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**MIDDLE MANAGEMENT STRATEGIC ROLES: STRATEGIC ROLE  
CONFLICT AND ITS ANTECEDENTS**

A Dissertation Presented

by

**HECTOR R. FLORES**

Submitted to the Graduate School of the  
University of Massachusetts Amherst in partial fulfillment  
of the requirements for the degree of

**DOCTOR OF PHILOSOPHY**

February 2016

Isenberg School of Management  
Strategic Management



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Approved as to style and content by:

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George R. Milne, Ph.D. Program Director  
Isenberg School of Management

## **DEDICATION**

To my children Blake, Natalie, and Matthew

Remember: you can always choose a different path!

## ACKNOWLEDGEMENTS

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**ABSTRACT**

**MIDDLE MANAGEMENT STRATEGIC ROLES: STRATEGIC ROLE  
CONFLICT AND ITS ANTECEDENTS**

**FEBRUARY 2016**

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The middle-management perspective has produced a great understanding of the connection of middle managers involvement in strategy and organizational outcomes (Floyd & Wooldridge, 1992, 1996; Floyd & Wooldridge, 2000; Wooldridge & Floyd, 1990). Strategic role conflict has been identified in the literature as a hindrance, even an impediment, to effective middle-management involvement in strategy (Floyd & Lane, 2000). Despite a growing body of theoretical work by scholars on the strategy process, there has been limited empirical research of the antecedents of strategic role conflict.

Drawing from the literatures of role conflict, middle management perspective, and social exchange theory, this dissertation hypothesized that demographic characteristics of middle managers, the nature of their position within the organization, the quality of their relationships with top management, and the degree of dissimilarity of their environmental perceptions vis-à-vis top management are associated with middle managers' strategic role conflict.

A large, global manufacturing company based in the United States participated in the study. Survey data was collected from 249 middle managers at four organizational levels within two divisions. Two structural models were tested. Data showed that the more parsimonious model was not supported while the less parsimonious model was supported. Results indicated that key predictors of middle managers' strategic role conflict were the amount of boundary spanning that middle managers engage in as part of their jobs, the degree of disparity in their perception of the products and factors markets vis-à-vis top management, the frequency of their direct communication with their top manager, the amount of mutual trust between the top manager and the middle manager, and the amount of disparity in the feelings of mutual affect between the top manager and the middle manager.

This study contributes to the strategy literature by demonstrating the applicability of role conflict theory to the strategy process in explicating links between strategic role conflict and its antecedents. A better understanding of strategic role conflict is important to the strategy process literature because of its theorized interference with middle manager's effective strategic performance and its possible negative consequences for the organization. An alternative model of strategic role conflict is presented.



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# CHAPTER 1 INTRODUCTION

## 1.1 The Research Question

It has been established that middle managers' involvement in strategy has an effect on important organizational outcomes (Wooldridge & Floyd, 1990). The middle management perspective (Floyd & Wooldridge, 1992, 1996; Floyd & Wooldridge, 2000) identifies four strategic roles of middle managers: championing alternatives, facilitating adaptability, synthesizing information, and implementing deliberate strategy. In the current business environment, characterized by intensified competition, rapid change, continuous innovation, shorter product life cycles, and blurring industry boundaries, middle managers face increasingly conflicting behavioral expectations between the need to exploit existing competencies (through implementing deliberate strategy and synthesizing information) and the need to develop new competencies (through facilitating adaptability and championing alternatives) resulting in what has been described as strategic role conflict (Floyd & Lane, 2000). The phenomenon of strategic role conflict has been identified as important because of its harmful effects on important organizational outcomes (Floyd & Lane, 2000). Consequently, the antecedents of strategic role conflict, i.e., the factors that make its occurrence more or less likely and its intensity more or less severe are also important to understand. Therefore, this dissertation addresses the following research question:

- What are the antecedents of strategic role conflict?

This research question is important because middle managers' involvement in strategy has been shown to have an effect on important organizational outcomes (Wooldridge & Floyd, 1990).

## **1.2 The Middle Management Perspective**

Two opposing views of strategic organizational change exist in the literature. The “top-down” or decision-making view of strategy (e.g., Chandler, 1962), argues that competitive advantage is achieved as the firm identifies an attractive industry, acquires and deploys the necessary resources, and carves out a defensible position called its product-market strategy (Porter, 1980, 1985). Key to this paradigm is that the organization is a reflection of its top managers (Hambrick & Mason, 1984) who are able to recognize and rationally evaluate all possible alternatives, choose the best course of action, acquire the necessary resources, and deploy them for a competitive advantage. In this view, middle managers’ and lower organizational members’ only role in strategy is its implementation.

An alternative view argues that competitive advantage derives from “bottom-up” social learning (Quinn 1980; Burgelman, 1983a,b,c; Burgelman, 1984; Floyd & Wooldridge, 2000). Strategy development is an evolutionary process that cycles through a belief that change is necessary, actions to create change, understanding what works, and learning how to do what works (Doz, 1996). Its focus is on developing new competencies. The purpose of these actions is to re-align the organization’s strategy with changes in the external environment (Floyd & Lane, 2000; Huff, Huff, & Thomas, 1992). In this view, middle managers’ actions that shield autonomous behaviors of operating managers from the selective forces of the existing structural context are important to organizational outcomes (Burgelman, 1991, 1994).



### **1.3 Strategic Role Conflict**

Role conflict is the simultaneous occurrence of two or more role expectations for the behavior of a person such that compliance with one would make compliance with the other(s) more difficult or even impossible causing problems for the person (Biddle, 1979, 1986; Pandey & Kumar, 1997). Dissensus occurs when two or more role expectations for the behavior of a person are in conflict. Polarized dissensus occurs when there exist two clear sets of opposing expectations (Biddle, 1979). Dissensus is likely to result in role conflict.

The type of conflict that concerns this dissertation is inter-sender role conflict. Inter-sender role conflict emerges when the expectations of two different role senders for the behaviors associated with the same position incumbent are incompatible (Rizzo, House, & Lirtzman, 1970). Inter-sender role conflict is likely to occur if managers are expected to follow instructions from two or more superiors who have differing agendas. A special type of inter-sender role conflict involves a manager and his or her supervisor. Specifically, if the expectations of a superior for a manager's behavior are in conflict with the expectations that the manager has for his or her own behavior, inter-sender role conflict is likely to occur. For instance, if a middle manager's supervisor believes that the middle manager should spend most of her time implementing given strategy whereas the middle manager believes that she should spend most of her time championing novel strategic initiatives, inter-sender (strategic) role dissensus occurs and can give rise to (strategic) role conflict. Strategic role conflict is a special type of role conflict that arises when the conflicting roles are strategic in nature (Floyd & Lane, 2000). Since the roles in the preceding example have been identified as strategic middle managers' roles (Floyd &

Wooldridge, 1992), the type of role conflict that arises in this situation is called strategic role conflict.

It is important to study role conflict because it has particularly negative effects on a manager's role performance (Friedman & Podolny, 1992). The dysfunctional effect of role conflict on the individual manager stems from the stress generated by the difficulty of satisfying different parties, the lack of full trust that it fosters, and the lack of clarity of which role is appropriate to enact (Van Sell, Brief, and Schuler, 1981). Role conflict has been linked to role stress in the workplace (Rizzo, House, & Lirtzman, 1970) and to withdrawal or avoidance of those who are perceived as creating the conflict (Kahn, Wolfe, Quinn, & Snoek, 1964). In addition, the effectiveness of the manager's role performance suffers because of strained relations that it creates (Adams, 1976). As a special kind of role conflict, strategic role conflict also has negative consequences, but because of its strategic nature, it ultimately can impact important organizational outcomes (Floyd & Lane, 2000).

Based on the middle management perspective (Floyd and Wooldridge, 2000) and combining insights from role theory (Biddle 1979, 1986), this dissertation explores the antecedents of strategic role conflict in a large, complex organization. The present study has significant implications for the strategic management literature. This study tests the assumptions that certain demographic characteristics of middle managers, the nature of their position within the organization, the quality of their relationships with top management, and the degree of dissimilarity of their environmental perceptions vis-à-vis top management's affect middle managers strategic role conflict. Understanding the reasons behind middle managers' strategic role conflict is an important research interest

in the field of strategy because it has been theorized that strategic role conflict undermines middle managers' strategic effectiveness and because it has been shown that middle managers involvement in strategy has an impact on important organizational outcomes (Floyd & Wooldridge, 1992). This study has an important implication for theory because it extends role theory into the middle management literature by testing empirically the relationship between strategic role conflict and its antecedents.

## **CHAPTER 2**

### **THEORETICAL FOUNDATIONS**

In this chapter, I lay the conceptual foundations that support the proposed relationships between strategic role conflict and its antecedents. I do this in several related sections. First, there is a summary of role theory since it is the underlying theory for the research being proposed. In this section, I discuss strategic role conflict. One topic discussed, among others, is how the degree of dissimilarity of a middle manager's environmental perceptions vis-à-vis his or her top manager's affects the middle manager's experience of strategic role conflict. Next, a discussion of the Middle Management Perspective follows. Within this section, I discuss the importance of middle managers' involvement in strategy, the strategic roles that middle managers play, the importance of the nature of their position within the organization, and the relevance of some demographic characteristics of middle managers. Finally, I close the chapter with a discussion of relational exchanges. Within this section, I discuss the importance of the quality of a middle manager's relationship with his or her top manager.

#### **2.1 Role Conflict**

To understand strategic role conflict, one must begin with an understanding of role theory and role concepts. The origins of role theory can be traced back to Weber's writings on bureaucracy and even before that (e.g., Durkheim, 1893; James, 1890; Sumner, 1906), but the use of the word "role" came later. Mead (1934) was the first to use the concept of "role taking" along with other terminology to describe the process of socialization. Role taking refers to an actor holding veridical expectations that correctly

map those of the individual holding expectations for the behavior of the actor (Biddle, 1979). Moreno (1934) used the terms “role” and “role playing” to study strategies for learning. Role-playing differs from role taking because role-playing involves behavior whereas role taking involves the accuracy of cognition. According to Moreno, role-playing occurs when a person tries to imitate the roles of others (Biddle, 1986) while role taking is “an attitude already frozen in the behavior of the person” (Biddle & Thomas, 1966, p. 7). Linton (1936) recognized the concepts of status (i.e., “a position”) and role (i.e., “a set of behaviors”) as separate and distinct. A position is a collection of rights and duties whereas a role is the dynamic enactment of said rights and duties, and as such, is characterized by behavior (Linton, 1936). Functional role theory studied the characteristic behaviors of actors in social positions within a stable social system and attempted to explain why a system is stable and how it induces conformity in its participants (Parsons, 1951; Parsons & Shils, 1951). Roles are conceived as shared, normative expectations that on the one hand prescribe behavior and on the other explain it. It is assumed that norms have been learned and that actors in the social system conform to them when they behave. It is further assumed that actors sanction other actors for conformity to “shared” norms (Bates & Harvey, 1975). Merton (1957) introduced the concepts of role-set (i.e., different sets of behaviors available to an actor), role relationships, and role-expectations. These important concepts led to the development of the concept of competing expectations between role-sets and the concept of role conflict. Katz and Kahn (1966, 1978) saw role behavior as a combination of the actor’s own perception of the role and his or her actions in response to the messages received from role senders. The literature defines three different modes of role expectations:

conceptions (i.e., covert expectations), enunciations (i.e., expressed expectations) and inscriptions (i.e., written expectations) and posits that conceptions can appear as norms, preferences, and beliefs (Biddle, 1979, 1986).

According to role theory, a role is a set of behaviors characteristic of individuals in a particular context that can be expected by others, by the individual, or both (Biddle, 1979; Friedman & Podolny, 1992; Katz & Kahn, 1978; Nandram & Klandermans, 1993). When actors in a social system know and share the same or similar expectations for the behaviors associated with a social position, it is said that they are in consensus. Contrary to consensus is dissensus. Dissensus occurs when expectations are dissimilar (Biddle, 1979, 1986). Conflicting expectations (i.e., dissensus) can lead to role conflict. Role conflict has been defined in different ways, two of which are adopted in this dissertation. (1) Role conflict is the concurrent appearance of two or more incompatible expectations for the behavior of a person that cause problems for the person (Biddle, 1979, 1986). And (2) role conflict is “a state of mind or experience or perception of the role incumbent arising out of the simultaneous occurrence of two or more role expectations such that compliance with one would make compliance with the other(s) more difficult or even impossible” (Pandey & Kumar, 1997, p. 191).

Intra-role conflict is experienced if the different expectations associated with a single role conflict with one another. There are two different types of intra-role conflict: (a) intra-sender conflict and (b) inter-sender conflict. Intra-sender conflict occurs when a single role sender has incompatible expectations towards the role incumbent. In other words, when a single individual makes contradictory demands for the behavior of himself or herself or of another person, intra-sender conflict is said to occur (Biddle, 1979; Katz

& Kahn, 1978). For example, if a supervisor expects a subordinate to carry out a specific task but at the same time forbids the use of the only tools that allow the subordinate to accomplish the task, intra-sender conflict ensues. Inter-sender conflict emerges when the expectations of two different role senders for the behaviors associated with the same position directed to the same position incumbent are incompatible. In other words, if the expectations of different groups or different persons (e.g., employees and customers; multiple supervisors; the employee and his or her supervisor) for the behavior of the focal (or object) individual are incompatible, inter-sender role conflict occurs (Rizzo, House, & Lirtzman, 1970). For example, inter-sender conflicts are likely to occur if the principle of unity of command is violated and managers are expected to follow instructions from, and report to, two or more superiors who have differing agendas. Thus, an individual can experience role conflict if he or she receives inconsistent direction from a single manager or if he or she receives inconsistent direction from multiple managers simultaneously (Rizzo *et al.*, 1970). The directions can be in the form of conceptions (covert expectations), enunciations (expressed expectations), or inscriptions (i.e., written expectations) (Biddle, 1979). A last type of role conflict is inter-role conflict, which is likely to occur if the expectations associated with the different roles that an individual is expected to play are incompatible with one another. For instance, the expectations associated with the individual's role as a manager (e.g., to work overtime) may conflict with the expectations associated with the individual's role as a father or mother (e.g., to come home from work early). Finally, individuals may experience personal role conflict if the expectations associated with one of the individual's roles are in conflict with the person's own needs, aspirations, or values. For example, a manager's superiors may

expect that he or she bribe local government officials in order to be awarded a contract but such behavior may be in conflict with his or her values (Mohr & Puck, 2007). Kahn, Wolfe, Quinn, and Snoek (1964) proposed a theoretical model of factors involved in role conflict and ambiguity that identifies antecedents of role expectations and role conflict. Of particular relevance for this dissertation is the effect of personality factors, interpersonal relations, and organizational factors as antecedents of role conflict.

### **2.1.1 Strategic Role Conflict**

Strategic role conflict is a special type of role conflict in which the conflicting roles are of strategic importance for the organization. Floyd and Lane (2000) proposed that the process of strategic renewal is composed of three distinct sub processes (i.e., competence definition, competence modification, and competence deployment). Each of these sub processes calls for a different set of strategic roles. The authors argue that each of these set of roles differ in the behaviors that they call for, their time horizons, the core values that they embed, the information required, and their emotional tone. Strategic role conflict develops when there is ambiguity as to which strategic renewal sub process the organization should use. In simple, stable situations, it is likely that managers at all levels will develop consistent interpretation of environmental cues and reach similar conclusions as to what strategic renewal sub process is required; and as a result, what strategic roles each level of management should enact. Conversely, in highly turbulent and complex conditions managers are likely to focus on different sub sections of the environment, and/or interpret environmental cues differently, and/or differ in their assessment of the relative importance of these environmental cues (Floyd & Lane, 2000;



Weick, 1995). These different perceptions and interpretations of environmental cues lead to different conclusions as to which strategic renewal sub process is adequate; and consequently, what strategic roles are expected. When different managers have dissimilar expectations for the strategic behavior of a third manager, inter-sender strategic role conflict (i.e., “strategic role conflict” for short) occurs. The focus of this dissertation is a special case of these inter-sender strategic role conflicts. The case under study is when a middle manager has dissimilar expectations for his or her own strategic behavior vis-à-vis the expectations held by his top manager.

### **2.1.2 Importance of Studying Strategic Role Conflict**

Role conflict has particularly negative effects on a middle manager’s role performance (Friedman & Podolny, 1992). Under turbulent and complex environmental conditions, managers at all levels become aware of conditions that require organizational action. As stated earlier, managers at different levels are likely to perceive and interpret environmental cues differently. As a result, it is also likely that top managers, for instance, will have dissimilar expectations for middle managers’ strategic behavior than middle managers may have for their own strategic behavior. These conflicting expectations are likely to result in strategic role conflict (Katz & Kahn, 1966). The dysfunctional effect of strategic role conflict on the individual manager stems from the stress generated by the difficulty of satisfying different parties, the lack of full trust shown by the party or parties with whom the middle manager disagrees, and the lack of clarity of which strategic role is appropriate to enact (Van Sell, Brief, and Schuler, 1981). Role conflict has been linked to role stress in the workplace (Rizzo, House, & Lirtzman, 1970) and to withdrawal or avoidance of those who are perceived as creating the conflict (Kahn, et al., 1964). Being

a special kind of role conflict, strategic role conflict is likely to lead to similar negative effects. In the special case of strategic role conflict, the effectiveness of the middle manager's strategic role performance is likely to suffer because of strained relations with top managers worrying that the middle manager is concentrating on the wrong things (Adams, 1976). Ultimately, organizational processes such as strategic renewal are presumably less effective as a result of the reduced level and poor quality of personal relationships that strategic role conflict produces (Floyd & Lane, 2000; Kahn, et al., 1964).

### **2.1.3 Dissimilarity in Environmental Perceptions between the Middle Manager and his or her Top Manager.**

The literature documents many reasons why managers at different levels in the organization have different perceptions of the environment. For instance, environmental dynamism is theorized to play a key role in the emergence and severity of strategic role conflict by eliciting different perceptions and interpretations of the need for and the type of change and by leading to different conclusions at different managerial levels of what strategic renewal sub process should be used; and therefore, what strategic roles are appropriate to enact (Floyd & Lane, 2000). Under highly complex, highly dynamic conditions, managers may be uncertain whether change is necessary and unclear of what kind of change is appropriate. And as a result, the likelihood of confusion of what strategic role is expected of them is increased (Floyd & Lane, 2000; Huff et al., 1992).

Functional orientation and technical expertise have been mentioned as reasons why managers at different levels perceive the environment differently because they create differences in managers' mental frameworks that translate in different perceptions. For

instance, individuals at lower-levels of management usually tend to acquire knowledge of new technologies earlier than managers at higher levels. Conversely, top managers tend to have more expertise in established technologies. These differences in technical expertise are likely to influence the way each level of management interprets the environment (Burgelman, 1991; Floyd & Lane, 2000; Weick, 1995). Environmental orientation and boundary-spanning activity have also been mentioned as reasons why managers at different levels perceive the environment differently (Floyd & Lane, 2000). For instance, when engaging in boundary-spanning activities, operating-level managers tend to focus on technical concerns (i.e., “factor markets”) or customer concerns (i.e., “product markets”, Floyd & Lane, 2000; Friedman & Podolny, 1992; Thompson, 1967). As a result of their closer contact with customers and suppliers, operating-level managers may be more likely to see a need for strategic change and the need for developing new competencies sooner than top managers, whereas top managers, who take their cue from capital markets, are more likely to perceive the need to preserve the status quo (Floyd & Lane, 2000; Burgelman, 1994). Conversely, top managers’ boundary-spanning activity tends to focus on shareholders, bondholders, or other financing concerns, (i.e., “capital markets”, Floyd & Lane, 2000; Pfeffer & Salancik, 1978). Being between these two levels, middle managers are expected to act like “linking pins” (Likert, 1961), and their focus could be on any one or a combination of these sub-environments on which the other levels are focused. If the middle manager’s focus is in alignment with his or her top manager’s, it is likely that their perceptions of the environment would tend to coincide, their expectations regarding strategic roles would tend to coincide as well, and strategic role conflict would not arise. However, if the middle manager’s focus is not in alignment

with his or her top manager's, their perceptions of the environment would tend to be in conflict, their expectations regarding strategic roles would tend to conflict as well, and strategic role conflict is likely to arise.

## **2.2 The Middle Management Perspective**

The middle management perspective emerged as an alternative view of strategy to the prevailing top management perspective of the 1980's. Hambrick and Mason's (1984) top management perspective conceptualizes strategy as a top-down decision-making process and rests on the assumption of a highly analytical and comprehensive process at the top, hyper-rational top managers, and a fully committed organization at the bottom (Andrews, 1971; Ansoff, 1965; Chandler, 1962; Child, 1972; Hambrick & Mason, 1984; Porter, 1980). The top management approach creates an artificial dichotomy between strategy formulation and strategy implementation whereby upper management makes strategic decisions and directs the resource allocation process (Andrews, 1971; Fredrickson, 1983; Hambrick, 1988; Mintzberg, 1978), while middle and operating managers implement the strategies set forth by upper management (i.e., "top-down"; Chandler, 1962). The focus of this view is more on the outcome of decisions (i.e., content) than on the decision-making process itself.

In contrast, the middle management perspective sees strategy making as a learning process. Middle managers are regarded as key actors in the development and accumulation of new capabilities for long-term, sustainable competitive advantage (Floyd & Wooldridge, 2000). The middle level perspective argues that middle managers' involvement in strategy has important consequences for organizational outcomes whether

it is bottom-up strategy making (Bartlett & Ghoshal, 1993; Nonaka, 1994) or strategy implementation (Floyd & Wooldridge, 1997). As a result, strategic leadership can also occur at any level of the organization (Floyd & Wooldridge, 1997, 2000). Strategy making is seen as an incremental model that studies how personnel at different levels of the organization contribute to the formation of strategy through a socio-political learning process (i.e., “bottom-up”; Burgelman, 1983a,b,c; Burgelman, 1994; Lindblom, 1959; Mintzberg, 1978; Quinn, 1980). “Social learning” implies that managers and others in the organization jointly learn how to adapt to a changing environment.

Researchers have long argued that the dichotomy of strategy into formulation and implementation, and its concomitant division of managers into thinkers and doers, is not an accurate representation of reality (Mintzberg, 1978). The flaw in this dichotomy is that it ignores the learning that follows the conception of an intended strategy and often influences and changes said strategy (Mintzberg, 1978). Accordingly, our interest should be on realized strategy as a discernible pattern in a stream of decisions that exhibits a consistency over time regardless of whether this consistency was intended or just “emerged”. Realized strategies frequently evolve from the interplay of top management’s intended strategies and the efforts of middle and lower managers throughout the organization to influence the strategic direction of the firm (Mintzberg, 1978; Mintzberg & Waters, 1985).

### **2.2.1 Importance of the Middle Manager’s Involvement in Strategy**

The involvement of middle management in the development of strategy has been shown to be not trivial. Indeed, it has been directly tied to measures of organizational performance (Wooldridge & Floyd, 1990). Improved decision-making and higher

strategic consensus have been identified as the key mechanism of a positive association between middle management involvement in strategy and organizational performance. Thus, middle managers play a more strategic role in capability development, quality of strategic decision-making, and strategy implementation. During turbulent conditions, companies that rely on middle level managers to continuously communicate alternative strategies to upper management are the best performing ones because they are able to execute the strategic renewal process more effectively (Wooldridge & Floyd, 1990; Floyd & Lane, 2000). It is in the context of strategic renewal that strategic role conflict takes place (Floyd & Lane, 2000).

### **2.2.2 Middle Managers' Strategic Roles**

Having discussed how middle managers' involvement in strategy has an important impact on organizational outcomes, I now turn my attention to the different forms of middle managers' strategic involvement. Floyd & Wooldridge (1992) identified four strategic roles of middle managers: championing alternatives, synthesizing information, facilitating adaptability, and implementing deliberate strategy. These four roles can be better understood by differentiating them along behavioral and cognitive dimensions (see Figure 2.1 below). On the behavioral dimension, middle managers' strategic roles can be differentiated according to the object of their action. Upward influence targets top managers. Downward influence targets operational managers and operational personnel. On the cognitive dimension, middle managers' integrative strategic roles are in alignment with existing strategy, whereas divergent roles attempt to alter the organization's concept of strategy.

**Figure 2.1**  
**Middle managers' strategic roles**

	Type of Activity	Behavioral	
		Upward Influence	Downward Influence
Cognitive	Divergent	Championing Alternatives	Facilitating Adaptability
	Integrative	Synthesizing Information	Implementing Deliberate Strategy

Further examination of the types of middle managers' strategic activity comes from the literature on middle managers' upward influence. Dutton and Ashford (1993) developed a framework to describe and study the upward influence efforts of middle managers, which the authors call "issue selling". The issue-selling role that Dutton and Ashford (1993) identified involves some of the behaviors found in the championing and information-synthesis roles identified by Floyd and Wooldridge (1992a). Through issue selling, middle managers influence what issues come to the attention of top management and thus help determine the strategic context, which in turn has an impact on important organizational outcomes (Dutton, Ashford, Wierba, O'Neill, & Hayes, 1997).

Literature focusing on the downward influence of middle managers shows how a middle manager's leadership style influences strategic change, another important organizational outcome. Middle managers tend to be more effective introducing technological change using a transformational leadership approach rather than a transactional one. Focusing on technical problems to the neglect of people and organizational issues tends to be counterproductive (Beatty & Lee, 1992). Similarly, management of employees' emotions is critical during periods of radical change. For

instance, middle managers that helped people make sense of, and cope with, change prevented potentially disorderly reactions and facilitated a smoother implementation of a downsizing strategy that otherwise would have been very disruptive (Huy, 2001; 2002). Thus, middle managers are essential to strategic implementation as well as to strategy development.

Middle management's strategic activities have in common their attempts to influence the strategic direction of the organization. These attempts occur in the context of strategic change. A form of strategic change called, "strategic renewal" is characterized by the renewal of capabilities (Agarwal & Helfat, 2009). The literature recognizes two basic types of strategic renewal: (1) discontinuous strategic renewal and (2) incremental renewal (Agarwal & Helfat, 2009). According to Floyd and Wooldridge (2000), strategic renewal includes three interrelated elements or sub-processes: idea generation, initiative development, and strategic reintegration. A long succession of social interactions within and outside the organization occurs in each of these sub-processes. Middle managers' strategic roles and strategic role conflict take place within the context of the strategic renewal sub-processes. Strategic role enactment is a highly social and political process sensitive to the health of relationships that is disrupted when strategic role conflict occurs. This connection between strategic role conflict and role enactment is the reason why it is important to understand strategic role conflict.

A competence-based view of the strategic renewal process identifies three sub-processes of renewal: competence deployment, competence modification, and competence definition. Floyd and Lane (2000) proposed a theoretical framework that maps ten strategic roles of top, middle, and operating managers to these three strategic



renewal sub-processes. Top managers' strategic roles include ratifying strategic initiatives, recognizing the strategic potential of initiatives, and directing the deployment of resources. Middle managers' roles include championing alternatives, synthesizing information, facilitating adaptability, and implementing given strategy. Operating managers' roles include experimenting with new capabilities, adjusting to challenging environmental conditions, and conforming to top managers' strategic directives. Dissimilar perceptions and interpretations of the environment lead managers at different levels to different conclusions of what strategic roles are appropriate resulting in strategic role conflict.

### **2.2.3 Relevance of the Middle Manager's Demographic Characteristics**

Kahn *et al.* (1964) studied the effects of an individual's personality on his or her experience of role conflict. The authors argued that observed dissimilarities among individuals' experience of role conflict from the pressures of conflicting expectations could not be attributed only to "objective differences in their jobs nor in the specific form of their role conflict" (Kahn *et al.*, 1964, p. 226). The authors theorized that differences in the personalities of the individuals involved also made a difference in their experience of role conflict. Kahn *et al.* (1964) posited that individual characteristics of the focal person made an impact on role conflict because they would: (1) affect the expectations sent by role senders, (2) affect the emotional reaction to stress, and (3) because personality factors lead to individual differences in coping techniques used to handle stress (Kahn *et al.*, 1964). The authors looked at personality attributes such as neurotic anxiety vs. emotional stability, favorable vs. unfavorable self-esteem, flexibility vs. rigidity, extroversion vs. introversion, and aggressive independence vs. genial

responsiveness. Kahn *et al.* (1964) found significant evidence to support their thesis that personality factors account for differences in role conflict.

The early management literature (e.g., Selznick, 1949) focused on the influence of management on organizational performance. An important branch of this research focuses on the links between the top management team characteristics and a variety of organizational outcomes (Bantel, 1993; Michel & Hambrick, 1992; Wiersema & Bantel, 1992). Two important theoretical developments in organizational studies led to this trend. Cyert and March (1963) developed the concept of the dominant coalition, which argued for a shift in the level of analysis from the individual CEO to the entire top management team. The second development was the increased emphasis on using observable demographic characteristics (e.g., age, tenure, experience, education level, etc) as proxies for internal cognitive phenomena and exploring the relationship between these characteristics and organizational outcomes (e.g., Bantel, 1993; Michel & Hambrick, 1992; Wiersema & Bantel, 1992).

Hambrick and Mason (1984) wrote the seminal paper in top management team research by uniting the dominant coalition and demographic characteristics streams of research. The authors argued that the internal characteristics of upper level managers (e.g., cognitive bases, values, and perceptions) influence their perceptions and their decisions. The authors further argued that observable demographic characteristics could be used as proxies for these internal characteristics. Thus, at the heart of the top management teams perspective is the belief that the background, experiences, and values of corporate executives influence their strategic decisions via internal cognitive processes. Finally, according to Hambrick and Mason (1984) observable characteristics

such as age, tenure, and functional experience might serve as useful proxies for the cognitive base that guides top manager's perceptions and decisions.

Combining the role conflict literature (e.g., Kahn *et al.*, 1964) with the top management literature (e.g., Hambrick & Mason, 1984), I argue that middle managers' internal cognitive bases (which shape their personalities) also influence middle managers' perceptions and the decisions that middle managers make regarding what strategic roles are appropriate to enact. I further argue that middle managers' demographic characteristics can serve as proxies for the cognitive bases that shape their perceptions and guide their decisions. Thus, the demographic characteristics of a middle manager are likely antecedents to a middle manager's experience of strategic role conflict.

#### **2.2.4 Middle Manager's Position within the Organization**

A middle manager's position within an organization has relevance to the occurrence of strategic role conflict. Boundary spanning is often associated with role conflict (Gross, Mason, & McEachern, 1958; Friedman & Podolny, 1992; Kahn *et al.*, 1964; Whetten, 1978). Managers in positions that are required to span the boundaries of their departments or the boundaries of the organization are exposed to interactions with different groups. These groups are likely to hold different values and interests. In consequence, these groups are likely to have conflicting expectations of the boundary-spanning manager about what role to play, how to behave, what values to espouse, and what interests to represent (Gross, Mason, & McEachern, 1958; Friedman & Podolny, 1992; Kahn *et al.*, 1964; Whetten, 1978). As a result, it is likely that the boundary-spanning manager will experience conflicting expectations of what role to fulfill. These conflicting expectations lead to stress because of the difficulty of satisfying the different

groups and the lack of trust in the boundary-spanning manager shown by the different groups (Adams, 1976; Miles, 1976; Organ, 1971; Organ & Greene, 1972; Van Sell, Brief, and Schuler, 1981). Furthermore, relations with the different parties tend to deteriorate because each group worries that the boundary-spanning manager is being influenced by other groups to behave in ways that work against their own interests (Adams, 1976). It is important to examine the effect of middle manager's boundary-spanning positions because it has been shown that organizational effectiveness is impaired as a result of this role conflict (Kahn *et al.*, 1964).

There is empirical evidence that organizational structure, specifically the number of hierarchical layers of management, influences a middle manager's perceptions of his or her strategic role (Carney, 2004; Currie & Procter, 2005). A flatter structure enhances downward communication and information flow allowing middle managers' involvement in strategy development and a clearer understanding of their strategic role (Carney, 2004). According to Floyd and Wooldridge (1992), managers at lower levels of middle management engage less frequently in the upward influencing roles of "synthesizing information" and "championing alternatives". As a result, the authors suggest that middle managers should not be considered as a monolithic group, but that the relationship between their contribution to strategy and their hierarchical position in the organization should be taken into account. Currie and Procter (2005) report a case study in which middle managers sabotaged a strategic initiative because their geographical distance from the center of the organization contributed to their not being asked to participate in the development of the strategy and as a result they misunderstood their strategic role. Thus, all the above characteristics of a middle manager's position in the organization discussed

in this section can contribute to the amount of strategic role conflict experienced by the middle manager.

### **2.3 Social / Relational Exchange Theory**

Social / relational exchange theory is based on the premise that individuals form relationships based on mutual exchange to achieve benefits (Thibaut and Kelley, 1959; Blau 1964). In a social exchange, an individual voluntarily provides a benefit to another creating an obligation on the other to reciprocate by providing some benefit in return. Parties involved in the exchange behave benevolently toward each other in the expectation that the other party will behave benevolently in return (Blau, 1964; Macneil, 1974, 1978, 1980). Social exchange theory posits that exchanges are embedded in a social context (Granovetter, 1985). Social exchanges are less formal and involve more uncertainty than economic exchanges because of their voluntary nature (Das & Teng, 2002). As a result, social exchanges are primarily based on trust. As times passes and mutually beneficial exchanges are completed, trust and commitment develop and grow (Thibaut and Kelley 1959, Blau 1964).

In contrast to economic exchanges, social exchanges have several fundamental differences (Blau, 1964). First, whereas economic exchanges are always extrinsic and have economic value, social exchanges may provide both extrinsic benefits with direct economic value (e.g., information and advice) and intrinsic benefits without any direct economic value (e.g., social support). In addition, the extrinsic benefits of a social exchange are often expressions of friendship and support that also have intrinsic value. Thus, exchanges that have little or unclear economic benefit can have a strong impact on

the social aspect of a relationship. Second, whereas benefits in economic exchanges are often stated in explicitly negotiated contracts, the benefits of social exchanges are rarely specified a priori or explicitly negotiated at all (Blau, 1964). Thus, providing or reciprocating benefits is completely voluntary. Finally, since such behavior is voluntary, there is no guarantee that benefits will ever be reciprocated or that reciprocation will result in receipt of future benefits (i.e., the exchange of benefits involves uncertainty). In consequence, relationships evolve slowly and the possibility of opportunism is always present in a social relationship (Blau, 1964).

Social exchanges are very frequently successful in regulating behavior because relational norms are used instead of contracts or other legal mechanisms (Thibaut and Kelley, 1959). Relational exchanges are the basis of clan controls (Ouchi, 1979, 1980). Parties involved in social exchange agree that the outcomes of the exchange are greater than could be obtained otherwise. This mutual agreement motivates the parties to consider the relationship intrinsically important, and as a result they are willing to invest in the development and maintenance of the relationship. Such exchange relationships are characterized by the presence of norms associated with the creation, preservation, and harmonization of the relationship (Goles & Chin, 2002). Among the norms of relational exchange are role integrity, relationship preservation, and harmonization of conflict. Role integrity provides for stability and for the possibility of role expansion. Relationship preservation reflects mutual perceptions of the relationship as important, not merely transactional, and with expectations for its longevity. Harmonization of conflict implies mutual satisfaction in the resolution of conflicts (Brown, Dev, and Lee 2000). As reliance on trust among the parties increases over time, informal psychological contracts

are posited to compensate or substitute for the safety of formal contracts (Ring & Van de Ven, 1994).

Relational exchanges are characterized by context. To understand a relational exchange, it is important to understand the past, present, and expected future interactions between the parties. Discrete transactions differ from relational exchanges along the following dimensions: First, relational exchanges transpire over time; there is a history and a presumed future. The basis of future collaboration is usually supported by implicit and explicit assumptions, trust, and planning. Second, relational exchange participants expect to derive complex, personal, non-economic benefits from the social exchange. Third, customized mechanisms to regulate collaboration and to resolve conflict may be designed and on occasion third parties may be called in to arbitrate (Macneil, 1974, 1978, 1980).

### **2.3.1 Quality of the Relationship between Middle Managers and Top Managers**

Strategic role conflict is the focus of this dissertation. As stated before, strategic role conflict occurs in the context of strategic renewal. Relational exchange theory can be applied to the understanding of strategic renewal and thus strategic role conflict by focusing on the effect of relational exchanges on the quality of the relationship between managers. Strategic renewal implies the development and accumulation of new capabilities or the effective implementation of top-down strategy (depending on the strategic renewal sub process appropriate for the environmental conditions), which depend on information flows, knowledge exchange, and knowledge recombination in the interaction of top, middle, and operating managers, (Floyd & Lane, 2000). The effectiveness of the information flows depends on managers having close, direct, and

productive contact with each other. According to Ring and Van de Ven (1994), tacit knowledge and other intangible assets can be more easily deployed through relational exchanges. Interpersonal relationships and interactions are effective mechanisms to transfer tacit knowledge because relational exchanges promote the development of mutual trust, respect, and friendship (Kale *et al.* 2000). Mutual trust, respect, and friendship are characteristics of a close, direct relationship between individuals that help minimize dissimilarities in expectations because they promote understanding through effective knowledge transfer (Dyer & Singh, 1998; Kale *et al.* 2000), which, as stated earlier, is critical in creating and sustaining innovation in organizations or for effective implementation of current strategy (Grant 1996a; Grant 1996b; Helfat & Raubitschek, 2000; Kale *et al.* 2000; Kogut & Zander, 1992; Kogut & Zander, 1996; Koza *et al.* 1998). Therefore, the effectiveness of relational exchanges is key to an effective strategic renewal process as they help minimize strategic role conflict through the exchange of knowledge about environmental conditions. Thus, it is important to understand the effect of the quality of the relationship between middle managers and top managers on strategic role conflict because of its theorized detrimental effect on strategic role enactment and ultimately on strategic renewal.



## **CHAPTER 3**

### **HYPOTHESES DEVELOPMENT**

#### **3.1 General Conceptual Framework**

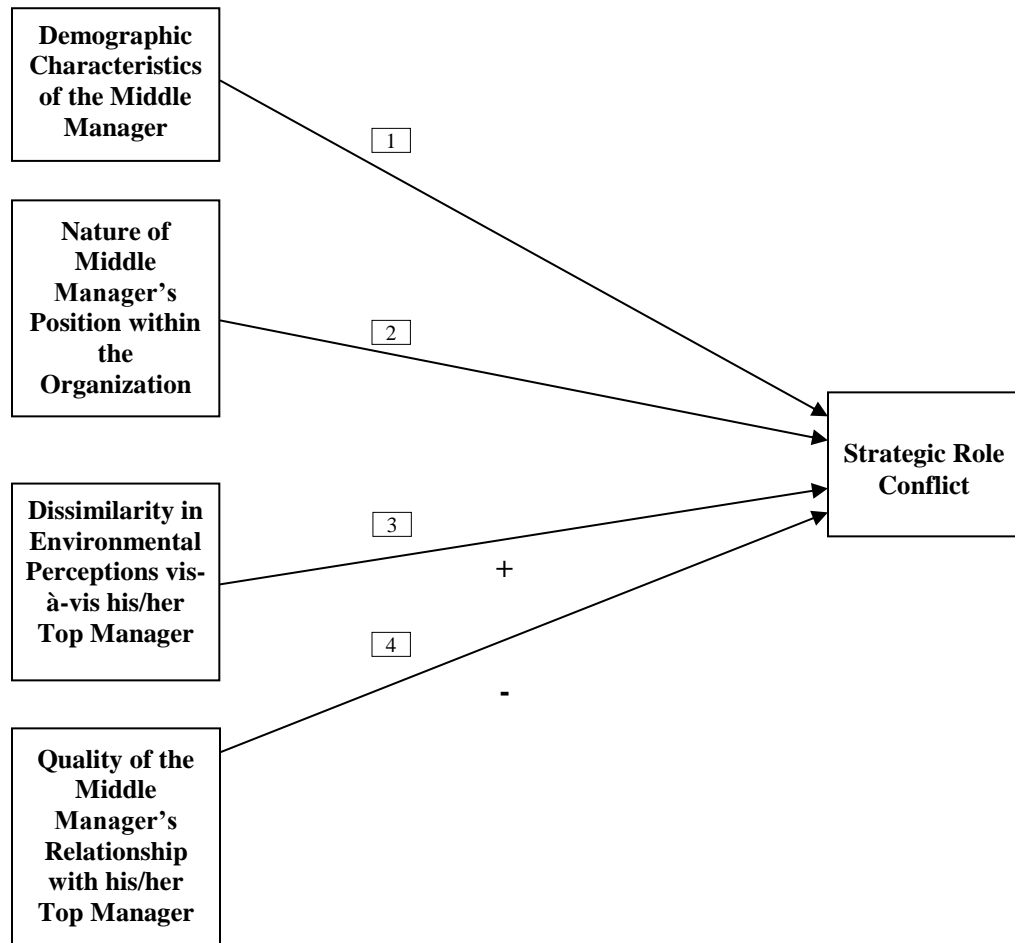
This chapter integrates the work presented in Chapter 2 in an overall conceptual model for the proposed research. A group of testable hypotheses is presented. The hypotheses reflect expected relationships between strategic role conflict and its antecedents, namely: (1) demographic characteristics of the middle manager as independent variable and strategic role conflict as dependent variable, (2) nature of the middle manager's position within the organization as independent variable and strategic role conflict as dependent variable, (3) dissimilarity in environmental perceptions between the middle manager versus his or her top manager as independent variable and strategic role conflict as dependent variable, (4) quality of the relationship between the middle manager and his or her top manager as independent variable and strategic role performance as dependent variable. The general model is presented in the following section.

#### **3.2 General Model**

Figure 3.1 presents the overall conceptual model on which this research rests. At its highest level of abstraction, the model indicates that middle managers' strategic role conflict is related to several antecedents. These are: demographic characteristics of the middle manager, nature of the middle manager's position within the organization, dissimilarity in environmental perceptions between the middle manager and his or her top

manager, and the quality of the relationship between the middle manager and his or her top manager.

**Figure 3.1**  
**General Strategic Role Conflict Model**



### **3.2.1 Hypotheses Regarding Demographic Characteristics of Middle Managers and Strategic Role Conflict**

As discussed in chapter 2 in the section reviewing the role conflict literature, Kahn *et al.* (1964) found that internal personality characteristics were related to employees' experience of role conflict. The top management literature, also reviewed in chapter 2, argued for and found supportive evidence that demographic characteristics of top managers could proxy for their internal cognitive bases. This literature defined a "cognitive base" as assumptions about the future, awareness and understanding of alternatives, and the likely consequences of these alternatives (e.g., Hambrick & Mason, 1984; March & Simon, 1958; Wiersema & Bantel, 1992). In this section, I use the demographic characteristics of middle managers to proxy for their cognitive bases and extend the role conflict literature into the strategic conflict literature by proposing testable hypotheses regarding middle managers' demographic characteristics and their experience of strategic role conflict.

An empirical connection between personality traits and role conflict was made by Kahn *et al.*'s (1964). According to Kahn *et al.*'s (1964) findings, personality characteristics such as neurotic anxiety vs. emotional stability, favorable vs. unfavorable self-esteem, flexibility vs. rigidity, extroversion vs. introversion, and aggressive independence vs. genial responsiveness were related to the employee's experience of role conflict because they affected the expectations sent by role senders, affected the emotional reaction to stress, and led to individual differences in coping techniques used to handle stress. These constructs represent personality traits but also to some degree mental health. Another dimension to an individual's personality is the extent to which a

person's outlook represents a mature approach to external events. Hogan and Roberts (2004) argued that maturity is a personality trait that is most productively viewed from the perspective of the actor and of the observer and that it should be measured from two perspectives – how people feel about themselves and how others feel about them. Mayseless and Scharf (2003) define emotional maturity as, “the capacity to control impulses, the adoption of a broad and unselfish perspective, and acceptance of responsibility for the consequences of one's actions” (p.6). According to other authors, emotional maturity is related to an individual's ability to be appropriately assertive and cope effectively with external pressures and adversity (Azuma, 1984; Helms, 1995; Sandoz, 1992). For example, Lawton, Kleban, Rajagopal, and Dean (1992) found that older adults were higher in emotional control, mood stability, and emotional maturity than younger adults. Their findings support the hypothesis that self-regulatory capacity increases with age. Neugarten and Neugarten (1996) argued that that age differences in social roles, relationships, and socio-emotional outlook influence the risk of angry emotionality. Support for this notion came from Schieman's (1999) random study of 951 Canadian adults and 1,450 American adults. The author found an essentially negative linear relationship between age and anger. That is, older people experienced and expressed significantly less anger than younger people did. Having established the association of age with emotional maturity, I now turn my attention to the role of age in strategy making.

In the management literature, Cyert & March (1963) argued that an individual's cognitive base evolves from experiences, including training and background, and Hambrick and Mason (1984) proposed that demographic characteristics of individuals are

indicators of the qualities of said cognitive base. In particular, Hambrick and Mason (1984) proposed that the age of a top executive would be related to a company's growth and riskier strategies. The use of demography is based on research that has found a link between demographic characteristics and specific beliefs, values, and abilities.

Demography has been used as a predictor of beliefs, values, and viewpoints (Dearborn & Simon, 1958; Kahalas & Groves, 1979; Walsh, 1988; Wiersema & Bantel, 1992). For instance, several authors have found that age is negatively related to the ability to integrate new information and to the tendency to make risky decisions (Carlson & Karlsson, 1970; Taylor, 1975; Vroom & Pahl, 1971). And that managerial age is positively associated with a tendency to seek more information, to evaluate the information more accurately, and to take longer to make decisions (Hambrick & Mason, 1984; Taylor, 1975). I argue that since age is positively related to maturity and since maturity is positively related to a tendency to search for more information and to take the time to evaluate it adequately, older middle managers would avert unnecessary disparities in the conclusions they draw from the information they gather and would be more in agreement with the conclusions that the top managers to whom they report draw than younger middle managers. Therefore, in line with the research laid out and the reasoning presented above, the following hypothesis is offered:

Hypothesis 1a: The chronological age of a middle manager will be negatively associated with the amount of strategic role conflict experienced by the middle manager.

In addition, the fact remains that there is another role sender that holds expectations of the strategic behavior of the middle manager, in addition to the middle manager's own expectations. That is of course the top manager to whom the middle manager reports. Consequently, the age of the top manager to whom the middle manager reports also has to be taken into account. A reason why it is important to consider the age difference between a middle manager and the top manager to whom he or she reports is that difference in the amount of life experience and on the content of those life experiences can lead to different conclusions regarding external stimuli and to different strategic role expectations and behaviors. The logic for a connection between the differences in ages of managers comes from the diversity perspective. For instance, extant literature suggests that a team's demographic homogeneity is linked to its propensity to maintain the strategic status quo. Authors have found that demographic homogeneity leads to perceptions of similarity with and attraction to others (Byrne, 1961; Kanter, 1977; Pfeffer, 1981; Wiersema & Bantel, 1992). When people are members of the same cohort (i.e., when two or more people experience event such as birth and organizational entry within the same time period), they are exposed to similar social, environmental, and organizational events (Ryder, 1965; Wiersema & Bantel, 1992). Furthermore, individuals with similar experiences, backgrounds, beliefs, and values develop a shared language, which enhances their communication (Allen & Cohen, 1969; O'Reilly, Caldwell, & Barnett, 1989; Rhodes, 1983; Wagner, Pfeffer, & O'Reilly, 1984; Wiersema & Bantel, 1992; Zenger & Lawrence, 1989). Similar individuals are likely to also develop solidarity, sponsorship, and mutual choice leading to congruence in their beliefs and perceptions, to high consensus, and similar decisions (Dutton & Duncan,

1987; Pfeffer, 1983; Janis, 1972; Tushman & Romanelli, 1985; Reed, 1978; Wagner et al., 1984). Demographic heterogeneity has the opposite effects. Organizational theorists have argued that teams high in demographic diversity on the variables of age and organizational tenure find it more difficult to communicate than do groups composed of members of the same cohort, leading to conflict and power struggles because at high levels of diversity communication becomes increasingly strained and riddled with conflict (McCain, O'Reilly, & Pfeffer, 1983; Pfeffer, 1983; Wiersema & Bantel, 1992). Having established a connection between demographic heterogeneity and lack of congruence in beliefs, perceptions, consensus, and similar decisions, I now turn my attention to the link between age-related differences and conflict per se.

Evidence supporting the importance of age-related differences on conflict comes from the conflict management literature. One aspect related to age differences in dyadic conflict that has been documented in the conflict management literature is how differences in cohort influence conflict interactions and also conflict management strategies (Silars & Wilmot, 1989; Silars & Zietlow, 1993). These authors found evidence that married couples of different cohorts used different conflict management styles at different life stages; specifically, younger couples were more combative and controlling than older couples (Silars & Wilmot, 1989; Silars & Zietlow, 1993). Bergstrom and Nussbaum (1996) found significant differences in conflict behaviors and satisfaction with those behaviors between older and younger adults. Based on the preceding discussion, I offer the following hypothesis:

Hypothesis 1b: The difference in chronological age between a middle manager and the top manager to whom the middle manager reports will be positively associated with the amount of strategic role conflict experienced by the middle manager.

Another demographic characteristic that can proxy for a person's internal cognitive base is a person's formal education. According to Hambrick and Mason (1984), a person's formal education indicates, to some degree, the person's knowledge and skill base. The authors suggest that if we assume that most people take seriously their decisions about education, then formal education serves to some extent as an indicator of a person's values and cognitive preferences. There is no evidence in the literature to suggest that any one particular educational background might lead to greater strategic role conflict if we look at it in a vacuum. However, there is evidence that years of formal education, in general, provide individuals with valuable skills to cope with increased information processing demands (Hambrick & Mason, 1984). The authors proposed that the amount of formal education of a management team would be associated with receptivity to innovation; probably because the more a person is exposed to education, the more a person learns to have an open mind. Having an open mind is associated with flexibility. Kahn *et al.* (1964) found that a flexible coping style is associated with less role conflict because when a person with a flexible coping style is confronted with a situation that does not fit his or her conceptual framework, the flexible person is more likely to assume that his or her expectations are not appropriate for the situation. As such, the person with a flexible coping style will be more willing to



accommodate another role sender's expectations and reduce role conflict. Based on the preceding discussion, I offer the following formal hypotheses:

Hypothesis 1c: A middle manager's amount of years of formal education will be negatively associated with the amount of strategic role conflict experienced by the middle manager.

As was the case with the middle manager's chronological age, the effect of the amount of years of formal education of the middle manager cannot be seen in isolation only. It also has to be seen in the context of the years of education of the top manager to whom the middle manager reports. The diversity argument presented in the discussion of age-related diversity is appropriate here too. As stated in the preceding section, a person's level of education is a reflection of the individual's cognitive ability and skills. That is, an individual's cognitive base evolves from experiences, including training and background, and demographic characteristics of individuals are indicators of the quality of their cognitive base (Cyert & March, 1963; Hambrick & Mason, 1984). Schroder, Driver, and Streufert (1967) found that high levels of education are associated with high capacity for information processing and ability to discriminate among many of stimuli. Educated individuals are more likely to engage in boundary spanning, tolerate ambiguity, and show increased ability to integrate complexity (Dollinger, 1984). In addition, many studies have found consistent evidence for a positive relationship between high educational level and innovation (e.g., Bantel & Jackson, 1989; Becker, 1970; Kimberly & Evanisko, 1981; Rogers & Shoemaker, 1971). According to the diversity argument,

demographic diversity in teams leads to conflict and power struggles because at high levels of diversity communication becomes increasingly strained and riddled with conflict as a result of the disparity in individual views (McCain, O'Reilly, & Pfeffer, 1983; Pfeffer, 1983; Wiersema & Bantel, 1992). Therefore, two individuals who are vastly different in terms of years of formal education will arrive at significantly different conclusions regarding external stimuli, develop different propensities to respond, disagree in their approaches, and arrive at different expectations for each other's behaviors because of their different cognitive bases. Since years of formal education is related to an individual's type of conclusions regarding stimuli and to the type of response to those stimuli, and since differences in conclusions and approaches is linked to poor communication and different expectations, the difference in years of formal education between the middle manager and the top manager to whom the middle manager reports can be a predictor of their likely agreement or disagreement as to what external events mean for the organization's strategy. Based on preceding argument, I offer the following hypothesis:

Hypothesis 1d: The difference in years of formal education between a middle manager and the top manager to whom the middle manager reports will be positively associated with the amount of strategic role conflict experienced by the middle manager.

### **3.2.2 Hypotheses Regarding the Nature of Middle Manager's Position within the Organization and Strategic Role Conflict**

There is evidence in the literature that the nature of an employee's position within the organization is related to the amount of role conflict that the employee experiences. Kahn *et al.* (1964) found that functional dependence, organizational proximity, and low status differential were positively related to role conflict. However, when both the role sender and the focal person became knowledgeable of the contribution of each of their positions to organizational goals, of their mutual dependence, and of the impact that changing their expectations would have on the organization, role conflict was reduced (Kahn *et al.*, 1964).

Boundary spanning is associated with role conflict because boundary-spanning individuals have role senders in other locations such as different departments, different divisions, or even external organizations (Gross, Mason, & McEachern, 1958; Friedman & Podolny, 1992; Kahn *et al.*, 1964; Whetten, 1978). Managers in positions that are required to span the boundaries of their departments or the boundaries of the organization are exposed to interactions with different groups where they interact with different role senders. Role senders that belong to different groups are likely to have different values and pursue different interests. As a result, they are likely to have conflicting expectations of the boundary-spanning manager's role, how to behave, what values to espouse, and what interests to represent (Gross, Mason, & McEachern, 1958; Friedman & Podolny, 1992; Kahn *et al.*, 1964; Whetten, 1978). Hence, it is likely that the boundary-spanning manager will experience conflicting expectations of what role to fulfill. As discussed in the review of the role conflict literature, conflicting expectations lead to stress because of

the difficulty of satisfying the different groups and the lack of trust that the different groups have in the boundary-spanning manager (Adams, 1976; Miles, 1976; Organ, 1971; Organ & Greene, 1972; Van Sell, Brief, and Schuler, 1981).

Furthermore, relations with the different parties tend to deteriorate because each group worries that the boundary-spanning manager is being influenced by other groups to behave in ways that work against their own interests and the different groups tend to put increasingly greater pressure on the boundary-spanning manager (Adams, 1976). One under-explored aspect of the effect of boundary-spanning activity of middle managers is the effect that such activity has on strategic role conflict as a result of exposing the middle manager to different points of view as to what environmental changes might mean for the organization. It is likely that the groups outside the organization with whom the middle manager interacts are not the same as the outside groups with whom top managers interact. When top managers engage in boundary-spanning activities, it tends to be with groups representing the capital markets, whereas when middle managers engage in boundary-spanning activities, it tends to occur as they support operating managers in interactions with customers and suppliers (Floyd & Lane, 2000). As a result, this disparity translates into intra-organizational disagreements as to what type of change is needed in the organization or whether any change is needed at all. Top managers tend to view external changes as temporary fluctuations not indicating a need for major internal change, whereas middle managers tend to view external changes as indications that strategic change is necessary. Conversely, non-boundary-spanning middle managers are only exposed to the expectations that other members belonging to their group, including their top manager, have of them. Non-boundary-spanning middle managers do not have

to contend with groups that have different expectations of their behavior and exert conflicting pressures. In addition, non-boundary spanning middle managers are also not exposed to groups whose views differ from the views of the groups that their top manager interacts with. Those two sources of differential exposure to dissimilar expectations, lead me to offer the following hypothesis.

Hypothesis 2a: Middle managers in boundary-spanning positions will experience a greater amount of strategic role conflict than middle managers in non-boundary-spanning positions.

Since the focus of the present study is on strategic role conflict, most strategic role conflict will involve vertical interactions with top managers. Thus, organizational distance of a middle manager from a top manager is the focus of this section. There is empirical evidence that organizational structure, specifically the number of hierarchical layers of management, influences a middle manager's perceptions of his or her strategic role (Carney, 2004; Currie & Procter, 2005). A flatter structure enhances downward communication and information flow allowing for middle managers' involvement in strategy and a clearer understanding of their strategic role (Carney, 2004). Floyd and Wooldridge (1992) found that middle managers at lower levels of the organization engaged less frequently in upward influencing roles (i.e., synthesizing information and championing alternatives). As a result, middle managers should not be considered as a monolithic group, but the relationship between their contribution to strategy and their hierarchical position in the organization should be taken into account (Floyd &

Wooldridge, 1992). Currie and Procter (2005) found that middle managers misunderstood their strategic role and sabotaged a strategic initiative because they were not asked to participate in the development of the strategy as a result of their large geographical distance from the center of the organization. Thus, a middle manager's position in the organization can contribute to the amount of strategic role conflict experienced by the middle manager. There are several reasons why a middle manager's relative position in the organization would lead to greater role conflict. First, the closer middle managers are from their top managers, the greater the observability of their behavior. Kahn *et al.* (1964) found that organizational proximity was positively related to role conflict precisely because role senders were able to increase their pressure on the focal person as they observed deviations in the focal person's behavior from what the role sender expected. Another reason for the increased pressure on focal persons who are closer to role senders is the functional dependence of the role sender on the performance of the focal person. Kahn *et al.*'s (1964) found that the closer a focal person was to his or her role sender, the more that the performance of the role sender depended on the performance of the focal person. Thus, as a role sender has more at stake in the behavior of the focal person, the more pressure that the role sender will put on the focal person to comply with the role sender's expectations. Proximity and frequency of communication would enable the top manager to exert the increased pressure. Based on the preceding discussion, I offer the following hypotheses.

Hypothesis 2b: Middle managers higher in the organizational hierarchy will experience a greater amount of strategic role conflict than middle managers lower in the organizational hierarchy.

Hypothesis 2c: The frequency of communication between the middle manager and the top manager to whom the middle manager reports will be positively associated with the amount of strategic role conflict experienced by the middle manager.

### **3.2.3 Hypothesis Regarding Differences in Environmental Perceptions and Strategic Role Conflict**

The literature documents many reasons for why managers at different levels in the organization have different perceptions of the environment. Environmental dynamism is theorized to play a key role in the emergence and severity of strategic role conflict by eliciting different perceptions and interpretations of the need for and the type of change and by leading to different conclusions at different managerial levels of what strategic renewal sub process should be used; and therefore, what strategic roles are appropriate to enact (Floyd & Lane, 2000). Under highly complex, highly dynamic conditions, managers may be uncertain whether change is necessary and unclear what kind of change is appropriate. As a result, the likelihood of confusion regarding what strategic role is expected of them is increased (Floyd & Lane, 2000; Huff et al., 1992). This occurs because changes in the external environment provide clues for organizational change (Floyd & Lane, 2000), and these clues in turn have to be interpreted for meaning (Weick, 1995). Manager's interpretations can vary from accurate representations of objective

measures of environmental uncertainty and complexity to completely flawed perceptions, and individual interpretations also can vary from each other (Bourgeois, 1980; Lorenzi, Sims, & Slocum, 1979). For example, Tosi, Aldag, and Storey (1973) found no significant correlations when comparing managers' responses on Lawrence and Lorsch's (1967) perceived uncertainty scale to actual variability in the respondents' industries. In complex, dynamic environments the combination of increased unpredictability, heterogeneity, and distorted individual perceptions increase the likelihood that individual manager's interpretations would differ from each other and prescribe different approaches and behaviors (Floyd & Lane, 2000). This has important consequences for the organization because role expectations are formed from these perceptions and prescribe what managerial roles and behaviors are appropriate.

Under conditions of high complexity and rapid environmental change, different layers of management are likely to attach different meanings for the organization to the environmental changes that they observe. Middle managers may interpret unexpected customers' demands or rapidly changing technology reported by operating managers as cues for radical strategic change. On the other hand, top managers do not have day-to-day contact with customers but interact frequently with representatives of the capital markets who tend to have a more conservative view of the environment and tend to be more committed to the status quo (Pfeffer & Salancik, 1978; Floyd & Lane, 2000). Hence, different perceptions lead to divergent interpretations among levels of management of what the environmental change implies for the organization, what strategic renewal sub-process is indicated, and hence divergent expectations over what strategic roles each level of management should enact (Floyd & Lane, 2000). These



contradictory views act as pressure on lower-level managers to react in the way in which the top manager perceives it. It is likely that the greater the dissimilarity in perceptions the greater the pressure exerted and the greater the strategic role conflict experienced (Biddle, 1979; Floyd & Lane, 2000).

In summary, given that individual managers have variability in their interpretations of environmental cues (Bourgeois, 1980; Lorenzi, Sims, & Slocum, 1979; Tosi, Aldag, & Storey, 1973), given that uncertainty and complexity in the environment will result in more cues to be interpreted, given that the level of management that managers occupy further determines their perceptions and shapes their interpretations, and given that their interpretations determine the role expectations that they form for themselves and for others, I offer the following hypothesis:

Hypothesis 3: The difference in environmental perceptions between the middle manager and the top manager to whom he or she reports is positively associated with the amount of strategic role conflict experienced by the middle manager.

Hypothesis 3.1: The difference in environmental perceptions of the product markets between the middle manager and the top manager to whom he or she reports is positively associated with the amount of strategic role conflict experienced by the middle manager.

Hypothesis 3.2: The difference in environmental perceptions of the factor markets between the middle manager and the top

manager to whom he or she reports is positively associated with the amount of strategic role conflict experienced by the middle manager.

### **3.2.4 Hypothesis Regarding the Quality of the Relationship Middle Manager / Top Manager and Strategic Role Conflict**

In chapter 2, I reviewed the literature on relational exchange theory. Following Floyd and Lane (2000), I argued that roles, role expectations, and strategic role conflict within strategic renewal can be better understood under the lens of relational exchange by focusing on the effect of relational exchanges on the quality of the relationship between different layers of management. As stated earlier, depending on environmental conditions and on the strategic renewal sub process appropriate for those environmental conditions, strategic renewal implies either the development and accumulation of new capabilities or the effective implementation of given strategy, both of which depend on information flows, knowledge exchange, and knowledge recombination in the interaction of top, middle, and operating managers (Floyd & Lane, 2000). The effectiveness of the information flows depends on managers having close, direct, and productive contact with each other. According to Ring and Van de Ven (1994), tacit knowledge and other intangible assets can be more easily deployed through relational exchanges. Interpersonal relationships and interactions are effective mechanisms to transfer tacit knowledge because relational exchanges promote the development of a quality interpersonal relationship based on mutual trust, respect, and friendship (Kale *et al.* 2000; Zaheer, McEvily, & Perrone, 1998). A close, direct relationship between individuals

characterized by mutual trust, respect, and friendship helps minimize dissimilarities in expectations by promoting understanding through effective knowledge transfer (Dyer & Singh, 1998; Kale *et al.* 2000), which is critical in creating and sustaining innovation in organizations or for effective implementation of current strategy (Grant 1996a; Grant 1996b; Helfat & Raubitschek, 2000; Kale *et al.* 2000; Kogut & Zander, 1992; Kogut & Zander, 1996; Koza *et al.* 1998). Thus, the quality of an interpersonal relationship would play a vital role in reducing middle managers' strategic role conflict by reducing the discrepancy in expectations between top managers and middle managers. Based on this discussion, I offer the following general hypothesis:

Hypothesis 4: The quality of the relationship between a middle manager and the top manager to whom he or she reports will be negatively associated with the amount of strategic role conflict experienced by the middle manager.

Kahn *et al.* (1964) identified interpersonal relations as a factor in role relations. The authors identified three types of interpersonal role relations (i.e., formal role relations, informal interpersonal bonds, and interaction processes) that one must consider that render the relationship between a role sender and a focal person unique. Informal interpersonal bonds refer to patterns of cognitive and affective orientation between two persons in a relationship that can have an effect on the quality of their relationship and the effectiveness of their communication. Under informal interpersonal bonds, Kahn *et al.* (1964) found that trust in senders was associated with a lower degree of role conflict. Trust defined as the degree to which one party has the willingness to be vulnerable to another party's actions based on the expectation that the other party (i.e., the trustee) will

perform a particular action important to the one party (i.e., the trustor), irrespective of the one party's ability to monitor or control the behavior of the other party (Mayer, Davis, & Schoorman, 1995). Therefore, under conditions of higher trust, communication tends to be more open, honest, and effective and help resolve conflicting expectations leading to the following hypothesis:

Hypothesis 4.1: The degree of joint trust in the relationship between a middle manager and the top manager to whom he or she reports will be negatively associated with the amount of strategic role conflict experienced by the middle manager.

On the other hand, if trust is not equally reciprocated, the one party experiencing the lower trust would tend to hold back and undermine the efforts of the other party at reaching consensus leading me to offer the following hypothesis:

Hypothesis 4.2: The degree of discrepancy in trust in the relationship between a middle manager and the top manager to whom he or she reports will be positively associated with the amount of strategic role conflict experienced by the middle manager.

Similarly, affective and affinity factors have an effect on role conflict because they help improve the quality and effectiveness of communication and the resolution of conflicting expectations. Affect helps minimize dissimilarities in expectations by promoting understanding through effective knowledge transfer (Dyer & Singh, 1998; Kale et al. 2000), which in turn leads to reduced role conflict. Kahn *et al.* (1964) found

that respect for and liking of senders was associated with a lower degree of role conflict.

Thus, based on this discussion, I offer the following hypothesis:

Hypothesis 4.3: The degree of joint affect in the relationship between a middle manager and the top manager to whom he or she reports will be negatively associated with the amount of strategic role conflict experienced by the middle manager.

Similarly, if affect is not equally reciprocated, the one party experiencing the lower affect would tend to have reservations and undermine the efforts of the other party at reaching consensus thus leading me to hypothesize the following:

Hypothesis 4.4: The degree of discrepancy in affect in the relationship between a middle manager and the top manager to whom he or she reports will be positively associated with the amount of strategic role conflict experienced by the middle manager.

Two characteristics of a high-quality interpersonal relationship identified in the literature are the cognitive flexibility and integrative bargaining orientation of the parties. Cognitive flexibility is the extent to which the information exchange process between two people is characterized by reflection, objective information review, use of different perspectives, being open to hearing from the other party, having the capacity and willingness to change one's opinion, and developing a large variety of interpretations. Parks (1994) argued that cognitive flexibility is an important aspect of communication competence and conversational sensitivity, which are positively related to self-monitoring, private self-consciousness, self-esteem, assertiveness, empathy, and social

skills and negatively related to communication apprehension, social anxiety, and receiver apprehension (Daly, Vangelisti, & Daughton, 1987). There is empirical support for these notions. For example, Chesebro and Martin (2003) found that conversational sensitivity and cognitive flexibility were positively related and that cognitive flexibility was inversely related to indirect interpersonal aggression. Cognitive flexibility affects strategic decision quality and implementation quality through increased trust and participative leadership and can have an ultimate positive effect on organizational performance (Raes *et al.*, 2011). According to Raes *et al.* (2011), cognitive flexibility has an effect on strategic decision quality and implementation quality because interactions between top managers and middle managers high in cognitive flexibility result in higher probability of making high-quality decisions. This higher probability results from top- and middle managers' better understanding of the environment through higher diversity of information, better understanding of cause-effect relationships, broader range of creative interpretations, and greater generation of alternatives (Raes *et al.*, 2011). The preceding discussion demonstrates that cognitive flexibility is a characteristic of positive, effective, high-quality interpersonal relationships and likely to lead to reduced strategic role conflict. Thus, I hypothesize the following:

Hypothesis 4.5: The degree of joint cognitive flexibility in the relationship between a middle manager and the top manager to whom he or she reports will be negatively associated with the amount of strategic role conflict experienced by the middle manager.

On the other hand, if only one party has high cognitive flexibility, the party with lower cognitive flexibility would tend to hold hard to entrenched positions and undermine the efforts of the other party at reaching consensus. Thus I offer the following hypothesis:

Hypothesis 4.6: The degree of discrepancy in cognitive flexibility in the relationship between a middle manager and the top manager to whom he or she reports will be positively associated with the amount of strategic role conflict experienced by the middle manager.

Having discussed why cognitive flexibility is a characteristic of a high-quality interpersonal relationship, now I turn my attention to the connection between integrative bargaining and a high-quality interpersonal relationship. Integrative bargaining is the degree to which two people try to find common or complementary interests that benefit both parties rather than just one during their mutual influencing process (Raes, Heijltjes, Glunk, and Roe (2011). When two parties engage in interaction, the extent to which bargainers perceive a situation as integrative (win-win) or distributive (i.e., win-lose) depends in part on the interaction between them (Putnam & Jones, 1982). An essential factor in evolving from distributive to integrative bargaining is reciprocity. According to social exchange theory, social exchanges are based on trust that the other party will reciprocate benevolently and depend largely on an honest exchange of information (Blau, 1964; Gouldner, 1960; Macneil, 1974, 1978, 1980). Thus, trust and honest information exchange are essential characteristics of high-quality interpersonal relationships where reciprocity is the norm.

In the organizational realm, integrative bargaining has been theorized to affect strategic decision quality and implementation quality through increased trust and participative leadership and can have an ultimate positive effect on organizational performance (Raes *et al.*, 2011). Furthermore, Raes *et al.* (2011) argued that integrative bargaining has an effect on strategic decision quality and implementation quality. The authors argued that interactions between the top management team and middle managers characterized by high integrative bargaining would result in higher-quality decisions (p. 111). Raes *et al.* (2011) contended that this outcome results from top- and middle managers' better understanding of the environment through higher diversity of information, better understanding of cause-effect relationships, broader range of creative interpretations, and greater generation of alternatives. The authors further argued that interaction between top- and middle managers high in integrative bargaining would result in better implementation quality through cooperation, mutual value creation, increased middle managers' commitment to strategy implementation, better allocation of resources, enhanced creativity of solutions generated, and improved understanding of the strategy. In summary, Raes, *et al.* (2011) argued that integrative bargaining has a positive effect on both strategic decision quality and implementation quality through an enhanced understanding of the environment and a win-win orientation to problem solving that enhances cooperation; that is, by enhancing the quality of the interpersonal relationship. Based on the preceding discussion, I hypothesize the following:



Hypothesis 4.7: The degree of joint integrative bargaining in the relationship between the middle manager and the top manager to whom he or she reports will be negatively associated with the amount of strategic role conflict experienced by the middle manager.

Alternatively, if only one party is high in integrative bargaining, the party with lower integrative bargaining would tend to concentrate on “winning”, hold win-lose positions, and undermine the efforts of the other party at reaching consensus. Thus I offer the following hypothesis:

Hypothesis 4.8: The degree of discrepancy in integrative bargaining in the relationship between a middle manager and the top manager to whom he or she reports will be positively associated with the amount of strategic role conflict experienced by the middle manager.

The following section presents a methodology for testing the hypotheses that I have offered.

## **CHAPTER 4**

### **METHODOLOGY**

#### **4.1 Introduction**

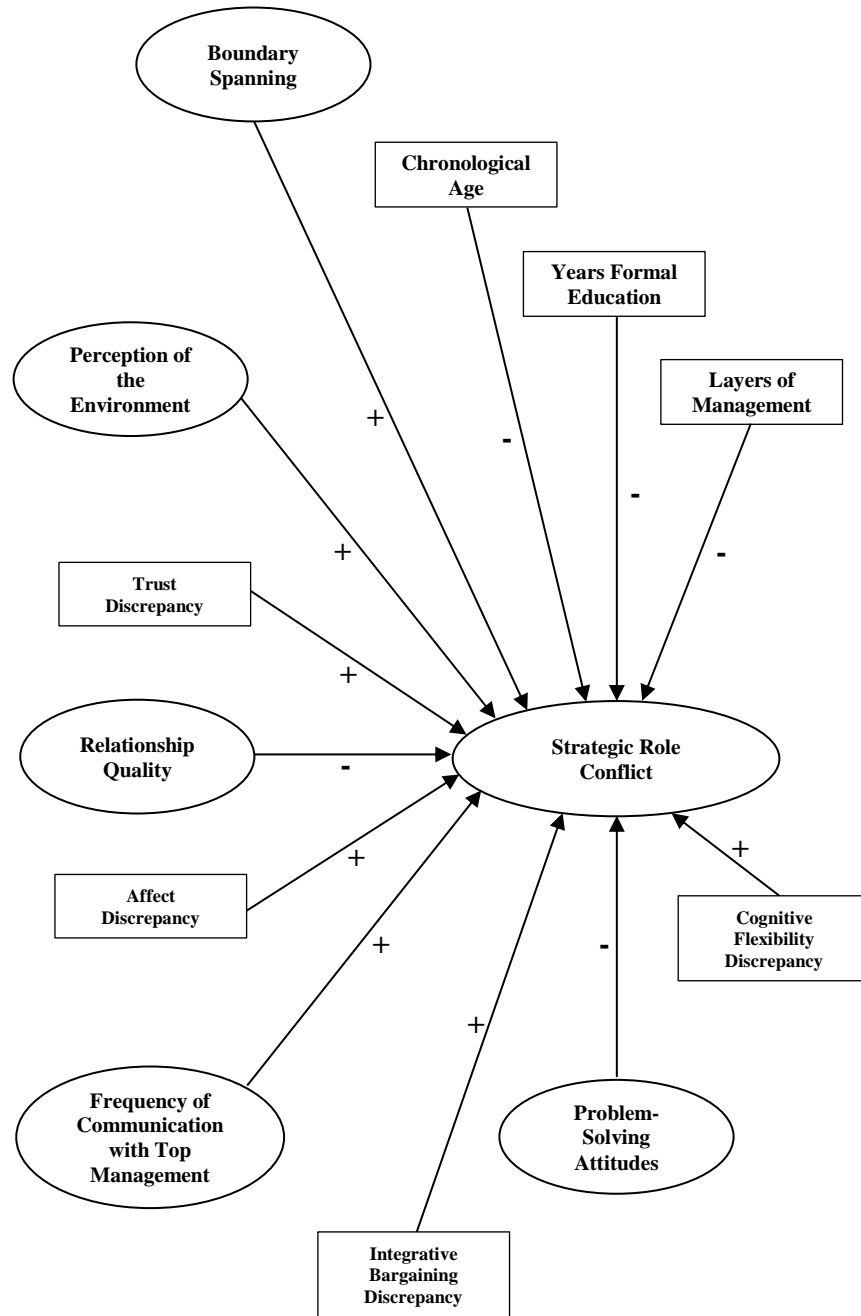
As stated in the introductory chapter, this dissertation explores the antecedents of strategic role conflict as its research question. Specifically, this study provides an empirical test of whether: (1) the demographic characteristics of middle managers, (2) the nature of their position within the organization, (3) the quality of their relationships with top management, and (4) the degree of dissimilarity of their environmental perceptions vis-à-vis top management's affect middle managers' experience of strategic role conflict.

This chapter presents the methodology used to empirically test the hypotheses offered in Chapter 3. First, the two specific conceptual models to be evaluated are presented followed by a discussion of the design of the study. Then, the research setting and sample are presented, followed by a description of the data collection methodology. Next, a description of the measures that were used is discussed. The actual items used in the survey are presented in the appendix. Finally, a description of the data analysis methodology, primarily Confirmatory Factor Analysis (CFA) and Structural Equations Modeling (SEM) is presented, followed by description statistics and figures of the two hybrid models that were tested.

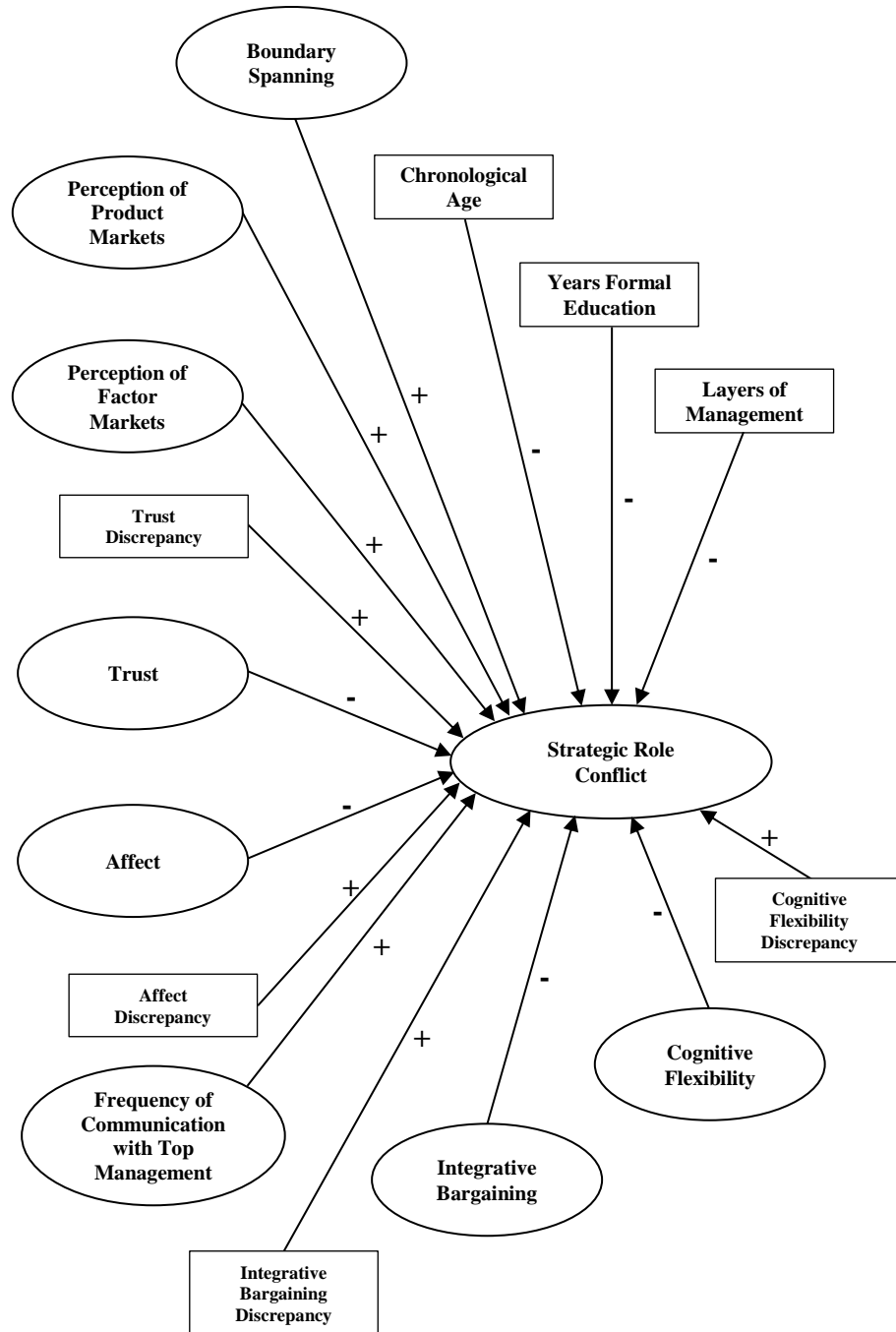
##### **4.1.1 Specific Conceptual Models**

Two specific conceptual models, Model A and Model B, were tested. The more parsimonious Model A uses twelve exogenous variables as predictors (see figure 4.1), whereas the less parsimonious Model B uses fifteen exogenous variables as predictors of the endogenous variable (see figure 4.2).

**Figure 4.1**  
**Strategic Role Conflict – Model A**



**Figure 4.2**  
**Strategic Role Conflict – Model B**



The methodology delineated in this chapter is intended to answer the following questions:

1. Which model provides the better fit to the data?
2. Does the better model have a reasonable fit to the data?
3. Are the links significant and in the hypothesized direction?
4. How much variance in the independent variable is explained by the model?

## **4.2 Research Design**

This dissertation examines the effects of several antecedents (i.e., demographic characteristics of the middle manager, nature of the middle manager's position within the organization, quality of the relationship of the middle manager with his or her top manager, and the degree of dissimilarity of environmental perceptions vis-à-vis his or her top manager's) on the middle manager's amount of strategic role conflict. Therefore, a cross-sectional field study was chosen as suitable to relate differences in these antecedents to the amount of strategic role conflict experienced by middle managers at a specific point in time. Another reason why a cross-sectional study is appropriate is that I asked informants to retrospectively report on specific experiences. All middle managers are theorized to experience some level of strategic role conflict irrespective of their location within the organization.

## **4.3 Research Setting**

An important condition for this study is an environment with a medium-high degree of dynamism and a sufficient but moderate amount of munificence (Sharfman &

Dean, 1991; Dess & Beard, 1984; Wu, Levitas, & Priem, 2005) that can lead to divergent perceptions and expectations among top and middle managers, which in turn can lead to strategic role conflict. A moderate amount of munificence should provide a minimum amount of slack resources for managers to engage in divergent strategic initiatives. Too little munificence is likely to lead to almost no opportunities for divergent behaviors, whereas too much munificence is likely to lead to diminished strategic conflict.

The nature of the competitive environment was an important element in the selection of the organization that ultimately was surveyed. An analysis of the competitive environment helped identify a number of large organizations that were experiencing significant but not drastic change in their environment. Consequently, environment signals were unclear as to whether middle managers should be trying to renew their capabilities to adapt to the changing conditions or whether they should hone their current competencies to better implement their current strategy.

Dess and Beard (1984) showed that higher levels of environmental dynamism are displayed by higher rates of turnover unpredictability. Accordingly, eighty-six four-digit NAICS Manufacturing Industries and thirty-four three-digit NAICS Service Industries were ranked by their degree of dynamism based on the degree of unpredictability of annual revenue using yearly revenue data from 2006 to 2011 obtained from the U. S. Annual Survey of Manufacturers and yearly revenue data from 2008 to 2013 obtained from the U. S. Annual Survey of Service Companies. Industries were classified as high, medium-high, medium-low, and low dynamism if they fell in the 25% above the 3<sup>rd</sup> quartile, 25% above the 2<sup>nd</sup> quartile, 25% above the 1<sup>st</sup> quartile, and 25% below the 1<sup>st</sup> quartile brackets ranked by unpredictability of annual revenue. In total, there were thirty

medium-high dynamism industries. From those thirty industries, all publicly held active profitable companies with annual sales of more than \$500 million were extracted from COMPUSTAT. In total, two hundred medium-high dynamism companies were identified, and a random sample of 30 companies were contacted. After contacting the 30 companies, a final company was selected as the subject based on the size of its revenues, profitability, and willingness to participate in the study.

The research site chosen was a large, global manufacturing company based in the United States. The company employs over 50,000 people worldwide. The organization, to be referred to here as Subject Company, has revenues of over \$20 billion and profits in excess of \$500 million. Subject Company currently finds itself in a difficult competitive situation. Changing communication technologies and globalization have been posing challenges to the company's traditional businesses and strategy for several years.

Two divisions within Subject Company participated in the study. Both divisions have substantial levels of revenues and profits, and both face similar and significant dynamism in their environments. There is nothing interestingly different between the two divisions in their competitive environments that would suggest that their environmental context should not be considered the same. Therefore, the data collected from both divisions was combined for purposes of this study.

#### **4.4 Sample**

The population of interest is middle managers. The sample frame consisted of all US-based middle managers working within the two participant divisions. The sampling method was comprehensive. That is, invitations were sent to all middle managers that met this criterion for the population: Middle managers were defined as individuals

holding managerial responsibilities supervising employees or supervising a function who are higher in the organizational hierarchy than first-level supervisors and lower than individuals reporting directly to the CEO (Floyd & Wooldridge, 1992; Wooldridge & Floyd, 1990; Wooldridge, Schmid, & Floyd, 2008). The large size of Subject Company provided the possibility of surveying a sufficient number of middle managers within the two participant divisions. An invitation to participate in the study was sent to all the middle managers within the two divisions. A sample of 249 middle managers was obtained. The hierarchical breakdown was 6 percent two levels below the CEO, 23 percent three levels below, 44 percent four levels below, and 27 percent five levels below the CEO. Two hundred thirty two (232) complete surveys were received. The remaining 17 surveys had missing data in varying degrees but all were used in the analysis (N=249). The top managers leading the participating divisions were also surveyed to match their responses with their middle managers’.

The 249 surveys received represent a combined 30% response rate. The response rates for each division were 28% and 32% respectively. Given that quantitative cross-sectional data was collected, this sample size was large enough to provide for robust statistical results (Hair, Black, Babin, & Anderson, 2009; Tsui & Gutek, 1984). For purposes of comparing demographic characteristics, differences in environmental perceptions, and quality of relationship middle manager / top manager, middle managers responses were paired with the responses of the respective top manager to whom their line of command reports, irrespective of whether the middle manager reported directly to the top manager or not. The top managers of each division were over fifty years old, had graduate education (MBA), more than twenty five years with the company, and more



than five years leading their respective divisions. For middle managers, individual demographic characteristics such as age, years of formal education, tenure with the company, and tenure within the industry were collected for purposes of characterizing the sample. Despite limitations regarding generalizability, using a sample from a single company has been an accepted procedure for testing theory since a homogeneous sample from a single population provides a rigorous test of the theoretical constructs and relationships and controls for spurious differences found when sample subjects have unique circumstances (Calder, Phillips, & Tybout, 1981). Data from the 25 pre-test survey respondents were not part of 249 surveys that were used in the final statistical analyses.

#### **4.5 Procedure / Data Collection / Anonymity**

A survey instrument to collect data from respondents was developed and pre-tested prior to its use. There were 25 respondents to the pre-test. Learning from the pre-test resulted in important revisions to the survey instrument. The changes resulted in a shorter survey as specific items that the respondents found confusing were clarified. In addition, a factor analysis of the pre-test responses resulted in the elimination of items that did not correlate well with the remaining items in its scale. Finally, the pre-test confirmed that the survey generated substantial variance across the 25 respondents.

Most sections of the survey were comprised largely of 7-point Likert-type response formats. The content of the survey instrument was based on a review of role conflict and middle management research, which provided a framework for measuring specific constructs of interest. This involved consulting published research in role

conflict, middle management, trust, negotiation, and organizational psychology.

Wherever possible, I used previously validated scales to measure my constructs. For example, quantitative measures derived from existing measures that have been empirically validated to measure managerial perceptions regarding the environment as well as strategic role conflict were used (Floyd & Lane, 2000; Floyd & Wooldridge, 1992, 1997; Rizzo *et al.*, 1970). Prior to starting fieldwork with human subjects, I obtained the appropriate approval of my survey instrument from the Institutional Review Board at the University of Massachusetts Amherst Isenberg School of Management.

Several measures were used to measure each one of the constructs: demographic characteristics, middle manager's position within the organization, differences in environmental perceptions, quality of the relationship between middle manager and top manager, and strategic role conflict. First, the survey measured individual perceptions of environmental conditions. Differences in individual perceptions of the environment are the source of disagreement between levels of management as to what strategic roles are appropriate to enact. Second, demographic characteristics and characteristics of middle managers' positions within the organization were examined. Third, the quality of the relationship that middle managers have with the top manager to whom their line of command reports was measured using several indicators. Finally, strategic role conflict was measured using a modified version of the Rizzo *et al.*'s (1970) role conflict scale. Structural Equations Modeling (SEM) was used to test the hypotheses presented in chapter 3. The ultimate dependent variable was middle manager's strategic role conflict.

To improve the response rate, I obtained the support of top management for the study. A letter was sent by the top manager's administrative assistant via email to all the

US-based middle managers of the volunteer divisions mentioning the approval of their top manager and his/her encouragement to participate in the survey but making clear that participation was anonymous and voluntary. The middle managers who received the survey were individuals holding managerial positions higher in the organizational hierarchy than first-level supervisors and lower than individuals reporting directly to the CEO (Floyd & Wooldridge, 1992; Wooldridge & Floyd, 1990; Wooldridge, Schmid, & Floyd, 2008).

The email contained a link to the electronic version of the questionnaire. The anonymity of the respondents was assured by not collecting any specific identifying information such as name of the respondent, social security number, exact date of birth, or title of the respondent's position. In addition, I tried to make the survey interesting, easy to respond, well structured, and the questions relevant and important (Dillman, 2006). I pre-tested the survey with a sample of 25 middle managers to ensure that the survey questions were adequate and not overly taxing (Dippo, Chun & Sander, 1995). Two options were offered to complete the survey: an online version of the survey using Qualtrics and a paper version. The online option allowed respondents to quickly respond to questions and helped the investigator with data entry. No middle managers requested to use the paper version of the survey. A similar online survey was administered to the top managers via electronic means.

#### **4.6 Operationalization of Constructs and Measures**

As stated, previously validated scales were used to measure most of the constructs in the survey. Some adaptations were necessary due to survey instrument constraints and

the strategic nature of the constructs. The operationalization and measurement of each construct is explained in this section and summarized in Table 1 in the appendix.

Operationalization of constructs is also illustrated in the structural models shown in Figures 4.3 and 4.4. The full scales that make up the survey can be found in Table 2 in the appendix.

In this study, demographic characteristics, middle manager's position within the organization, differences in environmental perceptions, and the quality of the middle manager' relationship with the top manager were treated as exogenous variables. Strategic role conflict was endogenous in the models. Since different managers experience different levels of strategic role conflict, the dependent variable had natural variability.

#### **4.6.1 Measures for Independent Variables**

##### **4.6.1.1 Demographic Characteristics of Middle Managers**

Chronological age and years of formal education of the middle manager were the two demographic characteristics of interest in this dissertation. Their absolute value as well as their relative value vis-à-vis the top manager to whom the middle manager reports were measured using single-item scales. Age was obtained by asking respondents to provide their month and year of birth. Year of formal education was obtained by asking respondents to provide their total years of formal education counting from the first grade.

##### **4.6.1.2 Nature of Middle Manager's Position within the Organization**

Middle managers' positions within the organization were characterized as boundary spanning or non-boundary-spanning. In addition, the number of managerial layers separating a middle manager from the respective top manager to whom their line

of command reports was measured to further characterize the nature of the middle manager's position within the organization. Finally, the frequency of communication of the middle manager with the respective top manager to whom his/her line of command reports was measured to add more nuance to the nature of the middle manager's position within the organization. Specific details on the procedures used are given below.

#### **4.6.1.2.1 Boundary Spanning**

Middle managers' boundary spanning activity was measured using a four-item scale related to contacts outside of their department, their operation, their division, and their company. This measure was constructed based on items used successfully in prior research (Keller & Holland, 1975). Keller and Holland's scale had a reliability of 0.73. To establish the extent of exposure to outside points of view, respondents were asked to report on the extent of their interactions outside their department, their operation, their division, and the company. A reliability analysis using Cronbach's alpha for the items used for this construct in this dissertation was 0.72, which exceeds the minimum target reliability of 0.7 for acceptable reliability (Nunnally, 1978). The actual items used are reported on Table 2 in the appendix.

#### **4.6.1.2.2 Number of managerial layers separating a middle manager from the respective top manager**

The number of managerial layers separating a middle manager from his/her respective top manager was obtained by asking respondents to provide to the best of their knowledge the number of layers of management separating their position from the position of the CEO. Ten percent of the 249 questionnaires that were returned was

randomly selected and compared against the organizational chart and found accuracy of about 97%.

#### **4.6.1.2.3 Frequency of communication of the middle manager with the respective top manager**

The frequency of communication of the middle manager with the respective top manager to whom his/her line of command reports was measured using a three-item scale related to various ways of communicating adapted from commonly used items examples of which were obtained from Biddle (1979) and Katz and Kahn (1978). To measure the extent of visibility to, direct supervision by, and pressure from their top manager, respondents were asked to report on the extent of their interactions with their top manager. A reliability analysis using Cronbach's alpha for the items used for this construct was 0.96, which exceeds the minimum target reliability of 0.7. Since it is higher than 0.8, it is considered good reliability (Nunnally, 1978). The actual items used are reported on Table 2 in the appendix.

#### **4.6.1.3 Dissimilarity in Environmental Perceptions**

The external environment is considered an important aspect that organizations must contend with (e.g., Child, 1972; Thompson, 1967). Yet, few scales are available for assessing environmental perceptions. Jaworski and Kohli (1993) developed new scales to measure perceived market and technological turbulence. The authors created a 6-item scale to measure perceived market turbulence and a 5-item scale to measure perceived technological turbulence. Dickson and Weaver (1997) used an environmental perception scale developed by Covin and Slevin (1989) and Schultz, Slevin, and Covin (1995). The original scale comprised five items drawn from Miller and Friesen's (1982)

environmental dynamism measures, five items from Khandwalla's (1977) external environment measures, and five items developed by Schultz, Slevin, and Covin (1995). Scale items focus on behavior, and assess environmental perceptions related to general uncertainty, technological demand and volatility, predictability of markets, and the potential for future growth and profits. Finally, Joshi and Campbell (2003) used a 4-item scale to measure perceived environmental dynamism. Their scale items were drawn from Achrol and Stern (1988). The environmental perceptions items for the present study are similar to these scales, but were customized more specifically for the strategic nature of the behaviors studied in this research. For Model B, two types of environmental perceptions were treated separately: perception of factor markets and perception of product markets. For Model A, these two dimensions were treated as one construct. . The specific details of the procedures and the reliability of the scales used are reported in the subsections below. The actual items used are reported on Table 2 in the appendix.

#### **4.6.1.3.1 Environmental perception of product markets**

Middle managers' environmental perception of product markets was measured using a four-item scale related to predictability of customer preferences and customer demand adapted from existing scales as explained above (i.e., Covin & Slevin, 1989; Dickson & Weaver, 1997; Jaworski & Kohli, 1993; Joshi and Campbell, 2003; Khandwalla, 1977; Schultz, Slevin & Covin, 1995; and Miller & Friesen, 1982). A reliability analysis using Cronbach's alpha for the items used for this construct was 0.79. The actual items used are reported on Table 2 in the appendix.

#### **4.6.1.3.2 Environmental perception of factor markets**

Middle managers' environmental perception of factor markets was measured using a four-item scale related to predictability and potential of technology in the industry adapted from existing scales as explained above (i.e., Covin & Slevin, 1989; Dickson & Weaver, 1997; Jaworski & Kohli, 1993; Joshi and Campbell, 2003; Khandwalla, 1977; Schultz, Slevin & Covin, 1995; and Miller & Friesen, 1982). A reliability analysis using Cronbach's alpha for the items used for this construct was 0.72. The specific items used in this study are reported on Table 2 in the appendix.

#### **4.6.1.4 Quality of the Middle Manager / Top Manager Relationship**

Trust, affect, cognitive flexibility, and integrative bargaining were used as indicators of the quality of the relationship between the middle manager and the top manager to whom the middle manager reports. They were measured using existing measures found in the literature. Whenever existing measures were obtained, I adapted them for purposes of this dissertation. When no existing scales were obtained, I created new survey items to use as indicators. The specific details of the procedures and the reliability of the scales used are reported in the subsections below. The actual items used are reported on Table 2 in the appendix.

##### **4.6.1.4.1 Trust**

The definition of trust used in this dissertation is taken from Mayer, Davis, and Schoorman (1995). According to these authors, mutual trust is the degree to which one party has the willingness to be vulnerable to another party's actions based on the expectation that the other party (i.e., the trustee) will perform a particular action important to the one party (i.e., the trustor), irrespective of the one party's ability to



monitor or control the behavior of the other party. There are a number of scales that measure trust in interpersonal relations, especially trust in people in general, or trust in social groups, or trust in social institutions (e.g., Wrightsman, 1964; Rosenberg, 1957; Rotter, 1967; Shure & Meeker, 1967). However, there are few scales that measure interpersonal trust within organizations. Cook and Wall (1980) developed an original 12-item scale to measure interpersonal trust at work. The trust items for the present study were adapted from Cook and Wall's (1980) scale and customized more specifically for the strategic nature of the behaviors studied in this research. A reliability analysis using Cronbach's alpha for the four-item scale used to measure this construct was 0.85. Since it is higher than 0.8, it is considered good reliability (Nunnally, 1978). An additional measure of trust measured the discrepancy rather than the summation of the perceptions of mutual trust between the middle manager and the top manager. The actual items used are reported on Table 2 in the appendix.

#### **4.6.1.4.2 Affect**

Affect is positive feelings of one party toward another party (i.e., "liking" the other person) that predispose the one party to be more receptive to persuasive communication from the other party. It involves special regard of one party for another party's judgment, competence, talents, and skills that translates into paying attention to and taking seriously the opinions of the other party. To measure affective bond, four items were adapted from the affective bond scale by Kahn *et al.* (1964) and Tsui's (1983) scale. The measure consists of three components: admiration, respect, and liking. A reliability analysis using Cronbach's alpha for the four-item scale used to measure this construct was 0.90. Since it is higher than 0.8, it is considered good reliability (Nunnally,

1978). An additional measure of affect measured the discrepancy rather than the summation of the perceptions of mutual affect between the middle manager and the top manager. The actual items used are reported on Table 2 in the appendix.

#### **4.6.1.4.3 Cognitive Flexibility**

As defined earlier, cognitive flexibility is the extent to which the information exchange process between top managers and middle managers is characterized by reflection, objective information review, use of different perspectives, being open to hearing from the other party, having the capacity and willingness to change one's opinion, and developing a large variety of interpretations (Raes *et al.*, 2011). Martin and Rubin (1995) developed a 12-item scale to measure cognitive flexibility and validated it in two separate studies involving a total of 522 participants. The authors' analysis demonstrated that their cognitive flexibility scale was internally reliable and had construct and concurrent validity. The specific items to measure cognitive flexibility in the present study were adapted from Martin and Rubin's (1995) scale to more specifically address the strategic nature of the behaviors studied in this research. The actual items used are reported on Table 2 in the appendix.

A reliability analysis using Cronbach's alpha for the four-item scale used to measure this cognitive flexibility was 0.90. Since it is higher than 0.8, it is considered good reliability (Nunnally, 1978). An additional measure of cognitive flexibility measured the discrepancy rather than the summation of the perceptions of mutual cognitive flexibility between the middle manager and the top manager.

#### **4.6.1.4.4 Integrative Bargaining**

Integrative bargaining is the degree to which top managers and middle managers try to find common or complementary interests that benefit both parties rather than just one party during their mutual influencing process (Raes *et al.*, 2011). It is based on the idea that a negotiation is not a zero-sum game, but that benefits can be found that increase both parties' welfare. Parties can discover solutions that meet one party's needs at little cost to the other party when the parties convey their true interests to each other and if they remain engaged with each other exploring options (Fisher, Ury, & Patton, 1991). Effective integrative bargaining requires persistence and effort and concern for the other side's interest as well as for one's own interest (Pruitt & Rubin, 1986). There are no known scales to measure integrative bargaining as in past literature it has been measured by observation. Therefore, I created new items based on Raes *et al.*'s (2011) description and definition of integrative bargaining. The new scale was pre-tested in the pre-test, and weaker items were removed to increase its internal reliability. The actual items used are reported on Table 2 in the appendix.

A reliability analysis using Cronbach's alpha for the five-item scale used to measure this integrative bargaining was 0.89. Since it is higher than 0.8, it is considered good reliability (Nunnally, 1978). An additional measure of integrative bargaining measured the discrepancy rather than the summation of the perceptions of mutual integrative bargaining between the middle manager and the top manager.

## **4.6.2 Measures for Dependent Variable**

### **4.6.2.1 Strategic Role Conflict**

The strategic role conflict that I am interested in is the one subjectively experienced by managers as tension and discomfort when faced with conflicting expectations for their strategic behavior. Traditionally, the literature identifies two ways used in the past to measure role conflict, one objective and one subjective. The objective measure assesses the level of role conflict from the existence of conditions likely to lead to the occurrence of role conflict. For example, the existence of role conflict can be inferred from the degree of incompatibility of role expectations between the expectations sent toward the role incumbent by the role senders (Kahn *et al.*, 1964). However, the objective measure does not really capture or predict the experience of role conflict. It only identifies the conditions that can lead to the experience of role conflict. On the other hand, the subjective measure attempts to gauge the degree of role conflict experience by the role incumbent. I believe that role conflict is mainly associated with the perception and subjective experience of the role incumbent. As a result, a subjective measure is more appropriate because it measures the actual psychological state of the individual experiencing the role conflict. It is the psychological state of internal discomfort of the individual that interferes with the appropriateness and effectiveness of the individual's decisions and actions; and for this reason, it is the phenomenon of study in this dissertation.

To measure strategic role conflict, I used a modified measure adapted from items originally developed by Rizzo, House, and Lirtzman (1970). The authors developed a questionnaire consisting of two independent scales designed to measure role conflict and

role ambiguity in complex organizations. Rizzo *et al.* (1970) used their new questionnaire to identify barriers for the effective implementation of a management development program in a large manufacturing company. The original items from Rizzo *et al.*'s (1970) role conflict scale were modified for purposes of this research, and after a pre-test, a six-item scale was created. Each item in the role conflict scale was measured on 7-point Likert-type scale using an agree-disagree response format. The items were combined by summation into a single construct. A 7-point Likert-type format ( 1 = "strongly agree," . . . , 7 = "strongly disagree") was used to anchor all of the items in this scale. The actual items used in this study are reported on Table 2 in the appendix.

A reliability analysis using Cronbach's alpha for the six-item scale used to measure strategic role conflict was 0.89. It is considered good reliability since it is higher than the rule of thumb 0.8 for good reliability (Nunnally, 1978) and compares favorably with a similarly-derived, eleven-item measure used by Rogers and Molnar (1976) in a study of top administrators in 110 county offices of federal, state, and county agencies, which had a Cronbach's alpha of 0.82.

#### **4.6.3 Threats to Validity**

The validity of the study results depends on having an unbiased sample of the total research population. In the present study, two potential sources of sampling bias merit attention. The first source of bias derives from the methods used in the data collection process. Common method bias can distort the results in studies that measure variables as subjective perceptions of the respondents and collect data for the dependent variable at the same time as data for the independent variables. The second source of

bias is the possibility that the respondent middle managers are systematically different in the primary study variables from the research population as a whole. Even if the sampling procedure is ideally random, such differences may exist if certain classes of individuals (for example, based on their position within the organization, years with the company) are more likely to respond than others.

#### **4.6.3.1 Common Method Bias**

As stated above, studies that measure variables as subjective perceptions of the respondents and collect data for the dependent variable at the same time as data for the independent variables have the potential that common method bias influences the results. Extant research mentions four main sources of common method bias: (1) the use of a common respondent, (2) how items are presented in the questionnaire, (3) the context surrounding items in the survey, and (4) when, where, and how the constructs are measured (Podsakoff et al, 2003).

The present study had a lesser potential for common method bias because most independent variables were measured as combinations of responses given by middle managers and responses given by their top manager. On the other hand, the dependent variable was measured exclusively via middle managers' responses. Nevertheless, I used several techniques during the design and data collection stages of my study to further reduce the potential for common method bias. First, all communication directed to the respondents, as well as the survey instrument, avoided any explicit mention of the purpose of the study or the dependent variable. This was done to reduce pre-conception bias by preventing respondents from anticipating the relationships under study. Second, the order and location of the survey items were also intentionally designed to help reduce

pre-conception bias. To further prevent other answering biases, respondents were assured of the voluntary and anonymous nature of their responses, and language that could give any indication of the purpose of the research was avoided (Podsakoff et al, 2003). Finally, Harman's single-factor test showed post hoc that common method bias was not a problem because neither a single factor nor one general factor accounted for more than 15% the variance in the data (e.g., Aulakh & Gencturk, 2000; Christmann, 2004; Lederer et al, 2000).

#### **4.6.3.2 Non-response Bias**

To reduce nonresponse bias, I thoroughly pre-tested my survey. I paid particular attention that my survey ran smoothly online, that loading times were not long, that questions fitted properly on the screen, and that the more sensitive questions regarding personal information were asked last. I avoided rushes by giving respondents a long data collection period so that participants could choose any day during the data collection period to respond according to their own busy schedule, and reminders were sent via email a week after and two weeks after the initial invitation to participate. Finally, respondents were assured of anonymity and confidentiality by not asking for any personally identifiable information and assuring respondents that the information they provide would be aggregated as part the whole sample and not individually scrutinized (Kline, 2010). To test for the presence of non-response bias, the study sample was compared to the total survey population on the basis of percent of respondents at each managerial level. The comparison revealed that for each managerial level, the proportion of respondents to non-respondents was similar. Although not a statistical test, the results give me confidence that non-response bias is not an issue in this study.

#### **4.7 Method of Statistical Analysis**

The models that I am testing were conceptualized a priori based on theory. Therefore, the appropriate statistical methodology to test them is Structural Equations Modeling (SEM). SEM examines the adequacy of the overall model, the paths between the constructs, and the overall explanatory power of the model measured as the percent of variability in the dependent variable explained by the model (Kline, 2010).

According to Kline (2010), there are six basic steps to follow when conducting Structural Equations Modeling. The first step is to specify the model, which was done in the preceding section. The second step is to determine if the model is identified. A model is said to be identified if there is no reciprocal causation between endogenous variables, if there are no feedback loops, and if the endogenous variables are otherwise unrelated (i.e., if the model is recursive; Kline, 2010). Based on the theory used to generate the model, all three of these restrictions have been met. Therefore, the models as presented are identified. The third step requires specifying the measures to be used (i.e., operationalizing the constructs) and collecting, preparing, and screening the data. All the data was reviewed and assessed for face validity and integrity. A visual check of the data and descriptive statistics revealed no obvious entry mistakes, incorrect reverse coding, or invalid responses. Descriptive statistics included mean, standard deviation, skewness, and kurtosis for each survey item. These are presented in Table 4.1. Skewness and kurtosis were within normal range. In the following section, Kline's (2010) step four Confirmatory Factor Analysis (CFA) was conducted to confirm the unidimensionality of the constructs.



#### **4.7.1 Measurement Models – Confirmatory Factor Analysis**

In addition to the alpha coefficients that I used to examine the validity of the scales, I conducted Confirmatory Factor Analyses (CFA's) to further establish the validity of the constructs. I conducted CFA's for both measurement models using Structural Equation Modeling (SEM) and the software package MPlus. As stated earlier, SEM examines the adequacy of the overall model, the paths between the constructs (i.e., the individual relationships between variables), and the general effectiveness of the measurement model (Kline, 2005; Hair, et al, 2009).

Traditional validity tests use coefficient alpha to measure reliability. However, coefficient alpha has some limitations. One limitation is that coefficient alpha assumes that all items contribute equally to reliability, which is usually not the case (Bollen, 1989; Shook, Ketchen, Hult, & Kacmar, 2004). SEM provides a better method because composite reliability can be inferred by examining the standardized factor loadings of each item on the construct they purportedly measure and comparing these standardized factor loadings to the correlations between the construct and other constructs. Large standardized factor loadings are evidence of convergent validity. Correlation coefficients between each latent variable that are less than the standardized factor loadings are evidence of discriminant validity (Anderson & Gerbing, 1988; Gerbing & Anderson, 1988; Kline, 2010; Shook, Ketchen, Hult, & Kacmar, 2004; Stevens, 1996)

The first step of the CFA is to assess the overall fit of the measurement model. If the CFA shows a reasonable fit to the data, the first evidence of convergent validity of the constructs has been found. SEM tests fit by examining how well the proposed model reproduces the actual covariance matrix. Several fit statistics are used to evaluate how

different the model-predicted covariance matrix is from the actual covariance matrix derived from the data (Hair et al, 2009). Goodness of fit is assessed looking at several fit statistics which include: Normed Chi-square fit statistic ( $\chi^2/Df$ ), Comparative Fit Indicator (CFI), Root Mean Square Error of Approximation (RMSEA), Non-Normed Fit Index (NNFI) also known as Tucker-Lewis Index (TLI), and the Standardized Root Mean Square Residual (SRMR). As shown below, I used traditional rules of thumb to assess the various fit statistics to decide if a model provided reasonable fit (e.g., Bentler and Bonnet, 1980; Hair et al, 2009; Hooper, Coughlan, and Mullen, 2008; Klein, 2005; Shook, Ketchen, Hult, & Kacmar, 2004; Wheaton, Muthen, Alwin, & Summers, 1977).

For Model A's measurement model, the normed  $\chi^2$  is 2.40, which is below the recommended cut off level of three indicating good fit. The Comparative Fit Indicator (CFI) of 0.770 suggests poor fit as it is below the recommended cut off of 0.90 for reasonable fit. The Root Mean Square Error of Approximation (RMSEA) is 0.083, below the 0.10 recommended cut off suggesting good fit. The RMSEA 90% confidence interval is from 0.078 to 0.087. It also suggests good fit as it below the recommended cut off of 0.10. The Non-Normed Fit Index (NNFI) also known as the Tucker-Lewis Index (TLI) is 0.752 suggesting poor fit as it is below the recommended cut off of 0.90 for reasonable fit. Finally, the Standardized Root Mean Square Residual (SRMR) of 0.097 is greater than 0.08, also suggesting poor fit. Taken together, the overall conclusion is that Model A's measurement model does not provide a reasonable fit to the data and barely an acceptable fit. Continuing, the CFA shows that each item factor loading loaded onto the construct it was supposed to measure with a statistically significant t-test ( $p < 0.05$ ) and that all the standardized factor loadings were large enough providing more evidence of

convergent validity. Finally, the correlation coefficients between each of the constructs are smaller than the standardized factor loadings of the items used to measure the constructs, which provides evidence of discriminant validity (Anderson & Gerbing, 1988; Kline, 2010; Shook, Ketchen, Hult, & Kacmar, 2004; Stevens, 1996). Since Model A's measurement model barely provides an acceptable fit to the data, I now proceed to examine Model B's measurement model.

For Model B's measurement model, the normed  $\chi^2$  is 1.82, which is below the recommended cut off of three indicating good fit. The Comparative Fit Indicator (CFI) of 0.893 suggests acceptable fit as it is almost the recommended cut off of 0.90 for reasonable fit. The Root Mean Square Error of Approximation (RMSEA) is 0.057, below the 0.10 recommended cut off suggesting good fit. The RMSEA 90% confidence interval is from 0.052 to 0.062. It also suggests good fit as it below the recommended cut off of 0.10. The Non-Normed Fit Index (NNFI) also known as the Tucker-Lewis Index (TLI) is 0.881 suggesting acceptable fit as it is slightly below the recommended cut off of 0.90 for reasonable fit. Finally, the Standardized Root Mean Square Residual (SRMR) of 0.086 is greater than 0.08, suggesting less than reasonable fit. Taken together, the overall conclusion is that the Model B's measurement model provides a reasonable fit to the data. The next step is to examine the individual factor loadings between the constructs and their associated measurement items for statistical significance. The CFA shows that each item factor loading loaded onto the construct it was supposed to measure with a statistically significant t-test ( $p < 0.05$ ). Finally, all the standardized factor loadings were large providing further evidence of convergent validity. The last step is to compare the correlation coefficients between each of the constructs to make sure that they are smaller

than the standardized factor loadings of the items used to measure the constructs. In all cases, the correlation coefficients between all the constructs are smaller than the standardized factor loadings of the items. This is evidence of discriminant validity (Anderson & Gerbing, 1988; Kline, 2010; Shook, Ketchen, Hult, & Kacmar, 2004; Stevens, 1996). In summary, Model B's measurement model provides reasonable fit to the data, has construct validity, and discriminant validity. Therefore, it can be used for testing the hypotheses of this dissertation.

#### **4.7.2 Structural Models**

Once the construct scales were set and unidimensionality determined, two structural models were tested (see figures 4.3 and 4.4 for the structural models A and B and table 5.1 for a summary of model fit). Model B was conceptualized as an alternative to Model A (Kline's, 2010 step 5). In the next chapter, path loadings connecting each independent variable to the dependent variable for the best fitting model are reported in table 5.4 and graphically in figure 5.1 (Kline's, 2010 step 6). The meanings of the constructs, variables, and indicators are shown in Tables 1 and 2 in the appendix.

**Table 4.1**

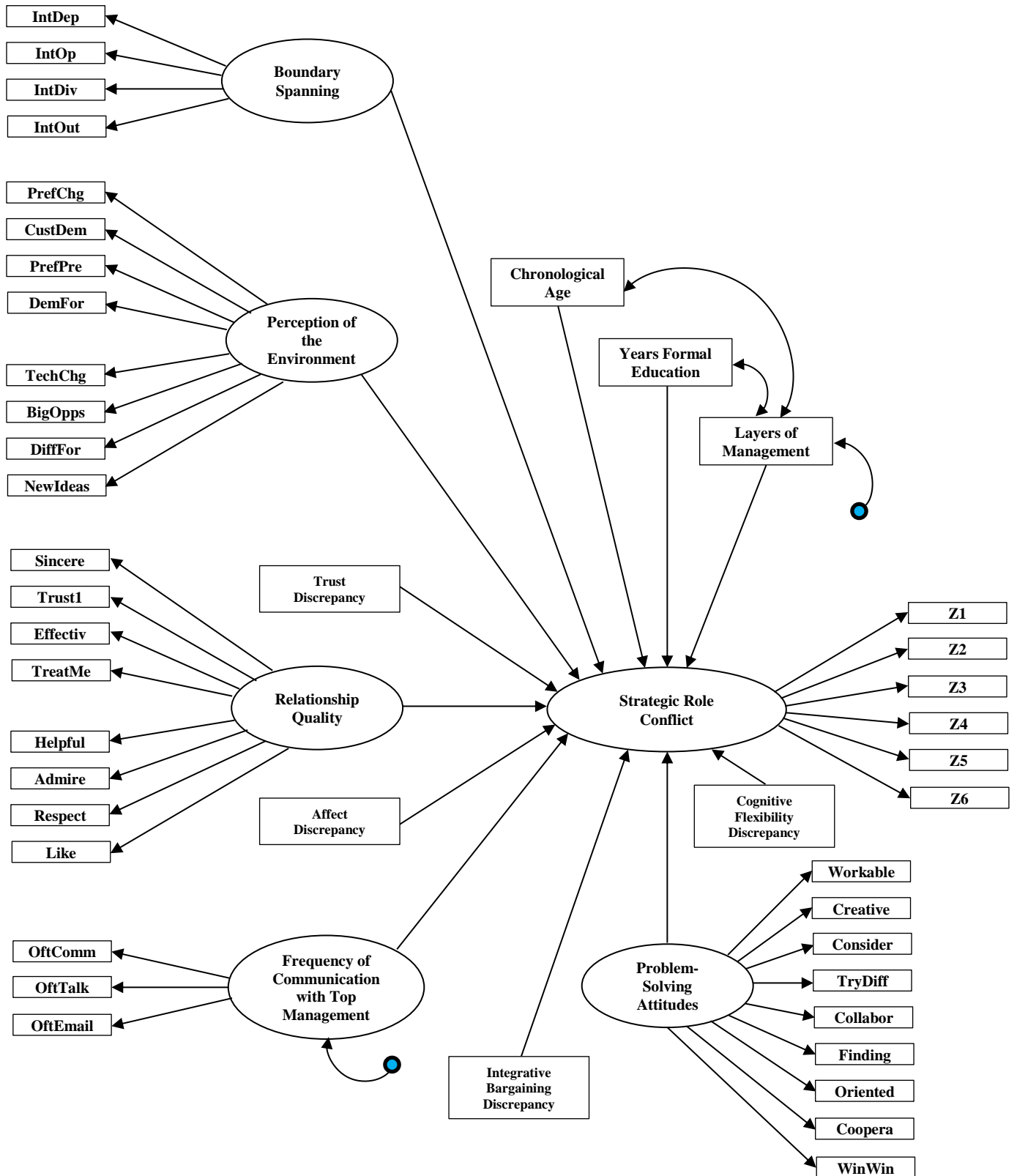
Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Age	232	29	58	41.47	6.29	0.13	0.16	-0.62	0.32
YrsEdu	232	11	22	16.03	1.64	-0.15	0.16	2.37	0.32
Layers	249	2	5	3.91	0.87	-0.43	0.15	-0.49	0.31
IntDep	249	2	7	5.46	1.30	-0.65	0.15	-0.14	0.31
IntOp	249	1	7	4.45	1.38	-0.18	0.15	-0.06	0.31
IntDiv	249	1	7	3.51	1.25	0.16	0.15	0.00	0.31
IntOut	249	1	7	3.68	1.72	0.39	0.15	-0.71	0.31
PrefChg	249	0	3	1.76	0.95	-0.25	0.15	-0.90	0.31
CustDem	249	0	3	1.84	1.02	-0.34	0.15	-1.06	0.31
PrefPre	249	0	4	2.57	1.14	-0.50	0.15	-0.47	0.31
DemFor	249	0	3	1.57	0.99	-0.03	0.15	-1.02	0.31
TechChg	249	0	4	2.79	1.24	-0.59	0.15	-0.86	0.31
BigOpps	249	0	3	1.90	1.06	-0.42	0.15	-1.14	0.31
DiffFor	249	0	3	2.09	1.04	-0.76	0.15	-0.72	0.31
NewIdeas	249	0	3	2.02	1.01	-0.64	0.15	-0.77	0.31
Sincere	247	6	12	8.90	1.27	-0.26	0.15	-0.39	0.31
Trust1	247	6	12	9.16	1.43	-0.05	0.15	-0.47	0.31
Effectiv	247	5	11	7.93	1.30	0.31	0.15	-0.32	0.31
TreatMe	247	5	11	7.69	1.40	0.18	0.15	-0.30	0.31
TrustD	247	0.00	3.50	0.98	0.79	0.93	0.15	0.33	0.31
Helpful	247	6	12	9.20	1.63	0.03	0.15	-0.64	0.31
Admire	247	5	11	8.40	1.32	0.00	0.15	-0.47	0.31
Respect	247	5	11	8.34	1.74	-0.17	0.15	-0.93	0.31
Like	247	6	12	9.75	1.62	-0.39	0.15	-0.56	0.31
AffectD	247	0.00	3.50	1.16	0.76	0.50	0.15	-0.25	0.31
Workable	247	6	12	9.47	1.46	0.07	0.15	-0.73	0.31
Creative	247	5	11	8.69	1.30	-0.36	0.15	-0.04	0.31
Consider	246	6	12	9.63	1.35	-0.34	0.16	-0.16	0.31
TryDiff	246	5	11	8.01	1.34	0.06	0.16	-0.60	0.31
CogFlexD	246	0.00	3.50	0.98	0.69	0.72	0.16	0.43	0.31
Collabor	246	6	12	10.09	1.62	-0.60	0.16	-0.39	0.31
Finding	246	6	12	10.45	1.60	-0.94	0.16	0.21	0.31
Oriented	246	5	11	9.28	1.56	-0.68	0.16	-0.25	0.31
Coopera	246	6	12	10.22	1.50	-0.46	0.16	-0.69	0.31
WinWin	246	6	12	9.93	1.58	-0.45	0.16	-0.56	0.31
IntBargD	246	0.00	3.80	1.16	0.72	0.45	0.16	-0.08	0.31
OftComm	239	1	7	3.62	1.72	0.28	0.16	-0.70	0.31
OftTalk	239	1	7	3.09	1.71	0.68	0.16	-0.30	0.31
OftEmail	239	1	7	3.33	1.74	0.34	0.16	-0.66	0.31
Z1	232	1	7	3.15	1.73	0.70	0.16	-0.41	0.32
Z2	232	1	7	3.14	1.80	0.77	0.16	-0.43	0.32
Z3	232	1	7	4.56	1.32	-0.01	0.16	-0.54	0.32
Z4	232	1	7	5.76	1.38	-1.54	0.16	2.18	0.32
Z5	232	1	7	5.84	1.30	-1.60	0.16	2.63	0.32
Z6	232	1	7	4.58	1.42	-0.42	0.16	-0.12	0.32
Valid N (listwise)	232					sk <2 Satisfied		ku <7 Satisfied	

**Table 4.2: Correlations, Means, and Standard Deviations**

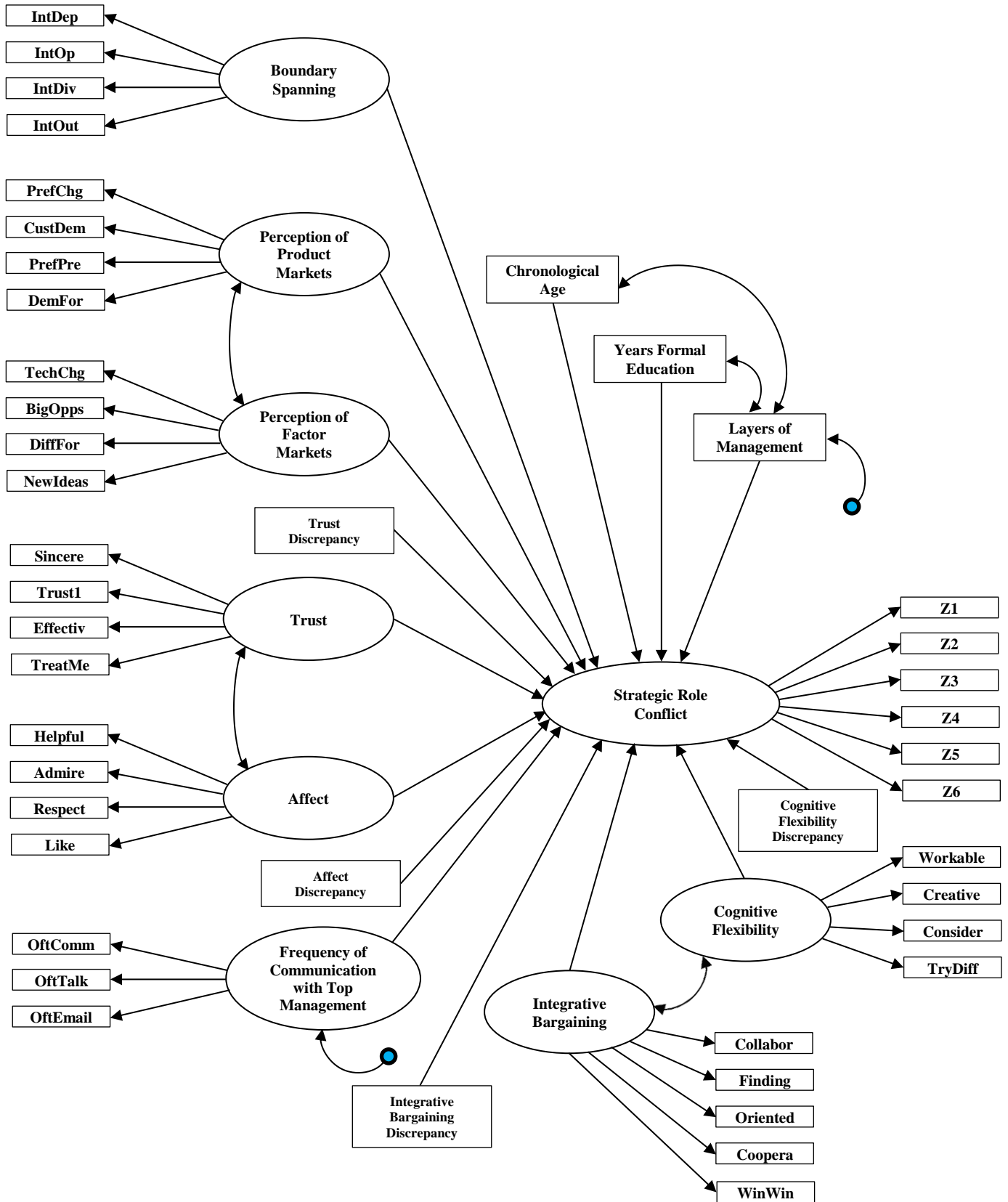
Variable	Mean	Std. Dev.	Age	AgeD	Yrs Edu	Yrs EduD	Bound Spa	Layers	Freq Comm	Prod Mkt	Factr Mkt	Trust	TrustD	Affect	AffectD	Cog Flex	Cog FlexD	Int Barg	Int BargD
Age	41.466	6.288																	
AgeD	9.819	5.832	-.960																
YrsEdu	16.034	1.638	.048	-.076															
YrsEduD	2.095	1.468	-.057	.085	-.819														
BoundSpa	4.272	1.052	-.174	.158	-.072	-.032													
Layers	3.912	.866	-.612	.571	-.160	.135	.250												
FreqComm	3.353	1.652	.447	-.403	.097	-.085	-.123	-.768											
ProdMkt	1.774	.840	-.304	.269	.020	-.015	.290	.376	-.327										
FactrMkt	1.832	.854	-.180	.161	-.060	.095	.165	.203	-.174	.320									
Trust	8.418	1.119	.169	-.160	.147	-.142	.072	-.248	.199	-.017	.072								
TrustD	.979	.794	-.188	.151	-.037	.011	.016	.259	-.155	.140	-.023	-.597							
Affect	8.921	1.388	.095	-.089	.018	-.060	.048	-.109	.079	.079	.043	.479	-.235						
AffectD	1.160	.764	.039	-.019	.045	-.010	-.065	-.037	.055	-.039	-.080	.002	.122	-.183					
CogFlex	8.945	1.194	.035	-.050	.082	-.084	-.058	-.138	.097	.040	.021	.013	-.062	.025	.056				
CogFlexD	.976	.687	-.090	.070	.076	-.031	-.022	.139	-.134	.016	.056	.014	.023	-.030	.016	-.186			
IntBarg	9.993	1.312	.079	-.056	.115	-.075	-.049	-.138	.121	.022	.039	.031	-.021	.076	.059	.513	-.166		
IntBargD	1.164	.719	.013	.023	.016	-.016	.019	-.018	-.015	.034	.036	.046	.071	.101	.065	.006	.160	.042	
StrRConf	4.504	1.206	-.051	.064	-.050	.073	.273	-.087	.177	.300	.335	-.003	-.009	-.032	.061	-.037	.004	.003	-.029

\*Note: Correlations > .134 are significant at the  $p < .05$  level

**Figure 4.3**  
**Strategic Role Conflict – Structural Model A**



**Figure 4.4**  
**Strategic Role Conflict – Structural Model B**





## **CHAPTER 5**

### **RESULTS**

#### **5.1 Introduction**

This chapter analyzes the results of empirical tests of structural models A and B presented in chapter 4 and of the hypotheses offered in Chapter 3. Descriptive statistics for the measures were shown in Chapter 4 so they will not be repeated here. A discussion of the findings will be undertaken in Chapter 6.

#### **5.2 Results of the Structural Models**

A cross-sectional field study was used to relate differences in the amount of strategic role conflict experienced by middle managers with its antecedents at a specific point in time. Informants were asked to report on their specific experiences. Two structural models (Model A and Model B) were tested. Results are presented in table 5.1.

##### **5.2.1 Structural Model A**

Model A (the more parsimonious) used twelve exogenous variables as predictors of the endogenous variable (see figure 4.1). Evaluation of several important fit indices is contradictory suggesting that Model A does not provide a reasonable fit to the data (see table 5.1). The Root Mean Square Error of Approximation (RMSEA) is 0.078, below the 0.10 recommended cutoff suggesting reasonable fit. The RMSEA 90% confidence interval is from 0.074 to 0.082 also suggesting reasonable fit as it is below the 0.10 recommended cutoff. However, the CFI is 0.769 and NNFI (TLI) is 0.743 indicating poor fit as they are well below the recommended cutoff of 0.90. The SRMR at 0.069 suggests acceptable fit as it is below the 0.08 cutoff. Taken together, these indices suggest that Model A does not provide a reasonable fit to the data.

### 5.2.2 Structural Model B

Model B (the less parsimonious) used fifteen exogenous variables as predictors of the endogenous variable (see figure 4.2). Evaluation of several important fit indices reveals that Model B provides reasonable fit to the data (see table 5.1). The Root Mean Square Error of Approximation (RMSEA) is 0.051, below the 0.10 recommended cutoff. The RMSEA 90% confidence interval is from 0.046 to 0.056. It suggests reasonable fit as it below the recommended cut off of 0.10 (Hair et al, 2009). The CFI is 0.904 and NNFI (TLI) is 0.889 suggesting acceptable fit as they are slightly above and slightly below the cutoff of 0.90 for reasonable fit. The SRMR of 0.052, smaller than 0.08, also suggests reasonable fit. Taken together, the fit indices indicate that Model B provides a reasonable fit to the data.

**Table 5.1: Strategic Role Conflict Models A and B Goodness of Fit Evaluation**

Model	Minimum Fit $\chi^2$	Df	$\chi^2$ /Df	Root Mean Square Error of Approximation		CFI	NNFI (TLI)	SRMR
				RMSEA	90% Confidence Interval			
A	2188.423 p = 0.000*	874	2.50 s/b < 3	0.078 s/b < 0.10	{0.074; 0.082} Upper Limit s/b < 0.10	0.769 s/b > 0.90	0.743 s/b > 0.90	0.069 s/b < 0.08
B	1374.334 p = 0.000*	832	1.65 s/b < 3	0.051 s/b < 0.10	{0.046; 0.056} Upper Limit s/b < 0.10	0.904 s/b > 0.90	0.889 s/b > 0.90	0.052 s/b < 0.08

H<sub>0</sub>: The model fits the data perfectly.

\* At  $\alpha = 0.05$ , we can reject the null. As expected, the model does not fit the data perfectly. However, the normed  $\chi^2$  is below the cutoff of 2 indicating reasonable fit.

### 5.2.3 Comparison of Model A versus Model B

Table 5.2 shows a comparison of Model A versus Model B. A delta Chi-square test was used to objectively compare both models. A delta Chi-square of 814.089 with 42 degrees of freedom has a p-value of 0.000, which is statistically significant and indicates that Model A does not provide a better fit of the data than Model B. Finally, a

delta CFI test can tell us if the worsening of the fit is relevant for practical purposes.

Since the delta CFI is greater than 0.01, we can conclude that the worse fit of Model A is not only statistically significant but also for practical purposes Model A provides a worse fit to the data than Model B.

**Table 5.2: Strategic Role Conflict Models A and B Comparison**

Model	Minimum Fit $\chi^2$	df	$\Delta \chi^2$ *	$\Delta$ df	$\Delta$ CFI
A (more parsimonious)	2188.423 p = 0.000	874			
B** (less parsimonious)	1374.334 p = 0.000	832	2188.423 - 1374.334 = 814.089 p = 0.000 <b>Reject H<sub>0</sub></b>	874 - 832 = 42	0.904 - 0.769 = 0.135

\*Represents change in  $\chi^2$  from the immediately prior model.

H<sub>0</sub>: The more parsimonious model provides a better fit than the less parsimonious model.

\*\*Best model. At  $\alpha = 0.05$ , we can reject the null. The more parsimonious model does not provide better fit than the less parsimonious model. Actually, the more parsimonious provides worse fit.

#### 5.2.4 Total Variance in Strategic Role conflict Explained by Model B

As table 5.3 below shows, Model B explained 36.4% of the observed variance in strategic role conflict.

**Table 5.3: Strategic Role Conflict Percent Variance Explained by Model B**

R-SQUARE				
Latent Variable	R-Square Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
<b>Strategic Role Conflict</b>	0.364	0.064	5.446	0.000

### **5.3 Tests of Hypotheses**

In the section below, the hypotheses presented in chapter 3 will be tested against the results of Model B. Table 5.4 summarizes these results at the conclusion of the chapter.

#### **5.3.1 Hypotheses Regarding Demographic Characteristics of Middle Managers**

The first set of hypotheses was designed to analyze the relationship between a middle manager's demographic characteristics and their influence on middle manager's strategic role conflict. In hypotheses 1a and 1b, I suggested that the chronological age of the middle manager and the difference in age between the middle manager and the top manager would be associated with higher levels of strategic role conflict. In hypotheses 1c and 1d, I suggested that the middle manager's years of formal education and the difference in years of formal education between the middle manager and the top manager would also be associated with higher levels of strategic role conflict.

Hypothesis 1a (middle manager's age) was not supported. The parameter sign was in the hypothesized direction, but it was not significant ( $\gamma = -0.017$ ,  $p = 0.277$ ). To test hypothesis 1b, the middle manager's age was replaced with the difference between the middle manager's age and the top manager's age. Hypothesis 1b (age difference) was also not supported. The parameter sign was in the hypothesized direction, but it was not significant ( $\gamma = 0.021$ ,  $p = 0.174$ ).

Hypothesis 1c (middle manager's years of formal education) was not supported. Hypothesis 1c's parameter estimate was in the hypothesized direction, but it was not significant ( $\gamma = -0.031$ ,  $p = 0.535$ ). To test hypothesis 1d, the middle manager's years of formal education was replaced with the difference between the middle manager's years of

formal education and the top manager's years of formal education. Hypothesis 1d's parameter estimate was also in the hypothesized direction, but it was not significant ( $\gamma = 0.056, p = 0.305$ ). Thus, none of the demographic hypotheses were supported.

### **5.3.2 Hypotheses Regarding the Nature of Middle Manager's Position within the Organization**

The second set of hypotheses was designed to analyze the relationship between the nature of the middle manager's position within the organization and their influence on middle manager's strategic role conflict. Data were collected on three types of characteristics: boundary-spanning activity, layers of management separating the middle manager from the top manager, and frequency of communication between the middle manager and the top manager. In hypothesis 2a, I suggested that the amount of boundary-spanning activity of the middle manager would be associated with higher levels of strategic role conflict. In hypothesis 2b, I suggested that middle managers higher in the organizational chart would experience higher levels of strategic role conflict. Finally, in hypothesis 2c, I suggested that the frequency of a middle manager's communication with the top manager would also be associated with higher levels of strategic role conflict.

Hypothesis 2a (boundary spanning) was supported. Its parameter sign was in the hypothesized direction and was statistically significant ( $\gamma = 0.323, p = 0.001$ ).

Hypothesis 2b (layers of management) was only marginally supported ( $\gamma = -0.318, p = 0.07$ ). Its parameter was in the hypothesized direction, which means that as middle managers are closer in the organizational chart, they experience more strategic role conflict. However, this result was not statistically significant at the  $p \leq 0.05$  level.

Finally, hypothesis 2c (frequency of communication) was supported. Its parameter estimate was in the hypothesized direction and was statistically significant ( $\gamma = 0.231$ ,  $p = 0.006$ ). This means that middle managers with higher boundary-spanning activity experience higher levels of strategic role conflict than their counterparts with lower levels of boundary-spanning activity. Similarly, middle managers who communicate more frequently with their top manager experience higher levels of strategic role conflict than their counterparts who communicate less frequently with their top manager.

### **5.3.3 Hypothesis Regarding Differences in Environmental Perceptions**

The third set of hypotheses was designed to analyze the relationship between differences in the environmental perceptions of the middle manager versus the top manager's and their impact on middle manager's strategic role conflict. Data were collected on two types of environmental perceptions: product markets and factor markets. In hypotheses 3.1 and 3.2, I suggested that the discrepancy of the middle manager's environmental perceptions versus the top manager's environmental perceptions would be associated with higher levels of strategic role conflict.

Hypotheses 3.1 (environmental perception of the product markets) and 3.2 (environmental perception of the factor markets) were both supported. Their parameters signs were both in the hypothesized direction and statistically significant ( $\gamma = 0.533$ ,  $p = 0.007$ ;  $\gamma = 0.383$ ,  $p = 0.001$ ). This means that middle managers who have increasingly different environmental perceptions than those of their top manager experience higher levels of strategic role conflict.

### **5.3.4 Hypothesis Regarding the Quality of the Relationship Middle Manager / Top Manager**

The fourth set of hypotheses was designed to analyze the quality of the relationship between middle managers and their top manager and its impact on middle manager's strategic role conflict. Data were collected on four dimensions of relationship quality: trust, affect, cognitive flexibility, and integrative bargaining. In hypothesis 4.1, I suggested that higher joint trust would be associated with lower levels of strategic role conflict. In hypothesis 4.2, I suggested that higher discrepancy in mutual trust would be associated with higher levels of strategic role conflict. In hypothesis 4.3, I suggested higher joint affect would be associated with lower levels of strategic role conflict. In hypothesis 4.4, I suggested that higher discrepancy in mutual affect would be associated with higher levels of strategic role conflict. In hypothesis 4.5, I suggested that higher cognitive flexibility would be associated with lower levels of strategic role conflict. In hypothesis 4.6, I suggested that higher discrepancy in cognitive flexibility would be associated with higher levels of strategic role conflict. Lastly, in hypotheses 4.7 I suggested that higher integrative bargaining would be associated with lower levels of strategic role conflict and in hypothesis 4.8 that higher discrepancy in cognitive flexibility would be associated with higher levels of strategic role conflict.

Hypotheses 4.1 (joint trust) was supported. Its parameter was in the hypothesized direction and was statistically significant ( $\gamma = -0.399$ ,  $p = 0.052$ ). Hypotheses 4.2 (trust discrepancy) was not supported. Its parameter estimate was in the opposite direction as hypothesized and was not statistically significant ( $\gamma = -0.204$ ,  $p = 0.177$ ). Hypothesis 4.3 (joint affect) was not supported. The parameter sign was not in the hypothesized

direction, and it was also not significant ( $\gamma = 0.012$ ,  $p = 0.89$ ). Hypothesis 4.4 (affect discrepancy) was supported. Its parameter was in the hypothesized direction and was statistically significant ( $\gamma = 0.214$ ,  $p = 0.048$ ). Hypotheses 4.5 (cognitive flexibility) and 4.6 (cognitive flexibility discrepancy) were not supported. Their parameter estimates were in the opposite direction as hypothesized and were not statistically significant ( $\gamma = -0.114$ ,  $p = 0.168$ ;  $\gamma = 0.130$ ,  $p = 0.264$ ). Hypotheses 4.7 (integrative bargaining) and 4.8 (integrative bargaining discrepancy) were also not supported. The parameter signs were in the hypothesized direction but were not significant ( $\gamma = 0.034$ ,  $p = 0.679$ ;  $\gamma = -0.077$ ,  $p = 0.474$ ).

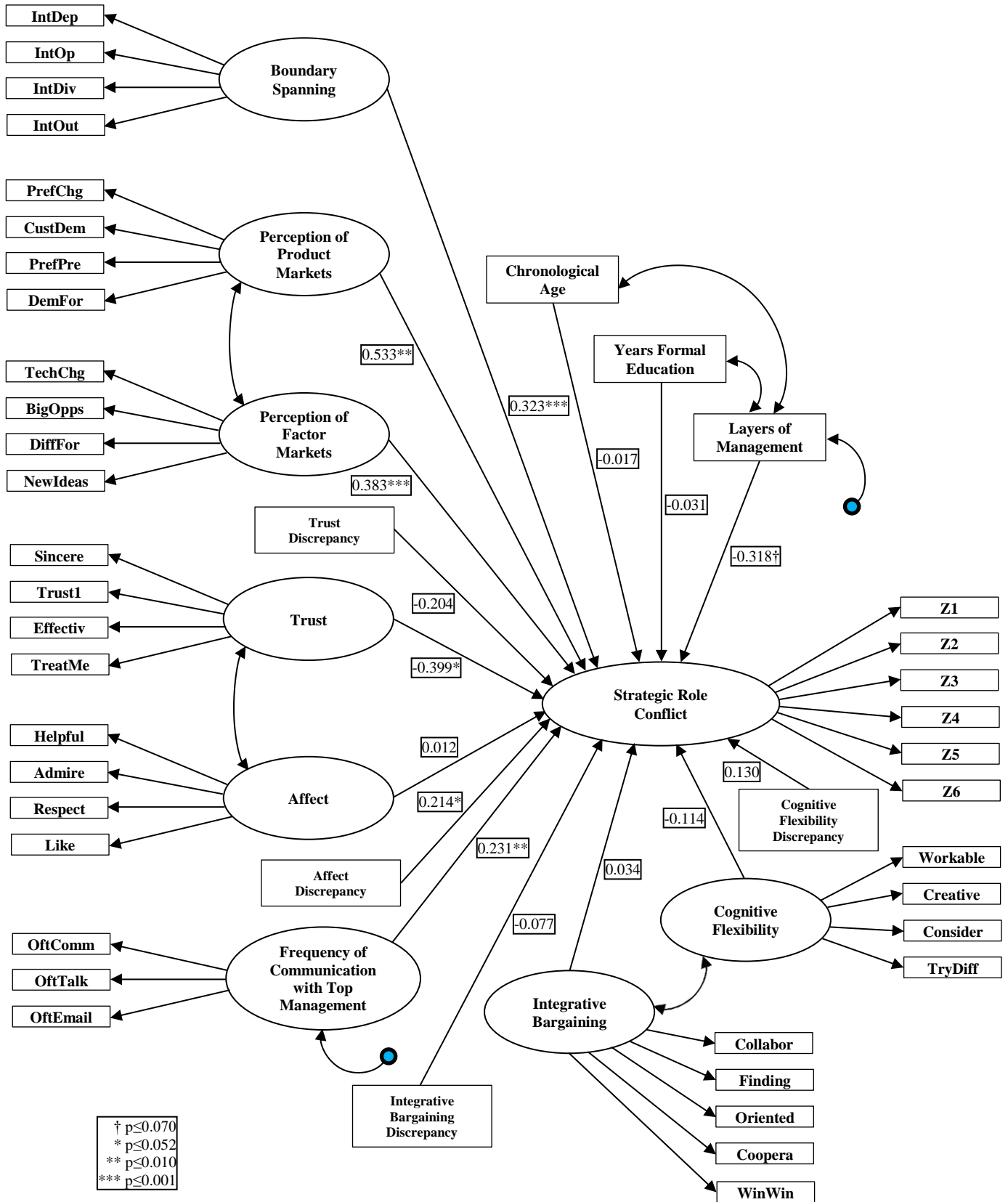
A summary of findings is presented in table 5.4 and a graphic depiction is seen in figure 5.1.

**Table 5.4: Strategic Role Conflict Parameter Estimates**

Hypotheses	$\gamma$ Estimates	S.E.	Est./S.E.	Two-Tailed P-Value	Results
1a Age	-0.017	0.015	-1.088	0.277	Not supported
1b Age Difference	0.021	0.016	1.360	0.174	Not supported
1c Years of Education	-0.031	0.049	-0.620	0.535	Not supported
1d Difference in Years of Education	0.056	0.054	1.027	0.305	Not supported
2a Boundary Spanning	0.323	0.101	3.198	0.001	Supported
2b Layers of Management	-0.318	0.176	-1.811	0.070	Marginal support
2c Frequency of Communication	0.231	0.085	2.726	0.006	Supported
3.1 Perception of Product Markets	0.533	0.199	2.681	0.007	Supported
3.2 Perception of Factor Markets	0.383	0.115	3.319	0.001	Supported
4.1 Joint Trust	-0.399	0.205	-1.943	0.052	Supported
4.2 Trust Discrepancy	-0.204	0.151	-1.350	0.177	Not supported
4.3 Joint Affect	0.012	0.086	0.139	0.890	Not supported
4.4 Affect Discrepancy	0.214	0.108	1.980	0.048	Supported
4.5 Cognitive Flexibility	-0.114	0.083	-1.378	0.168	Not supported
4.6 Cognitive Flexibility Discrepancy	0.130	0.116	1.118	0.264	Not supported
4.7 Integrative Bargaining	0.034	0.082	0.414	0.679	Not supported
4.8 Integrative Bargaining Discrepancy	-0.077	0.108	-0.716	0.474	Not supported



**Figure 5.1**  
**Strategic Role Conflict – Model B Parameter Estimates**



## **CHAPTER 6**

### **DISCUSSION**

#### **6.1 Discussion**

Middle managers influence organizational strategy through their four strategic roles of championing alternatives, facilitating adaptability, synthesizing information, and implementing deliberate strategy. It has been established that strategic middle managers are important to organizational outcomes (Floyd & Wooldridge, 1992, 1996; Wooldridge & Floyd, 1990; Floyd & Wooldridge, 2000). Floyd and Lane (2000) identified the phenomenon of strategic role conflict and argued the importance of understanding it because of its potential for undermining strategic organizational efforts. This dissertation explored the antecedents of middle managers' strategic role conflict in two divisions of a large organization to shed light on their connection to strategic role conflict. The broad research question that I set out to examine in this dissertation was: what are the antecedents of strategic role conflict? To address this question, seventeen hypotheses were proposed in chapter 3. Five of the hypotheses were fully supported (see Table 6.1). The results show a clear linkage between the presence of certain antecedents and the experience of strategic role conflict by middle managers. Thus, these findings have significant theoretical and practical implications that will be reviewed in the following sections. Finally, this chapter will conclude with a discussion of the limitations of this study and suggest avenues for future research.

##### **6.1.1 Research Findings**

Differences in perceptions of product and factor markets between middle manager and top manager were found positively related to middle manager's strategic role

conflict. Stated differently, the more the environmental perceptions of the middle manager differed from the environmental perceptions of the top manager to whom the middle manager reported, the greater the strategic role conflict that the middle manager experienced. In addition, the more that the middle manager's position within the organization caused him/her to engage in boundary spanning activities, the greater the strategic role conflict that the middle manager experienced. Furthermore, the more that the middle manager communicated with his/her top manager, the greater the strategic role conflict that the middle manager experienced. Conversely, the more trust that the middle manager and his/her top manager had in each other, the less the strategic role conflict that the middle manager experienced. Finally, the greater the discrepancy in the amount of affect that the middle manager and the top manager had for each other, the greater the strategic role conflict that the middle manager experienced.

**Table 6.1: Summary of Support for the Hypotheses**

Hypothesis	Relationship Tested	Support
1a	Middle Manager's Age (-)	Not supported
1b	Age Difference between Middle and Top Managers (+)	Not supported
1c	Middle Manager's Years of Education (-)	Not supported
1d	Difference in Years of Education between Middle and Top Managers (+)	Not supported
2a	Middle Manager's Amount of Boundary Spanning (+)	Supported
2b	Layers of Management Separating Middle and Top Managers (-)	Marginally supported
2c	Frequency of Communication with Top Management (+)	Supported
3.1	Difference in Perception of Product Markets (+)	Supported
3.2	Difference in Perception of Factor Markets (+)	Supported
4.1	Trust between Middle and Top Managers (-)	Supported
4.2	Trust Discrepancy (+)	Not supported
4.3	Affect between Middle and Top Managers (-)	Not supported
4.4	Affect Discrepancy (+)	Supported
4.5	Cognitive Flexibility between Middle and Top Managers (-)	Not supported
4.6	Cognitive Flexibility Discrepancy (+)	Not supported
4.7	Integrative Bargaining between Middle and Top Managers (-)	Not supported
4.8	Integrative Bargaining Discrepancy (+)	Not supported

### **6.1.2 Discussion of results about the relationship between demographic characteristics of middle managers and strategic role conflict**

In hypothesis 1a, I suggested that the chronological age of a middle manager would be negatively associated with strategic role conflict. The rationale for this hypothesis was based on extant research that established a connection between personality traits and role conflict. An important dimension to an individual's personality is the extent to which a person's outlook represents a mature approach to external events. Emotional maturity has been defined as, "the capacity to control impulses, the adoption of a broad and unselfish perspective, and acceptance of responsibility for the consequences of one's actions" (Mayseless & Scharf, 2003, p.6). Previous research found a negative linear relationship between age and emotionality (e.g., Lawton, Kleban, & Dean, 1993; Neugarten & Neugarten, 1996; Schieman, 1999). Thus, age is positively related to maturity. In addition, maturity is positively related to a tendency to search for more information and to take the time to evaluate it adequately. Therefore, older middle managers were expected to experience lower levels of strategic role conflict than younger middle managers by averting unnecessary disparities in the conclusions they drew from the information they gathered that would be more in agreement with the conclusions that the top managers to whom they reported draw. However, although the sign was in the hypothesized direction this hypothesis was not supported. One reason for this lack of support could be that age might have an effect on strategic role conflict through environmental perceptions. It may be that older middle managers tend to interpret the environment as more stable, which may coincide with their top manager's interpretations because top managers tend to view environments as more stable. Thus, the effect of age

on strategic role conflict may be occurring through environmental perceptions. However, such mediating effect was not hypothesized and was not tested.

In hypotheses 1b, I suggested that the difference in chronological ages of the middle manager and the top manager to whom the line of command reports would be positively related to strategic role conflict. The rationale for this hypothesis was that differences in the amount of life experience and on the content of those life experiences can lead to different conclusions regarding external stimuli and to different strategic role expectations and behaviors. Extant research showed that high demographic diversity on the variables of age and organizational tenure results in more difficulty in communication that leads to conflict and power struggles (McCain, O'Reilly, & Pfeffer, 1983; Pfeffer, 1983; Wiersema & Bantel, 1992). Thus, I expected that as the difference in age between the middle manager and the top manager increased, the level of strategic role conflict would go up. Yet, although the sign was in the hypothesized direction this hypothesis was not supported. One reason for the lack of support that age differential had an effect on strategic role conflict could be that middle managers who had the largest age difference with their top manager also had the largest differences in environmental perceptions. The correlations between age differential and differences in environmental perceptions were 0.264 for product markets and 0.212 for factor markets and both were highly significant. This study found that differences in environmental perceptions had a significant effect on strategic role conflict. Age difference could be exerting an effect on strategic role conflict through the mechanism of different environmental perceptions. This potential mediating effect was not hypothesized and consequently not explored. Another reason could be that the difference in chronological ages does not act alone in

creating higher levels of strategic role conflict in middle managers but interacts with the difference in years of education. This interaction was not hypothesized, but a post hoc analysis found evidence of this interaction ( $\gamma = 0.008$ ,  $p = 0.039$ ). It is possible that as the middle manager and his/her top manager diverge more in age and in years of formal education, they have increasingly more difficulty finding common ground and seeing a common strategic vision. This post hoc finding should be further explored in future research with new data to ascertain that it is not a product of chance.

In hypothesis 1c, I suggested that the middle manager's years of formal education would be associated with lower levels of strategic role conflict. I offered this hypothesis based on theory and empirical evidence showing that years of formal education provide individuals with valuable skills to cope with increased information processing demands, with ability to discriminate among many of stimuli, and with open-mindedness and flexibility that lead to less role conflict (Schroder, Driver, & Streufert, 1967). A person's level of education reflects the individual's cognitive ability and skills because an individual's cognitive base evolves from experiences, and demographic characteristics of individuals are indicators of the quality of their cognitive base (Cyert & March, 1963; Hambrick & Mason, 1984). When confronted with a situation that does not fit his or her conceptual framework, a person with a flexible coping style is more likely to accommodate another role sender's expectations and reduce role conflict (Hambrick & Mason, 1984; Kahn *et al.*, 1964). Although the parameter estimate was in the hypothesized direction, the hypothesis was not supported. There is at least one possible explanation for this. Although years of formal education do provide individuals with skills to cope with increased information processing demands, flexibility, and open-

mindedness, they also provide individuals with inquisitive minds, receptivity to innovation, and a repertoire of knowledge to support more assertive positions (Hambrick & Mason, 1984). It has also been shown that educated individuals are more likely to engage in boundary spanning, which has been linked to higher role conflict previously (Dollinger, 1984) and also found in the present study. It is possible that in spite of the flexibility conferred by higher levels of education, as middle managers' knowledge increases, they also span more boundaries and question, and perhaps even challenge, their top manager's positions, albeit in the privacy of their own thoughts, leading to more rather than less strategic role conflict.

In hypothesis 1d, I suggested that the difference in years of formal education between the middle manager and the top manager to whom their line of command reports would be associated with higher levels of strategic role conflict. I based this hypothesis on a similar diversity argument as the one I used in the age-related diversity hypothesis. Extant research had showed that demographic diversity in teams leads to conflict and power struggles because at high levels of diversity communication becomes increasingly strained and riddled with conflict as a result of the disparity in individual's views (McCain, O'Reilly, & Pfeffer, 1983; Pfeffer, 1983; Wiersema & Bantel, 1992). Therefore, I argued that two individuals who are vastly different in terms of years of formal education can arrive at significantly different conclusions regarding external stimuli, develop different propensities to respond, disagree in their approaches, and arrive at different expectations for each other's behaviors because of their different cognitive bases. I further argued that since years of formal education is related to an individual's type of conclusions regarding stimuli and to the type of response to those stimuli, and

since differences in conclusions and approaches are linked to poor communication and different expectations, the difference in years of formal education between the middle manager and the top manager to whom the middle manager reports could be a predictor of their likely agreement or disagreement as to what external events mean for the organization's strategy and could lead to higher levels of strategic role conflict in the event of disagreements. Although the parameter estimate was in the hypothesized direction and in spite of the sound theoretical basis for this prediction, the data did not support this hypothesis. A possible reason for this result could be that the difference in years of education does not act alone in creating higher levels of strategic role conflict in middle managers but interacts with the difference in chronological ages. This interaction was not hypothesized, but a post hoc analysis found evidence of it ( $\gamma = 0.008$ ,  $p = 0.039$ ). It is possible that as the middle manager and his/her top manager diverge more in age and years of formal education, they have increasingly more difficulty finding common ground and seeing a common strategic vision. This post hoc finding should be further explored in future research with new data to ascertain that it is not a product of chance.

### **6.1.3 Discussion of results about the relationship between the nature of the middle manager's position within the organization and strategic role conflict**

In hypothesis 2a, I suggested that middle managers in positions with more boundary-spanning activity would experience more strategic role conflict than middle managers in positions with less boundary-spanning activity. The rationale for this hypothesis was that managers in positions that are required to span the boundaries of their departments or the organization interact with different groups and different role senders. Role senders that belong to different groups are likely to have different values and pursue



different interests. Being likely that the groups outside the organization with whom the middle manager interacts are not the same as the outside groups with whom the top manager interacts, I hypothesized that boundary-spanning middle managers would have increasingly different ideas than their top managers regarding what strategic behaviors would be more appropriate and lead to higher strategic role conflict. This hypothesis was fully supported.

As stated, there was considerable theoretical basis to expect this result. As boundary-spanning middle managers interact with outside groups and outside role senders, they are likely to be exposed to conflicting expectations regarding roles, strategic behaviors, what values to espouse, and what interests to represent. Middle managers exposed to different points of view encounter difficulty deciding what strategic behaviors to enact and hence experience more stress (Gross, Mason, & McEachern, 1958; Friedman & Podolny, 1992; Kahn *et al.*, 1964; Whetten, 1978). In addition to the difficulty of satisfying different groups, the lack of trust in the boundary-spanning middle manager that the different groups might develop as the different parties worry that the boundary-spanning manager is being influenced by other groups is also a source of stress (Adams, 1976; Miles, 1976; Organ, 1971; Organ & Greene, 1972; Van Sell, Brief, and Schuler, 1981).

In hypothesis 2b and 2c, I suggested that middle managers higher in the organizational hierarchy would experience greater amounts of strategic role conflict than middle managers lower in the organizational hierarchy (hypothesis 2b) and that middle managers that communicated more frequently with their top manager would experience greater amounts of strategic role conflict (hypothesis 2c). I based these predictions on the

rationale that most middle managers' strategic role conflict derives from vertical interactions with top managers. A middle manager's position in the organization and frequency of communication with his/her top manager can contribute to the amount of strategic role conflict experienced by the middle manager for several reasons. First, the closer the middle managers are to their top manager, the greater the observability of their behavior (Kahn *et al.*, 1964). As a result, top managers would be able to increase their pressure on the middle manager as they are able to observe deviations in the middle manager's behavior from what the top manager expected (Kahn *et al.*, 1964). Another reason for the increased pressure on middle managers who are closer to their top managers is the functional dependence of the top manager's job on the performance of the middle manager. The closer a middle manager is to his/her top manager, the more the performance of the top manager depends on the performance of the middle manager and the more pressure the top manager would want to exert (Kahn *et al.*, 1964). Finally, top managers have more opportunity to exert pressure on middle managers closer to them, and they exert this pressure via communication. Thus, proximity and frequency of communication would enable the top manager to exert the increased pressure and increase the middle manager's strategic role conflict. Hypothesis 2c (frequency of communication) was fully supported. As theory suggested, top managers were able to put more pressure on the middle managers with whom they most frequently communicated. On the other hand, hypothesis 2b (layers of management) was only marginally supported. A possible reason why hypothesis 2b was only marginally supported might be that middle managers need not only to be close to their top manager in the organizational chart but also need to have frequent communication with their top

manager in order to be increasingly pressured. Thus, we would have to look at the interaction between layers of management and frequency of communication to see if there is a significant difference between managers at the same organizational level but who differ in the frequency of communication with their top manager.

#### **6.1.4 Discussion of results about the relationship between differences in environmental perceptions and strategic role conflict**

In hypotheses 3.1 and 3.2, I predicted that the greater the difference in environmental perceptions of the product and factor markets between the middle manager and the top manager to whom the middle manager reported, the greater the amount of strategic role conflict that the middle manager would experience. The basis for this prediction was that under conditions of high complexity and rapid environmental change, different layers of management would likely attach different meanings for the organization to the environmental changes that they observe (Bourgeois, 1980; Floyd & Lane, 2000; Lorenzi, Sims, & Slocum, 1979; Pfeffer & Salancik, 1978; Tosi, Aldag, & Storey, 1973). The reasoning was that middle managers would interpret unexpected customers' demands or rapidly changing technology reported by operating managers as cues for radical strategic change. Conversely, top managers who usually do not have day-to-day contact with customers would tend to be more committed to the status quo rather than to support radical strategic change because their environmental perceptions are influenced by frequent interactions with representatives of the capital markets who tend to have a more conservative view of the environment (Pfeffer & Salancik, 1978; Floyd & Lane, 2000). Thus, differences in environmental perceptions between the middle manager and the top manager would lead to greater strategic role conflict that the

middle manager would experience. These hypotheses were fully supported. As predicted, the different environmental perceptions led to divergent interpretations of what the environmental changes imply for the organization, what strategic renewal sub-process was appropriate to enact, and increased strategic role conflict in the middle management ranks (Biddle, 1979; Floyd & Lane, 2000).

#### **6.1.5 Discussion of results about the relationship between the quality of the relationship middle manager / top manager and strategic role conflict**

Hypothesis 4.1 suggested that the greater the trust between middle and top manager, the lower the strategic role conflict that the middle manager would experience. The basis for this prediction was that mutual trust, respect, and friendship are characteristics of a close, direct relationship between individuals that help minimize dissimilarities in expectations because they promote understanding through effective knowledge transfer (Dyer & Singh, 1998; Kale et al. 2000). Informal interpersonal bonds that involve trust, respect, and liking are associated with a lower degree of role conflict in part because they help improve the quality and effectiveness of communication and predispose the parties to resolve conflicting expectations through dialogue and exchange of information (Kahn et al., 1964). Thus, the expectation that the higher the trust, the lower the strategic role conflict. This hypothesis was supported ( $p \leq 0.052$ ). These results suggest that when a middle manager and a top manager have mutual trust for each other, the middle manager is better equipped to manage differences in mutual expectations and resolve them in ways that do not result in increased strategic role conflict for the middle manager. The angle that was explored in hypothesis 4.2 was the notion that if one of the parties in the relationship had more trust in the other party than the other party had in the

former, the discrepancy would result in higher strategic role conflict. However, the data failed to support this hypothesis.

Building on hypothesis 4.1, in hypothesis 4.3 I suggested that as mutual affect in the relationship between the middle manager and the top manager to whom he or she reported increased, the amount of strategic role conflict experienced by the middle manager would decrease. However, even though the theoretical rationale is solid and similar to the one offered for hypothesis 4.1, hypothesis 4.3 was not supported. This lack of support suggests that in the professional setting of the organization, the amount of the mutual affective dimension is not as important to manage differences in strategic role expectations as is the ability to trust that the other party is acting in good faith. Following a similar argument as in hypothesis 4.2, hypothesis 4.4 proposed that that if one of the parties in the relationship had more affect for the other party than the other party had on the former, this discrepancy would result in higher strategic role conflict. This hypothesis was fully supported ( $p < 0.05$ ). This finding in conjunction with the finding in hypothesis 4.3 suggest that the affect dimension is relevant to strategic role conflict only when the relationship between the middle manager and the top manager is unbalanced; that is, when the affect that one party feels for the other is not reciprocated equally.

In hypotheses 4.5, I predicted that the more the relationship between the middle manager and the top manager showed cognitive flexibility, the less strategic role conflict the middle manager would experience. The basis for this prediction was that when the information exchange process between two people is characterized by reflection, objective information review, use of different perspectives, openness to listening to the other party, having the capacity and willingness to change one's opinion, and developing

a large variety of interpretations (i.e., characterized by high cognitive flexibility), interpersonal aggression is diminished (Chesebro & Martin, 2003). Thus, it was hypothesized that cognitive flexibility, as a characteristic of positive, effective, high-quality interpersonal relationships, would be inversely related to the middle manager's strategic role conflict. Surprisingly, this hypothesis was not supported by the data. The lack of support might be that high cognitive flexibility between the middle manager and the top manager has an effect on strategic role conflict only under special conditions, high trust, for example. However, possible interaction effects of cognitive flexibility with other exogenous variables were not hypothesized and not tested. Hypothesis 4.6 explored the notion that if one of the parties in the relationship had more cognitive flexibility than the other party, this discrepancy would result in higher strategic role conflict. This hypothesis was not supported.

Following a similar argument as the one offered for hypothesis 4.5, hypothesis 4.7 suggested that as integrative bargaining in the relationship between the middle manager and the top manager to whom he or she reported increased, the amount of strategic role conflict experienced by the middle manager would decrease. The basis for this hypothesis was that as two parties engage in interaction, the extent to which bargainers perceive a situation as integrative (win-win) depends on the interaction between them being based on reciprocity (Putnam & Jones, 1982). If two people try to find common or complementary interests that benefit both parties rather than just one during their mutual influencing process (Raes, et al., 2011) the win-win orientation to problem solving enhances cooperation and decreases conflict. However, even though the theoretical rationale is solid and similar to the one offered for hypothesis 4.5, hypothesis 4.7 was

also not supported. As was the case with hypothesis 4.5, this lack of support could be the result of possible interaction effects of integrative bargaining with other exogenous variables that were not hypothesized and not tested. Lastly, hypothesis 4.8 argued that if one of the parties in the relationship had more integrative bargaining than the other party, this discrepancy would result in higher strategic role conflict, but this hypothesis was not supported either.

## **6.2 Conclusion**

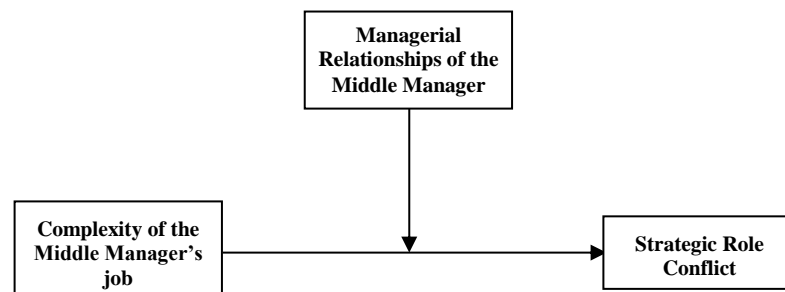
This dissertation contributes to the stream of research of strategy process by extending our understanding of the new construct “strategic role conflict” offered by Floyd and Lane (2000). The findings in this dissertation support the notion that middle managers experience strategic role conflict and that there are certain antecedents that precede it. This is an important finding because it has been demonstrated that middle managers can be critical to a firm’s strategic renewal and that barriers to their strategic involvement can negatively affect firm performance. In conducting this research, I examined this important but understudied area of strategic management in the context of a large domestic firm undergoing significant but not drastic environmental change because in organizations in this type of environment, it may not be clear whether middle managers should be trying to renew the organization’s capabilities to adapt to the changing conditions or whether they should hone their current competencies to better implement their current strategy. The results indicate that the key predictors of middle managers’ strategic role conflict are the amount of boundary spanning that middle managers engage in as part of their jobs, the degree of disparity in their perception of the products and factors markets vis-à-vis top management, the frequency of their direct

communication with their top manager, the amount of mutual trust between the top manager and the middle manager, and the amount of disparity in the feelings of mutual affect between the top manager and the middle manager.

According to the results, the degree of boundary spanning activities of middle managers sets the stage for middle managers' differential exposure to diverging perspectives. The disparity of middle managers' perceptions of the products and factors markets vis-à-vis top management's defines the areas of disagreement about what middle-management's strategic roles top management expects to see enacted. The frequency of direct communication with top management provides the battleground for strategic role conflict to emerge. Finally, the degree of mutual trust between the top manager and the middle manager and the amount of disparity in the feelings of mutual affect between the top manager and the middle manager allow for strategic role conflict to be experienced by the middle manager.

The support found for the hypotheses mentioned above lead the researcher to speculate that the key factors involved in strategic role conflict can be reduced to the amount of complexity involved in the middle manager's job and to the relationships that the middle manager has at high managerial levels. A possible theoretical model to describe this conjecture would look like this:

**Figure 6.1**  
**Alternative Model of Strategic Role Conflict**





This model implies some interesting research questions. For example, how is job complexity related to strategic role conflict? And are aspects of job complexity more prominent in explaining strategic role conflict? Also interesting would be to ask how managerial relationships impact strategic role conflict and whether there are dimensions of the relationship that are more important in explaining strategic role conflict. Finally, it would be of interest to understand if job complexity and managerial relationships interact to explain strategic role conflict.

As the empirical results lend support to these conjectures, this study has significant implications for practice and research. In the following sections, I discuss these implications. Then, I turn my attention to the limitations of this study and conclude by examining areas of future research.

### **6.2.1 Implications for practice**

This dissertation has several important implications for managers. It articulates that practitioners can predict what factors contribute to strategic role conflict and suggests that strategic role conflict can be managed in a constructive way. This is important because many organizational outcomes such as strategic renewal depend on middle managers' being able to enact appropriate strategic roles and top management's supporting the actions of middle managers as they enact strategic roles appropriate for the environment. Consequently, the focus of this study on the antecedents of strategic role conflict should be of particular interest. The first takeaway from a practice perspective is the importance for top managers to develop a more attentive, two-way dialogue with boundary-spanning middle managers to avail themselves of divergent perspectives. By being open to consider the middle manager's perspective, top managers can go a long

way to help reduce differences in environmental perspective and what they mean for the organization, help reduce strategic role conflict in the middle-management ranks, and help the organization have a more successful strategic renewal process. In addition, this study also suggests that by developing relationships with middle managers characterized by high mutual trust and balanced mutual affect top managers can help middle managers experience lower levels of strategic role conflict. Finally, given the proposed alternative model of strategic role conflict, practicing managers can pay attention to the complexity of the middle manager's job and to the managerial relationships of the middle manager to try to reduce strategic role conflict.

### **6.2.2 Implications for research**

This dissertation contributes to theory by extending role theory and relational exchange theory into strategic process research. Our better understanding of the role of strategic role conflict in organizations has several implications for strategic management research. Extant literature on strategic renewal suggests that middle managers' involvement in strategy is important for firms and that middle management's involvement in strategy can result in performance benefits to firms. This dissertation explains, in limited fashion, some of the antecedents of strategic role conflict that interfere with middle manager's effective performance of their strategic roles that can result in negative consequences for the organization. It demonstrates empirically that strategic role conflict is a useful and distinct construct that can be related to certain, measureable antecedents. The concept of strategic role conflict is important because it has the potential to help explain why some organizations adapt better than others. It can

also help explain differences in individual middle manager's contributions to the strategic process.

This study tested two possible models to explain strategic role conflict. Strategic role conflict is a complex phenomenon, and the findings suggest that it is necessary to look for more fine-grained explanation. The model that offered more and more nuanced explanatory variables was able to provide a reasonable fit to the data and explain a satisfactory amount of the variance in strategic role conflict.

Using the context of a large, complex firm that was undergoing substantial environmental change, this study examined strategic role conflict empirically for the first time in the literature. This approach was appropriate and enabled the possibility of testing the emerging theories of strategic role conflict because it used a homogeneous sample from a single population providing a rigorous test of the theoretical constructs and relationships and avoiding spurious differences that arise when sample subjects have unique circumstances (Calder, Phillips, & Tybout, 1981). In doing so, this study effectively combined role theory, social / relational exchange theory, and the middle management perspective making contributions to all three and extended strategic management research by elucidating the link between strategic role conflict and some of its antecedents.

This dissertation highlighted the importance of differences in environmental perceptions, boundary spanning, frequency of communication, trust, and affect in the emergence of strategic role conflict. While considerable theoretical research has been done in the area of middle management involvement in strategy, this study helps build on that literature by helping us better understand strategic role conflict.

Finally, future research might explore the alternative model of strategic role conflict that was proposed above. Researchers could test hypotheses of how the complexity of the middle manager's job and to the managerial relationships of the middle manager relate to strategic role conflict. Hopefully, this study will spur further research into this important stream of research.

### **6.3 Limitations and areas for future research**

This study has several potential limitations. Generalizability is the most notable limitation of this study given that the findings are based on a one-company sample. However, by design, this study was not meant to offer generalizability across all firms. Instead, this study was designed to search for evidence that certain theoretical linkages between the exogenous and the endogenous variables existed and to test if the theorized construct of strategic role conflict could be measured and linked to some theoretical antecedents such as characteristics of the middle manager's position within the organization, difference in environmental perceptions, and quality of the relationship between the middle manager and the top manager. Understanding the dynamics of strategic role conflict as an important organizational phenomenon was the main goal of this dissertation.

Another potential limitation is that both dependent measures and independent measure were collected on the same survey instrument. Again, because many of the independent measures were composites of the middle managers' and the top manager's responses and because of the many techniques used in the design of the survey instrument, the chance for common method bias was minimized. Nevertheless, even

though I used Harman's single-factor test to test post hoc that common method bias was not a problem, there is always the possibility that it is a limitation.

One important limitation of this study is that as a result of practical limitations during data collection, the range of variance of the discrepancy variables that imply a relationships between top managers and middle managers (i.e., trust discrepancy, affect discrepancy, cognitive flexibility discrepancy, and integrative bargaining discrepancy) have constrained ranges of variation. This is the result of having only one set of responses for these discrepancy variables from each of the two top managers included in the study. Another important limitation is that the statistical power of this study is somewhat weak having only a sample size of 249 cases to estimate a large number of parameters in the structural model. Given these two limitations (i.e., constrained variance and rather weak statistical power), the likelihood of getting any results was very low. It is somewhat impressive that in spite of these two limitations, the study was able to find support for the structural model and for six of the seventeen hypotheses that were tested.

Lastly, another important limitation of this study is the cross-sectional nature of the survey and the analysis. While this project has yielded important insights into how strategic role conflict relates to its antecedents, nevertheless it is still a one-shot fixed in time picture that gives no true sense of the direction of causation or if there is any reason to suspect causation between the independent variables and the dependent variable. Future research should consider studying strategic role conflict using longitudinal studies or experimental studies which could also make manipulations of the exogenous variables.

At the individual level, future research should take a closer look at the effect of strategic role conflict on the effectiveness of the middle manager's strategic involvement.

At the firm level, future research should examine if differences in aggregate middle managers strategic role conflict can explain differences in firm performance. Another important area for future research could examine strategic role conflict in the context of many firms. A study involving many firms would give the opportunity to test for interaction effects between measures of the objective environment and the exogenous variables used in this study. In addition, it would provide the ability to generalize to other firms. Finally, another area of future research in the context of many firms could examine the effect of different types of organizational controls on the management or prevention of strategic role conflict.

This dissertation sought a better understanding of the new construct of strategic role conflict. The middle management perspective was used to understand how strategic role conflict relates to certain antecedents, providing evidence that the strategic renewal efforts of middle managers can potentially be impacted by the existence of strategic role conflict and interfere with important, long-term organizational goals such as strategic adaptation.

This research project has made some significant contributions to the field of strategic management by providing an empirical test of how the characteristics of the middle manager's position within the organization, the difference in environmental perceptions between the middle manager and the top manager, and the quality of the relationship between the middle manager and the top manager relate to the level of strategic role conflict experienced by middle managers.

## APPENDIX A

### INVITATION TO PARTICIPATE IN THE STUDY

Dear \_\_\_\_\_:

In today's business world, it is hard to find an executive of an American company who is not convinced of the importance of utilizing the potential of its middle managers to implement strategy or to contribute to the development of strategic initiatives. Yet many firms today are having a difficult time harnessing this strategic potential in a manner that allows them to compete more effectively. In this regard, the University of Massachusetts Amherst is conducting a study of factors that influence the development of strategic role conflict. Strategic role conflict interferes with a company's efforts to effectively align their middle managers' strategic behaviors to the company's external environment to develop and sustain a competitive advantage.

We would greatly appreciate your company's participation in this study. Ahead you will find links to the surveys for your inspection. There are two versions of the survey: one for top managers, the other one for middle managers. The survey should take no more than 15-20 minutes for your managers to complete. In return for your company's participation, we will provide you with a summary of the findings from the study as well as a customized profile of your company with recommendations if appropriate. Under no circumstances will your responses be made available to anyone other than the research team members listed below.

If your company wishes to participate, please contact me by e-mail at: hflores@xxx.xxxxx.xxx. If you prefer to call, my mobile number is: (xxx) xxx-xxxx. Thank you in advance for your interest in our study. We look forward to your participation.

Sincerely,

Hector R. Flores  
PhD Candidate  
(Principal Co-Investigator)

William Wooldridge, PhD  
Professor  
(Principal Co-Investigator)

**APPENDIX B**  
**INFORMED CONSENT FORM**

Dear Respondent,

The Isenberg School of Management, University of Massachusetts Amherst, is working on a research project about strategic role conflict. We need your help in completing our survey. Your responses will make a valuable contribution to the general knowledge base in this area. Through your participation, we hope to understand what leads to the strategic role conflict experienced by middle managers. The results of the survey will be useful to devise ways to reduce strategic role conflict. We also hope to publish the results in a scientific journal.

On the next page is a link to a short questionnaire that asks a variety of questions about strategic role conflict. Participation in the study is voluntary. There will be no negative consequences to you if you choose not to do the survey. If you choose to complete the survey, it should take you about 15-20 minutes to do so. This survey is not a test of ability, and there is no right or wrong answer to each of the questions or statements.

The survey is anonymous and all responses will be kept strictly confidential in this study. The data or information collected from you will be aggregated for analysis only for this project. No information that might tend to identify you will be shared with anyone outside the research group or with any third parties.

We hope you will take the time to complete the questionnaire. Regardless of whether you choose to participate, if you would like a summary of the findings, please contact us at the address given below.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact us at hflores@xxx.xxxxx.xxx. The Institutional Review Board (IRB) at the Isenberg School of Management at the University of Massachusetts Amherst has approved this study. If you have any concerns about your rights as a participant in this study, you may contact Isenberg IRB Chair, Professor D. Anthony Butterfield at dabutter@xxx.xxxxx.xxx.

If you have read this form and decided to participate in the project described above, please click on the link in the following page to proceed to the questionnaire. Thank you.

Sincerely,

Hector R. Flores  
PhD Candidate  
(Principal Co-Investigator)

William Wooldridge, PhD  
Professor  
(Principal Co-Investigator)



## APPENDIX C

### TABLES

**Table A.1: Table of Constructs and Variables**

<b>Concept</b>	<b>Construct</b>	<b>Indicator</b>	<b>Variable Name</b>	<b>Internal Reliability (*)</b>
Demographic Characteristics	Chronological Age	Observed Variable Survey Item	Age	N/A
	Total Years of Formal Education	Observed Variable Survey Item	YrsEdu	N/A
Middle Manager's Position within the Organization	Boundary Spanning	Latent Variable Survey Items	BoundSpa	Cronbach's alpha = .72
	Managerial Layers below Top Management	Observed Variable Survey Item	Layers	N/A
Dissimilarity in Environmental Perceptions	Environmental Perceptions – Product Markets	Latent Variables Survey Items adapted from Joshi & Campbell (2003), Jaworski & Kohli (1993), and Dickinson & Weaver (1997)	ProdMkt	Cronbach's alpha = .79
	Environmental Perceptions – Factor Markets		FactrMkt	Cronbach's alpha = .71
Relationship Characteristics	Trust	Latent Variable Survey Items adapted from Cook & Wall (1980)	Trust	Cronbach's alpha = .85
	Trust Discrepancy		TrustD	
	Affect	Latent Variable Survey Items adapted from Tsui (1983)	Affect	Cronbach's alpha = .90
	Affect Discrepancy		AffectD	
	Cognitive Flexibility	Latent Variable Survey Items adapted from Martin & Rubin (1995)	CogFlex	Cronbach's alpha = .90
	Cog. Flex. Discrep.		CogFlexD	
	Integrative Bargaining	Latent Variable New Items derived from Raes, Heijltjes, Glunk & Roe's (2011) definition	IntBarg	Cronbach's alpha = .89
	Int. Barg. Discrep.		IntBargD	
Frequency of Communication with Top Manager	Latent Variable Commonly Used Items	FreqComm	Cronbach's alpha = .96	
Internal Subjective Psychological State	Strategic Role Conflict	Latent Variable Survey Items adapted from items originally developed by Rizzo, House, and Lirtzman (1970)	StrRConf	Cronbach's alpha = .89

(\*) From my SPSS internal reliability analysis.

**Table A.2: Survey Items**

<b>Variable Name</b>	<b>Indicator Name</b>	<b>Survey Item</b>
BoundSpa	IntDep	As part of your job, how frequently do you interact with persons outside your department?
	IntOp	As part of your job, how frequently do you interact with persons outside your operation?
	IntDiv	As part of your job, how frequently do you interact with persons outside your division?
	IntOut	As part of your job, how frequently do you interact with persons outside your company?
Layers	Layers	To the best of your knowledge, how many layers of management separate your position from the position of the CEO?
ProdMkt	PrefChg	Customer preferences are constantly changing in / our industry.
	CustDem	Customer demand for our products varies dramatically.
	PrefPre	In our kind of business, customers' product / preferences are very difficult to predict.
	DemFor	In our industry, customer demand is fairly easy to / forecast.
FactrMkt	TechChg	The technology in our industry is changing / rapidly.
	BigOpps	Technological changes provide big opportunities / in our industry.
	DiffFor	It is very difficult to forecast where the technology in our industry will be in the next 2 to 3 years.
	NewIdeas	In the last five years, a large number of new product ideas have been made possible through technological breakthroughs in our industry.
Trust & TrustD	Sincere	Top management is sincere in their attempts to meet my point of view.
	Trust1	I can trust top management to lend me a hand if I need it.
	Effectiv	Top management seems to do an effective job.
	TreatMe	I feel quite confident that top management will always try to treat me fairly.
Affect & AffectD	Helpful	To what degree do you consider top management to be helpful?
	Admire	To what extent do you admire top management?
	Respect	To what extent do you respect top management's judgment?
	Like	How well do you like top management?
CogFlex & CogFlexD	Workable	I can find workable solutions to seemingly unsolvable problems.
	Creative	I am willing to work at creative solutions to problems.
	Consider	I am willing to listen and consider alternatives for handling a problem.
	TryDiff	I am willing to try different ways of thinking.

**Table 2 – SURVEY ITEMS (Continued)**

IntBarg & IntBargD	Collabor	My relationships and interactions with top management can be characterized as a collaborative problem-solving process.
	Finding	My relationships and interactions with top management can be characterized as finding common or complementary interests that benefit both parties rather than just one.
	Oriented	My relationships and interactions with top management can be characterized as oriented toward achieving a win-win situation.
	Coopera	My relationships and interactions with top management can be characterized as cooperative and oriented to create value for both parties.
	WinWin	My relationships and interactions with others within the organization can be characterized as a process of mutual influence seeking a better understanding of the external environment and its implications for the organization.
StrRConf	Z1	I am expected to enact one set of strategic behaviors when I should be enacting a different one (for example, helping to create a new strategy vs. implementing the current strategy, or vice versa).
	Z2	I work under incompatible policies and / guidelines.
	Z3	My boss and I disagree on what strategic behaviors I should be enacting under current environmental conditions (for example, helping to create a new strategy vs. implementing the current strategy, or vice versa).
	Z4	I receive incompatible strategic direction from two or more / people.
	Z5	I am not sure if my proposing new strategic initiatives is what / my boss expects of me.
	Z6	The company's present strategy is not what current environmental conditions require.
FreqComm	OftComm	How often do you communicate with top management?
	OftTalk	How often do you talk with top management?
	OftEmail	How often do you exchange email with top management?
Age	Age	What year were you born?
YrsEdu	YrsEdu	What are your total years of formal education counting from the first grade?

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