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CONFLICT MANAGEMENT BETWEEN EMPLOYEES
FROM DIFFERENT DEPARTMENTS: CONTRIBUTION OF
ORGANIZATIONAL IDENTIFICATION AND CONTROVERSY

ZHU TAOHONG

MPHIL

LINGNAN UNIVERSITY

2013

CONFLICT MANAGEMENT BETWEEN EMPLOYEES
FROM DIFFERENT DEPARTMENTS: CONTRIBUTION OF
ORGANIZATIONAL IDENTIFICATION AND CONTROVERSY

by
ZHU Taohong

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

Lingnan University

2013

ABSTRACT

Conflict Management between Employees from Different Departments: Contribution of Organizational Identification and Controversy

by

Zhu Taohong

Master of Philosophy

Synthesizing theories of social identity, 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 constructive controversy (i.e. the open-minded discussion for mutual benefit) 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.

An interview sample of 129 employees from various business organizations and diverse industries in mainland China described and rated a critical incident when they had a conflict with their coworker from another department in the same organization. Results of the structural equations modeling and other analyses support the hypotheses and the hypothesized model that interdepartmental goal interdependence, specially, cooperative, competitive, and independent goals, are antecedents to employees between different departments engaging in constructive controversy and that constructive controversy in turn influences conflict outcomes, specifically, task accomplishment, employee intention to quit, and their intentions for future cooperation. Results further indicate that employee identification with the organization moderates the association of competitive interdepartmental goal interdependence with constructive controversy such that employees who identify strongly with the organization will be more likely to engage in open-minded discussion of controversy dynamics than employees who identify weakly with the organization. These results underline the positive role of employee organizational identification in conflict management, especially under competitive interdepartmental goals.

Findings suggest important practical implications that employees from different departments can improve their collaboration in Chinese organizations by

strengthening their common organizational identification, setting cooperative interdepartmental goal interdependence, and handling conflict through constructive controversy. The study contributes to the conflict management literature as well as the social identity theory in organizational behavior literature.

Key words: organizational identification, constructive controversy, interdepartmental goal interdependence, 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.

(Zhu Taohong)

Date

CERTIFICATE OF APPROVAL OF THESIS

CONFLICT MANAGEMENT BETWEEN EMPLOYEES FROM DIFFERENT DEPARTMENTS: CONTRIBUTION OF ORGANIZATIONAL IDENTIFICATION AND CONTROVERSY

by
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Master of Philosophy

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ACKNOWLEDGEMENTS

This dissertation traces a journey that spans two years of my life. I would like to take this opportunity to express my deepest and most heartfelt gratitude to all the people who helped make this adventure a success.

My greatest appreciation goes first to Professor Dean Tjosvold, my dissertation advisor, professor, mentor, teacher, inspirer, and friend, for his tremendous support and help he has provided throughout the past two years. I feel motivated and encouraged every time he responds to my questions and queries so promptly. The production of this thesis would not have been done without his patient guidance, encouragement and advice. Not only research knowledge I have learned from him, but also how to be a happy person and always be generous and encouraging. His kindness is something that I will never forget in my life.

Second, I would like to thank my dissertation committee members, Prof. Yaping Gong, Dr. May, M. L., Wong, and Dr Tingting Chen for the time and expertise that they have contributed throughout the process. I would also like to express my great gratitude to Simon, M.S., Lo from Hong Kong Institute of Business Studies for his insight in statistical analysis.

Third, my sincere thanks go to all the faculty, staff and research students in Department of Management in Lingnan University. Special thanks go to Dr. Alfred, S. H., Wong, who despite his busy schedule managed to provide me worthy comments and advice. Thanks to Dr. Nancy, Y. F., Chen, for her support, reading my drafts, and providing helpful revisions. Thanks to my colleagues, Serena, C. H., Lu, Jessie, L., Wang, Tijs Besieuxand, and Crystal, X. R., Wu, for their generous help in my research study. Thanks to Fonsa, Y. F., Lau and Joly, M. Y., Tam for their warmth and kindness.

Fourth, I want to thank all my friends in Hong Kong and research students in the graduate student office of business school. Special thanks go to Betty, C., Zhang, Lanzy, N.Q., Liu, Fiona, C. Y., Li, Joshua, J. H., Shen, Aaron, L., Peng, M. Z., Zhuang, H. B., Li, and S. B., Liu. We eat, study, and play together, and often laugh and cry together. I couldn't have had such a wonderful time without you guys.

Fifth, I would like to express my gratitude to my relatives, former school mates, friends, and former colleagues for their support, advice, and help in recruiting participants and to Dan Lin, Xiaoyan Zheng, Yan Zhou, and Yu Zhou, who helped me a lot on the data collection. A special thank you to all the participants of this study and to the company who allowed me access to their employees.

Last but not least, my thanks would go to my family members, my parents, my brother's family, and my wonderful husband. I am so grateful for all of your unfaltering love and support. I love you all with all my heart and soul.

CHAPTER I

INTRODUCTION

With the advent of the knowledge economy, traditional organizational relationships have subtly changed in the increasing global and technological innovation business environments. Organizations are increasingly using organic and flexible team-based structures instead of traditional organization structure (Sundstrom, 1999), which makes departments interdependent and undermines traditional power relations (Pfeffer, 1997). The growing organizational interactions among employees from different departments with different professional specializations lead to more complex and dynamic relationships within organizations. Practitioners and researchers have understood 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).

However, conflicts between departments are rising more frequently within organizations, 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). Meanwhile, the evolving business environments encourage organizations to consider conflicts a reality that have

potential value, no longer as just harm and destruction. Substantial empirical evidence has indicated the value of conflict in decision-making, organization innovation and team building. Conflict itself does not bring useful functions to organizations; 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).

This dissertation includes a literature review that examines effective conflict management dynamics within the context of interdepartmental conflict in organizations. The literature review led to investigate the effects of interdepartmental relationships and organizational identification on interdepartmental conflict management in organizations. This chapter develops the background information related to the topic, a 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. Additional difficulty is added as the increasing use of organic and flexible team-based structure, which increases interdepartmental interdependence and undermines traditional power relations in organizations (Pfeffer, 1997). Coupled with the proceeding professional specialization and workforce diversification in the currently changing market place, 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.

Although the conflict management research in organizations has grown in the past few decades, the definition of the term conflict has not reached a general agreement among the researchers (De Dreu & Gelfand, 2008; Wall & Callister, 1995). Failure to agree on the definition of conflict contributes to the difficulty of studying conflict management in empirical studies. The conflict definition should be clearly clarified as the first step in learning conflict management.

Researchers have noted numerous studies of conflict bringing positive results (Amason, 1996; Amason & Schweiger, 1997; Rahim, 2011; Simons & Peterson, 2000); however, other studies have demonstrated the opposite results (De Dreu & Weingart, 2003; Jehn, 1995; Jehn & Mannix, 2001; Tepper, Moss, & Duffy, 2011). Contributing to the conflicting research results is the absence of effective conflict management skills impact upon the outcomes of conflict. Specifically, conflict itself cannot bring useful functions or harmful outcomes to organizations, instead the conflict outcomes depend on the employee personal awareness and acknowledgment of the value of conflict and conflict management skills (Rahim, 2011).

Researchers have employed a multitude of mechanisms to manage conflict effectively and productively in business environment (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 benefit, labeled constructive controversy and developed by Johnson, Johnson, and Tjosvold (2000). Constructive controversy, 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 constructive controversy dynamics contribute to effective collaboration between departments within organizations in a collectivistic eastern culture like China.

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, 1979; 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 et al., 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.

Recently, researchers have used social identity theory to explain the relationship between employees and their organizations and employee behaviors. Meanwhile, studies have illustrated the need for more contextual analyses of identity 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.

It has been observed by many scholars that employees are able to think and act in ways that are supportive of organizational goals and interests if they identify with the organization (Pratt, 2000). Organizational identification is a specific form of social identification where the individual perceives the oneness with and belongingness to a particular organization (Ashforth & Mael, 1989). Organizational identification reflects the cognitive connection one has with their work organization and may help employees fulfill their needs for self-esteem and belongingness (Ashforth & Mael, 1989; Carmeli, Gilat, & Waldman, 2007; Hogg & Mullin, 1999; Millward & Postmes, 2010; Pratt, 1998), and may also help organizations benefit from increasing employee organization loyalty (Adler & Adler, 1988; Edwards, 2005; Keh & Xie, 2009; Marin, Ruiz, & Rubio, 2009) and motivating employees to act in the organization's best interests (Pratt, 2000). Thus, organizational identification should be an appropriate choice for a specific organizationally focused 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 constructive controversy dynamic to effective collaboration among employees from different departments within organizations. Specifically, this study argues that constructive controversy dynamic between employees from different departments within organizations will result in productive interdepartmental conflict outcomes, such as organizational task accomplishment and employee commitment to the organization 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 examine the proposition, derived from the theory of goal interdependence, that constructive controversy 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 organizational identification 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 relationship individuals have with their employing organization. I investigate whether one aspect of social identity, organizational identification, can moderate the effect of departmental goal interdependence (i.e. cooperative, competitive and independent) on constructive controversy dynamic so that it enhances productive conflict outcomes. The

moderating effect of organizational identification on effects of departmental goal interdependence has not been empirically tested, a gap in extant research that this study addresses.

In doing so, I answer calls from both the social identity and the conflict management literatures and connect research on social identity and conflict management. The combined consideration of goal interdependence and social identity 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 does constructive controversy dynamic (i.e. the open-minded discussion for mutual benefit) between individuals from different departments in the same organization affects 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 interdepartmental goal interdependence affect the way that the individual deals the conflict with individuals from other departments?

The third research question of this study is: In an interdepartmental conflict setting, does an individual's identification with the organization influence the relationship between cooperative goal interdependence between departments and

constructive controversy dynamic?

The fourth research question of this study is: In an interdepartmental conflict setting, does an individual's identification with the organization influence the relationship between competitive goal interdependence between departments and constructive controversy dynamic?

The fifth research question of this study is: In an interdepartmental conflict, does an individual's identification with the organization influence the relationship between independent goal interdependence between departments and constructive controversy dynamic?

Significance of the Study

The present study contributes to the social identity literature. Researchers have argued that social identity research needs to more fully consider intergroup relations and contextual analyses (Ethier & Deaux, 1994; Stryker, 2000; van Knippenberg, 2003), including competitive and cooperative intergroup interdependence as important contextual variables (Ashmore et al., 2004). This study attempts to remedy this gap in the current research by empirically investigating the moderating effects of one aspect of social identity, organizational identification, on cooperative, competitive and independent interdepartmental interdependences.

This study enriches studies on organizational identification. Organizational identification has been investigated as the main factor that influences employees' behavior in organizations. Research has shown that organizational identification

usually works as the mechanism or the antecedent to help organization benefit from increasing employees' organization loyalty, job performance, organizational commitment, and intention to remain within the organization (Adler & Adler, 1988; Edwards & Peccei, 2010; Jiang & Law, 2012; Knippenberg & Schie, 2000; Mael & Ashforth, 1995; Riketta, 2005; Rousseau, 1998; Smith, Amiot, Callan, Terry, & Smith, 2012; Wan-Huggins, Riordan, & Griffeth, 1998). In the present study, organizational identification is working as a specific organizationally focused individual characteristic hypothesized to be a moderator of the cognitive process of goal interdependence.

The current study also contributes to the conflict management literature. Previous studies have documented that constructive controversy can facilitate solving problems within teams and departments (Amason, 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 constructive controversy dynamic to effective collaboration among employees from different departments within organizations.

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. 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 moderating role of organizational identification on interdepartmental goal interdependence.

In addition to enhancing the theoretical understanding, this study has important practical implications for effective collaboration between departments in organizations. This study could provide assistance to managers identifying 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 AND HYPOTHESES DEVELOPMENT

The first chapter of the dissertation 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 organizational identification and its 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.

The main theoretical framework of this study is built upon the goal interdependence theory (Deutsch, 1973, 1980, 1990), which proposes that when people emphasize their cooperative rather than competitive or independent goals they express their opposing views openly and constructively (Tjosvold, 2008). 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. This study examines the

goal interdependence theory and links it with constructive controversy dynamics in an interdepartmental conflict setting. Organizational members from departments have tasks, responsibilities, and characteristics different from other departments (Hall, 1972; Ruyter & Wetzels, 2000). Members of departments believe that they receive rewards for achieving different outcomes and goals. When they are interacting with employees from other departments, employees usually take their own department's goals and interests as their own goals and interests. I expect that an individual's perception of interdepartmental goal interdependence would affect the way that the individual deals the conflict with individuals from other departments. Specifically, when employees from different departments perceive cooperative rather than competitive or independent goal relationship between departments they express their opposing views openly and constructively (constructive controversy), that in turn leads to productive conflict outcomes.

Research has shown that organizational identification can help organization benefit from increasing employees' organization loyalty, job performance, organizational commitment, and intention to remain within the organization (Adler & Adler, 1988; Edwards & Peccei, 2010; Jiang & Law, 2012; Knippenberg & Schie, 2000; Mael & Ashforth, 1995; Riketta, 2005; Rousseau, 1998; Smith, Amiot, Callan, Terry, & Smith, 2012; Wan-Huggins, Riordan, & Griffeth, 1998). In the present study, organizational identification is hypothesized to be a moderator of the relationship between interdepartmental goal interdependence and constructive controversy. For employees from different departments within the same organization,

the common thing they have is that they belong to the same organization. When there are conflicts happening among them, their identification to the organization may have some effect on how they deal the conflict with each other. I expect organizational identification has significant moderating effect in the study's context.

Conflict and Conflict Management

Conflict is an inevitable phenomena that occurs in every part of our daily life, whether within or outside of the organizational context. 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 positive results (Amason, 1996; Amason & Schweiger, 1997; Rahim, 2011; Simons & Peterson, 2000); however, other studies have demonstrated the opposite results (De Dreu & Weingart, 2003; Jehn, 1995; Jehn & Mannix, 2001; Tepper, Moss, & Duffy, 2011). Contributing to the conflicting research results is the absence of productive conflict management skills impact upon the outcomes of conflict. Specifically, conflict itself cannot bring useful functions or harmful outcomes to organizations, instead the conflict outcomes depend on the employee's personal awareness and acknowledgment of the value of conflict and conflict management

skills (Rahim, 2011). Essentially, conflict has no direct relationship to positive or negative outcomes. The positive results of conflict result from the use of appropriate conflict management skills and the negative results of conflict come from the use of inappropriate conflict management skills (Barki & Hartwick, 2001). 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).

Concept and definitions 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”.

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. Most process models focused on the stages of conflict, increasing the complexity and difficulty of understanding conflict phenomena and dealing with conflict effectively. Deutsch’s (1973) conflict definition addresses the flaws in process models by clearly refining conceptualizations.

Most process models define conflict as opposing interests, confusing conflict with competition and overlooking the reality that people with cooperative, highly overlapping goals can be and often are in conflict (Tjosvold, 1998). Confusing conflict with competition induces negative conceptions of conflict that in turn accelerate the difficulty of positive conflict management as more destructive approaches like competitive and avoiding approach are fostered. Deutsch’s (1973) definition addresses the flaws by distinguishing competition and conflict, which helps understanding the potential value and positive aspect of conflict. With this

definition, competition implies opposing goal attainments between two interaction parties, whereas conflict can occur both in cooperative or competitive contexts.

Causes of conflict

The focus of conflict researchers has not been on determining the causes of conflict (Deutsch, 1990; Wall & Callister, 1995). Various factors contribute to setting the stage for conflict to emerge. Dirks and Parks posited that the interdependence of the disputants, with actual or perceived differences in goals, values, or aims, who view the other party as potentially interfering with the attainment of those goals, values, or aims lead to conflict in the workplace (Dirks & Parks, 2003). Putnam and Poole (1987) viewed the competition for resources, coordination of systems, work distribution, and participation in decision making as key factors to conflict in organizations. The rising conflicts between departments within organizations 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 et al., 2006; Lovelace et al., 2001; Nauta & Sanders, 2001; Van De Ven & Ferry, 1980).

Conflict management studies

Conflict management researchers suggest that conflict is a multidimensional construct (Jehn, 1992; Pinkley, 1990). 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). Among them, Kilmann and Thomas' (1975) two-dimensional model of conflict management and Rahim's (1983) dual concern model are the most widely used models. However, research findings have been conflicting. De Dreu and Weingart's (2003) meta-analysis found the same significant relationship between both types of conflict and conflict outcomes. They concluded that both types of conflict were disruptive and the classification was not so useful.

This study follows the second main stream of conflict management research led by Deutsch (1973, 1983) and others. 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). Contributing to the conflicting research results is the absence of effective conflict management skills impact upon the outcomes of conflict. Poor conflict management skills cause conflict escalation and negative results. Managing conflict in a way to reduce its destructive effects while capitalizing on and enhancing its productive effects is critical to organizations. Researchers have studied a multitude of mechanisms to manage conflict productively in business environment (Montoya-Weiss, et al., 2001; Rahim, 1983, 1992; Ruble & Thomas, 1976; Simons, & Peterson, 2000; Stewart, & Barrick, 2000). Johnson, Johnson, and Tjosvold (2000) demonstrate the open-minded discussion of conflicting perspectives for mutual benefit, labeled constructive controversy, is an effective way to manage conflict effectively in order to capitalize on the potential positive outcomes of conflict (De Dreu & Gelfand, 2008; Tetlock, Armor, & Peterson, 1994).

Open-minded discussion of controversy and conflict management between departments

Effective collaboration between departments is a pressing challenge for organizations (van Knippenberg, 2003). Resource and workflow interdependence between departments as well as differences in their short-term objectives and their desires for autonomy produces strains (Barclay, 1991; Dutton & Walton, 1966; Gresham et al., 2006; Lovelace et al., 2001; Nauta & Sanders, 2001; Van De Ven &

Ferry, 1980), stimulate increasingly more conflicts among the employees from different departments. Previous studies have shown that conflict itself is neither productive nor destructive, but depends on how it is managed (Tjosvold, 2006; Tjosvold, Law, & Sun, 2006). Thus, realizing the value of conflict between departments and getting to know how to manage interdepartmental conflict effectively in order to capitalize on the potential positive outcomes of conflict are important to organizations (Rahim, 2011).

A central conflict management mechanism is the open-minded discussion of conflicting perspectives for mutual benefit, labeled constructive controversy and developed by Johnson, Johnson, and Tjosvold (2000). Constructive controversy, 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 (Amason, 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). A yet unexamined issue has to do with how constructive controversy dynamics contribute to effective collaboration between departments within organizations in a collectivistic eastern culture like China.

Controversy refers to the intellectual aspects of conflict in that it occurs when conflict participants express their opposing ideas, opinions, conclusions, theories, and information that at least temporarily obstruct resolving issues. Researchers have

emphasized that protagonists are able to discuss conflicts openly and productively when they seek mutually acceptable solutions (Jehn, 1997; Jehn & Chatman, 2000; Somech, Desivilva, & Lidogoster, 2009). Open-minded discussion can invoke interest in searching for more information and understanding of the opposing position (Berlyne, 1963; Garvin, Edmondson, & Gino, 2008; Hare, 2003). Confronted with opposing views, protagonists begin to doubt the adequacy of their own perspective and are motivated to search the arguments of opposing positions by asking questions and demonstrating more understanding. Then 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 (De Dreu & Gelfand, 2008).

Constructive controversy is an effective way to capitalize on the potential positive outcomes of conflict (De Dreu & Gelfand, 2008; Tetlock, Armor, & Peterson, 1994). Constructive controversy leads to high task accomplishment, high job satisfaction, good job performance, low intention to quit, high confidence for future cooperation and so on (Almost, 2006; De Dreu & Weingart, 2003; Tjosvold, 1998; Tjosvold, Hui, & Yu, 2003).

Normally, task accomplishment, employee intention to quit, and the confidence for future cooperation 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).

Thus I propose the three outcomes would be especially salient in this study's context. This study argues that constructive controversy can help employees from different departments in organizations manage conflicts productively so that they can collaborate effectively. The constructive controversy dynamics lead to quality solutions that employees from different departments accept and implement that bring organizational task accomplishment and develop their commitment to the organization and confidence in working together in the future. Based on the above literature review and reasoning, I propose that:

Hypothesis 1a. Employees from different departments are more likely to complete tasks to the extent that they engage in constructive controversy.

Hypothesis 1b. Employees from different departments are more likely to undermine their intentions to quit to the extent that they engage in constructive controversy.

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 constructive controversy.

Goal Interdependence Theory

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 the way goals are perceived to be structured determines how people interact, and these

interaction patterns in turn determine outcomes (Deutsch, 1973; Johnson & Johnson, 1989; Stanne, Johnson, & Johnson, 1999). Based on this theory, goals may be considered cooperatively, competitively or independently related.

In cooperative goals, people perceive their goal achievements are positively correlated so that as one moves toward goal achievement, others do too. In competitive goals, people perceive their goal achievements are negatively correlated so that each perceives that the achievement of one prohibits or makes it less likely that others will achieve their goals. In independent goals, people perceive their goal achievements are not correlated so that each perceives that the achievement of one has no impact on their goal achievements.

Interdepartmental goal interdependence and open-minded discussion of controversy

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.

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.

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, 1973, 1980, 1990) to analyze the nature of effective relationships between departments. Specifically, when departments develop cooperative, rather than competitive or independent goals with each other, employees from different departments are expected to contribute to the productive conflict outcomes through constructive controversy dynamics.

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. When employees from different departments perceive they have cooperative interdepartmental goals, they are confident that they want each other to express their feelings and doubts fully, including opposing views. As interdepartmental goals are perceived positively related, employees from different departments will reflect upon and integrate their information and ideas to solve identified conflicts.

However, when employees from different departments perceive they have competitive interdepartmental goals, they expect each other to work for their own department's goals at the expense of other departments' goals. They are suspicious that if they identify issues and mistakes that others 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). As interdepartmental goals are perceived negatively related, employees from different departments doubt that they will combine their information and ideas to solve identified conflicts.

Studies show that independent goals have similar effects on interaction as competitive goals (Deutsch, 1973; Johnson & Johnson, 1989). When employees from different departments perceive they have independent interdepartmental goals, they expect each other to work for their own department's goals independently, not caring about other departments' goals. As interdepartmental goals are perceived independently related, employees from different departments do not communicate with each other and have little information and resource sharing to solve conflicts.

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 of controversy 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 of controversy to the extent that they perceive

competitive goal relationship between departments.

Hypothesis 2c. Employees from different departments are less likely to engage in open-minded discussion of controversy to the extent that they perceive independent goal relationship between departments.

Open-minded discussion of controversy as mediating interdepartmental goal interdependence and conflict outcomes

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, employees' quit intention 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 between employees from different departments.

Prevalence of perceived competitive and independent goals between departments

In order to pursue overall organizational goals such as profit maximization, survival, and benefit (Haroun, & Duffuaa, 2009; Miller & Arnold, 1998), organizations have to divide the overall organizational goals into several different sub goals over organization divisions, units, departments and people. As soon as goals are distributed over different departments within the organization, which makes departments within organizations aim at different departmental goals, the problem of coordination of these goals arises. Meanwhile, the goal coordination makes departments interdependent.

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, et al., 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). Cases of many industrial organizations with departments of manufacturing, planning, and sales illustrate difficulties of interdepartmental coordination (Ettlie & Reza, 1992; Gresham et al., 2006; John, 1991; Schmenner & Swink, 1998; Walton, Dutton, & Fitch, 1966). For example, the agility of manufacturing process is often disrupted by unplanned production schedules made by planning employees, which are from rush orders accepted by sales employees in their aim to satisfy customer needs (Nauta et al., 2002). This example demonstrated that the sales goal of serving the customer is often perceived partially incompatible with the planning goal of delivery performance and the manufacturing goal of efficiency.

In many organizations, members of different departments believe that they have different goals (Brown, Condor, Mathews, Wade, & Williams, 1986; Nauta et al., 2002; Ruyter & Wetzels, 2000). Although organizations are designed to combine the abilities and efforts of those in various departments and groups, members of different departments in organizations may perceive that their goals are separate and distinct from one another. An important concept in organizational behavior is differentiation, i.e., the idea that organizational members from departments have tasks, responsibilities, and characteristics different from other departments (Hall, 1972; Ruyter & Wetzels, 2000). These variations may lead to the members of departments to believe that they receive rewards for achieving different outcomes and may even conclude that they have incompatible goals.

The social psychological perspective of social identity theory (Hogg & Terry,

2000; Tajfel & Turner, 1986) can help to explain how intergroup differentiation can lead to perceived goal incompatibility even without concrete incompatible rewards. Social identity theory proposes that group membership gives members potentially important identity in organizations, which is sought to establish a positive differentiation through means of intergroup comparisons. The mere awareness of being a member of one department but not other departments creates perceptions that favor one's own department and show affectively negative perceptions, attitudes and behaviors towards the out-department (Hogg & Terry, 2000; Tajfel & Turner, 1986).

In summary, 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, 1986). Perceived interdepartmental goal incompatibility can very much reduce overall organizational effectiveness (Nauta et al., 2002).

Organizational Identification

Concept and definition

Organizational identification has been defined and conceptualized in different ways since March and Simon established the first model in 1958 (Ashforth, Harrison,

& Corley, 2008; Edwards, 2005; Riketta, 2005). However, organizational identification research has been hampered by the frequent confusion with other closely related constructs such as organizational commitment (Ashforth & Mael, 1989). Mowday, Steer and Porter (1979) conceptualized organizational identification as one essential component of organizational commitment. O'Reilly and Chatman (1986) defined organizational identification as affective and motivational processes of "an individual accepting influence from a group (organization) in order to establish and maintain a relationship". Proposing that organizational identification and organizational commitment are two different constructs, Cheney and Tompkins (1987) conceptualized organizational identification as a social, rhetorical, discursive process that "a decision maker identifies with an organization desires to choose the alternative which best promotes the perceived interests of that organization". Other authors have suggested that attitudinal commitment results from organizational identification, arguing the similarity of the concepts of organizational identification and organizational commitment (Sass & Canary, 1991).

This study adopts the most widely accepted conceptualization of organizational identification proposed by Ashforth and Mael (1989). Ashforth and Mael (1989) have argued that organizational identification and organizational commitment are conceptually distinct constructs. Organizational identification is not a facet of organizational commitment. Organizational identification has roots in social identity theory and self-categorization theory, while organizational commitment is rooted in social exchange theory. Organizational identification can represent both positive and

negative attitudes toward the organization, whereas organizational commitment represents a positive attitude toward the organization (Ashforth et al., 2008; Dutton, Dukerich, & Harquail, 1994; Pratt, 1998). As Pratt (1998: 178) noted, organizational commitment is often associated with “how happy or satisfied am I with my organization?” Organizational identification, by contrast, is concerned with the question, “How do I perceive myself in relation to my organization?” For example, in a study of organizational identification, Dutton and Dukerich (1991) found that, when media criticized the Port Authority’s image as a compassionate and humane organization, its members felt anger, frustration, and disappointment. Furthermore, organizational identification is organization-specific (“I am a member of Nike and it’s important to me”) but organizational commitment is more generalizable. In OI, as the individual’s identity and fate become intertwined with those of the organization, he or she becomes a microcosm of the organization (Ashforth & Mael, 1989). Commitment may be more readily transferred to other organizations that inspire a similar positive attitude. Commitment involves acceptance of goals and values that may not be organization-specific. Henceforth, an individual may transfer because of career goals to another organization that embodies the same beliefs and without sacrificing what they believe in.

Organizational identification is defined as “the perception of oneness with or belongingness to an organization, where the individual defines him or herself in terms of the organization(s) in which he or she is a member” (Mael & Ashforth, 1992). Different from other definitions and conceptualizations, this relatively clear

and concise definition has roots in social identity theory (Tajfel, 1978; Tajfel & Turner, 1979; 1986) and its cousin, self-categorization theory (Turner, 1985).

Social identity perspective and organizational identification

Social identity theory addresses the impact that an individual's self-concept derives from the membership of social groups and categories (Tajfel & Turner, 1979; 1986). Self-concept refers to "the totality of self-descriptions and self-evaluations subjectively available to an individual" (Hogg & Abrams, 1988). According to social identity theory, individuals form self-concept based on two parts (Hogg & Abrams, 1988): (1) one's personal identity that is comprised of unique personality, traits and abilities distinct from other individuals at the interpersonal level, and (2) one's social identity that is derived from the social categories to which individual belongs, and the emotional and evaluative consequences of this group membership at the intergroup level.

The main focus of the literature on organizational identification is social identity rather than personal identity (Hogg, 2003; Hogg & Terry, 2001). Tajfel (1978) defined social identity as "the individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of the group membership". Individuals derive their sense of social identity largely from the groups to which they belong. Social identification is a socio-cognitive process that individuals accept themselves in terms of their similarities with other members of their own group and differences from members of other groups (Tajfel & Turner,

1986). Hogg and Terry (2001) have demonstrated that an organization can be a primary source of an individual's social identity in workplace. Individuals define themselves in terms of their membership in a particular organization through organizational identification, which is a specific form of social identification (Mael & Ashforth, 1992).

The social identity perspective argues that the primary underlying motives for individuals to identify with organizations are to fulfill their need for self-esteem and need for belongingness (Ashforth & Mael, 1989; Carmeli et al., 2007; Hogg & Mullin, 1999; Millward & Postmes, 2010; Pratt, 1998). Smith and Mackie (2007) have defined self-esteem as the positive or negative evaluations of the self. Self-esteem is considered to be an innate individual need that can be fulfilled by group membership, including organizational membership (Ashforth & Mael, 1989; Erez & Earley, 1993).

Social identity perspective asserts that a shared group membership creates an in-group bias through the perceptual accentuation of attitudinal, emotional, and behavioral similarities between the self and in-group members, and differences from out-group members. They tend to develop in-group favoritism and a negatively biased view of members of the out-group to enhance their self-image (Hogg & Abrams, 1988). When individuals identify with a particular organization, self-esteem is usually achieved during the comparison process. In addition to self-esteem, organizational identification can also help individuals to fulfill their basic need for

belongingness (Ashforth & Mael, 1989; Carmeli et al., 2007; Hogg & Mullin, 1999; Millward & Postmes, 2010; Pratt, 1998). The need for belongingness refers to an individual's need for social interaction and good interpersonal relationships (Alderfer, 1972). Organizations can help to fulfill such needs by providing a forum for interaction with others and by giving individuals a sense of belonging in a larger entity.

The nature of organizational identification

Regarding the nature of organizational identification, there is a debate between researchers. Bergami and Bagozzi (2000) suggested that organizational identification is both cognitive and emotional in nature, while Van Dick (2004) suggested organizational identification involves cognitive, emotional and behavioral aspects. However, most researchers argue that organizational identification is a cognitive process, not necessarily associated with emotional or behavioral states (Ashforth & Mael, 1989; Dutton et al., 1994; Rousseau, 1998; Wan-Huggins, Riordan, & Griffeth, 1998). Dutton et al. (1994: 242) stated that organizational identification is a “cognitive connection between the definition of an organization and the definition a person applies to him or herself, viewing identification as a process of self-definition”.

Organizational identification as a moderator

Recently, researchers have used social identity theory to explain the relationship

between employees and their organizations and employee behaviors. Meanwhile, studies have illustrated the need for more contextual analyses of identity processes (Ethier & Deaux, 1994; Stryker, 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 relationship individuals have with their employing organization.

Organizational identification reflects the cognitive connection employees have with their work organization and may help to prime them to think and act in ways that are supportive of organizational goals and interests (Pratt, 2000). Strongly identified employees tend to bring positive organizational outcomes because they perceive their own destinies as tied to the organization (Ashforth & Mael, 1989; Dutton et al., 1994; Mael & Ashforth, 1992), and this reaffirms the individual's self-concept (Hogg & Terry, 2000).

Research has shown that organizational identification can influence employees' productive work behavior, such as increased organization loyalty, job performance,

organizational commitment, and decreased turnover intentions (Adler & Adler, 1988; Edwards & Peccei, 2010; Jiang & Law, 2012; Knippenberg & Schie, 2000; Mael & Ashforth, 1995; Riketta, 2005; Rousseau, 1998; Smith et al., 2012; Wan-Huggins et al., 1998). Thus organizational identification should be an appropriate choice for a specific organizationally focused individual characteristic hypothesized to be a moderator of cognitive process of goal interdependence. Organizational identification as a cognitive process interacts with the cognitive process of goal interdependence in this study's model.

The more employees conceive of themselves in terms of their membership in an organization, the more they identify with the organization, the more likely they act in accordance with the organization's norms and values (Ashforth & Mael, 1989; Dutton et al., 1994; Kell & Motowidlo, 2012; Scott & Kowalski, 2011; Umphress, Bingham, & Mitchell, 2010). As characterized as “the essence” and distinctive characteristic of an organization (Aust, 2004; Meglino & Ravlin, 1998), organizational values are an important aspect of employee organizational identification because organizational values are the principles that members within an organization use as criteria for behavior (Scott, 2003). Organizational norms are also central to employee organizational identification as they are generalized rules and expectations that govern the behavior of organizational members (Scott, 2003). Norms encourage individuals to comply with informal organizational rules that govern behavior and justify enforcing the conformity of others to group expectations (Scott, 2003).

In an interdepartmental conflict setting, when employees from different departments perceive they have cooperative interdepartmental goals, they believe their department's goals are positively related and they can succeed together. And cooperative interdepartmental goals are congruent with organizational values and norms to motivate employees from different department to engage in behaviors that help the organization to achieve its goals. Organizational researchers have suggested that strongly identified individuals are more likely to adopt cooperative orientations in their interactions with coworkers (Ashforth & Mael, 1989; Dutton, et al., 1994; van Knippenberg, 2000). Accordingly, I propose that for employees who identify strongly with the organization, the positive relationship between cooperative interdepartmental goal interdependence and open-minded discussion of controversy dynamics will be stronger compared to employees who identify weakly with the organization.

Hypothesis 4a. An employee's identification with the organization will moderate 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 constructive controversy is stronger when employees identify more strongly with the organization.

In an interdepartmental conflict setting, when employees from different departments perceive they have competitive interdepartmental goals, they will be motivated to compete for organizational resources rather than to cooperate for the

organizational interest (Turner, 1975). However, employees who strongly identified with the organization will take each other as part of a larger in-group (Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993) that shares the same organizational values and norms. Such an activation of a 'we' or an in-group identification provides employees from different departments with organization-oriented motivation and fosters them to be committed to organizational values and norms. Driven by such shared organizational values and norms, when confronting disagreement, employees from different departments are more likely to discuss issues in conflict open-mindedly and collaboratively with a purpose of seeking best solutions that benefit all people from different departments (Nemeth & Kwan, 1985; Johnson et al., 2000). Based on the above reasoning, I propose that:

Hypothesis 4b. An employee's identification with the organization will moderate 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 constructive controversy is weaker when employees identify more strongly with the organization.

In an interdepartmental conflict setting, when employees from different departments perceive they have independent interdepartmental goals, they may conclude that they are working for their own department's goals independently without caring about other departments' goals. However, with the similar effect of organizational identification under the situation of competitive interdepartmental

goals, employees who identify strongly with the organization will be driven by organizational values and norms to be more likely to communicate with each other and share the information and resource to seek best solutions that benefit all employees from different departments. Based on this reasoning, I propose the following:

Hypothesis 4c. An employee's identification with the organization will moderate the relationship between independent interdepartmental goal interdependence and open-minded discussion of controversy dynamics, such that the negative relationship between independent interdepartmental goal interdependence and constructive controversy is weaker when employees identify more strongly with the organization.

Figure 1 presents the hypothesized conceptual model of this study. As shown in the figure, this 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, quit intention, and future cooperation). This model also posits that employees' organizational identification moderates 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 procedures

As the interview structure of this study was designed originally in English and the data collection would mainly be from Chinese participants in a Chinese environment, a bilingual scholar translated the first English version of the interview structure into Chinese. To detect any possible deviation between the original version of the interview structure and the translated version, a second bilingual scholar back-translated the Chinese version into English by using back translation technique (Douglas & Craig, 2007) in order to ensure the conceptual consistency (Brislin, 1970). A third bilingual scholar translated the second version of the English interview structure back into Chinese. At last the three bilingual scholars met together to discuss the differences and determined the final Chinese version of the instrument.

Pre-test

Prior to conducting the pre-test, I showed the interview structure to my

supervisors and colleagues, who had experience with similar materials. They reviewed my materials and gave me expert opinions on which questions and responses were valid and reliable and which were not. I adjusted and refined the items according to their suggestions.

A pre-test was then conducted to ensure that participants would understand the questions. I administered interviews to eight Master of Science (MSc) students in Human Resource Management and Organizational Behaviour (HRM&OB) program at Lingnan University who had working experience. I measured how much time it took to complete each interview and debriefed the respondents after they completed the interview. Based on their feedback, a few questions were rephrased for clarity.

Pilot study

In May 2012, 30 employees from a clothing company in Guangzhou were recruited to participate in the pilot study at the site of their office building. A sample of 28 valid responses were obtained, coded, and analyzed. Means, standard deviations, correlations, and scale reliabilities for the pilot study appear in Table 1. Although there were only 28 data points, the results of scale reliabilities were all acceptable.

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 deter subjects from completing the survey and using 5-point Likert could get higher response rate. Besides, the results showed that very few participants chose the extreme numbers (i.e. 1 or 7), which make the scores cluster in the middle instead of going across the scale. These reasons

directed me to revise the scale into 5-point Likert scale. A few questions and items were also revised and the final version of the instruments was made based on other feedback and result from the pilot study.

Table 1 Means, Standard Deviations, and Correlations for Study Variables

Variables	M	SD	1	2	3	4	5	6	7	8
1. Organization identification	5.31	.74	(.80)							
2. Cooperative goal	5.27	1.41	.52**	(.92)						
3. Competitive goal	2.66	1.22	-.24	-.65**	(.80)					
4. Independent goal	3.40	1.41	-.21	-.54**	.77**	(.88)				
5. Constructive controversy	5.39	.78	.43*	.09	.08	.03	(.69)			
6. Task accomplishment	5.21	1.31	.48*	.64**	-.72**	-.73**	.32	(.83)		
7. Quit intention	2.07	1.12	-.28	-.41*	.61**	.52**	.06	-.64**	(.71)	
8. Future cooperation	5.32	1.20	.56**	.60**	-.64**	-.64**	.48**	.90**	-.56**	(.94)

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

$N = 28$ cases for all variables. Coefficient alphas appear on the diagonal for multi-item scales.

Participants

Participants in this study included one hundred and twenty-nine employees who worked in various Chinese organizations in Guangzhou, Zhuhai, and Shenzhen in Mainland China. All the participants were recruited from my personal network and

were chosen to represent diverse regions, business types, gender, age, and education level in Chinese organizations. Participants were informed regarding criteria to be eligible to participate in the study: (1) participants must be at least 18 years of age; (2) participants should feel comfortable answering questionnaires in Simplified Chinese; (3) participants should be a grass-roots staff or low-level manager in the current organization. For departmental managers, their identifications to their own departments are usually very strong as they represent and are responsible for the department. The strong departmental identification may have a negative effect on constructive controversy, opposite from the effect of organizational identification. In order to control the effect of departmental identification, I choose the grass-roots staff or low-level manager as the participants in my study, excluding the departmental managers. And (4) participants must have worked in the current organization for at least half a year so as to ensure the minimal experience with current organization culture.

Among all the 129 participants, 68 people were interviewed in Guangzhou, 36 people interviewed in Zhuhai, and 25 people interviewed in Shenzhen. The participants were from 41 different organizations. Organizations offered 1 to 8 participants. In average, 3.2 participants were recruited from each organization. Among the 41 organizations, most of the organizations offered 2 to 3 participants. Only 3 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.

Of the participants, 48.1% (62) were male; females comprised the remaining 51.9% (67). Their average age was 27.3 ($SD = 4.1$), with 20.9% (27) below 25 years

old, 60.5% (78) between 25 and 30 years old, and 18.6% (24) above 31 years old. With respect to education level, 6.2% (8) reported having a high school degree, 20.2% (26) of participants had a college degree, 60.5% (78) held university degrees, and 13.2% (17) held graduate degrees. Regarding the years worked in current organization, 15.5% (20) worked for less than 1 year, 48.8% (63) of the participants worked for 1 year to 3 years, 19.4% (25) worked for 3 years to 5 years, and 16.3% (21) worked for over 5 years. Of all the participants, 59.7% (77) were from privately owned organizations, while 29.5% (38) and 10.9% (14) were from state-owned organizations and foreign-invested organizations, respectively. Table 2 provides the current sample's demographic data.

Table 2 Demographic Characteristics of Interviewees

Variable	Category	Code	Number of Participants	Percentage	Mean	S D
Gender	Male	1	62	48.1%	1.52	.50
	Female	2	67	51.9%		
Age	< 25	1	27	20.9%	27.29	4.09
	25-30	2	78	60.5%		
	>=31	3	24	18.6%		
Education Level	High School	1	8	6.2%	2.81	.74
	College Degree	2	26	20.2%		
	University Degree	3	78	60.5%		
	Graduate Degree	4	17	13.2%		
Years Worked in Current Organization	Less than 1 year	1	20	15.5%	2.36	.94
	1-3 years	2	63	48.8%		
	3-5 years	3	25	19.4%		
	Over 5 years	4	21	16.3%		
Organization Ownership	State-owned	1	38	29.5%	1.81	.61
	Private-owned	2	77	59.7%		
	Foreign-invested	3	14	10.9%		

Note: *N* = 129

Procedures

Participants were recruited in three locations: Guangzhou, Zhuhai, and Shenzhen in Mainland China. My previous colleagues, business partners, former classmates, family members, relatives, and friends were approached and informed about the study through my personal network. Other recruitment venues included social networking website, informal meetings, student organizations, postgraduate office, personal contacts, and through snowball sampling.

All the 129 participants took part in this study in the form of interviews. Interviews have been used as practical ways to help people report past events fully with accuracy (Goodman, Fichman, Lerch, & Snyder, 1995; Yukl, Kim, & Falbe, 1996). Each interview lasted for thirty minutes to one hour. The interview structure was developed by employing the Critical Incident Technique (CIT) (Flanagan, 1954). CIT is described as “an observable human activity that is complete enough in itself to permit inferences to be made about the person performing the act” (Bitner, Booms & Tetreault, 1990). CIT was regarded as a useful technique to study complex interpersonal phenomena (Walker & Truly, 1992). In most surveys, interviewees need to summarize across several incidents to make response. Schwarz (1999) concluded CIT could help to moderate errors by making interviewees respond to one particular incident.

All participants were assured confidentiality regarding their responses and were informed that results would only be used for research purposes and would not be released to their employer. Participants were not compensated for their participation in the study. After that, each of the interviewees was asked to describe a

concrete incident when they had disagreement or other kind of conflict with their coworker from another department and it affected their role performing or their well-being.

After they described 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 (see Appendix I). Depending on the interview settings and logistical factors, some participants were given the option of filling out questionnaires at a later date and returning completed surveys. Upon completion of the survey, participants were given the option to be debriefed verbally or in written form.

Scales

A full list of the items used in each of the measures discussed below is included in Appendix I (English Version) and Appendix II (Chinese Version). Measures included the scales of organizational identification, goal interdependence (i.e. cooperative goal interdependence, competitive goal interdependence, and independent goal interdependence), constructive controversy, and three outcomes of task accomplishment, quit intention, and future cooperation. Alpha statistics for all measures were above .8, except for competitive goals which had an alpha statistic of .78. Specific alpha statistics for each scale are listed in Table 3.

Organizational identification

An open question "How salient did you identify with your organization before you perceived the conflict between you and your coworker" was asked through the

interview before the participants filled the organizational identification questionnaire. This approach was thought to help them rate the scales accurately based on their immediate feelings during the incident.

The six-item scale developed by Mael and Ashforth (1992) was used to measure organizational identification. Organizational identification measures an individual's self-definition in terms of their membership in a particular organization (Mael & Ashforth, 1992). A sample item from the scale was "When I talk about this organization, I usually say 'we' rather than 'they'". The internal consistency alpha was .84.

Goal interdependence

Goal interdependence indicated how employees perceived the relationship between their own department's goals and those of their coworker's department in the recalled conflict incident. Goal interdependence was measured with three five-item scales developed from previous studies based on Deutsch's (1949, 1973) goal interdependence theory (Alper, Tjosvold, & Law, 1998), which included three subscales measuring cooperative goal interdependence, competitive goal interdependence, and independent goal interdependence. A minor modification of the scales was employed to increase the relevance of the items to the sample used in this study (i.e. the term 'My coworker and I' was replaced with the wording of 'two departments').

More specifically, cooperative goal assessed the extent to which the interviewees perceived their own department had a cooperative goal relationship with their coworkers' department in the recalled incident. A sample item for the

cooperative goals was “In this incident, the goals of two departments went together”. Competitive goal measured the extent to which the interviewees perceived their department had a competitive goal relationship with their coworkers' department in the recalled incident. “In this incident, two departments structured things in ways that favored their own department goals rather than the goals of another department” was a sample item for the competitive goals. Independent goals measured the extent to which the interviewees perceived their department had an independent goal relationship with their coworkers' department in the recalled incident. A sample item for the independent goals was “In this incident, one department's success was unrelated to the success of another department”. The coefficient alphas for the cooperative, competitive, and independent goals scales were .90, .78, and .86 respectively.

Constructive controversy

Constructive controversy refers to employees from different departments engaging in the open-minded discussion of opposing views for mutual benefit in the recalled interdepartmental conflict incident in this study. With such a discussion, studies suggest that decision-makers take each other's perspective, directly discuss their opposing views openly, and try to integrate them for the best solution. Constructive controversy was measured with a five-item scale developed from a set of experimental studies (Tjosvold, 1998) and questionnaire studies in North America (Alper, Tjosvold & Law, 1998). A sample item was "In this incident, my coworker and I expressed our views directly to each other". Coefficient alpha of the scale was .85.

Task accomplishment

This study adopted the items used by Tjosvold, Peng, Chen, and Su (2008) to measure the extent to which the interviewees' interaction with their coworkers helped them to solve the problem effectively and efficiently in the recalled incident. A sample item was "My coworker and I accomplished the task efficiently because of this interaction". This three-item scale had a Cronbach alpha reliability of .94.

Quit intention

Quit intention indicated the extent to which subjects' desire to leave their jobs in the recalled incident. Quit intention was measured by a scale composed of three items developed from Colarelli (1984). A sample item was "Because of this incident, I frequently think of quitting my job". All the items were anchored from strongly disagree (1) to strongly agree (5), the scale's internal consistency reliability (alpha) was .84.

Future cooperation

Future cooperation was measured by the effectiveness of the interaction between employees from different departments on the likelihood of their future effective collaboration (Tjosvold, Peng, Chen & Su, 2008). A sample item was "This interaction helped my coworker and I feel motivated to work with each other in the future". This three-item scale had a Cronbach alpha reliability of .91.

Demographic data

A demographic questionnaire was included in the interview structure. Questions pertained to gender, age, education level, years worked in current organization, and organization ownership.

Table 3 Alpha statistics for all measures

Measure	Number of Items	Cronbach's Alpha
Organization identification	6	.84
Cooperative goal	5	.90
Competitive goal	5	.78
Independent goal	5	.86
Constructive controversy	5	.85
Task accomplishment	3	.94
Quit intention	3	.84
Future cooperation	3	.91

Data Analysis

Both qualitative and quantitative analysis methods were employed in the present study. For the qualitative data from the participants' narrative accounts on those critical incidents, results are presented in the next chapter.

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 validity of the proposed measurement model. Correlation analyses were conducted in the next step to provide a preliminary examination of the hypotheses. After that, Structural Equation Modeling (SEM) was employed to further test the causal relationships

among goal interdependence, organizational identification, constructive controversy, and the three outcome variables. Finally, Ping (1995) procedures in SEM were conducted to test the moderating effect of organizational identification.

Assessment of 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 items measures were entered in to an exploratory factor analysis, using principal components factor analysis with varimax rotation to perform Harman's one-factor test. The exploratory factor analysis results showed that 8 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 explaining 29.82% of the variance. If common 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 to 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 17.0 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 accessed in the second step.

The hypothesized measurement model of this study contained four exogenous latent variables (organizational identification, cooperative goal, competitive goal, and independent goal), and four endogenous latent variables (constructive controversy, task accomplishment, quit intention, and future cooperation). To test the validity of the proposed measurement model, this study compared the eight-factor measurement model labeled M0 to five different seven-factor models (M1, M2, M3, M4, and M5), one six-factor model (M6), one five-factor model (M7), one four-factor model (M8), and one one-factor solution model (M9) by using AMOS 17.0.

Competitive goal and independent goal were combined into one factor in M1 as these two variables were highly correlated ($r = .61, p < .01$; see Table 9). Constructive controversy and task accomplishment ($r = .66, p < .01$; see Table 9) were combined into one factor in M2. Constructive controversy and future cooperation were combined into one factor in M3 as these two variables were highly correlated ($r = .56, p < .01$; see Table 9). Organizational identification and cooperative goal ($r = .30, p < .01$; see Table 9) were combined into one factor in M4. Task accomplishment and future cooperation ($r = .60, p < .01$; see Table 9) were combined into one factor in M5. Three types of goal interdependence, namely cooperative goal, competitive goal, and independent goal, were combined into one factor in M6. In the 6-factor model (M7), three types of goal interdependence and

organizational identification were combined into one factor. In the 5-factor model (M8), three types of goal interdependence, organizational identification, and constructive controversy were combined into one aggregate factor. Finally in one factor solution model (M9), all eight indicators were combined into a single factor.

Table 4 Confirmatory Factor Analyses

	<i>df</i>	χ^2	$\Delta \chi^2$	CFI	IFI	RMSEA
Baseline 8-factor Model (M0)	224	288.1	-	.97	.97	.05
Combined competitive goal and independent goal (M1)	231	351.3	63.2***	.94	.94	.06
Combined constructive controversy and task accomplishment (M2)	231	370.3	82.2***	.93	.93	.07
Combined constructive controversy and future cooperation (M3)	231	390.5	102.4***	.92	.92	.07
Combined organizational identification and cooperative goal interdependence (M4)	231	426.7	138.6***	.90	.91	.08
Combined task accomplishment and future cooperation (M5)	231	468.4	180.3***	.88	.88	.09
Combined cooperative goal, competitive goal, and independent goal (M6)	237	529.3	241.2***	.85	.86	.10
Combined cooperative goal, competitive goal, independent goal, and organizational identification (M7)	242	662.8	374.7***	.79	.79	.12
Combined cooperative goal, competitive goal, independent goal, organizational identification, and constructive controversy (M8)	246	816.6	528.5***	.72	.72	.14
One factor solution (M9)	252	1306.6	1018.5***	.47	.48	.18

Note: $N = 129$; *** $p < .005$; ** $p < .01$; * $p < .05$

In the one-factor Model (M9), all the factors were combined into one factor.

Results of the confirmatory factor analysis are showed in Table 4. 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 good model fit. Moreover, Kline (1998) suggested that a χ^2/df ratio of less than two or three is indicative of good model fit. All model fit statistics suggest that the baseline 8-factor Model (M0) shows good fit to the data, with a CFI, an IFI, a RMSEA, and a χ^2/df ratio of .97, .97, .05, and 1.29 respectively. The chi-square tests were all significant for the seven alternative models. However, these model fit statistics suggest that the seven alternative models fit the data poorly. Therefore, the results suggested that the proposed eight factors were distinct measures of the constructs in the present study, despite some relatively high correlations over .60. These results suggest that respondents distinguished the eight constructs.

Testing the structural model

In line with the two-step modeling, the structural component of the hypothesized model was accessed in the second step. Overall goodness-of-fit indices suggested that the proposed fully mediated model (M_o) fits the data very well. The Model χ^2 and *df* of the hypothesized model were 248.4 and 200, with a χ^2/df ratio of 1.24. And CFI, IFI, and RMSEA of the proposed model (M_o) were .97, .97, and .04 respectively. The CFI, which ranges from 0 to 1, indexes 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 (Ullman & Bentler, 2003); values

less than 0.05 indicate excellent model fit. Moreover, given the usually critical IFI value of .90 (Bentler & Bonett, 1980), and a χ^2/df 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.

Hypotheses testing

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 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 25 and 30 years old, between 31 and 40 years old, and above 41 years old) and tested the differences of their responses to find out whether the age status of participants influenced specific actions they took to manage conflict.

After that, the relationships of constructive controversy with the three outcomes (i.e. constructive controversy and task accomplishment; *Hypothesis 1a*), goal interdependence with constructive controversy (i.e. cooperative goal and constructive controversy; *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 17.0 in the next step to further explore the underlying causal relationships among goal

interdependence (i.e. cooperative goal, competitive goal, and independent goal), organizational identification, constructive controversy, and three outcomes (i.e. task accomplishment, quit intention, and future cooperation).

A nested model test commonly adopted in the structural equation modeling analysis was conducted where partially mediated model (M_a), non-mediated model (M_b), fully mediated model (the proposed model M_o), and two other alternative models (M_c and M_d) were compared. The partially mediated model (M_a) holds that goal interdependence not only impacts outcomes through constructive controversy but also influences conflict outcomes directly, while the fully mediated model (M_o) proposes that goal interdependence impacts outcomes fully through constructive controversy, that is to say, constructive controversy 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 constructive controversy. In the third alternative model (M_c), both goal interdependence and constructive controversy working as antecedents that impacts conflict outcomes directly, omitting the path from goal interdependence to constructive controversy. In the fourth alternative model (M_d), goal interdependence impacts constructive controversy and conflict outcomes directly, by the absence of the paths from constructive controversy to the conflict outcomes.

Finally, Ping (1995) procedures in SEM were conducted to test the moderating effect. Computing the interaction term following Ping (1995) procedures were performed respectively in SEM to test for possible moderating effects of organizational identification on the relationships between interdepartmental goal interdependence (i.e. cooperative goal, competitive goal, and independent goal) and

constructive controversy as proposed in Hypothesis 4a, 4b and 4c. 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 dissertation. Interviews administered to a sample of one hundred and twenty-nine employees who worked in various Chinese organizations in Guangzhou, Zhuhai, and Shenzhen in Mainland China during the summer of 2012 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 organizational identification, goal interdependence (i.e. cooperative goal, competitive goal, and independent goal), constructive controversy, and three outcomes (i.e. task accomplishment, quit intention, and future cooperation). 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 analysis and the results of hypothesis testing.

CHAPTER IV

RESULTS

The previous chapter described the research design and methodology employed in this study. This chapter 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. Chapter V discusses the results.

Data Screening

Prior to hypothesis testing, several data screening procedures were conducted. First, participants who did not meet the four selection criteria mentioned in previous chapter in this study were not included in the final sample. Participants should: (1) be at least 18 years of age; (2) feel comfortable answering questionnaires in Simplified Chinese; (3) be a grass-roots staff or low-level manager; and (4) have at least half a year working experience. Next, data from participants who did not indicate gender or age in the demographic portion of the questionnaire were omitted from the sample. Finally data with more than two missing items were identified and removed from the final sample. For data with two missing items or less than two missing items, according to Cohen and Cohen (1975), missing values for the measurement were replaced with means of items. Through data screening procedures, 21 participants were excluded from the final sample. The total final sample consisted of 129 participants.

Sample Difference Analysis

Regional difference analysis

Among the 129 participants, 68 people were interviewed in Guangzhou, 36 people interviewed in Zhuhai, and 25 people interviewed in Shenzhen. Three different cities may stand for different cultural backgrounds, economic development, and working environments. Thus I conducted one-way analysis of variance to examine whether there was any difference of study variables in terms of the three different interview cities. The results (Table 5) indicate that there are no significant effects of the regional factor on any of the study variables. Because I did not hypothesize differences and the results do not indicate any significant difference, I merged the data from three sets of samples together.

Table 5 Results of Regional Difference Analysis

Dependent Variable	df	Mean Square	F	Sig.
Organizational identification	2	.00	.01	.99
Cooperative goal	2	.28	.36	.70
Competitive goal	2	1.11	2.19	.12
Independent goal	2	.06	.09	.91
Constructive controversy	2	.82	1.74	.18
Task accomplishment	2	1.17	1.51	.22
Quit intention	2	.61	1.16	.32
Future cooperation	2	1.31	2.04	.13

Gender difference analysis

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. Among all the 129 participants, 48.1% (62) of the participants was male; females comprised the remaining 51.9% (67). The participants were divided into two groups according to gender (i.e. female and male) and then tested the differences of their responses.

I conducted one-way analysis of variance by SPSS 19.0 to exam whether the effects of gender significantly affected the responses from interviewees. As shown in Table 6, the results did not show significant differences in goal interdependence (i.e. cooperative goal, competitive goal, and independent goal), organizational identification, constructive controversy, and three outcomes (i.e. task accomplishment, quit intention, and future cooperation).

Table 6 Results of Gender Difference Analysis

Dependent Variable	df	Mean Square	F	Sig.
Organizational identification	1	.08	.22	.64
Cooperative goal	1	.45	.57	.45
Competitive goal	1	.04	.08	.78
Independent goal	1	.07	.12	.73
Constructive controversy	1	.61	1.29	.26
Task accomplishment	1	1.91	2.47	.12
Quit intention	1	.02	.03	.87
Future cooperation	1	.31	.47	.49

Age difference analysis

Pelled (1996) also indicated that age status may affect the application of different conflict-handling style. Therefore reported organizational identification, perception of goal interdependencies, constructive controversy and conflict outcomes may differ across participants with different age status. I divided all the participants into three groups according to their age status (i.e. below 25 years old, between 25

and 30 years old, and above 31 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. Among the 129 participants, their average age was 27.3 ($SD = 4.1$), with 20.9% (27) below 25 years old, 60.5% (78) between 25 and 30 years old, and 18.6% (24) above 31 years old.

Table 7 Results of Age Difference Analysis

	df	Mean Square	F	Sig.
Organizational identification	2	.17	.45	.64
Cooperative goal	2	.02	.03	.97
Competitive goal	2	2.46	5.05	.01
Independent goal	2	1.42	2.51	.09
Constructive controversy	2	.31	.65	.52
Task accomplishment	2	.44	.56	.57
Quit intention	2	.42	.79	.46
Future cooperation	2	1.23	1.91	.15

The results (Table 7) indicate that there are no significant effects due to age on participants' ratings to organizational identification and perception of cooperative goal, independent goal, constructive controversy, task accomplishment, quit intention and future cooperation. However, there is significant effect of the age factor on the perception of competitive goal.

To further analyze the main effect of the age factor, this study conducted Post hoc tests using Turkey HSD. The results (Table 8) suggested that participants with age below 25 years old are not different from participants with age between 25 and 30 years old and participants with age above 31 years old on the ratings. Yet, there is significant difference between participants with age between 25 and 30 years old and participants with age above 31 years old on the responses. Participants with age between 25 and 30 years old reported significant higher perception of competitive

goal.

Table 8 Post Hoc Test of Age Difference on Competitive Goal

Dependent Variable	(I) age	(J) age	Mean Difference (I-J)	Std. Error	Sig.
Competitive goal	1	2	-.07	.16	.90
		3	.45	.20	.06
	2	1	.07	.16	.90
		3	.51*	.16	.01
	3	1	-.45	.20	.06
		2	-.51*	.16	.01

Notes: 1 = below 25 years old; 2 = between 25 and 30 years old; 3 = above 31 years old

*. The mean difference is significant at the 0.05 level.

Table 9 Means, Standard Deviations, and Correlations for All Variables

Variables	Mean	S D	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	1.52	.50	-												
2. Age	27.29	4.09	.01	-											
3. Education level	2.81	.74	.04	.24**	-										
4. Years at organization	2.36	.94	.18*	.52**	.19*	-									
5. Organization ownership	1.81	.61	-.07	-.23**	-.18*	-.24**	-								
6. Organization identification	3.72	.60	.04	-.04	-.09	-.10	-.07	-							
7. Cooperative goal	3.52	.88	-.07	-.04	-.09	-.06	.00	.30**	-						
8. Competitive goal	2.65	.72	.03	-.13	.10	-.08	-.01	-.24**	-.51**	-					
9. Independent goal	2.81	.76	.03	-.08	.09	.00	-.11	-.03	-.39**	.61**	-				
10. Constructive controversy	3.53	.69	-.10	-.11	-.17	.04	.06	.25**	.44**	-.26**	-.32**	-			
11. Task accomplishment	3.47	.88	-.14	-.15	-.06	-.04	.18*	.18*	.45**	-.20*	-.30**	.66**	-		
12. Quit intention	2.21	.73	-.02	.19*	.11	.08	-.04	-.20*	-.27**	.16	.17	-.39**	-.35**	-	
13. Future cooperation	3.33	.81	-.06	.05	-.22*	.00	-.02	.21*	.45**	-.25**	-.35**	.56**	.60**	-.32**	-

* $p < .05$; ** $p < .01$ $N = 129$ cases for all variables.

Identification of additional sample difference analysis

Table 9 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 ($r = .19, p < .05$) was correlated with quit intention, education level ($r = -.22, p < .05$) was correlated with future cooperation and organization ownership ($r = .18, p < .05$) as correlated with task accomplishment. The effect of age difference analysis was investigated earlier. Therefore I may assume that the future cooperation and task accomplishment may differ across participants with different education level and organization ownership respectively.

Table 10 Results of Education and Organization Ownership Difference Analysis

	Dependent Variable	df	Mean Square	F	Sig.
Education level	Future cooperation	2	1.91	3.07	.03
Organization ownership	Task accomplishment	2	1.71	2.23	.11

The results (Table 10) indicate that there are no significant effects of the organization ownership factor on participants' ratings of task accomplishment. However, there is significant effect of the education level factor on future cooperation. To further analyze the effect of the education level factor on future cooperation, this study conducted post hoc tests using Turkey HSD. The results (Table 11) suggested that there is significant difference between participants with high school or below education and participants with university degree or participants with graduate degree on the responses. Participants with high school or below education reported significant higher intent for future cooperation. Other

significant difference of education on future cooperation could not been found in the result.

Table 11 Post Hoc Test of Education Difference on Future Cooperation

Dependent Variable	(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.
Future Cooperation	High School or below	College Degree	.74	.32	.10
		University Degree	.79*	.29	.04
		Graduate Degree	1.00*	.34	.02
	College Degree	High School or below	-.74	.32	.10
		University Degree	.05	.18	.99
		Graduate Degree	.27	.25	.70
	University Degree	High School or below	-.79*	.29	.04
		College Degree	-.05	.18	.99
		Graduate Degree	.22	.21	.73
	Graduate Degree	High School or below	-1.00*	.34	.02
		College Degree	-.27	.25	.70
		University Degree	-.22	.21	.73

*. The mean difference is significant at the 0.05 level.

Correlational Analysis

An initial examination of the correlation table (Table 9) 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 (constructive controversy) and outcome variables (task accomplishment, quit intention, and future cooperation) was performed to test the first three hypotheses (1a, 1b, and 1c) of the study. The association between the measures of constructive controversy and task accomplishment was found to be significant and positive ($r = .66, p < .01$), supporting H1a. Significant and negative correlation was obtained between the measures of constructive controversy and quit intention ($r = -.39, p < .01$), supporting H1b. Constructive controversy was positively and significantly related to future cooperation ($r = .56, p < .01$), supporting H1c as well.

Hypotheses 2a through 2c also called for bivariate correlation analyses as initial tests. Hypothesis 2a proposed that cooperative goal was positively related to constructive controversy. Result was consistent with this hypothesis. I found a positive and significant correlation between cooperative goal and constructive controversy ($r = .44, p < .01$). Hypothesis 2b posited that competitive goal was negatively related to constructive controversy. A significant and negative correlation was found between competitive goal and constructive controversy ($r = -.26, p < .01$), indicating that Hypothesis 2b had initial support. Hypothesis 2c predicted that independent goal was negatively related to constructive controversy. The association between the measures of independent goal and constructive controversy was found to be significant and negative ($r = -.32, p < .01$); the result provide support for Hypothesis 2c.

Structural Equation Modeling Analysis

In order to further explore the relationship among organizational identification, constructive controversy, goal interdependence and conflict outcomes, I conducted a nested model test commonly adopted in the structural equation modeling analysis by using AMOS 17.0 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_o).

Model comparison

Table 12 presents model fit statistics for the fully mediated model (the proposed model M_o), partially mediated model (M_a), and two other alternative models (M_b and M_c). Overall goodness-of-fit indices suggested that the proposed fully mediated model (M_o) fits the data very well. The Model χ^2 and df of the hypothesized model were 499.3 and 310, with a χ^2/df ratio of 1.61. And CFI, IFI, and RMSEA of the proposed model (M_o) were .91, .91, and .07 respectively. The CFI, which ranges from 0 to 1, indexes 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 excellent model fit. Moreover, given the usually critical IFI value of .90 (Bentler & Bonett, 1980), and a χ^2/df 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_o) by adding the direct paths from antecedent variables to the outcome variables, indicating that goal interdependence not only impacts outcomes through constructive controversy but also influences conflict outcomes directly, while the fully mediated model (M_o) proposes that goal interdependence impacts outcomes fully through constructive controversy, that is to say, constructive controversy mediates the relationship between goal interdependence and conflict outcomes. As shown in the Table 12, the partially mediated model (M_a) resulted in non-significant chi-square value and very slight deterioration in overall model fit ($\chi^2 = 491.9$, $df = 298$, $\chi^2/df = 1.65$, $p > .05$; IFI = .91, CFI = .91; RMSEA = .07). 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 fuller model and is preferred (Rigdon, 1999). Therefore, the partially mediated model (M_a) appears to be less suitable than the original conceptual model (M_o).

Two sets of goodness of fit statistics (χ^2 , df , χ^2/df 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 constructive controversy working as antecedents that impacts conflict outcomes directly, omitting the path from goal interdependence to constructive controversy. In the alternative model M_d , goal interdependence impacts constructive controversy and conflict outcomes directly, omitting the path from constructive controversy to conflict outcomes. The results (Table 12) indicated that although M_b and M_c resulted in significant chi-square value, their values of CFI, IFI, RMSEA, and χ^2/df were not as good as the hypothesized model (M_o). 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.

Overall, the fit statistics show that the hypothesized fully mediated model fits the data best. Hypothesis 3 suggests that constructive controversy mediates the relationship between goal interdependence and conflict outcomes. Therefore, Hypothesis 3 is supported.

Table 12 Results of Model Comparison Analyses

	Model χ^2	df	$\Delta\chi^2$	χ^2/df	IFI	CFI	RMSEA
1. Partially mediated model (M_a)	491.9	298	-	1.65	.91	.91	.07
2. Fully mediated model (M_o)	499.3	310	7.4	1.61	.91	.91	.07
3. The alternative model (M_b)	541.4	305	49.5***	1.78	.89	.89	.08
4. The alternative model (M_c)	506.1	301	14.2***	1.68	.91	.90	.07

Note: $N = 129$; *** $p < .005$; ** $p < .01$; * $p < .05$

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 constructive controversy on the outcome variables, constructive controversy was significantly positive related to task accomplishment ($\beta = .90, p < .001$), negative to quit intention ($\beta = -.50, p < .001$), and positive to future cooperation ($\beta = .79, p < .001$). The results indicate that constructive controversy likely leads to task accomplishment and future cooperation, and low quit intention.

The results indicate that cooperative goal has positive and significant effects on constructive controversy ($\beta = .44, p < .001$), supporting Hypothesis 2a. A significant and negative correlation was found between independent goal and constructive controversy ($\beta = -.42, p < .01$), indicating that Hypothesis 2c had initial support. Hypothesis 2b posited that competitive goal was negatively related to constructive controversy. However, a non-significant and positive correlation was found between competitive goal and constructive controversy ($\beta = .32, ns$), indicating that Hypothesis 2b was not supported.

Figure 2 Path Estimates for the Hypothesized Structural Model

Moderating effect

An insignificant and positive path coefficient was found between organizational identification and constructive controversy ($\beta = .16, ns$). This finding suggests that organizational identification had no main effect on constructive controversy and thus may be a moderator.

Hypothesis 4a proposed that the relationship between cooperative goal and constructive controversy is moderated by organizational identification, such that employees who identify strongly with the organization will be more likely to engage in constructive controversy than employees who identify weakly with the organization. To test Hypothesis 4a that predicts an interactive effect of organizational identification and cooperative goal, I followed Ping (1995) method in SEM to compute the interaction term. As shown in Figure 2, the interaction of organizational identification with cooperative goal was insignificant in predicting constructive controversy ($\beta = -.10, ns$). Hypothesis 4a was not supported in this study.

Hypothesis 4b predicted that the relationship between competitive goal and constructive controversy is moderated by organizational identification, such that employees who identify strongly with the organization will be more likely to engage in constructive controversy than employees who identify weakly with the organization. Similarly, Ping (1995) procedures in SEM in computing the interaction term was used to test Hypothesis 4b which predicts an interactive effect of organizational identification and competitive goal. As shown in Figure 2, the interaction of organizational identification and competitive goal was significant predicting constructive controversy ($\beta = .16, p < .05$), 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) and Dawson and Richter (2006). Figure 3 depicts the interaction of organizational identification with competitive goal in predicting constructive controversy. For employees who identify strongly with the organization, the perception of competitive interdepartmental goal was significantly and positively associated with employees from different departments engaging in constructive controversy (simple slope = .55, $t = 2.61$, $p < .01$); while for employees who identify weakly with the organization, the perception of competitive interdepartmental goal was not significantly associated with employees from different departments engaging in constructive controversy (simple slope = .12, $t = .62$, *ns*). Therefore the interaction is significant and the pattern is consistent with Hypothesis 4b.

Hypothesis 4c proposed that the relationship between independent goal and constructive controversy is moderated by organizational identification, such that employees who identify strongly with the organization will be more likely to engage in constructive controversy than employees who identify weakly with the organization. The interaction term of organizational identification and independent goal was computed by using Ping (1995) procedures in SEM to test Hypothesis 4c that predicts an interactive effect of organizational identification and independent goal. As shown in Figure 2, the interaction of organizational identification with independent goal was insignificant predicting constructive controversy ($\beta = -.08$, *ns*). Hypothesis 4c was not supported.

Figure 3 Moderating Effects of Organizational identification on the competitive goal-constructive controversy relationship

Summary of the Incidents

This study recorded 129 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 129 cases, 92 cases indicated cooperative interdepartmental goal interdependence and in which 79 cases reported high willingness to engage in open-minded discussion of controversy with employees from other departments, according to the ratings on constructive controversy. There were 19 cases indicating

competitive interdepartmental goal interdependence and in which 10 cases reported high willingness to engage in open-minded discussion of controversy with employees from other departments. The remaining 18 cases indicated independent interdepartmental goal interdependence and in which 9 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 organizational identification on the relationship between interdepartmental goal interdependence and open-minded discussion of controversy.

Case illustrations

Drawing upon interviewees' qualitative accounts and on their quantitative codings of their incidents, this study presents three cases respectively representing three types of goal relationship, namely, cooperative goal interdependence, competitive goal interdependence, and independent goal interdependence. These three cases illustrate how the perceived different types of interdepartmental 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 organizational identification on the relationship between competitive goal and open-minded discussion of controversy, one more case is introduced in the competitive goal interdependence part for further verification of the hypothesized model.

Case A illustrates how perceived cooperative interdepartmental goal relationship can lead to open-minded discussion of controversy among employees from different departments, and in turn lead to satisfactory task accomplishment, low intentions to quit and confidence for future collaboration. A female employee working in the human resources department of a large consulting firm in Guangzhou recalled an incident when she had a conflict with a male coworker from marketing department. Human resources department needed to hire a graphic designer urgently for the marketing department due to business requirements. Due to the characteristics of the graphic designer position, she thought it would take a longer hiring cycle compared to other positions. However, the coworker from marketing department insisted they needed the graphic designer 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. 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 graphic designer 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 real deadline for the task. Finally they tried to understand each other's concerns and figured out a better deadline to hire the new graphic designer that both agreed.

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, high intentions to quit and less confidence for future collaboration. A female employee working in the sales department of a software technology company in Zhuhai described a recent conflict incident with a male coworker from the engineering and installation department. At the beginning of one project, she communicated the needs of the customer company to the engineer coworker after she approached the customer company and got their needs and requirement for the software. The engineer coworker was responsible for designing and pricing the software during negotiations with the customer in advance of a sale. After receiving the project plan from the engineer coworker, she proposed the product design and provided estimates of cost and time during the conversations with the customer company. After the sale was made, the same coworker from engineering and installation department was responsible for the product design and software installation. The customer company began to test the software after the engineer coworker finished the installation. The customer company refused to sign

the acceptance test form due to a software defect that did not meet one of their needs. But the engineer coworker did what the sales employee told. The engineer coworker thought that she was not sufficiently clear when she communicated the needs of customers to him at the very first. She stated that the engineer coworker misunderstood her meaning although she was sufficiently accurate. Both of them did not want to take the responsibility and blamed the other because the company would punish the one who committed the mistake. At the end, the company decided to punish both of them. Both felt innocent and that they were unfairly punished.

Case C illustrates the dynamics of how an employee's identification with the organization moderates the relationship between competitive interdepartmental goal interdependence and open-minded discussion of controversy dynamics, such that employees who identify strongly with the organization are more likely to engage in open-minded discussion of controversy, that in turn results in satisfactory conflict outcomes. A male employee who works at engineering department of a state-owned enterprise in Shenzhen recalled a conflict incident with a coworker from budget department. During one of their project design meetings, they had a disagreement about choosing the model of projector used in the project. The employee from engineering department insisted that they have to use the model A projectors with high lumens in order to ensure the display effect. But the coworker from budget department preferred the model B projectors with normal level of lumens in order to reduce project cost. They had a fight at the meeting and neither wanted to back down from their position. They considered their interdepartmental goals as incompatible in

this incident. They gave high priority to the things their own department wanted to accomplish and low priority to the things another department wanted to accomplish. The next day they had another meeting. The project manager told them that they were in the same company and the company's successes were their successes. They needed to collaborate with each other instead of fighting with each other. Then they agreed that they should try to understand each other's concerns and work together. So both of them did more research work on the projectors and had an open-minded discussion for mutual benefit. Finally they made an agreement on choosing model C projectors that not only ensured the display effect but also met the budget plan.

Case D describes how perceived independent interdepartmental goal relationship lead to less open-minded discussion of controversy among employees from different departments, and in turn results in unsatisfactory conflict outcomes. A male employee who works at sales department of a medium-sized private company in Guangzhou told a story about an unhappy experience with a female cashier from the accounting department. One of his clients made a sales payment to his company. The client company was in great need of the goods so that they hoped his company could deliver the goods immediately after his company received the payment. So he asked the cashier to check if they received the payment at the very first day. She checked and said no. The next day they did the same thing. Then the day after that, he called the cashier again. She was unpleasant about his call and said no again. So he told her to check the payment every day and call him back when the payment arrived. However, after a week, the client called him and complained about the

company's efficiency and confirmed that they did make the payment a week ago. But the cashier did not call him back about the payment during week. Then he went to the cashier again, and asked her to check the payment immediately and show him the evidence, or else he would not leave. The supervisor of the cashier helped him to do that, and found out that the payment arrived four days ago. The cashier explained that she checked every day at the first few days and did not get the payment. She argued that he should confirm the payment date and the bank information with the client first before he went to her. But her supervisor blamed her for not being responsible for this task. Even though, the salesmen still felt very angry because his department delayed the delivering for four days all because of the cashier's fault. It influenced the collaboration with the client next time. Both the cashier and the salesmen worked for their independent department goal in this incident. Through this incident, they had a low quality of relationship and were unwilling to work with each other in the future.

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 constructive controversy and conflict outcomes (i.e. task accomplishment, quit intentions, and future cooperation), supporting Hypothesis 1a, 1b, and 1c. Both correlational and path estimates results also supported Hypotheses 2a and 2c, supporting the hypothesized relationships between interdepartmental goal interdependence (i.e. cooperative and independent) and constructive controversy. As for Hypothesis 2b, correlational results provided support but path estimates results did not. The SEM analysis supported Hypothesis 3, suggesting that constructive controversy has important mediating effect on the relationship between interdepartmental goal interdependence and conflict outcomes. Although the structural equation modeling analysis did not support Hypotheses 4a nor 4c, the results supported Hypothesis 4b, indicating that an employee's identification with the organization will moderate the relationship between competitive interdepartmental goal interdependence and open-minded discussion of controversy dynamics.

Qualitative analyses including case illustration provided understanding to illustrate how employees' perception of interdepartmental goal interdependence affects employees between different departments engaging in constructive controversy and that constructive controversy in turn influences conflict outcomes, specifically, task accomplishment, employees' intention to quit, and their intentions for future cooperation.

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, constructive controversy, conflict outcomes, and the effect of organizational identification on the relationship between interdepartmental goal interdependence and constructive controversy. 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 identity, 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 constructive controversy (i.e. the open-minded discussion for mutual benefit) 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 constructive controversy and that constructive controversy in turn influences conflict outcomes. Results further support the theorizing that an employee's identification with the organization moderates the association of competitive interdepartmental goal interdependence with constructive controversy.

Specifically, the results of bivariate correlation analyses support the hypothesized relationship between interdepartmental goal interdependence and constructive controversy, suggesting a significant and positive correlation between cooperative interdepartmental goal and constructive controversy, a significant and negative correlation between competitive interdepartmental goal and constructive controversy, and a significant and negative correlation between independent interdepartmental goal and constructive controversy. The correlational results also support the proposed relationships between constructive controversy and conflict outcome variables, suggesting a significant and positive association between constructive controversy and task accomplishment, a significant and negative association between constructive controversy and quit intention, and a significant and positive association between constructive controversy and future cooperation.

The results of the structural equation modeling (SEM) further test the hypotheses and the proposed model. It shows that although the relationship between competitive interdepartmental goal and constructive controversy is not statistically

significant, all other hypothesized relationships between interdepartmental goal interdependence (i.e. cooperative and independent) and constructive controversy, and the relationships between constructive controversy and conflict outcomes (i.e. task accomplishment, quit intentions, and future cooperation) are significant. The SEM results also support the hypothesis that constructive controversy mediates the relationship between interdepartmental goal interdependence and conflict outcomes.

As to the proposed moderating effect of organizational identification, SEM results support the moderating effect of organizational identification on the relationship between competitive interdepartmental goal and constructive controversy, not supporting the moderating effect of organizational identification on associations between cooperative interdepartmental goal or independent interdepartmental goal with constructive controversy. Results further indicate that an employee's identification with the organization moderates the association of competitive interdepartmental goal interdependence with constructive controversy such that employees who identify strongly with the organization will be more likely to engage in open-minded discussion of controversy dynamics than employees who identify weakly with the organization. These results underline the positive role of employee organizational identification in conflict management, especially under competitive interdepartmental goals.

Discussion of the Results

Interdepartmental goal interdependence and constructive controversy

When perceive cooperative goals between departments, employees from different departments expect their interdepartmental goal achievements are 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 that proposes 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 they perceive 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. Previous studies suggested that with competitive goals, people are suspicious that if they identify issues and mistakes that others 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). Correlational 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.

However, path estimates results do not provide support for Hypothesis 2b. The path estimates results show that competitive interdepartmental goal relationship had an insignificantly positive effect on constructive controversy.

One theoretical reason for this unexpected result may lie in the difference between interdepartmental goal interdependence and interpersonal goal interdependence. The results in this study are not as strong and consistent as with those on interpersonal goal interdependence. In 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 et al., 1999). While in this study, 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 due to the influence of personal attributes

and other factors.

Results suggest that goals between departments may not have as strong practical implications as interpersonal goal interdependence. Interdepartmental goal interdependence can still suggest important practical implications. The goal interdependence in this study refers to the nature of goal relationships among departments. Specifically, when departments develop cooperative, rather than competitive or independent goals with each other, employees from different departments are expected to contribute to the productive conflict outcomes through constructive controversy dynamics.

A possible analytical explanation for the inconsistent results on competitive goals and constructive controversy is that the sample size may be sufficient for correlational analysis, but may be relatively small for structural equation modeling. Under this relatively small sample size, the total effect (i.e. the amount of variance explained by the goal interdependence, organizational identification, constructive controversy, and conflict outcomes) is fixed. And the significant interaction effect of organizational identification and interdepartmental competitive goal interdependence may take some effect power from the effect of competitive interdepartmental goal on constructive controversy, making the path estimates result inconsistent with the correlational result.

Consistent with our expectations, correlational and path estimation results both provide support for Hypothesis 2c that employees from different departments are less

likely to engage in open-minded discussion of controversy to the extent that they perceive independent goal relationship between departments. With perceived independent goals between departments, employees from different departments expect each other to work for their own department's goals independently, not caring about other departments' goals.

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 suggest 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 constructive controversy. This study adds to our understanding of conflict management between departments.

Constructive controversy and conflict outcomes

Both correlational and path estimates results find expected significant relationship between constructive controversy and conflict outcomes (i.e. task accomplishment, quit intentions, and future cooperation), supporting Hypothesis 1a, 1b, and 1c. These results are consistent with previous research that protagonists engaging in discussing conflicts openly and constructively results in quality solutions that both sides accept (Jehn, 1997; Jehn & Chatmas, 2000; Somech, Desivilva, & Lidogoster, 2009). Constructive controversy, the open-minded discussion for mutual

benefit, leads to desirable conflict outcomes for employees from different departments. Specifically, employees from different departments complete tasks, reduce their intentions to quit, 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 constructive controversy

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 constructive controversy 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 constructive controversy 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 constructive controversy or theorizing that constructive controversy 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 usefulness of constructive controversy dynamics to manage conflict effectively between employees from different departments and the importance of constructive controversy dynamics to understand

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 organizational identification

Organizational identification appears 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 constructive controversy, I hypothesized that the strength of an individual's identification with the organization would moderate the relationship between interdepartmental goal interdependence and constructive controversy. The rationale for the moderating relationship was based on the idea that individuals who identify strongly with the organization would be primed to think and act in ways that are supportive of organizational goals and interests (Pratt, 2000), as well as their own department's goals and interests when assessing how to deal with the conflict; while individuals who identify weakly with the organization would focus mostly on their own department's goals and interests, and how they act would depends on the goal relationship between departments.

The results of this study indicate that employees who identify strongly with the organization 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 identify weakly with the organization appear to focus more on their

own departmental environment view. The direct relationship between organizational identification and constructive controversy is not significant, suggesting that organizational identification does not play a direct or main effect for employees from different department engaging in constructive controversy.

Although examination of the coefficient estimates does not support that organizational identification has a moderating effect on the relationship between cooperative goal and constructive controversy nor between independent goal and constructive controversy, the results support that an employee's identification with the organization will moderate the relationship between competitive interdepartmental goal interdependence and open-minded discussion of controversy dynamics, such that employees who identify strongly with the organization will be more likely to engage in open-minded discussion than employees who identify weakly with the organization. The result enriches studies on organizational identification. Organizational identification has been investigated as the main factor that influences employees' behavior in organizations. But in the present study, organizational identification worked as a specific organizationally focused individual characteristic hypothesized and tested as a moderator of cognitive process of goal interdependence.

As for the unsupported results, one possible explanation is that organizational identification may have moderating effects on the relationship between cooperative interdepartmental goal and constructive controversy and on the relationship between

independent interdepartmental goal and constructive controversy, but may not have the moderating effect on the relationship between cooperative interdepartmental goal and constructive controversy. With competitive or independent interdepartmental goal relationship, employees from different departments perceive their interdepartmental goal achievements are negatively correlated or not correlated. Employees from different departments face the dilemma between serving their own department's goals and the overall goal of organizational effectiveness. Organizational identification reflects the cognitive connection one has with their work organization and helps to prime employees to think and act in ways that are supportive of organizational goals and interests (Pratt, 2000). For employees strongly identified with the organization, they are more likely to engage in constructive controversy for the organization's goals and interest. Because constructive controversy dynamics can help parties to develop win-win solutions that meet the needs and desires of all parties involved (Alper, Tjosvold & Law, 1998; Blake & Mouton, 1970; Lax & Sebenius, 1986). For employees weakly identified with the organization, they are less likely to engage in constructive controversy for their own department's goals and interest.

With cooperative interdepartmental goal relationship, employees from different departments perceive their interdepartmental goal achievements are positively correlated. The goal of serving own department is consistent with serving the overall goal of organizational effectiveness for employees from different departments. Thus employees from different departments would tend to engage in constructive

controversy dynamic, no matter they are strongly or weakly identified with the organization.

Limitations

Several limitations should be acknowledged for interpreting the results of this study. First, I used a cross-sectional design and a single method of data collection, which might inflate the relationships between goal interdependence, constructive controversy, 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 peers and supervisors.

Furthermore, the specific single region (i.e. Guangzhou, Zhuhai, and Shenzhen in Guangdong Province) in which the research took place could limit the generalization of the research conclusions. Although the participants in this study

working in different Chinese organizations, due to different regional culture characteristics, our findings may not be applicable in other Chinese regions or other countries, such as Huibei Province in China or America. Future research should examine the contextuality and potential cross-cultural differences to enhance external validity of the study.

The sample size in this study is relatively small. To maximize the chances of detecting significant interaction effect of organizational identification and competitive goal interdependence and the total effect (i.e. the amount of variance explained by the goal interdependence, organizational identification, constructive controversy, and conflict outcomes), a larger sample size would be useful. Thus, the future research needs a relatively large sample to enhance the validation and generalization of the findings.

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 many employees rated interdepartmental goal interdependence and whether they agree in terms of their ratings in order to further ensure goal interdependence is 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 ratings of interdepartmental goal interdependence in the specific conflict incident.

This study considers organizational identification as a moderator. A potential limitation is that organizational identification might be an endogenous variable in the study and caused by interdepartmental goal interdependence. Collective identification develops from the extent to which these common concerns of organization goals and norms are acknowledged and enacted. When individuals identify with an organization, they base their self-esteem partly on their organization membership and partly on the organization's successes or failures (Mael & Ashforth, 1992). Thus cooperative interdepartmental goals may tend to create greater identification with organizations. Future research is needed to explore that organizational identification mediates the relationship between interdepartmental goal interdependence on constructive controversy and conflict outcomes.

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. 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 interdependence 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.

The current study was limited to organizational identification as a moderator. Using similar methods, further studies could investigate other possible 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 social value orientation. People with high social value orientation have a high concern for their own outcomes but also for the outcomes of interdependent others (Messick & McClintock, 1968). It is likely that for employees with high social value orientation, cooperative interdepartmental goals will be more likely to develop constructive controversy, and competitive or independent interdepartmental goals will be less likely to develop constructive controversy.

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 constructive controversy. 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 constructive controversy, and competitive or independent interdepartmental goals will be less likely to develop constructive controversy.

In previous studies, organizational identification usually works as the process mechanism or the antecedent to organizational outcomes. Research has shown that organizational identification can help organization benefit from increasing employees' organization loyalty, job performance, organizational commitment, and intention to remain within the organization (Adler & Adler, 1988; Edwards & Peccei, 2010; Jiang & Law, 2012; Knippenberg & Schie, 2000; Mael & Ashforth, 1995; Riketta, 2005; Rousseau, 1998; Smith et al., 2012; Wan-Huggins et al., 1998). However, in this study, organizational identification was found to work as a specific organizationally focused individual characteristic hypothesized and was tested as a moderator of cognitive process of goal interdependence. In order to enrich the study of organizational identification, future research can examine the moderating effects of organizational identification in different theoretical models.

In order to control the effect of departmental identification, I choose the grass-roots staff or low-level manager as the participants in my study, excluding the

departmental managers. For departmental managers, their identifications to their own departments are usually very strong as they represent and are responsible for the department. The strong departmental identification may have a negative effect on constructive controversy, opposite from the effect of organizational identification. Future research can investigate the effects of both departmental identification and organizational identification in the study's context. Future research can also investigate the boundary spanners (i.e., managers) in the same study context.

Mainland Chinese participants suggested that private discussion would be more effective than open discussion. Future research may distinguish between constructive controversy in public or private and investigate which one is more effective. This would help advance theory and research on constructive controversy.

Practical Implications

The findings, if they can be replicated, have important practical implications for effective collaboration among employees from different departments in organizations. The results imply that cooperative goal interdependence between departments plays a prominent role in leading to effective collaboration among employees from different departments through constructive controversy. Previous research suggests that transformational leadership, relationship, openness, collectivist values, and guanxi can reinforce cooperative goal (Chen, Tjosvold, Huang, & Xu, 2011; Tjosvold, Wu, & Chen, 2010; Wong & Tjosvold, 2010; Zhang et al., 2011).

Feeling 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 effective collaboration through constructive controversy is conditional on strong employee organizational identification. Results were interpreted as suggesting that organizational identification is an important foundation for effective collaboration between departments in organizations. Even if employees from different departments perceive interdepartmental competitive or independent goals, they may still tend to engage in open-minded discussion for mutual benefit that leads to effective collaboration by the influence of strong organizational identification. Managers may try to identify different ways to strengthen employee organizational identification. For example, they can emphasize that the organization promotes employee values and that employees are part of a cohesive community (Hunt, & Morgan, 1994).

This study demonstrates that realizing the value of conflict between departments and getting to know how to manage interdepartmental conflict effectively in order to capitalize on the potential positive outcomes of conflict are important to organizations. Managers can encourage employees to engage more in constructive controversy dynamics when they have a conflict in order to manage conflicts productively so that they can collaborate effectively.

Conclusion

Synthesizing theories of social identity, 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 constructive controversy (i.e. the open-minded discussion for mutual benefit) dynamics adopted by employees from different departments in the organization. This study also proposes that organization identification moderates the link between interdepartmental goal interdependence and constructive controversy. The study contributes to the conflict management literature as well as the social identity theory in the organizational behavior literatures.

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 with coworkers from other departments in organizations. Findings suggest that employees from different departments can improve their collaboration by strengthening their common organizational identification, setting cooperative interdepartmental goal interdependence, and handling conflict through the open-minded discussion for mutual benefit.

APPENDIX I

Conflict Management between Employees from Different Departments

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 Zhu Taohong, Department of Management, Lingnan University, Hong Kong (E-mail: Taohongzhu@ln.edu.hk, Tel: (00852) 54259226).

Interviewee: _____ Gender: _____ Age: _____
Email: _____ Contact No.: _____
Education level: ☐ High School ☐ College Degree ☐ University Degree
☐ Graduate Degree ☐ Others: _____
Company: _____ Years worked in this Company: _____
Position: _____ Department: _____
Company type: ☐ State-owned ☐ Private company ☐ Joint Venture ☐ Other: _____

Section 1

We are studying people's experiences working with coworkers from a different department in your organization. We want you to recall and describe a concrete situation when you had disagreement or another conflict with a coworker from another department. We define conflict as incompatible activities, so it does not have to be a war against each other. Please select a situation when you and a coworker from other department interacted and it affected your performance or your well-being or both. The situation could either be successful or unsuccessful.

1.1 Please describe what happened, how you and your coworker reacted, and the outcomes of this interaction. (Record Verbatim)

Section 2

2.1 When you perceived the conflict between you and your coworker, how much did you feel a sense of belonging to the organization? (Record Verbatim)

Regarding your feelings toward your organization at the beginning of the incident, please indicate the extent to which you disagree or agree with each of the following statements by CIRCLING the appropriate number from 1-5.

	Strongly Disagree		Neutral	Strongly Agree	
(1) When someone criticizes this organization, it feels like a personal insult.	1	2	3	4	5
(2) I am very interested in what others think about this organization.	1	2	3	4	5
(3) When I talk about this organization, I usually say 'we' rather than 'they'.	1	2	3	4	5
(4) This organization's successes are my successes.	1	2	3	4	5
(5) When someone praises this organization, it feels like a personal compliment.	1	2	3	4	5
(6) If a story in the media criticized the organization, I would feel embarrassed.	1	2	3	4	5

2.2.1 What were your department objectives in this incident? What were your coworker's department objectives in this incident? (Record Verbatim)

2.2.2 Were they related so that both of your departments could achieve your department objectives or only one department could achieve the objectives? What led you to conclude that two departments' objectives were related in this way? (Record Verbatim)

Regarding your feelings toward your department's objectives and your coworker's department objectives at the beginning of the incident, please indicate the extent to which you disagree or agree with each of the following statements by CIRCLING the appropriate number from 1-5.

	Strongly Disagree		Neutral	Strongly Agree	
(1) In this incident, the goals of two departments went together.	1	2	3	4	5
(2) In this incident, two departments 'swam or sunk' together.	1	2	3	4	5
(3) In this incident, two departments had common goals.	1	2	3	4	5
(4) In this incident, two departments sought compatible goals.	1	2	3	4	5
(5) In this incident, two departments wanted each other to succeed.	1	2	3	4	5
(6) In this incident, two departments structured things in ways that favored their own department goals rather than the goals of another department.	1	2	3	4	5
(7) In this incident, two departments had a 'win-lose' relationship.	1	2	3	4	5
(8) In this incident, two departments liked to show that they were superior to each other.	1	2	3	4	5
(9) In this incident, the goals of two departments were incompatible with each other.	1	2	3	4	5
(10) In this incident, two departments gave high priority to the things their own department wanted to accomplish and low priority to the things another department wanted to accomplish.	1	2	3	4	5
(11) In this incident, each department 'did its own thing'.	1	2	3	4	5
(12) In this incident, one department's success was unrelated to the success of another department.	1	2	3	4	5
(13) In this incident, two departments were most concerned about what they accomplished when working by themselves.	1	2	3	4	5
(14) In this incident, each department liked to be successful through its own department's work.	1	2	3	4	5
(15) In this incident, two departments worked for their independent department goal.	1	2	3	4	5

Section 3

Regarding how you and your coworker actually approached and discussed issues in this case, please indicate the extent to which you disagree or agree with each of the following statements by CIRCLING the appropriate number from 1-5.

	Strongly Disagree		Neutral	Strongly Agree	
(1) In this incident, my coworker and I expressed our views directly to each other.	1	2	3	4	5
(2) In this incident, my coworker and I listened carefully to each other's opinions.	1	2	3	4	5
(3) In this incident, my coworker and I tried to understand each	1	2	3	4	5

other's concerns.

(4) In this incident, my coworker and I worked for decisions we all accept.	1	2	3	4	5
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(5) In this incident, my coworker and I used the opposing views to understand the problem better.	1	2	3	4	5
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Section 4

Regarding the effects after the incident was completed, please indicate the extent to which you disagree or agree with each of the following statements by *CIRCLING* the appropriate number from 1-5.

	Strongly Disagree			Neutral			Strongly Agree
(1) My coworker and I made progress on the task because of this interaction.	1	2	3	4	5		
(2) My coworker and I accomplished the task efficiently.	1	2	3	4	5		
(3) My coworker and I accomplished the task effectively.	1	2	3	4	5		
(4) Because of this incident, if I have my own way, I will be working for this organization on year from now.	1	2	3	4	5		
(5) Because of this incident, I frequently think of quitting my job.	1	2	3	4	5		
(6) Because of this incident, I am planning to search for a new job during the next 12 months.	1	2	3	4	5		
(7) This interaction helped my coworker and I feel confident that we can use our abilities effectively in the future.	1	2	3	4	5		
(8) This interaction helped my coworker and I feel motivated to work with each other in the future.	1	2	3	4	5		
(9) This interaction helped my coworker and I feel more motivated to take on projects with each other.	1	2	3	4	5		

-----The End-----

Thanks again for your participation and support.

APPENDIX II

关于不同部门员工冲突管理状况的调查

感谢您的参与合作。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。如果您对问卷中有不清楚或想要探讨的问题，欢迎您随时与我们联系（请联系香港岭南大学管理系朱桃红，电话：(00852) 54259226，电邮：taohongzhu@ln.edu.hk）。

整个测试时间约持续 30 分钟，请您尽可能一次性完成，从而保证数据的真实有效性。并且，您的回答没有正确和错误之分——我们希望得到的是您个人真实的看法和评价。

姓名: _____ 性别: _____ 年龄: _____
电邮地址: _____ 联系电话: _____
学历: ☐高中 ☐大专 ☐本科 ☐硕士及以上 ☐其它: _____
公司名称: _____ 在现公司工作年限: _____
职位: _____ 部门: _____
公司类型: ☐国有 ☐私营 ☐合资 ☐外资 ☐其它: _____

第一部分 事例回顾

我们目前在研究中国企业员工是如何处理**与其它部门同事之间的工作冲突**的。我们希望您能回忆并讲述一件您亲身经历的具体事例，在该事件中**您与其它部门的一位同事意见不同，或者有其他方面的冲突**。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。这个事例可以是影响到您的工作表现也可以是影响到您的个人福利。该事件可以是成功的也可以是失败的。

1.1 请描述当时发生了什么、您和那位同事分别是如何反应的以及最终结果。

第二部分 事前

2.1 冲突发生时，您对**您所在公司**的认同感有多强烈？

请根据事件开始时**您对您所在公司**的真实感受，对 1-5 中合适的数字画圈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）

	非常 不同意	不同 意	中 立	同 意	非常 同意
(1) 当有人批评我们公司时，我觉得好像自己被侮辱了一样。	1	2	3	4	5
(2) 我非常在意公司外成员对我们公司的看法。	1	2	3	4	5
(3) 每当我提及公司时，我通常会称呼“我们”并非“他们”。	1	2	3	4	5
(4) 公司的成功就是我的成功。	1	2	3	4	5
(5) 当有人称赞我们公司时，我会觉得自己好像被赞美了一样。	1	2	3	4	5
(6) 如果在媒体报道批评了公司，我会觉得很尴尬。	1	2	3	4	5

2.2.1 在这件事中，**您所在的部门**所期望达成的目标是什么？**您同事所在的部门**所期望达成的目标又是什么？

2.2.2 **您所在的部门**和**您同事所在的部门**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？

请根据该冲突发生时**您对您所在部门目标**和**您同事所在部门目标**的真实感受，对 1-5 中合适的数字画圈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）

	非常 不同意	不同 意	中 立	同 意	非常 同意
(1) 在这件事中，两部门的目标能达成一致。	1	2	3	4	5
(2) 在这件事中，两部门同舟共济。	1	2	3	4	5
(3) 在这件事中，两部门有共同的工作目标。	1	2	3	4	5

(4)在这件事中，两部门追求的目标是可以相容的。	1	2	3	4	5
(5)在这件事中，两部门希望大家都能取得成功。	1	2	3	4	5
(6)在这件事中，两部门以各自部门目标为重，而相对忽视另外一方的部门目标。	1	2	3	4	5
(7)在这件事中，两部门之间有一种你胜我败或我胜你败的对立关系。	1	2	3	4	5
(8)在这件事中，两部门之间喜欢互相显示自身的优越。	1	2	3	4	5
(9)在这件事中，两部门的目标互相冲突、不相容。	1	2	3	4	5
(10)在这件事中，两部门优先考虑各自想完成的事情，而把另外一方部门的事放在次要位置。	1	2	3	4	5
(11)在这件事中，两个部门都只做自己部门份内的事情。	1	2	3	4	5
(12)在这件事中，其中一个部门的成功与另外一个部门的成功无关。	1	2	3	4	5
(13)在这件事中，两部门只关注各自部门要独立完成的事情。	1	2	3	4	5
(14)在这件事中，每个部门喜欢只凭自身部门的独立工作获得成功。	1	2	3	4	5
(15)在这件事中，两个部门只为各自部门的目标努力工作。	1	2	3	4	5

第三部分 事中

请根据您和您同事**在该冲突发生后实际采取的行动**，对 1-5 中合适的数字画圈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）

	非常 不同意	不同 意	中 立	同 意	非常 同意
(1)在这件事中，我和同事直接表达彼此的观点。	1	2	3	4	5
(2)在这件事中，我和同事仔细聆听彼此的观点。	1	2	3	4	5
(3)在这件事中，我和同事努力理解彼此的顾虑。	1	2	3	4	5
(4)在这件事中，我和同事努力做出大家都接受的决定。	1	2	3	4	5
(5)在这件事中，我和同事使用提出不同看法的方法来更好的理解问题。	1	2	3	4	5

第四部分 事后

请您根据对**该冲突事件结束后的感觉**，通过对 1-5 中合适的数字画圈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）

	非常 不同意	不同 意	中 立	同 意	非常 同意
(1)通过这件互动，我和同事在该任务上取得了进展。	1	2	3	4	5
(2)通过这次互动，我和同事有效率地完成了任务。	1	2	3	4	5
(3)我和同事进行该项任务时的合作是有效的。	1	2	3	4	5
(4)由于这件事，如果我有后路，我打算在这家公司只待一年。	1	2	3	4	5
(5)由于这件事，我经常想到辞职。	1	2	3	4	5
(6)由于这件事，我计划在下一年里换工作。	1	2	3	4	5
(7)这件事使我和同事相信以后的工作中可以有效地发挥自己的能力。	1	2	3	4	5
(8)这件事使我和同事相信日后可以再次与对方进行有效的合作。	1	2	3	4	5

(9)这件事使我和同事更加愿意日后同对方一起承担项目或任务。

1 2 3 4 5

—————结束—————

再次衷心感谢您的参与合作！

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