypothesized Structural Model**



Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; N=133.

**Figure 3 Moderating Effects of Prosocial Motive on the Relationship between Competitive Goal and Open-minded Discussion**

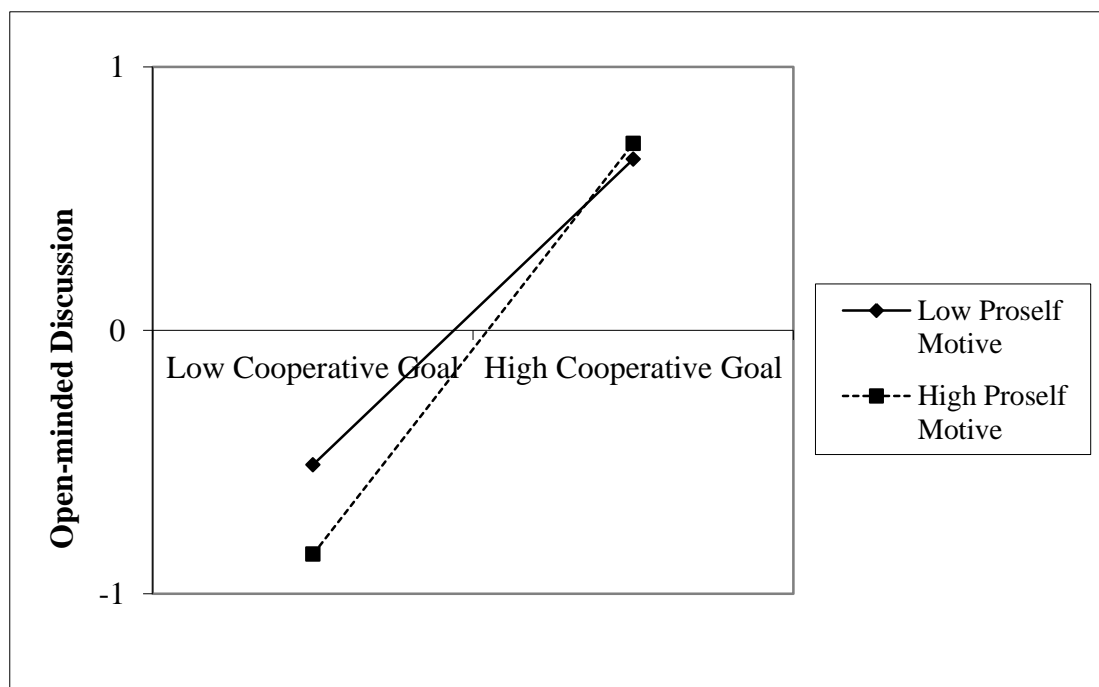


Hypothesis 5a proposed that the relationship between cooperative goal interdependence and open-minded discussion is moderated by prosocial motive, such that employees who have strong prosocial motive will be more likely to engage in open-minded discussion than employees whose prosocial motive is low. To test Hypothesis 5a that predicts an interactive effect of prosocial motive and cooperative goal, I followed Ping (1995) method in SEM to compute the interaction term. As shown in Figure 2, the interaction of prosocial motive with cooperative goal was significant in predicting open-minded discussion ( $\beta = .10, p < .05$ ). The first part of Hypothesis 5a was initially supported in this study.

To determine the shape of the significant interactions, I plotted them using procedures suggested by Aiken and West (1991), Dawson (2013), and Dawson and

Richter (2006). Figure 4 depicts the interaction of prosself motive with cooperative goal in predicting open-minded discussion. For employees who have high prosself motive, the perception of cooperative interdepartmental goal was significantly and positively associated with employees from different departments engaging in open-minded discussion (simple slope = .58,  $t = 2.81$ ,  $p < .05$ ); while for employees who have low prosself motive, the perception of cooperative interdepartmental goal was not significantly associated with employees from different departments engaging in open-minded discussion (simple slope = .37,  $t = 1.82$ , ns). As shown, the existence of prosself motive strengthens the positive effect of cooperative goal interdependence on open-minded discussion. Therefore the interaction is significant and the pattern is consistent with Hypothesis 5a.

**Figure 4 Moderating Effects of Prosself Motive on the Relationship between Cooperative Goal and Open-minded Discussion**



Hypothesis 5b predicted that the relationship between competitive goal and open-minded discussion is moderated by proself motive. Employees who have strong proself motive will be less likely to engage in open-minded discussion than employees whose proself motive is low. Similarly, Ping (1995) procedures in SEM in computing the interaction term was used to test Hypothesis 5b which predicts an interactive effect of proself motive and competitive goal. As shown in Figure 2, the interaction of proself motive and competitive goal was insignificant predicting open-minded discussion ( $\beta = -.01$ , ns), and thus Hypothesis 5b was not supported.

### **Comparison of Other Alternative Models**

To more obviously present the differences between the most competitive models related to the proposed model, this part throws some light upon the statistical results and points out the comparable advantages in the studied model  $M_0$ .

The most competitive models comprise of Model X, Model Y, and Model Z. Model X is raised because of the goal interdependence literature documenting the open-minded discussion dynamics. This model has 6 factors, including cooperative/competitive goal interdependence, open-minded discussion, and task accomplishment/relationship strengthening/future collaboration. Likewise, Model Y is based on the dual concern literature documenting the role of social motives in the negotiation and discussion process. The model includes 6 factors, i.e. prosocial/proself motive, open-minded discussion, and task accomplishment/relationship strengthening/future collaboration. Compared with Model X & Y, Model Z combines the direct effects of both goal interdependence and social motives, and has 8 factors. Though Model Z is also an 8-factor model like  $M_0$ , it does not consider the moderat-

ing effects of social motives.

As listed in the table below, all  $\chi^2/d.f.$  are acceptable. However, none of the indices CFI, IFI, RMSEA in Model X, Y, & Z are as good as those in the proposed model  $M_0$ . For example, the CFI, IFI, RMSEA of Model X is .93, .93, and .08. According to the standards stated before, definitely the proposed model  $M_0$  is better.

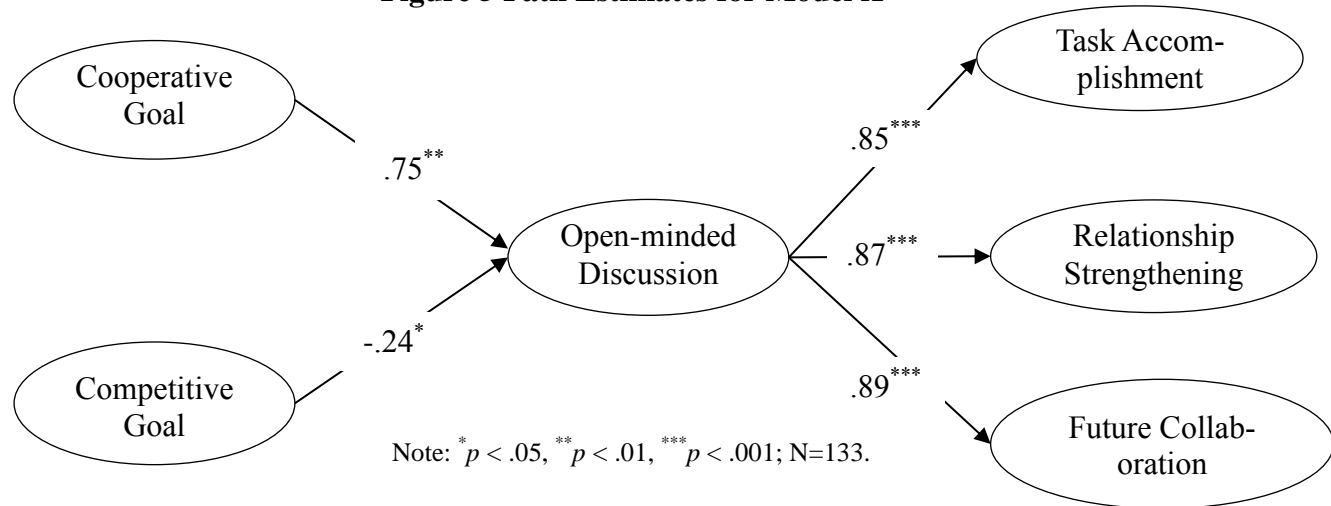
**Table 20 Comparison of Other Alternative Models**

| <b>Models</b>  | <b><i>d.f.</i></b> | <b><math>\chi^2</math></b> | <b><math>\chi^2/d.f.</math></b> | <b>CFI</b> | <b>IFI</b> | <b>RMSEA</b> |
|--|--------------------|----------------------------|---------------------------------|------------|------------|--------------|
| Proposed Model ( $M_0$ )                               | 296                | 422.6                      | 1.43                            | .95        | .95        | .06          |
| Model X (Without social motives)                       | 183                | 348.8                      | 1.91                            | .93        | .93        | .08          |
| Model Y (Without goal interdependence)                 | 146                | 280.8                      | 1.92                            | .92        | .92        | .08          |
| Model Z (Without moderating effects of social motives) | 311                | 505.8                      | 1.63                            | .93        | .93        | .07          |

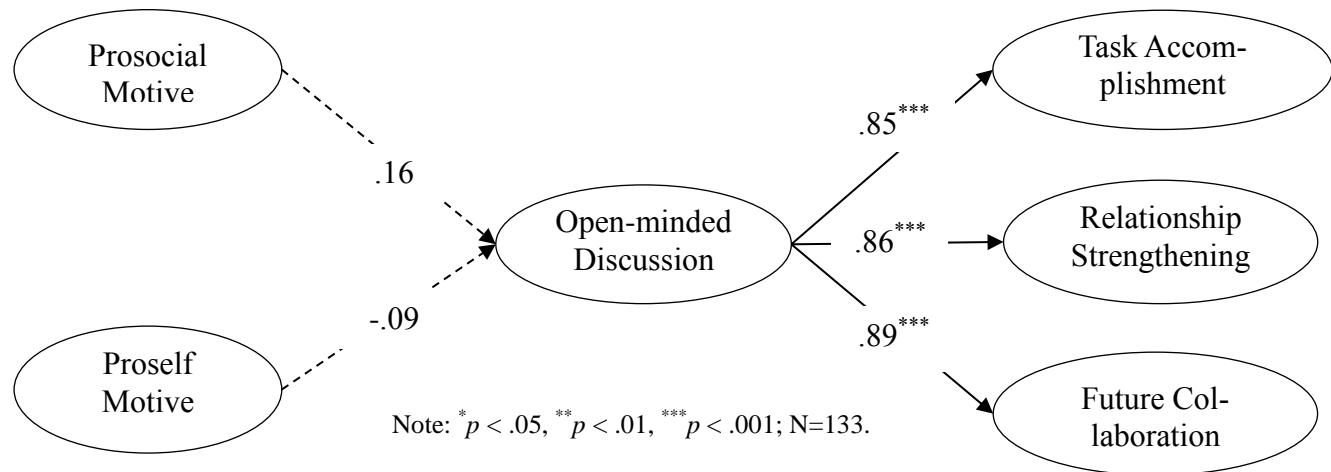
For further comparison of the models, the other three competitive ones are also analyzed in the path estimates. According to the results in Figure 5-7, Model X, Y, & Z cannot provide evidence for the moderating effects of social motives as proposed in model  $M_0$ . Therefore, the proposed model is the best in the study. Figure 8 shows the finalized model with all the significant effects included.



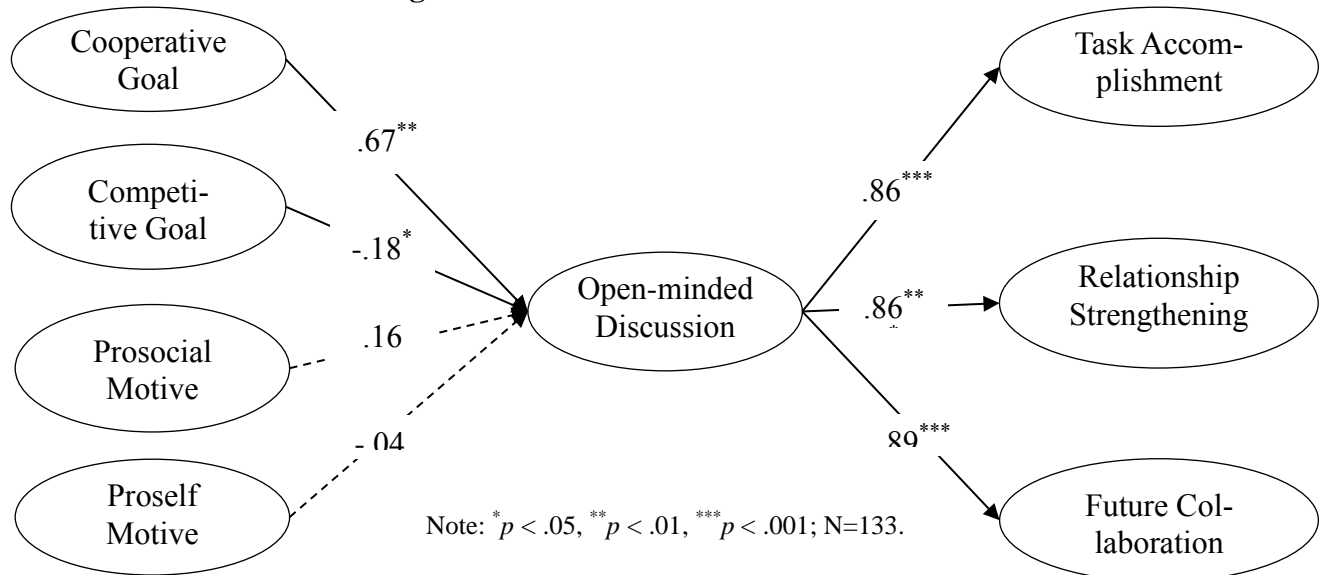
**Figure 5 Path Estimates for Model X**



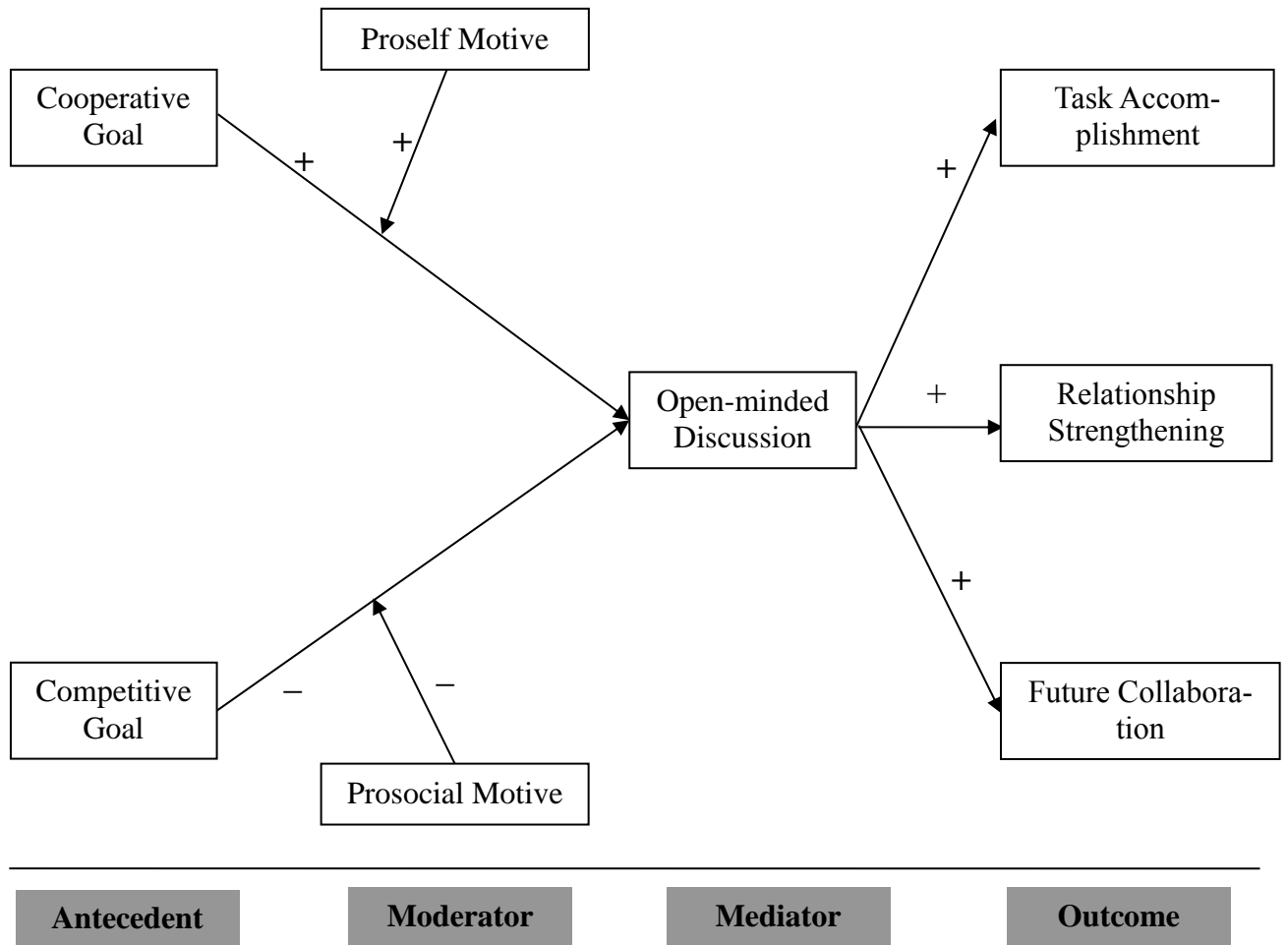
**Figure 6 Path Estimates for Model Y**



**Figure 7 Path Estimates for Model Z**



**Figure 8 Results of the Final Model**



### Summary of the Incidents

This study recorded 133 incidents from interviews. The incidents were classified as cooperative, competitive, or independent depending upon which goal interdependence had the highest ratings and their descriptions on the incidents. Among the 133 cases, 100 cases indicated cooperative interdepartmental goal interdependence and in which 96 cases reported high willingness to engage in open-minded discussion of controversy with employees from other departments, according to the ratings on open-minded discussion. There were 28 cases indicating competitive inter-

departmental goal interdependence and in which 21 cases reported high willingness to engage in open-minded discussion of controversy with employees from other departments. The remaining 5 cases indicated independent interdepartmental goal interdependence and in which 3 cases reported high willingness to engage in open-minded discussion of controversy with employees from other departments. These results are consistent with the correlations and structural equation analyses that the extent to which employees from different departments perceive cooperative interdepartmental goal relationship, rather than competitive goal interdependence and independent goal relationship, they are more likely to engage in open-minded discussion of controversy. These incidents also suggested the moderating role of prosocial motive and prosocial motive on the relationship between interdepartmental goal interdependence and open-minded discussion of controversy.

### **Case illustrations**

The final model mainly takes two types of goal interdependence into consideration. Therefore, this study presents two cases respectively representing cooperative goal interdependence and competitive goal interdependence, drawing upon interviewees' qualitative accounts and on the quantitative coding of their incidents. These two cases illustrate how different types of perceived goal relationship affect employees from different departments engaging in open-minded discussion of controversy and how open-minded discussion of controversy impacts the conflict outcomes. As the results from structural equation modeling suggest the significant moderating effect of prosocial motive on the relationship between competitive goal and open-minded discussion, and prosocial motive on the relationship between cooperative goal and open-minded discussion, two more cases are introduced in the goal interdepend-

ence parts for further verification of the hypothesized model.

Case A illustrates how perceived cooperative goal interdependence can lead to open-minded discussion of controversy among employees from different departments, and in turn lead to satisfactory task accomplishment, strengthen relationship among the involved parties, and enhance willingness and confidence for future collaboration. A male manager working in the finance department of a large fertilizer supplying firm in Beijing recalled an incident when she had a conflict with a male coworker from strategy department. Finance department in the headquarters needed to formulate performance appraisal strategy and indicators for one affiliated branch office because of business management requirements. Since the strategy was newly adopted and executed, the manager insisted that the appraisal indicators should not be changed too much compared with last year. He also insisted that the system should pay more attention to the measurable, quantified, and result-oriented indicators. However, the coworker from the strategy department firmly thought that the indicators should work for the benefit of the strategy to realize its effects, and therefore required process more instead of result in the indicator system. At first, they kept arguing against each other over the different opinions towards the strategic arrangement. The finance manager pointed out that the strategy department only cared about whether the indicator system would make the affiliated branch more cooperative, and therefore only emphasized the process-oriented indicators which are less standardized and less feasible; While the strategy coworker argued that the finance department only desired to settle down the appraisal system as early as possible without taking the actual situation of the affiliation into consideration. Neither of them would agree with the counterparty. After realizing that if both would not com-

promise, then they would not reach the goal that they shared: to confirm the appraisal system and make it more practical to appraise the performance of the affiliation. So they discussed again and again, and expressed mutual understanding towards each other's concerns. Finally, they agreed on raising the proportion of the indicators required by the strategy department, and in the meantime introduced in the third-party appraisal method to make the evaluation more objective and measurable in accordance with the finance department's request.

Case B describes how perceived competitive interdepartmental goal relationship led to little open-minded discussion of controversy among employees from different departments that in turn resulted in unsatisfactory conflict outcomes in terms of low task accomplishment, low relationship strengthening and less confidence for future collaboration. A female employee working in the administration department of an intellectual property consulting firm in Shanghai described a recent conflict incident with a male coworker from the IT department. The incident was the project initiated because the admin department head asked her to compile the data resources for the company in recent 5 years. Although with company database, the workload was still so heavy as to require the joint effort of the coworker from IT department. At the beginning of the project, she communicated the needs of finishing the data compilation in a fast and accurate way to the coworker after she looked through all the data resources and knew the relevant requirement for the tasks. The coworker's expertise was information technology processing, but was not good at word processing tasks. Therefore, she asked the coworker to follow her mindset and provide technical assistance whenever it was needed. However, the coworker took many tasks as issues that were not of his department's business and refused to work in an

active and proactive way together. The female employee insisted that the tasks be finished early in satisfaction in order to provide foundation for departmental work in the following stage, while the coworker did not even want to accomplish the project soon and return to his department early. With such different goals and attitudes in collaboration, they had a very unpleasant experience working together, argued against each other often, and thus delayed work for half a month. In the end, the company decided to punish them. Both felt innocent and that they were unfairly punished.

Case C illustrates the dynamics of how an employee's prosocial motive moderates the relationship between competitive goal interdependence and open-minded discussion of controversy dynamics, such that employees who have strong prosocial motive are more likely to engage in open-minded discussion of controversy, that in turn results in more satisfactory conflict outcomes. A female employee who works at product management department of a state-owned enterprise in Guangzhou recalled a conflict incident with a male coworker from marketing department. During the project of upgrading flight class products, they had a disagreement when they worked together to promote the flight sales. She insisted that the onboard class upgrading products should emphasize the characteristics of comfortable and noble experience, with which the customers would develop special preferences for their products and airlines; While the marketing coworker preferred the promotion of product convenience and economic benefit to attract those with low consuming power, and in turn to increase flight sales and product income. They had a fierce argument over the product promotion emphasis at the meeting and neither wanted to back down from their position. They considered their interdepartmental goals as in-

compatible in this incident, and gave high priority to the things their own department wanted to accomplish and low priority to the things another department wanted to accomplish, therefore delaying the planning of product appeal for several weeks. In the following week they had another meeting. Both of them expressed that the sole consideration of their own departmental benefits could only lead to longer postpone of product promotion and more departmental loss. Instead of continuously arguing against their counterparties, they should help others and collaborate with each other to realize their respective goals, to minimize their loss, and, if possible, to increase the company's success. Then they agreed that they should try to understand each other's concerns and work together to optimize the final decision. So both of them integrated each other's ideas and had an open-minded discussion for mutual benefit. Finally they reached an agreement on key benefits (comfort/nobleness) to promote product core value, and meanwhile on lower price to attract more customers and increase sales.

Case D describes the dynamics of how an employee's prosself motive moderates the relationship between cooperative goal interdependence and open-minded discussion of controversy dynamics, such that employees who have strong prosself motive are more likely to engage in open-minded discussion of controversy, that in turn results in more satisfactory conflict outcomes. A female employee who works at Human Resource department of a private enterprise in Shanghai called up a conflict incident with a female coworker from marketing department. Human resources department needed to hire a sales person urgently for the marketing department because of business requirements. Due to the high demands of 5-year sales experience and bachelor education of the position, she thought it would take a longer hiring cy-

cle compared to other positions. However, the coworker from marketing department insisted they needed the salesperson in two weeks, accusing her department of not wanting to cooperate with them. She was angry that she only got accusations from him, although she was the expert in hiring and she did her best on this task. So they had a fierce wrangling with each other. The next day she calmed down and realized that the goals of two departments went together. Both of them wanted to perform well in the joint task, and also desired to hire the suitable person to meet the development need of their organization. So she changed her communication style, and told him that they were in the same team so that they needed to cooperate with each other instead of accusing each other. Then she demonstrated the characteristics of the sales position and the hiring status, asked him the status of their project, and told him that when she could hire the new employee as soon as possible. The coworker from marketing department expressed understanding and told her the status of their project and the exact deadline for the task. Finally they tried to understand each other's concerns and figured out a better way to hire the sales person based on mutual agreement.

### **Summary**

This chapter described the methods and results of the data analyses. To test the hypotheses and the model proposed in this study, I conducted quantitative analyses including sample difference analysis, correlational analysis, and structural equation modeling analysis. The results of sample difference analysis indicated no necessity to include demographic variables in the final analyses.

The results of correlational analysis and structural equation modeling analysis



found expected significant relationship between open-minded discussion and conflict outcomes (i.e. task accomplishment, relationship strengthening, and future collaboration), supporting Hypothesis 1a, 1b and 1c. Both correlational and path estimates results also supported Hypotheses 2a and 2b, supporting the hypothesized relationships between perceived goal interdependence (i.e. cooperative and competitive goal interdependence) and open-minded discussion. The SEM analysis supported Hypothesis 3, suggesting that open-minded discussion of controversy has an important mediating effect on the relationship between perceived goal interdependence and conflict outcomes. Although the structural equation modeling analysis did not support Hypotheses 4a and 5b, the results supported Hypothesis 4b, indicating that an employee's prosocial motive moderates the relationship between competitive interdepartmental goal interdependence and open-minded discussion of controversy dynamics; the results also supported Hypothesis 5a, suggesting that an employee's prosocial motive moderates the relationship between cooperative goal interdependence and open-minded discussion dynamics.

Qualitative analyses including case illustration provided understanding to illustrate how employees' perception of interdepartmental goal interdependence affects employees between different departments engaging in open-minded discussion of controversy that in turn influences conflict outcomes, specifically, task accomplishment, relationship strengthening and their intentions for future collaboration.

## **CHAPTER V DISCUSSION**

This chapter summarizes the results of this study and then discusses and interprets the study's findings in reference to possible explanations for the results and their connections to previous research findings. Specifically, it discusses issues on the relationships among interdepartmental goal interdependence, open-minded discussion, conflict outcomes, and the effect of social motives on the relationship between interdepartmental goal interdependence and open-minded discussion. Then it discusses the implications and directions for research and presents the practical implications. Finally, it examines limitations of the study and summarizes the study in a general conclusion.

### **Summary of the Results**

Synthesizing theories of social motives, goal interdependence, and conflict management, this study builds and tests a theoretical model in which interdepartmental goal interdependence affects conflict outcomes between different departments through open-minded discussion dynamics adopted by employees from different departments in the organization. This study also proposes that organizational identification moderates the link between interdepartmental goal interdependence and constructive controversy. A series of statistics analysis were conducted to test the hypothesized relationships among variables.

Results support the hypothesized model that interdepartmental goal interdependence is a significant predictor to employees between different departments engaging in open-minded discussion that in turn influences conflict outcomes. Results further support the theorizing that an employee's prosocial motive moderates the

association of competitive interdepartmental goal interdependence with open-minded discussion, and an employee's proself motive moderates the association of cooperative interdepartmental goal interdependence with open-minded discussion.

Specifically, the results of bivariate correlation analyses support the hypothesized relationship between interdepartmental goal interdependence and open-minded discussion, suggesting a significant and positive correlation between cooperative interdepartmental goal and open-minded discussion, and a significant and negative correlation between competitive interdepartmental goal and open-minded discussion. The correlational results also support the proposed relationships between open-minded discussion and conflict outcome variables, suggesting a significant and positive association between open-minded discussion and task accomplishment, a significant and positive association between open-minded discussion and relationship strengthening, and a significant and positive association between open-minded discussion and future collaboration.

The results of the structural equation modeling (SEM) further test the hypotheses and the proposed model. It shows that all the hypothesized relationships between interdepartmental goal interdependence (i.e. cooperative and competitive) and open-minded discussion, and the relationships between open-minded discussion and conflict outcomes (i.e. task accomplishment, relationship strengthening, and future collaboration) are significant. The SEM results also support the hypothesis that open-minded discussion mediates the relationship between interdepartmental goal interdependence and conflict outcomes.

As to the proposed moderating effect of social motives, SEM results support

the moderating effect of prosocial motive on the relationship between competitive interdepartmental goal and open-minded discussion, and not support its moderating role on the association between cooperative goal and open-minded discussion. Results further indicate that an employee's prosocial motive moderates the association of competitive interdepartmental goal interdependence with open-minded discussion such that employees who have high prosocial motive are more likely to engage in open-minded discussion of controversy dynamics than employees who have weak prosocial motive. The aforementioned results underline the positive role of employee prosocial motive in conflict management, especially under competitive interdepartmental goals.

SEM results also support the moderating effect of proself motive on the relationship between cooperative interdepartmental goal and open-minded discussion, and not support its moderating role on the association between competitive goal and open-minded discussion. Results further indicate that an employee's proself motive moderates the association of cooperative interdepartmental goal interdependence with open-minded discussion such that employees who have high proself motive are more likely to engage in open-minded discussion of controversy dynamics than employees who have weak proself motive. The aforementioned results underline the positive role of employee's proself motive in conflict management, especially under cooperative interdepartmental goals.

## **Discussion of the Results**

### **Interdepartmental goal interdependence and open-minded discussion**

When perceiving cooperative goal relationships between departments, em-

employees from different departments expect their interdepartmental goal achievements to be positively correlated so that they are able to incorporate opposing ideas and information into making high-quality decisions. Both correlational and path estimates results support Hypothesis 2a proposing that employees from different departments are more likely to engage in open-minded discussion of controversy to the extent that they perceive cooperative goal relationship between departments. This result is consistent with previous experimental and field studies that cooperative relationship is a vital foundation for the open and constructive discussion of conflict (Tjosvold, 2008; Tjosvold, Leung & Johnson, 2006).

When perceiving competitive goals between departments, employees from different departments expect each other to work for their own department's goals at the expense of other departments' goals. Both correlational results and path estimates results support Hypothesis 2b that employees from different departments are less likely to engage in open-minded discussion of controversy to the extent that they perceive competitive goal relationship between departments. The result is consistent with previous studies that documented the negative effects of competitive goal relationship on open-minded discussion of conflict and controversy (Tjosvold, 2008; Tjosvold, Leung & Johnson, 2006).

Findings provide support for the utility of goal interdependence theory for employees from different departments in the organization when they have a conflict with each other. Specifically, findings have important practical implications that employees from different departments can improve their collaboration in organizations by setting cooperative goal relationship between departments, rather than competitive or independent goal relationship between departments, and handling conflict

through open-minded discussion of controversy. This study adds to our understanding of conflict management between departments.

### **Open-minded discussion and conflict outcomes**

Both correlational and path estimates results find expected significant relationship between constructive controversy and conflict outcomes (i.e. task accomplishment, relationship strengthening, future collaboration), supporting Hypothesis 1a, 1b, and 1c. These results are consistent with previous research that protagonists engaging in discussing conflicts openly and constructively end in quality solutions that both sides accept (Jehn, 1997; Jehn & Chatmas, 2000; Somech, Desivilva, & Lidogoster, 2009). Open-minded discussion of controversy for mutual benefit leads to desirable conflict outcomes for employees from different departments. Specifically, employees from different departments complete tasks, strengthen their relationships with the interdepartmental partner, and develop confidence in working together in the future to the extent that they engage in open-minded discussion of controversy when they have a conflict with each other.

### **The mediating effect of open-minded discussion**

Results support Hypothesis 3 that the relationship between interdepartmental goal interdependence and conflict outcomes is mediated by the open-minded discussion of controversy among employees from different departments. Scholars have demonstrated that open-minded discussion is an effective way to promote productive conflict management within teams and departments (De Dreu & Gelfand, 2008; Johnson, Johnson, & Tjosvold, 2000; Tetlock, Armor, & Peterson, 1994). This study included open-minded discussion as the process variable to analyze the dynamics by

which interdepartmental goal interdependence influences conflict outcomes between employees from different departments. Model comparison results in SEM suggest that the omission of mediating effects of open-minded discussion or theorizing that open-minded discussion is an antecedent significantly deteriorates the model fit. The fit statistics in SEM show that the hypothesized fully mediated model fits the data best. Findings indicate the value of open-minded discussion dynamics to manage conflict effectively between employees from different departments and the importance of open-minded discussion dynamics to understanding goal interdependence theory. The study contributes to the conflict management literature as well as the goal interdependence theory in organizational behavior literature.

### **The moderating effects of social motives**

Social motives appear to play an important role in the process by which employees from different departments respond to interdepartmental conflict. Although interdepartmental goal interdependence plays a primary effect on employees from different department engaging in open-minded discussion of controversy, I hypothesized that the strength of an individual's prosocial/proself motive would moderate the relationship between interdepartmental goal interdependence and open-minded discussion. The rationale for the moderating relationship was based on the idea that both Goal Interdependence Theory and Dual Concern Theory both see social motives as the key motivational factor to problem-solving behavior especially conflict resolution and outcomes besides the influence of cognitive and emotional factors (De Dreu, Weingart, & Kwon, 2000; Deutsch, 1973; Tjosvold, 1998). Prosocial and proself employees differ in attaching a positive, zero, or negative weight to other's outcomes (De Dreu & Boles, 1998; Van Lange, 1999). In the case of proself motive,

employees try best to maximize their own departmental outcomes, as well as achieve their own department's goals and interests when assessing how to deal with the interdepartmental conflict. In contrast, employees with prosocial motive try to maximize both departments' outcomes, and how they act would depend on the goal relationship between departments.

The results of this study indicate that employees who have high prosocial motive do appear to take a higher level or broader view when assessing how to deal the conflict with a coworker from another department in the organization; while employees who have low prosocial motive appear to focus more extensively on their own departmental view. Also, those who have low proself motive do show less concern for their own outcomes and interests, and thus are not restricted to their own departmental goals and interests. The direct relationship between prosocial/proself motive and open-minded discussion is not significant, suggesting that prosocial/proself motive does not have a direct or main effect for employees from different department engaging in open-minded discussion.

Although examination of the coefficient estimates neither supports that prosocial motive has a moderating effect on the relationship between cooperative goal and open-minded discussion, nor supports the moderating effect of proself motive on the relationship between competitive goal and open-minded discussion, the results support that an employee's prosocial motive will moderate the relationship between competitive interdepartmental goal interdependence and open-minded discussion of controversy dynamics, such that employees who have high prosocial motive will be more likely to engage in open-minded discussion than employees who have low prosocial motive; and that an employee's proself motive will moderate the relationship



between cooperative interdepartmental goal interdependence and open-minded discussion dynamics. The results of this study indicate that when perceiving competitive goal relationships with coworkers from other departments, employees who have high prosocial motive take a higher level or broader view when assessing how to deal the conflict with a coworker from another department in the organization; while employees who have low prosocial motive appear to focus more extensively on their own departmental view. Also, when perceiving cooperative goal relationships with interdepartmental partners, those who have high proself motive do show high concern for their own outcomes and interests; and in order to maximize their own benefits, they should also try their best to promote the benefits of the coworker from another department, as they know to help the counterparty department is the best way to help their own department achieve the most success. The result enriches studies on social motives. Social motives have been investigated as a critical motivational factor that influences employees' behavior in organizations. But in the present study, social motives worked as a specific individual characteristic hypothesized and tested as a moderator of cognitive process of goal interdependence.

As for the results that do not support the moderating effect of prosocial motive on cooperative goal which is somewhat counterintuitively, one possible explanation is that with cooperative interdepartmental goal relationship, employees from different departments perceive their interdepartmental goal achievements are positively correlated. The goal of serving their own department is consistent with serving the overall benefits and interests for employees from different departments. Thus those employees would tend to engage in open-minded discussion dynamics, no matter they have high or low prosocial motive. Also for the unsupported result of proself

motive moderating the relationship between competitive interdepartmental goal relationships, a possible reason may lie in that these employees already only care for their own departmental goals and try to maximize their own outcomes in the context of competitive goal interdependence, without concern for other departments' goal attainments and benefits. They are afraid of information or resources sharing with employees from other departments through open-minded discussion dynamics, because they know their goal attainments should be at the expense of other departments' benefits; the more resources shared and occupied by other departments, the fewer benefits they will achieve. Therefore those employees would choose not to engage in open-minded discussion, no matter they have high or low proself motive.

### **Limitations**

Several limitations should be acknowledged for interpreting the results of this study. First, we used a cross-sectional design and a single method of data collection, which might inflate the relationships between goal interdependence, open-minded discussion, and conflict outcomes, making drawing causal inferences problematic. Although previous studies have demonstrated that common method variance is often not strong enough to invalidate research findings (Doty & Glick, 1998), experimental and longitudinal designs with greater internal validity would directly address recall and other methodological weaknesses is needed for future research.

A second limitation of this study is the reliance on same-source data; all the study variable assessments came from the employees. Although researchers have shown that it seems appropriate that employees assess these variables which pertain to their perceptions and responses (Bauer & Green, 1994), and self-reported data are

not as limited as commonly expected (Spector, 1987), it would strengthen the findings if they could be replicated by using assessments from other sources such as dyadic peers and supervisors.

Third, the specific single region (i.e. Beijing, Shanghai, Guangdong and others) in which the research took place could limit the generalization of the research conclusions. Although the participants in this study work in different Chinese organizations, because of different regional culture characteristics, our findings may not be applicable in other Chinese regions or other countries, such as Xinjiang Province in China or America. Future research should examine the contextuality and potential cross-cultural differences to enhance external validity of the study.

Fourth, some interviews were not conducted through face-to-face talk with interviewees because of logistic and schedule concerns. Although the interviewees were later on contacted to confirm the ambiguous details, it still might make it likely to leave out valuable non-verbal cues or information expressed, for example, through gestures.

Furthermore, the sample size in this study is relatively small. To maximize the chances of detecting significant interaction effect of prosocial motive and competitive goal interdependence and the total effect (i.e. the amount of variance explained by the goal interdependence, prosocial motive, open-minded discussion, and conflict outcomes), as well as the significant interaction effect of proself motive and cooperative goal interdependence and the total effect (i.e. the amount of variance explained by the goal interdependence, proself motive, open-minded discussion, and conflict outcomes), a larger sample size would be useful. Thus, the future research needs a

relatively larger sample to enhance the validation and generalization of the findings.

Last but not least, the interdepartmental goal interdependence in the current study is measured by one individual member's perception of interdepartmental goal interdependence in a specific conflict incident. Although it captures departmental-level goal interdependence, future studies may need to clarify how differently employees rated interdepartmental goal interdependence and whether they agree in terms of their ratings in order to further ensure goal interdependence as a group-level variable. For example, if the conflict incident happens between two employees, then both of them need to rate the interdepartmental goal interdependence. Then the mean ratings may represent the real rating of interdepartmental goal interdependence in the specific conflict incident.

### **Implications and Directions for Future Research**

In addition to the future research implications through addressing limitations, this study has additional implications and directions for future research. Generally speaking, it can provide implications and directions for future research in the Theory of Goal Interdependence, Conflict Management studies, and Social Motives literature.

First, it can provide directions for improvement in the literature of Goal Interdependence. It focused on individual interviews to discover their perceptions of goal relationship between departments in the recalled conflict incident. Following goal interdependence theory, this study suggests that how employees from different departments perceive their own department's goals to be related with other departments' goals affects their attitudes and actual interactions in conflict. Thus, goal in-

terdependence refers to the nature of goal relationships among departments in this study. In most previous studies, goal interdependence refers to the goal relationship between the people in interaction. The theory of goal interdependence (Deutsch, 1973, 1980, 1990) holds the belief that the way people's goals are perceived to be structured determines how they interact, and these interaction patterns in turn determine outcomes (Deutsch, 1973; Johnson & Johnson, 1989; Stanne, Johnson, & Johnson, 1999). A suggestion for future study would be to introduce both perceptions of interpersonal goal interdependence and perceptions of interdepartmental goal interdependence into the recalled conflict incident interviews that when employees from different department in the organization have a conflict with each other. This could help further illuminate the differences and the linkage between perceptions of interpersonal goal interdependence and perceptions of interdepartmental goal interdependence in seeking productive conflict outcomes and the reasons behind that. Besides, future study may test the effect of independent interdepartmental goal interdependence to make the model more complete.

Second, it has important implication for studies in Conflict Management. On the one hand, the current study was limited to social motives as motivational moderators. Using similar methods, further studies could investigate other possible emotional or cognitive moderators or a combination of moderators to study the influence of individual differences on conflict management from a broader perspective. For example, one potential moderator is organizational commitment. Employees who have strong commitments to organizations tend to bring positive organizational outcomes because they are psychologically attached to the organization and therefore will pay more efforts for the organizational effectiveness and wellbeing (Dirani &

Kuchinke, 2011). It is likely that for employees with high organizational commitment, cooperative interdepartmental goals will be more likely to develop open-minded discussion, and competitive or independent interdepartmental goals will be less likely to develop open-minded discussion.

On the other hand, further studies could investigate other possible moderators to study the influence of climate and culture on conflict management from a broader perspective. For example, psychological safety climate may moderate the link between goal interdependence and open-minded discussion. Psychological safety climate indicates the extent that the departments feel safe to make mistakes, propose different ideas, get support from other members, and value others' unique skills and talents (Edmondson, 1999). It is likely that under high psychological safety climate, cooperative interdepartmental goals will be more likely to develop open-minded discussion, and competitive or independent interdepartmental goals will be less likely to develop open-minded discussion.

In addition, mainland Chinese participants suggested that private discussion would be more effective than open discussion. Future research may distinguish between open-minded discussions in public or private forms and investigate which one is more effective. This would help advance theory and research on open-minded discussion and conflict resolution.

Third, this study points out the direction for enriching studies on social motives. In previous studies, social motives usually work as the process mechanism or the antecedent to organizational outcomes. Research has shown that social motives can help organization benefit from increasing employees' helping behaviors, job perfor-

mance, job satisfaction, and relationship development within the organization (De Dreu, Weingart, & Kwon, 2000; Liebrand, Jansen, Rijken, & Suhre, 1986; Van Lange, 1999; Van Lange & Kuhlman, 1994; Weingart, Bennett, & Brett, 1993). However, in this study, social motives were found to work as a specific individual characteristic hypothesized and was tested as a moderator of cognitive process of goal interdependence. In order to enrich the study of social motives, future research can examine the moderating effects of social motives in different theoretical models.

### **Practical Implications**

The findings, if they can be replicated, have important practical implications for effective collaboration between different departments in organizations in China from several aspects.

First, this study demonstrates the significance of cooperative relationships in interdepartmental collaboration. The results imply that cooperative goal interdependence between departments plays a prominent role in leading to effective collaboration among employees from different departments through open-minded discussion. Previous research suggests that transformational leadership, relationship, openness, collectivist values, and *guanxi* can reinforce cooperative goals (Chen, Tjosvold, Huang, & Xu, 2011; Tjosvold, Wu, & Chen, 2010; Wong & Tjosvold, 2010; Zhang et al., 2011). To facilitate effective collaboration between different departments, managers and organizations should promote the sense of cooperative interdepartmental goal interdependence and emphasize the role of interdepartmental goal compatibility in diversified teams or projects.

Second, the present study also thinks highly of realizing the value of conflict

between departments and getting to know how to manage interdepartmental conflict in organizations effectively in order to capitalize on the potential positive outcomes of conflict. To promote productive conflict management and effective collaboration between employees from different departments, managers and organizations should enhance the sense of handling conflict through open-minded discussion of controversies for mutual benefit, and take measures to improve employee's skills accordingly.

Third, it points out the importance of social motives in collaboration among employees from different departments in organizations. Perceiving cooperatively related goals is possible but employees from different departments can also perceive interdepartmental competitive and independent goals that make collaboration less effective. However, the study also detected that competitive goal interdependence between departments may lead to less ineffective collaboration through open-minded discussion is conditional on employee's strong prosocial motive. Results were interpreted as suggesting that prosocial motive is an important foundation for effective collaboration between departments in organizations. Even if employees from different departments perceive competitive interdepartmental goals, they may still tend to engage more in open-minded discussion for mutual benefit that leads less to ineffective collaboration with the influence of strong prosocial motive. Findings suggest that employees from different departments can improve their collaboration by realizing the value of their prosocial motive, especially when they perceive competitive interdepartmental goal relationships with their coworkers.

On the other hand, the study also demonstrates the potential positive effects of prosocial motive. Results indicated that the positive effect of cooperative goal interde-



pendence between departments on effective interdepartmental collaboration will be strengthened by the influence of strong proself motive. Findings suggest that employees from different departments can collaborate in a more effective way by awareness and acknowledgement of their proself motive on the condition of cooperative goal relationships between different departments. Managers may try to identify different ways to better manage the benefits of employee's social motives. For example, they can emphasize prosocial motive and behavior as part of employee extra-role motivation and behavior in organizational culture, therefore raising the importance of prosocial motive and behavior in organizational process.

### **Conclusion**

Synthesizing theories of social motives, goal interdependence, and conflict management, this study built and tested a theoretical model in which interdepartmental goal interdependence affects conflict outcomes between different departments through open-minded discussion dynamics adopted by employees from different departments in the organization. This study also proposes that social motives moderate the link between interdepartmental goal interdependence and open-minded discussion. The study contributes to the conflict management literature as well as studies on social motives in the organizational behavior field.

In addition to enhancing the theoretical understanding, this study has important practical implications for effective collaboration between departments in organizations. This study helps managers identify important foundations for effective interdepartmental interaction and, particularly, an effective way to manage conflicts productively between employees from different departments in organizations. Findings

ductively between employees from different departments in organizations. Findings suggest that interdepartmental coworkers can improve their collaboration by fostering perception of cooperative interdepartmental goal interdependence, realizing the value of their prosocial motives on the basis of competitive interdepartmental goal relationships, realizing the value of their proself motive in the existence of cooperative goal relationships between different departments, and handling conflict through open-minded discussion of controversies for mutual benefit.

## **APPENDIX I: SCALES AND ITEMS**

### **Cooperative goal**

1. In this incident, the goals of the interdepartmental coworker and I went together.
2. In this incident, the interdepartmental coworker and I would “swim or sink” together with each other.
3. In this incident, the interdepartmental coworker and I sought goals that were compatible with each other.
4. In this incident, the interdepartmental coworker and I contributed to each other’s achievement.

### **Competitive goal**

5. In this incident, the interdepartmental coworker and I structured things in a way that favored his/her/my departmental goal rather than the goal of another party.
6. In this incident, the interdepartmental coworker and I had a win-lose relationship.
7. In this incident, the interdepartmental coworker regarded his/her purposes as targets and mine as obstacles.
8. In this incident, what helped the interdepartmental coworker got in my way.

### **Prosocial motive**

9. In this incident, I cared about benefiting the interdepartmental coworker through the discussion.
10. In this incident, I wanted to help the interdepartmental coworker through the discussion.
11. In this incident, it was important to do good for the interdepartmental coworker through the discussion.

### **Proself motive**

12. In this incident, I cared about benefiting myself through the discussion.
13. In this incident, I wanted to achieve as much as possible for myself through the discussion.

14. In this incident, it was important to find useful resources for myself through the discussion.

### **Open-minded discussion**

15. In this incident, the interdepartmental coworker and I expressed our own views directly to each other.
16. In this incident, the interdepartmental coworker and I listened carefully to each other's opinions.
17. In this incident, the interdepartmental coworker and I tried to understand each other's concerns.
18. In this incident, the interdepartmental coworker and I worked for decisions we both accepted.

### **Task Accomplishment**

19. Because of this interaction, the interdepartmental coworker and I made progress on the task.
20. Because of this interaction, the interdepartmental coworker and I accomplished the task efficiently.
21. Because of this interaction, the interdepartmental coworker and I worked on the task effectively.

### **Relationship Strengthening**

22. Because of this incident, the relationship between the interdepartmental coworker and I was strengthened.
23. Because of this incident, the interdepartmental coworker and I trusted each other more.
24. Because of this incident, the interdepartmental coworker and I enhanced our support to each other at work.

### **Future Collaboration**

25. Because of this incident, I hope to work again with the interdepartmental coworker in the future.

26. Because of this incident, I try to seek opportunity to work with the interdepartmental coworker in the future.
27. Because of this incident, I would be very pleased if the interdepartmental coworker continued to be my partner in the future.

## APPENDIX II: SURVEY

### SURVEY ON OPEN-MINDED DISCUSSION IN INTERDEPARTMENTAL COLLABORATION 关于跨部门合作中开放性讨论状况的调查

We very much appreciate your participation. The information you provide will be kept confidential and used only for research purposes. If you have any questions, please feel free to contact Ms Lu Jiewei, Antonia, Department of Management, Lingnan University of Hong Kong (Email: [jieweilu@ln.hk](mailto:jieweilu@ln.hk), Tel: 00852-98558536). 感谢您的参与。根据国家统计法，我们将对统计资料严格保密；所有资料只用于项目的综合层面研究；您的回答将不会被用于任何针对个人的分析；您单位中的任何人都不会了解这些数据。整个测试约持续 30 分钟，请您尽可能一次性完成，从而保证数据的真真实有效性；您的回答没有正确和错误之分，我们希望得到您个人真实的看法和评价。如果您对问卷中有不清楚或想要探讨的问题，欢迎随时联系我们（香港岭南大学管理系吕杰伟，电话：00852-98558536，电邮：[jieweilu@ln.hk](mailto:jieweilu@ln.hk)）。

|   |                                  |
|---|----------------------------------|
| Name 姓名:  | Gender 性别:                       |
| Age 年龄:   | Education 教育程度:                  |
| Telephone 电话:   | Email 电邮:                        |
| Company 公司名称:   | Department 部门:                   |
| Position (level: junior/middle/senior)职位:   | Months in the company<br>在公司的月数: |
| Company type 公司类型: State-owned (SOE)/Joint-venture (JV)/Privately-owned (PO)/Foreign-funded (FF)/Other (specify) 国有/合资/私营/外资/其他 (请详述) |                                  |

We are studying when employees from different departments work together. Please recall and describe a concrete situation recently when you worked with another employee from a different department and had disagreement or even conflict. We define conflict as incompatible activities, so it does not have to be a war against each other. It can involve aspects such as different working habits, project-related activities taken part in together, gossiping about things and people, and so on. The situation may have turned out to be successful or unsuccessful. 我们正在研究不同部门之间的员工共事的情况。请您回忆最近的一个您与另一名来自不同部门的员工共事并有不同观点甚至是冲突的具体事例。我们定义冲突为不一致的行为，而不一定是双方之间的斗争。这个事例可以是关于不同的工作习惯、共同参与的工作项目、对他人他物的闲谈，或者其他方面的不同。该事件最后可以是成功的也可以是不成功的。

## Part I. The Incident 事例回顾

**1.1** Please describe what happened, with whom you were working, how you and your coworker reacted, and the outcomes of this interaction. 请描述发生了什么事情，您与谁共事，您和该同事各自的反应，最终的结果如何。

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## Part II. At the Beginning of the Incident 事前

**2.1** What was your objective in this incident? What was your coworker's objective in this incident? 在这次事件中，您期望达成的目标是什么？该同事所期望的达成的目标是什么？

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**2.2** Were they related so that you both could achieve your objectives or only one party could achieve the objective? What led you to conclude that the objectives of you and the coworker were related in this way? 您所期望的目标和该同事所期望的目标，是可以同时实现的还是只能让其中一个实现？您为什么会这样认为？

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**2.3** Regarding your feelings toward your objectives and those of the coworker at the beginning of this incident, please indicate the extent to which you disagree or agree with each of the following statements by ticking the appropriate number from 1 to 5. 请根据事件开始时您对自己的目标和该同事的目标的真实感受，对 1-5 中合适的数字打钩来评价您对下列说法的同意程度（1=非常不同意，2=不同意，3=无所谓/中立，4=同意，5=非常同意）。

**Cooperative goal**

|   | 非常不同意 | 不同意 | 中立 | 同意 | 非常同意 |
|---|-------|-----|----|----|------|
| 28. In this incident, the goals of the coworker and I went together. 在这次事件中，该同事和我的目标是一致的。   | 1     | 2   | 3  | 4  | 5    |
| 29. In this incident, the coworker and I would “swim or sink” together with each other. 在这次事件中，该同事和我能同舟共济。                                | 1     | 2   | 3  | 4  | 5    |
| 30. In this incident, the coworker and I wanted each other to succeed. 在这次事件中，该同事和我希望彼此成功。  | 1     | 2   | 3  | 4  | 5    |
| 31. In this incident, the coworker and I sought goals that were compatible with each other. 在这次事件中，该同事和我追求可以相容的目标。                        | 1     | 2   | 3  | 4  | 5    |
| 32. In this incident, the coworker and I contributed to each other’s achievement. 在这次事件中，该同事和我对彼此之间目标的实现有所贡献。                             | 1     | 2   | 3  | 4  | 5    |
| 33. In this incident, the goal of the coworker’s department and the goal of my department went together. 在这次事件中，该同事所在部门的目标和我所在部门的目标一致、相容。 | 1     | 2   | 3  | 4  | 5    |

**Competitive goal**

|   | 非常不同意 | 不同意 | 中立 | 同意 | 非常同意 |
|---|-------|-----|----|----|------|
| 34. In this incident, the coworker and I structured things in a way that favored his/her/my own goal rather than the goal of another party. 在这次事件中，该同事和 | 1     | 2   | 3  | 4  | 5    |



|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 我以各自的目标为重，而忽视另外一方的目标。   |   |   |   |   |   |
| 35. In this incident, the coworker and I had a win-lose relationship. 在这次事件中，该同事和我之间有非赢即输的对立关系。   | 1 | 2 | 3 | 4 | 5 |
| 36. In this incident, the coworker regarded his/her purposes as targets and mine as obstacles. 在这次事件中，该同事视自己的目标为任务，而视我的目标为阻碍。   | 1 | 2 | 3 | 4 | 5 |
| 37. In this incident, the coworker gave high priority to the things he/she wanted to accomplish and low priority to the things I wanted to accomplish. 在这次事件中，该同事优先考虑完成自己的事情，而把我的事情放在不重要位置。 | 1 | 2 | 3 | 4 | 5 |
| 38. In this incident, what helped the coworker got in my way. 在这次事件中，对该同事有帮助的情况都对我造成阻碍。   | 1 | 2 | 3 | 4 | 5 |
| 39. In this incident, the goal of my department and the goal of the coworker's department are incompatible. 在这次事件中，该同事所在部门的目标和我所在部门的目标相互冲突、不相容。   | 1 | 2 | 3 | 4 | 5 |

### Independent goal

|  | 非<br>不<br>意 | 常<br>同 | 不<br>同<br>意 | 中<br>立 | 同<br>意 | 非<br>常<br>同<br>意 |
|--|-------------|--------|-------------|--------|--------|------------------|
| 40. In this incident, the coworker and I "did my own thing" without regard to the needs of the other. 在这次事件中，该同事和我“做自己分内的事情”而没有考虑对方需要。 | 1           |        | 2           | 3      | 4      | 5                |
| 41. In this incident, the coworkers(s) and I were seeking to be successful through our own separate work. 在这次事件中，该同事和我凭着各自独立的工作获得成功。   | 1           |        | 2           | 3      | 4      | 5                |
| 42. In this incident, the coworker and I were working for our own separate interests. 在这次事件中，该同事和我为各自独立的利益而工作。                         | 1           |        | 2           | 3      | 4      | 5                |
| 43. In this incident, the coworker and I worked for his/her/my own independent goal respectively. 在这次事件中，该同事和我只为各                      | 1           |        | 2           | 3      | 4      | 5                |

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| 自独立的目标努力工作。  |   |   |   |   |   |
| 44. In this incident, the success of the coworker and I were unrelated to each other. 在这次事件中，该同事和我成功与否互不相关。  | 1 | 2 | 3 | 4 | 5 |
| 45. In this incident, the goal of my department and the goal of the coworker's department had nothing to do with each other. 在这次事件中，该同事所在部门的目标和我所在部门的目标互不相关。 | 1 | 2 | 3 | 4 | 5 |

### Part III. Interaction 事中

**3.1** Regarding your feelings toward your motives to discuss with the coworker in the incident based on your objectives and those of the coworker, please indicate the extent to which you disagree or agree with each of the following statements by ticking the appropriate number from 1 to 5. 请根据在对彼此目标认知基础上该事件中您与该同事之间展开讨论的动机，对 1-5 中合适的数字打钩来评价您对下列说法的同意程度（1=非常不同意，2=不同意，3=无所谓/中立，4=同意，5=非常同意）。

#### Prosocial motive

|  | 非常不同意 | 不同意 | 中立 | 同意 | 非常同意 |
|--|-------|-----|----|----|------|
| 1. In this incident, I cared about benefiting the coworker through the discussion. 在这次事件中，我在意通过讨论来使该同事受益。                  | 1     | 2   | 3  | 4  | 5    |
| 2. In this incident, I wanted to help the coworker through the discussion. 在这次事件中，我想要通过讨论来帮助该同事。                           | 1     | 2   | 3  | 4  | 5    |
| 3. In this incident, I wanted to have a positive impact on the coworker through the discussion. 在这次事件中，我想要通过讨论给该同事带来积极的影响。 | 1     | 2   | 3  | 4  | 5    |
| 4. In this incident, it was important to do good for the coworker through the discussion. 在这次事件中，通过讨论为该同事带来好处对我来说是很重要的。    | 1     | 2   | 3  | 4  | 5    |

### Proself motive

|  | 非<br>常<br>不<br>同<br>意 | 不<br>同<br>意 | 中<br>立 | 同<br>意 | 非<br>常<br>同<br>意 |
|--|-----------------------|-------------|--------|--------|------------------|
| 5. In this incident, I cared about benefiting myself through the discussion. 在这次事件中，我在意通过讨论来使自己受益。                                 | 1                     | 2           | 3      | 4      | 5                |
| 6. In this incident, I wanted to achieve as much as possible for myself through the discussion. 在这次事件中，我想要通过讨论来为我自己争取尽可能多的收获。      | 1                     | 2           | 3      | 4      | 5                |
| 7. In this incident, I wanted to realize my personal goals through the discussion. 在这次事件中，我想要通过讨论来实现自己的目标。                         | 1                     | 2           | 3      | 4      | 5                |
| 8. In this incident, it was important to find useful resources for myself through the discussion. 在这次事件中，通过讨论为我自己寻找有用的资源对我来说是很重要的。 | 1                     | 2           | 3      | 4      | 5                |

**3.2** Regarding your feelings toward your concerns in the incident based on your objectives and those of the coworker, please indicate the extent to which you disagree or agree with each of the following statements by ticking the appropriate number from 1 to 5. 请根据在对彼此目标认知基础上该事件中您的关注取向，对 1-5 中合适的数字打钩来评价您对下列说法的同意程度（1=非常不同意，2=不同意，3=无所谓/中立，4=同意，5=非常同意）。

### Concern for others

|   | 非<br>常<br>不<br>同<br>意 | 不<br>同<br>意 | 中<br>立 | 同<br>意 | 非<br>常<br>同<br>意 |
|---|-----------------------|-------------|--------|--------|------------------|
| 1. In this incident, it would be very important that the coworker got what he/she wanted. 在这次事件中，该同事得到所想的结果对我来说是很重要的。 | 1                     | 2           | 3      | 4      | 5                |
| 2. In this incident, I was concerned for the needs and outcomes of the coworker. 在这次事件中，我关注该同事的需要和所得。                 | 1                     | 2           | 3      | 4      | 5                |
| 3. In this incident, I would strongly desire that the coworker obtain his/her outcome.                                | 1                     | 2           | 3      | 4      | 5                |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 在这次事件中，我强烈希望该同事得到他/她想要的结果。  |   |   |   |   |   |
| 4. In this incident, the coworker should get what he/she pursued. 在这次事件中，该同事应该得到他/她追求的东西。 | 1 | 2 | 3 | 4 | 5 |

### Concern for self

|   | 非常不同意 | 不同意 | 中立 | 同意 | 非常同意 |
|---|-------|-----|----|----|------|
| 5. In this incident, it would be very important that I got the outcomes I desired. 在这次事件中，如我所愿获取所想的结果对我来说是很重要的。 | 1     | 2   | 3  | 4  | 5    |
| 6. In this incident, I was concerned for my needs and outcomes. 在这次事件中，我关注我自己的需要和所得。                            | 1     | 2   | 3  | 4  | 5    |
| 7. In this incident, I would feel strongly that I should get what I want. 在这次事件中，我强烈地觉得我应该得到所想获取的结果。            | 1     | 2   | 3  | 4  | 5    |
| 8. In this incident, the most important thing would be that I get what I pursued. 在这次事件中，最重要的事情是我得到所追求的东西。      | 1     | 2   | 3  | 4  | 5    |

**3.1** Regarding how you discussed and interacted with the coworker in this incident, please indicate the extent to which you disagree or agree with each of the following statements by ticking the appropriate number from 1 to 5. 请根据在本次事件中您与该同事讨论和互动的情况，对 1-5 中合适的数字打钩来评价您对下列说法的同意程度（1=非常不同意，2=不同意，3=无所谓/中立，4=同意，5=非常同意）。

### Open-minded discussion

|  | 非常不同意 | 不同意 | 中立 | 同意 | 非常同意 |
|--|-------|-----|----|----|------|
| 1. In this incident, the coworker and I expressed our own views directly to each other. 在这次事件中，该同事和我直接表达自己的观点。 | 1     | 2   | 3  | 4  | 5    |
| 2. In this incident, the coworker and I lis-   | 1     | 2   | 3  | 4  | 5    |

|  |   |   |   |   |   |
|--|---|---|---|---|---|
| tened carefully to each other's opinions. 在这次事件中，该同事和我仔细聆听彼此的意见。   |   |   |   |   |   |
| 3. In this incident, the coworker and I tried to understand each other's concerns. 在这次事件中，该同事和我努力理解彼此的顾虑。                  | 1 | 2 | 3 | 4 | 5 |
| 4. In this incident, the coworker and I worked for decisions we both accepted. 在这次事件中，该同事和我努力做出大家都接受的决定。                   | 1 | 2 | 3 | 4 | 5 |
| 5. In this incident, the coworker and I used opposing views to understand the problem better. 在这次事件中，该同事和我使用不同的观点来更好地理解问题。 | 1 | 2 | 3 | 4 | 5 |

## Part IV. Outcomes 事后

**4.1** Regarding the effects of the incident after it was completed, please indicate the extent to which you disagree or agree with each of the following statements by ticking the appropriate number from 1 to 5. 请根据这次事件结束时的影响，对 1-5 中合适的数字打钩来评价您对下列说法的同意程度（1=非常不同意，2=不同意，3=无所谓/中立，4=同意，5=非常同意）。

### Task accomplishment

|  | 非常不同意 | 不同意 | 中立 | 同意 | 非常同意 |
|--|-------|-----|----|----|------|
| 1. The coworker and I made progress on the task because of this interaction. 通过这次互动，我和该同事在该任务上取得了进展。         | 1     | 2   | 3  | 4  | 5    |
| 2. The coworker and I accomplished the task efficiently because of this interaction. 通过这次互动，我和该同事有效率地完成了任务。  | 1     | 2   | 3  | 4  | 5    |
| 3. The coworker and I worked on the task effectively because of this interaction. 通过这次互动，我和该同事在该任务上进行了有效地合作。 | 1     | 2   | 3  | 4  | 5    |

### Relationship strengthening

|   | 非<br>常<br>不<br>意 | 不<br>同<br>意 | 中<br>立 | 同<br>意 | 非<br>常<br>同<br>意 |
|---|------------------|-------------|--------|--------|------------------|
| 4. The relationship between the coworker and I was strengthened because of this incident. 通过这次事件，我和该同事的关系加强。                                    | 1                | 2           | 3      | 4      | 5                |
| 5. The coworker and I trusted each other more because of this incident. 通过这次事件，我和该同事更加信任彼此。   | 1                | 2           | 3      | 4      | 5                |
| 6. The coworker and I enhanced our support to each other at work because of this incident. 通过这次事件，我和该同事更加支持彼此的工作。                               | 1                | 2           | 3      | 4      | 5                |
| 7. This incident made me believe that the coworker and I always take each other's interests into consideration. 通过这次事件我相信，我和该同事彼此总会估计到对方的利益和需要。 | 1                | 2           | 3      | 4      | 5                |

#### Future collaboration

|   | 非<br>常<br>不<br>意 | 不<br>同<br>意 | 中<br>立 | 同<br>意 | 非<br>常<br>同<br>意 |
|---|------------------|-------------|--------|--------|------------------|
| 8. Because of this incident, I hope to work again with the coworker in the future. 因为这次事件，我希望未来再次与该同事共事。  | 1                | 2           | 3      | 4      | 5                |
| 9. Because of this incident, I try to seek opportunity to work with the coworker in the future. 因为这次事件，我尽可能寻找机会未来与该同事合作。                        | 1                | 2           | 3      | 4      | 5                |
| 10. Because of this incident, I would be very pleased if the coworker continued to be my partner in the future. 因为这次事件，如果该同事未来继续成为我的合作伙伴我会非常满意。 | 1                | 2           | 3      | 4      | 5                |

-----The End-----Thanks again for your support and participation! -----

## REFERENCES

- Adler, N. J. (1983). Cross-cultural management research: The ostrich and the trend. *Academy of Management Review*, 8, 226-232.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications, Incorporated.
- Alderfer, C. P., & Smith, K. K. (1982). Studying intergroup relations embedded in organizations. *Administrative Science Quarterly*, 35-65.
- Almost, J. (2006). Conflict within nursing work environments: concept analysis. *Journal of Advanced Nursing*, 53(4), 444-453.
- Amason, A. C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, 39(1), 123-148.
- Amason, A. C., & Schweiger, D. M. (1997). The effects of conflict on strategic decision making effectiveness and organizational performance. In C. K. W. De Dreu & E. Van De Vliert (Eds.), *Using conflict in organizations* (pp. 101-115). London: Sage.
- Amason, A. C., Thompson, K. R., Hochwarter, W. A., & Harrison, A. W. (1995). An important dimension in successful management teams. *Organizational Dynamics*, 23, 20-35.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Aroian, L. A. (1944/1947). The probability function of the product of two normally distributed variables. *Annals of Mathematical Statistics*, 18, 265-271.
- Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin*, 130(1), 80-114.
- Barclay, D. W. (1991). Interdepartmental conflict in organizational buying: The impact of the organizational context. *Journal of Marketing Research*, 145-159.
- Barki, H., & Hartwick, J. (2001). Interpersonal conflict and its management in information system development. *Mis Quarterly*, 195-228.
- Baron, R. M., & Kenny, D. A. (1986). Moderator-mediator variables distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-82.
- Batson, C. D. (1987). Prosocial motivation: Is it ever truly altruistic? In L. Berkowitz (Eds.), *Advances in experimental social psychology* (vol. 20, pp. 65-122). New York: Academic.

- Bauer, T. N., & Green, S. G. (1994). Effect of newcomer involvement in work-related activities: A longitudinal study of socialization. *Journal of Applied Psychology*, 79(2), 211-223.
- Beersma, B., & De Dreu, C. K. W. (1999). Negotiation processes and outcomes in prosocially and egoistically motivated groups. *The International Journal of Conflict Management*, 10(4), 385-402.
- Beersma, B., & De Dreu, C. K. W. (2002). Integrative and distributive negotiation in small groups: Effects of task structure, decision rule, and social motive. *Organizational Behavior and Human Decision Process*, 87(2), 227-252.
- Beersma, B., & De Dreu, C. K. W. (2005). Conflicts' consequences: Effects of social motives on postnegotiation creative and convergent group functioning and performance. *Journal of Personality and Social Psychology*, 89(3), 358-374.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606.
- Ben-Yoav, O., & Pruitt, D. G. (1984a). Accountability to constituents: A two-edged sword. *Organizational Behavior and Human Decision Process*, 34, 283-295.
- Ben-Yoav, O., & Pruitt, D. G. (1984b). Resistance to yielding and the expectation of cooperative future interaction in negotiation. *Journal of Experimental Social Psychology*, 34, 323-335.
- Berlyne, D. E. (1963). Complexity and incongruity variables as determinants of exploratory choice and evaluative ratings. *Canadian Journal of Psychology/Revue canadienne de psychologie*, 17(3), 274-290.
- Blake, R., & Mouton, J. (1964). *The managerial grid*. Houston: Gulf.
- Blake, R. R., & Mouton, J. S. (1970). The fifth achievement. *The Journal of Applied Behavioral Science*, 6(4), 413-426.
- Blake, R. R. & Mouton, J. S. (1979). Intergroup problem solving in organizations: From theory to practice. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 19-23). Monterey, CA: Brooks/Cole.
- Blake, R. R., Shepard, H. A. & Mouton, J. S. (1964). *Managing intergroup conflict in industry*. Houston, TX: Gulf Publishing.
- Boisot, M., & Child, J. (1996). From fiefs to clans and network capitalism: Explaining china's emerging economic order. *Administrative Science Quarterly*, 41(4), 600-628.
- Bracken, B. A., & Barona, A. (1991). State of the art procedures for translating, validating, and using psychoeducational tests in cross cultural assessment. *Social Psychology International*, 12(1), 119-132.
- Brewer, N., Mitchell, P., & Weber, N. (2002). Gender role, organizational status,



and conflict management styles. *International Journal of Conflict Management*, 13(1), 78-94.

Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-cultural Psychology*, 1(3), 185-216.

Brown, R., Condor, S., Mathews, A., Wade, G., & Williams, J. (1986). Explaining intergroup differentiation in an industrial organization. *Journal of Occupational Psychology*, 59(4), 273-286.

Carmeli, A., & Gittell, J. H. (2009). High-quality relationships, psychological safety, and learning from failures in work organizations. *Journal of Organizational Behavior*, 30(6), 709-729.

Carnevale, P. J., & Isen, A. M. (1986). The influence of positive affect and visual access on the discovery of integrative solutions in bilateral negotiation. *Organizational Behavior and Human Decision Process*, 37, 1-13.

Carnevale, P. J., & Lawler, E. J. (1986). Time pressure and the development of integrative agreements in bilateral negotiations. *Journal of Conflict Resolution*, 30, 636-659.

Chapman, D. W., & Charter, J. F. (1979). Translation procedures for the cross cultural use of measurement instruments. *Educational Evaluation and Policy Analysis*, 1(3), 71-76.

Chen, C. C., Chen, X. P., & Meindl, J. R. (1998). How can cooperation be fostered? The cultural effects of individualism-collectivism. *Academy of Management Review*, 23(2), 285-304.

Chen, G., & Tjosvold, D. (2012). Shared rewards and goal interdependence for psychological safety among departments in China. *Asia Pacific Journal of Management*, 29(2), 433-452.

Chen, N. Y., & Tjosvold, D. (2007). Guanxi and leader member relationships between American managers and Chinese employees: Open-minded dialogue as mediator. *Asia Pacific Journal of Management*, 24, 171-189.

Chen, N. Y., Tjosvold, D., Huang, X., & Xu, D. (2011). New manager socialization and conflict management in China: Effects of relationship and open conflict values. *Journal of Applied Social Psychology*, 41(2), 332-356.

Christie, R., & Geis, F. L. (1970). *Studies in Machiavellianism*. New York: Academic Press.

Cosar, L.A. (1956). *The Functions of Social Conflict*. Free Press, New York.

Cosier, R. A., & Schwenk, C. R. (1990). Agreement and thinking alike: Ingredients for poor decisions. *Academy of Management Executive*, 4(1), 69-74.

Cronin, M. A., & Weingart, L. R. (2007). Representational gaps, information pro-

cessing, and conflict in functionally diverse teams. *Academy of Management Review*, 32(3), 761-773.

Das, T. K., & Teng, B. S. (1998). Between trust and control: developing confidence in partner cooperation in alliances. *Academy of Management review*, 491-512.

Dawes, R. M., Van De Kragt, A. J. C., & Orbell, J. M. (1988). Not me or thee but we: The importance of group identity in eliciting cooperation in dilemma situations: Experimental manipulations. *Acta Psychologica*, 68(1), 83-97.

Dawson, J. F. (2014). Moderation in Management Research: What, why, when and how. *Journal of Business Psychology*, 29, 1-19.

Dawson, J. F., & Richter, A. W. (2006). Probing three-way interactions in moderated multiple regression: development and application of a slope difference test. *Journal of Applied Psychology*, 91(4), 917-926.

De Dreu, C. K. W. (2006). Rational self-interest and other-orientation in organizational behavior: A critical appraisal and extension of Meglino and Korsgaard (2004). *Journal of Applied Psychology*, 91, 1245-1252.

De Dreu, C. K. W., & Boles, T. L. (1998). Share and share alike or winner take all? The influence of social value orientation upon choice and recall of negotiation heuristics. *Organizational Behavior and Human Decision Processes*, 76, 253-276.

De Dreu, C. K. W., Evers, A., Beersma, B., Kluwer, E. S., & Nauta, A. (2001). A theory-based measure of conflict management strategies in the workplace. *Journal of Organizational Behavior*, 22(6), 645-668.

De Dreu, C. K. W., & Gelfand, M. J. (2008). *The psychology of conflict and conflict management in organizations*. New York: Lawrence Erlbaum Associates.

De Dreu, C. K. W., Giebels, E., & Van de Vliert, E. (1998). Social motives and trust in integrative negotiation: Disruptive effects of punitive capability. *Journal of Applied Psychology*, 83, 408-422.

De Dreu, C. K. W., & Van de Vliert, E. (1997). *Using conflict in organizations*. Sage: London.

De Dreu, C. K. W., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology*, 88(4), 741-749.

De Dreu, C. K. W., Weingart, L. R., & Kwon, S. (2000). The influence of social motives in integrative negotiation: A meta-analytical review and test of two theories. *Journal of Personality and Social Psychology*, 78, 889-905.

DeChurch, L. A., & Marks, M. A. (2001). Maximizing the benefits of task conflict: The role of conflict management. *International Journal of Conflict Management*, 12(1), 4-22.

Deutsch, M. (1949). A theory of cooperation and competition. *Human Relations*, 2, 129-152.

Deutsch, M. (1973). *The resolution of conflict*. New Haven: CT Yale University Press.

Deutsch, M. (1980). Fifty years of conflict. *Retrospections on social psychology*, 46-77.

Deutsch, M. (1983). Conflict resolution: Theory and practice. *Political Psychology*, 431-453.

Deutsch, M. (1990). Sixty years of conflict. *International Journal of Conflict Management*, 1(3), 237-263.

Desivilya, H. S., Somech, A., & Lidgoster, H. (2010). Innovation and conflict management in work teams: The effects of team identification and task and relationship conflict. *Negotiation and Conflict Management Research*, 3(1), 28-48.

Dirani, K., & Kuchinke, P. (2011). Job satisfaction and organizational commitment: validating the Arabic satisfaction and commitment questionnaire (ASCQ), testing the correlations, and investigating the effects of demographic variables in the Lebanese banking sector. *International Journal of Human Resource Management*.

Dirks, K. T., & Parks, J. M. (2003). Conflicting Stories: The state of the science of conflict. In J. Greenberg (Eds.), *Organizational behavior* (pp. 283-324). London: Lawrence Erlbaum Associates.

Douglas, S. P., & Craig, C. S. (2007). Collaborative and iterative translation: an alternative approach to back translation. *Journal of International Marketing*, 15(1), 30-43.

Dutton, J. M., & Walton, R. E. (1966). Interdepartmental conflict and cooperation: Two contrasting studies. *Human Organization*, 25(3), 207-220.

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383.

Edwards, M. R., & Peccei, R. (2010). Perceived organizational support, organizational identification, and employee outcomes: Testing a simultaneous multifoci model. *Journal of Personnel Psychology*, 9(1), 17-26.

Ethier, K. A., & Deaux, K. (1994). Negotiating social identity when contexts change: Maintaining identification and responding to threat. *Journal of Personality and Social Psychology*, 67(2), 243-251.

Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51(4), 327.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-

Gersick, C. J., Dutton, J. E., & Bartunek, J. M. (2000). Learning from academia: The importance of relationships in professional life. *Academy of Management Journal*, 43(6), 1026-1044.

Gibson, D. E., & Callister, R. R. (2010). Anger in organizations: Review and integration. *Journal of Management*, 36(1), 66-93.

Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32, 393-417.

Grant, A. M. (2008a). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, 93(1), 48-58.

Grant, A. M. (2008b). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology*, 93, 108-124.

Gresham, G., Hafer, J., & Markowski, E. (2006). Inter-functional market orientation between marketing departments and technical departments in the management of the new product development process. *Journal of Behavioral and Applied Management*, 8(1), 43-65.

Graziano, W. G., Bruce, J., Sheese, B. E., & Tobin, R. M. (2007). Attraction, personality, and prejudice: Liking none of the people most of the time. *Journal of Personality and Social Psychology*, 93(4), 565-582.

Hall, R. D. (1972). *Organizations: Structure and process*. Englewood Cliffs, N.J.: Prentice Hall.

Hayward, M. L., & Boeker, W. (1998). Power and conflicts of interest in professional firms: Evidence from investment banking. *Administrative Science Quarterly*, 43(1), 1-22.

Hempel, P. S., Zhang, Z. X., & Tjosvold, D. (2009). Conflict management between and within teams for trusting relationships and performance in China. *Journal of Organizational Behavior*, 30(1), 41-65.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.

James, L. R., & Jones, A. P. (1976). Organizational structure: a review of structural dimensions and their conceptual relationships with individual attitudes and behavior. *Organizational Behavior and Human Performance*, 16(1), 74-113.

Jameson, J. K. (1999). Toward a comprehensive model for the assessment and management of intraorganizational conflict: Developing the framework. *International Journal of Conflict Management*, 10(3), 268-294.

- Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 256-282.
- Jehn, K. A. (1997). A qualitative analysis of conflict types and dimensions in organizational groups. *Administrative Science Quarterly*, 530-557.
- Jehn, K. A., & Chatman, J. A. (2000). The influence of proportional and perceptual conflict composition on team performance. *International Journal of Conflict Management*, 11(1), 56-73.
- Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, 44(2), 238-251.
- John, C. H. S. (1991). Marketing and manufacturing agreement on goals and planned actions. *Human Relations*, 44(3), 211-229.
- Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and competition: Theory and research*. Edina, MN: Interaction Book Company.
- Johnson, D. W., & Johnson, R. T. (2005). New developments in social interdependence theory. *Genetic, social, and general psychology monographs*, 131(4), 285-358.
- Johnson, D. W., Johnson, R. T., & Tjosvold, D. (2000). Constructive controversy. In M. Deutsch, P. T. Coleman & E. Marcus (Eds.), *The handbook of conflict resolution: Theory and practice* (pp. 65-85). San Francisco, CA: Jossey-Bass.
- Johnson, D. W., Johnson, R. T., & Tjosvold, D. (2006). Constructive controversy: The value of intellectual opposition. In M. Deutsch, P. T. Coleman & E. Marcus (Eds.), *The handbook of conflict resolution: Theory and practice* (pp. 69-91). San Francisco, CA: Jossey-Bass.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York: Wiley.
- King, E. B., Hebl, M. R., & Beal, D. J. (2009). Conflict and cooperation in diverse workgroups. *Journal of Social Issues*, 65(2), 261-285.
- Kline, R. B. (1998). *Principles and practice of structural equation modeling: A very readable introduction to the subject, with good coverage of assumptions and SEM's relation to underlying regression, factor, and other techniques*. The Guilford Press.
- Kostova, T., & Roth, Kendall. (2003). Social Capital in Multinational Corporations and a Micro-Macro Model of its Formation. *Academy of Management Review*, 28(2), 297-317.
- Lancioni, R., Schau, H. J., & Smith, M. F. (2005). Intraorganizational influences on business-to-business pricing strategies: A political economy perspective. *Industrial Marketing Management*, 34(2), 123-131.
- Lester, D. L., Parnell, J. A., & Carraher, S. (2010). Assessing the desktop manager.

*Journal of Management Development*, 29(3), 246-264.

Leung, K. (1997). Negotiation and reward allocations across cultures. In P. C. Earley, & M. Erez (Eds.), *New perspectives on international industrial/organizational psychology* (pp. 640–675). San Francisco: The New Lexington Press.

Li, Y., Chun, H., Ashkanasy, N. M., & Ahlstrom, D. (2012). A multi-level study of emergent group leadership: Effects of emotional stability and group conflict. *Asia Pacific Journal of Management*, 29(2), 351-366.

Liebrand, W. B. G., Jansen, R. W. T. L., Rijken, R. M., & Suhre, C. J. M. (1986). Might over morality: Social values and the perception of other players in experimental games. *Journal of Experimental Social Psychology*, 22(3), 203-215.

Lovelace, K., Shapiro, D. L. & Weingart, L. R. (2001). Maximizing cross-functional new product teams' innovativeness and constraint adherence: A conflict communications perspective. *Academy of Management Journal*, 22 (4), 779-793.

MacKinnon, D. P., & Dwyer, J. H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review*, 17, 144-158.

MacKinnon, D. P., Warsi, G., & Dwyer, J. H. (1995). A simulation study of mediated effect measures. *Multivariate Behavioral Research*, 30, 41-62.

Mael, F. A., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2), 103-123.

Mason, R. O., & Mitroff, I. I. (1981). *Challenging strategic planning assumptions: Theory, cases, and techniques*. New York: Wiley.

McCann, J. E., & Ferry, D. L. (1979). An approach for assessing and managing inter-unit interdependence. *Academy of Management Review*, 4(1), 113-119.

McClintock, C. G. (1972). Social motivation - a set of propositions. *Behavioral Science*, 17(5), 438-454.

McClintock C. (1976). Social motivations in settings of outcome interdependence. In D. Druckman (Eds.) *Negotiations: Social Psychological Perspective* (pp. 49–77). Sage: Beverly Hills.

McCormick, B., Li, N., Chiaburu, D., & Zhang, X. (2013, August). *Worker prosocial motivation: Responses to customers in an experience sampling study*. Paper presented at the annual meeting of the Academy of Management. Orlando, FL.

McDonald, R.P. (1999). *Test theory: A unified treatment*. Hillsdale: Erlbaum.

Meglino, B., & Korsgaard, M. (2004). Considering the rational self-interest as a disposition: Organizational implications of other orientation. *Journal of Applied Psychology*, 89, 946–959.

- Meglino, B. M., & Ravlin, E. C. (1998). Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24(3), 351-389.
- Mohrman, S. A., Cohen, S. G., & Mohrman, A. M. (1995). *Designing team-based organizations: New forms for knowledge work*. San Francisco: Jossey-Bass.
- Montoya-Weiss, M. M., Massey, A. P., & Song, M. (2001). Getting it together: Temporal coordination and conflict management in global virtual teams. *Academy of management Journal*, 44(6), 1251-1262.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *The Journal of Marketing*, 20-38.
- Morris-Conley, C. M., & Kern, R. M. (2003). The relationship between lifestyle and conflict resolution strategy. *Journal of Individual Psychology*, 59(4), 475-487.
- Nauta, A., De Dreu, C. K. W., & Vaart, T. (2002). Social value orientation, organizational goal concerns and interdepartmental problem-solving behavior. *Journal of Organizational Behavior*, 23(2), 199-213.
- Nauta, A., & Sanders, K. (2001). Causes and consequences of perceived goal differences between departments within manufacturing organizations. *Journal of occupational and Organizational Psychology*, 74(3), 321-342.
- Nauta, A., De Dreu, C. K., & Van Der Vaart, T. (2002). Social value orientation, organizational goal concerns and interdepartmental problem-solving behavior. *Journal of Organizational Behavior*, 23(2), 199-213.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York: McGraw-Hill.
- O'Connor, K. M., & Carnevale, P. J. (1997). A nasty but effective negotiation strategy: Misrepresentation of a common-value issue. *Personnel Social Psychology Bulletin*, 23(5), 504-515.
- Pache, A. C., & Santos, F. (2010). When worlds collide: The internal dynamics of organizational responses to conflicting institutional demands. *Academy of Management Review*, 35(3), 455-476.
- Pelled, L. H. (1996). Demographic diversity, conflict, and work group outcomes: An intervening process theory. *Organization Science*, 7(6), 615-631.
- Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. (1999). Exploring the black box: An analysis of work group diversity, conflict and performance. *Administrative Science Quarterly*, 44(1), 1-28.
- Penner, L. A., Dovidio, J. F., Piliavin, J. A., Schroeder, D. A. (2005). Prosocial behavior: multilevel perspectives. *Annual Review of Psychology*. 56, 365-392.
- Perry, J. L., & Hondeghem, A. (2008). Building theory and empirical evidence about

- public service motivation. *International Public Management Journal*, 11(1), 3–12.
- Pfeffer, J. (1997). *New directions for organization theory*. New York: Oxford University Press.
- Ping, R. A. (1995). A parsimonious estimating technique for interaction and quadratic latent variables. *Journal of Marketing Research*, 32(3), 336-347.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Pondy, L. R. (1967). Organizational conflict: Concepts and models. *Administrative Science Quarterly*, 12, 296-320.
- Pondy, L. R. (1992). Reflections on organizational conflict. *Journal of organizational behavior*, 13(3), 257-261.
- Porter, L. W. & Roberts, K. H. (1983). Communication in Organizations. In M. D. Dunnette (Eds.), *Handbook of industrial and organizational psychology* (pp. 1553-1589). New York: Wiley.
- Pruitt, D. G. (1998). Social conflict. In D. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of Social Psychology* (pp.89–150). McGraw-Hill: New York.
- Pruitt, D. G., & Lewis, S. (1975). Development of integrative solutions in bilateral negotiation. *Journal of Personality and Social Psychology*, 31, 621-633.
- Pruitt, D. G., & Syna, H. (1989). ‘Successful problem solving’. In D. Tjosvold & D. W. Johnson (Eds), *Productive Conflict Management: Perspectives for Organizations* (pp. 69-90). Minneapolis, MN: Team Media.
- Putnam, L. L., & Poole, M. S. (1987). Conflict and negotiation. In F. M. Jablin, L. L. Putnam, K. H. Roberts, & L. W. Porter (Eds.), *Handbook of organizational communication: An interdisciplinary perspective* (pp. 549-599). Newbury Park, CA: Sage.
- Rahim, M. A. (1983). A measure of styles of handling interpersonal conflict. *Academy of Management Journal*, 26(2), 368-376.
- Rahim, M. A. (1992). *Managing conflict in organizations (2nd ed.)*. Westport, CT: Praeger Publishers.
- Rahim, M. A. (2011). *Managing conflict in organizations*. Transaction Publishers.
- Wall, J. A., & Callister, R. R. (1995). Conflict and its management. *Journal of management*, 21(3), 515-558.
- Rigdon, E. E. (1999). Using the Friedman method of ranks for model comparison in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary*



*Journal*, 6(3), 219-232.

Rousseau, D. M. (1998). The "problem" of the psychological contract considered. *Journal of Organizational Behavior*, 19, 665-671.

Rubin, J. Z., Pruitt, D. G., & Kim, S. H. (1994). *Social conflict*. New York: McGraw-Hill.

Ruble, T. L., & Thomas, K. W. (1976). Support for a two-dimensional model of conflict behavior. *Organizational Behavior and Human Performance*, 16(1), 143-155.

Ruekert, R. W., & Walker, O. C. (1987). Marketing's interaction with other functional units: A conceptual framework and empirical evidence. *Journal of Marketing*, 51(1), 1-19.

Ruyter, K. D., & Wetzels, M. (2000). Determinants of a relational exchange orientation in the marketing-manufacturing interface: An empirical investigation. *Journal of Management Studies*, 37(2), 257-276.

Schotter, A., & Beamish, P. W. (2011). Performance effects of MNC headquarters-subsidiary conflict and the role of boundary spanners: the case of headquarter initiative rejection. *Journal of International Management*, 17(3), 243-259.

Schulz, J. W., & Pruitt, D. G. (1978). The effects of mutual concern on joint welfare. *Journal of Experimental Social Psychology*, 14, 480-491.

Schwarz, N. (1999). Self reports. *American Psychologist*, 54(2), 93-105.

Schweiger, D. M., Sandberg, W. R., & Rechner, P. L. (1989). Experiential effects of dialectical inquiry, devil's advocacy, and consensus approaches to strategic decision making. *Academy of Management Journal*, 745-772.

Shelton, C. D., & Darling, J. R. (2004). From chaos to order: Exploring new frontiers in conflict management. *Organization Development Journal*, 22, 22-41.

Simons, T. L., & Peterson, R. S. (2000). Task conflict and relationship conflict in top management teams: The pivotal role of intragroup trust. *Journal of Applied Psychology*, 85(1), 102-111.

Simons, T., Pelled, L. H., & Smith, K. A. (1999). Making use of difference: Diversity, debate, and decision comprehensiveness in top management teams. *Academy of Management Journal*, 42(6), 662-673.

Somech, A., Desivilva, H. S., & Lidogoster, H. (2009). Team conflict management and team effectiveness: The effects of task interdependence and team identification. *Journal of Organizational Behavior*, 42: 359-378.

Sorenson, R. L., Morse, E. A., & Savage, G. T. (1999). A test of the motivations underlying choice of conflict strategies in the Dual-Concern model. *International Journal of Conflict Management*, 10(1), 25-44.

- Spector, P. E. (1987). Method variance as an artifact in self-reported affect and perceptions at work: myth or significant problem?. *Journal of Applied Psychology*, 72(3), 438-443.
- Stanne, M. B., Johnson, D. W., & Johnson, R. T. (1999). Does competition enhance or inhibit motor performance: a meta-analysis. *Psychological bulletin*, 125(1), 133-154.
- Sternberg, R. J., & Soriano, L. J. (1984). Styles of conflict resolution. *Journal of Personality and Social Psychology*, 47(1), 115-126.
- Stewart, G. L., & Barrick, M. R. (2000). Team structure and performance: Assessing the mediating role of intrateam process and the moderating role of task type. *Academy of management Journal*, 43(2), 135-148.
- Stryker, S. (2000). Identity theory. In E. F. Borgatta & R. J. V. Montgomery (Eds.), *Encyclopedia of sociology* (pp. 1253-1258). New York: Macmillan References USA.
- Sundstrom, E. (1999). Supporting work team effectiveness. In E. Sundstrom (Eds.), *Supporting work team effectiveness: Best management practices for fostering high performance* (pp. 3-23). San Francisco: Jossey-Bass.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The social psychology of intergroup relations*, 33, 47.
- Tepper, B. J., Moss, S. E., & Duffy, M. K. (2011). Predictors of abusive supervision: Supervisor perceptions of deep-level dissimilarity, relationship conflict, and subordinate performance. *Academy of Management Journal*, 54(2), 279-294.
- Tetlock, P. E., Armor, D., & Peterson, R. S. (1994). The slavery debate in antebellum America: Cognitive style, value conflict, and the limits of compromise. *Journal of Personality and Social Psychology*, 66, 115-115.
- Thomas, K. W. (1976). Conflict and conflict management. In M. Dunnette (Eds.), *Handbook of industrial and organizational psychology* (pp. 889-935). Chicago: Rand-McNally.
- Thomas, K., Walton, R., & Dutton, J. (1972). Determinants of interdepartmental conflict. In M. Tuite, R. Chisholm, & M. Radmor (Eds.), *Interorganizational Decision Making* (pp. 45-69). Chicago: Aldine.
- Tjosvold, D. (1982). Effects of the approach to controversy on superiors' incorporation of subordinates' information in decision-making. *Journal of Applied Psychology*, 67, 189-93.
- Tjosvold, D. (1984). Cooperation theory and organizations. *Human Relations*, 37, 743-767.
- Tjosvold, D. (1989). Interdependence and power between managers and employees: A study of the leader relationship. *Journal of Management*, 15(1), 49-62.

- Tjosvold, D. (1998). Cooperative and competitive goal approach to conflict: Accomplishments and challenges. *Applied Psychology*, 47(3), 285-313.
- Tjosvold, D., (2002). Managing anger for teamwork in Hong Kong: Goal interdependence and open-mindedness. *Asian Journal Social Psychology*, 5, 107-123.
- Tjosvold, D. (2006). Defining conflict and making choices about its management: Lighting the dark side of organizational life. *International Journal of Conflict Management*, 17(2), 87-95.
- Tjosvold, D. (2008). Conflicts in the study of conflict in organizations. In C. K. W. De Dreu & M. J. Gelfand (Eds.), *The psychology of conflict and conflict management in organizations* (pp. 445-453). New York: Lawrence Erlbaum Associates.
- Tjosvold, D. (2008). Constructive controversy for management education: Developing committed, open-minded researchers. *Academy of Management Learning & Education*, 7(1), 73-85.
- Tjosvold, D. (2008). The conflict-positive organization: It depends upon us. *Journal of Organizational Behavior*, 29(1), 19-28.
- Tjosvold, D., & Deemer, D. K. (1980). Effects of controversy within a cooperative or competitive context on organizational decision-making. *Journal of Applied Psychology*, 65, 590-595.
- Tjosvold, D., Hui, C., & Yu, Z. (2003). Conflict management and task reflexivity for team in-role and extra-role performance in China. *International Journal of Conflict Management*, 14(2), 141-163.
- Tjosvold, D., Leung, K. & Johnson, D. W. (2006). Cooperative and competitive conflict in China. In M. Deutsch, P. T. Coleman, & E. Marcus (Eds.), *The handbook of conflict resolution: Theory and practice* (pp. 671-692). San Francisco, CA: Jossey-Bass.
- Tjosvold, D., Law, K. S., & Sun, H. (2006). Effectiveness of Chinese teams: the role of conflict types and conflict management approaches. *Management and Organization Review*, 2(2), 231-252.
- Tjosvold, D., Peng, A. C., Chen, Y. F., & Su, F. (2008). Business and government interdependence in China: Cooperative goals to develop industries and the marketplace. *Asia Pacific Journal of Management*, 25(2), 225-249.
- Tjosvold, D., Wedley, W. C., & Field, R. H. G. (1986). Constructive controversy, the Vroom-Yetton model, and managerial decision making. *Journal of Occupational Behavior*, 7, 125-138.
- Tjosvold, D., Wu, P., & Chen, Y. F. (2010). The effects of collectivistic and individualistic values on conflict and decision making: an experiment in China. *Journal of Applied Social Psychology*, 40(11), 2904-2926.
- Ullman, J. B., & Bentler, P. M. (2003). Structural equation modeling. In J. A.

- Schinka & W. F. Velicer (Eds.), *Handbook of psychology* (pp. 607-634). Hoboken, NJ: Wiley.
- Valentine, P. E. (2001). A gender perspective on conflict management strategies of nurses. *Journal of Nursing Scholarship*, 33(1), 69-74.
- Van de Ven, A. H., & Ferry, D. L. (1980). *Measuring and assessing organizations* (p. 19). New York: Wiley.
- van Knippenberg, D. (2003). Intergroup relations in organizations. In M. West, D. Tjosvold, & K. G. Smith (Eds.), *International handbook of organizational teamwork and cooperative working* (pp. 381-400). Chichester, UK: Wiley.
- Van Lange, P. A. M. (1999). The pursuit of joint outcomes and equality in outcomes: an integrative model of social value orientation. *Journal of Personality and Social Psychology*, 77, 337-349.
- Van Lange, P. A. M., & Kuhlman, D. M. (1994). Social value orientations and impressions of partner's honesty and intelligence: A test of the might versus morality effect. *Journal of Personality and Social Psychology*, 67(1), 126-141.
- Van Lange, P. A. M., Vugt, M. V., Meertens, R. M., & Ruiter, R. A. C. (1998). A social dilemma analysis of commuting preferences: The roles of social value orientation and trust. *Journal of Applied Social Psychology*, 28(9), 796-820.
- Walker, S., & Truly, E. (1992). The critical incidents technique: Philosophical foundations and methodological implications. *Marketing Theory and Applications*, 3, 270-275.
- Wall, J. A., & Callister, R. R. (1995). Conflict and its management. *Journal of Management*, 21(3), 515-558.
- Walton, R. E., & Dutton, J. M. (1969). The management of interdepartmental conflict: A model and review. *Administrative Science Quarterly*, 14(1), 73-84.
- Walton, R. E., Dutton, J. M., & Cafferty, T. P. (1969). Organizational context and interdepartmental conflict. *Administrative Science Quarterly*, 14(4), 522-542.
- Wan-Huggins, V. N., Riordan, C. M., & Griffeth, R. W. (1998). The development and longitudinal test of a model of organizational identification. *Journal of Applied Social Psychology*, 28(8), 724-749.
- Weingart, L. R., Bennet, R. J., & Brett, J. M. (1993). The impact of consideration of issues and motivational orientation on group negotiation process and outcome. *Journal of Applied Psychology*, 78, 504-517.
- Weitz, B. A., & Jap, S. D. (1995). Relationship marketing and distribution channels. *Journal of the Academy of Marketing Science*, 23(4), 305-320.
- Wong, A., & Tjosvold, D. (2010). Guanxi and conflict management for effective partnering with competitors in China. *British Journal of Management*, 21(3), 772-

788.

Yamagishi, T. (1986). The provision of a sanctioning system as a public good. *Journal of Personality and Social Psychology*, 51, 110-116.

Zhang, X. A., Cao, Q., & Tjosvold, D. (2011). Linking transformational leadership and team performance: A conflict management approach. *Journal of Management Studies*, 48(7): 1586-1611.