An Empirical Analysis of the Relationships between Politics, Conflicts, and Performance in Government Organizations

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ABSTRACT OF THE DISSERTATTION

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The key objective of this study is to examine 1) what relationships exist between organizational politics, conflicts, and other organizational factors; 2) how organizational conflicts affect conflict management effectiveness and the performance of government organizations; 3) how the perception of politics affects conflict management effectiveness and the performance of government organizations; and 4) how conflict management effectiveness affects the performance of government organizations.

While many studies have focused on the performance of public organizations, relatively few have probed organizational politics, conflicts, conflict management, and their effects on organizational performance. Even though politics and conflict are common in public organizations, we have little knowledge and understanding of their implications for effects on organizational outcomes. In particular, there has been no study that treated internal politics and organizational conflicts as variables and statistically tested their simultaneous effects on organizational performance. Moreover, there has been no previous study that has adequately developed measuring conflict management

effectiveness. This research 1) statistically tests the relationships among politics, conflict, and the performance of government organizations; 2) develops indicators for measuring conflict management effectiveness; and 3) tests the effects of conflict management effectiveness on organizational performance.

To address the research questions, the study employed various statistical techniques including descriptive statistics, confirmative factor analyses, multiple regression analyses, reliability tests, and structural equation modeling. The empirical evidence indicates that perceptions of organizational politics and conflicts have negative effects on conflict management effectiveness and on organizational performance. This study also finds that public organizations with higher conflict management effectiveness have higher organizational performance.

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Chapter 1. Purpose of the Research

The traditional accountability system in the public sector generally focused on legal and political accountability (Behn, 2001). However, this traditional system has limitations. In contemporary rapidly-changing democratic society, accountability cannot be narrowed down into simple legal and political issues.

According to Behn (2001), accountability can refer to accountability for finances, fairness, and performance. Accountability for finances and fairness is related to legal and political responsibility. However, accountability for performance is not about rules and compliance. To hold a public agency accountable for performance, it is necessary to establish expectations for outcomes of government agencies. Accountability for performance means more than providing the appropriate and required services to the agency's direct customers, citizens.

In this regard, performance management in public organizations has become a world-wide phenomenon and one of the most important topics in public administration. The process of performance management in public organizations can achieve a better quality of management, and it can contribute to enhancing the accountability of public organizations. Moreover, because performance measurement can provide important information, it can improve the transparency of government. Therefore, the performance measurement and management process can provide various advantages in public organization management.

In spite of this importance of performance measurement and management, there are various practical difficulties and challenges in improving performance because too many internal and external factors affect it. Moreover, Boyne (2003) argues that the

relationship between management and performance has not been comprehensively tested and theorized. Some studies have tried to examine the relationship theoretically and empirically (Boschken, 1994; Rainey and Stenbauer, 1999; Brewer and Selden, 2000; Boyne, 2003; Boyne, Meier, O'Toole, and Walker, 2005; Moynihan and Pandey, 2004; Andrews, Boyne, and Walker, 2006).

These studies found various determinants of organizational performance stemming from internal factors (organizational culture, clarity of organizational goal, centralization of decision authority, reorganization, human capital capacity, structure, leadership, red tape, individual factors, etc) and external factors (political support, client influence, media influence, relationship with stakeholders, etc). Even though these studies explored the theoretical foundations and factors affecting the organizational performance of government, researchers generally examined the relationship between particular factors and the effects on organizational performance based on their specific research questions. In other words, few studies have been empirically, extensively approached, and researchers mostly "focused only on agencies or bureaus, considered only a few factors that affect organizational performance, and examined only narrow measures of organizational performance" (Brewer and Selden, 2000, 688).

More seriously, most studies of organizational performance in the public sector have not considered crucial factors affecting organizational performance such as 'organizational conflicts' and 'organizational politics.' That is, "many scholars and practitioners do not recognize that conflict is inherent to social interaction and common to organizational life" (De Dreu and Van de Vlier, 1997, 2).

Conflict and politics are common in most organizations in the public and private sectors. They affect organizational performance. Therefore, public organizations need

effective conflict management strategies and ways of shaping organizational politics to be constructive. However, there is no comprehensive study regarding the relationship between politics, conflict, and organizational performance in the public sector. Except for several studies by Vigoda (2000a; 2000b) and Parker et al. (1995), moreover, there are few studies which examine organizational politics and its effects on the performance of government organizations. In contrast, there have been continuous academic and practical attempts at exploring the effects of organizational politics and conflicts on organizational outcomes in the business administration field[1].

Nevertheless, even in other academic fields such as business administration and psychology, few studies have been undertaken to comprehensively understand the relationships among organizational conflicts, organizational politics, conflict management, and organizational outcomes. Pfeffer (1981) argues that organizational politics stems from conflict, and relationships between conflict, politics, and performance could be positive or negative depending on different situations and strategies of using power. Nevertheless, there are few studies examining the relationships and those effects on other organizational outcomes in a research model simultaneously. Therefore, it is necessary to clarify the relationships between organizational politics and conflicts and these effects on organizational outcomes based on a comprehensive assessment. Moreover, in order to understand the relationship between these organizational dynamics and organizational performance in the public sector, this research attempts to develop a structural equation model for empirically analyzing how

[1] Even though many researchers in business administration have made efforts at studying organizational conflicts, conflict management, organizational politics, and organizational performance, their studies are limited in several ways because most of their research only focused on the narrow perspective of the relationship between conflict and performance or between politics and performance. That is, none studied extensively with a focus on the relationship between conflict, politics, and performance simultaneously. I will discuss this more in chapter 2.

organizational politics, conflicts, and conflict management strategies are related and how these organizational dynamics shape organizational performance[2].

In chapter 2, therefore, this research explores the theoretical foundations of organizational performance, organizational conflicts and conflict management, and organizational politics. In chapter 3, it draws from the literature to develop hypotheses and a conceptual framework. Chapter 4 presents the methodology. It develops a survey design and questionnaire, and shows how measures and survey items are operationalized. Chapter 5 overviews sample descriptions and issues of data management. In particular, the survey items and variables are tested to confirm the constructive validity. It also preliminarily presents correlation and regression analyses to verify the relationship between variables to develop a structural equation model. In addition, the relationships between organizational politics, conflicts, and other organizational factors are tested. Then, it examines the hypotheses with the statistical results based on the structural equation modeling from chapter 6. Chapter 7 discusses the findings, implications, and contribution of this research based on the statistical results of the regression analyses and the structural equation modeling. In addition, it summarizes the findings and implications of this research, discusses limitations, and offers suggestions for future inquiry.

This study's principal research questions are as follows: **What relationships are there between organizational politics, conflicts, and other organizational factors? How do organizational conflicts affect conflict management effectiveness and the performance of government organizations? How do perceptions of politics affect conflict management effectiveness and the performance of government**

[2] Organizational conflicts can be classified into intraorganizational conflicts and interorganizational conflicts. In this study, intraorganizational conflicts are the concerned conflicts.

organizations? How does conflict management effectiveness affect the performance of government organizations?

Chapter 2. Theoretical Foundation

1. Organizational Performance

To severe criticism of the organizational performance of government, Rainey and Steinbauer (1999) argue that, even though government organizations may seem to be "cumbersome and bungling entities," many public organizations actually have performed very well. There have been various theories and models that focus on the problems of public organizations (e.g., Downs, 1967; Niskanen, 1971; Warwick, 1975); however, there also have been public organization defenders such as Goodsell (1994), Wamsley et al. (1990), and Milward and Rainey (1983).

In spite of these debates, there is no one who denies that organizational performance has been treated as a main concern in public management since Wilson (1887) published a classic article, "The Study of Public Administration." According to Ingraham and Moynihan (2000), public sector reforms of the last quarter century have basically focused on improving the performance and the effectiveness of public organizations. Therefore, many efforts have been adopted in the names of New Public Management (NPM), Reinventing Government (Osborne and Gaebler, 1992), GPRA, total quality management (TQM), business process restructuring (BPR), strategic planning, privatization, contracting out, and more. As a matter of fact, "the NPM movement that has spread through many nations in recent decades has taken various forms but has often emphasized the use in government of procedures similar to those purportedly used in business and private market activities, on the basis of the assumption that government and business organizations are sufficiently similar to make it possible to

use similar techniques in both setting" (Rainey, 2003, 60).

Therefore, most students of public administration agree that management should be a very important variable in the organizational performance of government. Moynihan and Pandey (2004) also argue that "management matters to performance and effectiveness, and that performance is the ultimate goal of public management systems and actions" (422).

However, the problem is that organizational performance is extremely dynamic and so many factors have an effect on organizational performance. "Organizational performance is a socially constructed phenomenon that is subjective, complex, and particularly hard to measure in the public sector" (Au, 1996; Anspach, 1991; Brewer and Selden, 2000, 688). The complexity of organizational performance comes from the fact that government management systems and organizational performance consist of various and complex key components in the "*black box*" of public administration (Donahue, Selden, and Ingraham, 2000, 382). In other words, Ido not have extensive ideas and information about the process of public organization (Ingraham, Joyce, and Donahue, 2003). Therefore, it is necessary to review how scholars approached the *black box* of organizational performance.

According to the ecological model in public organization theories, organizational performance could be defined as an ability of organizations to meet organizational goals and demands from their environments (Boshcken, 1994; Connolly, Conlon, and Deuthch, 1980; Keely, 1978; Miles, 1980; Zammuto, 1984; Selden and Sowa, 2004). Therefore, socio-economic, legal, and administrative factors have put emphasis on studying organizational performance in the public sector. In other words, external factors have been emphasized in research on the organizational performance of government (Boyne

and Walker, 2005). On the other hand, there were also some early scholars who focused on internal factors for defining organizational performance (Argyris, 1964; Etzioni, 1964; Bennis, 1966; Likert, 1967). Moreover, many researchers argue organizational health, management variables, and various internal factors have significant effects on organizational performance (Brewer and Selden, 2000; Donahue, Selden, and Ingraham, 2000; Meier and O'Toole, 2002; Boyne, 2003; Ingraham, Joyce, and Donahue, 2003; Moynihan and Pandey, 2004; Andrew, Boyne, and Walker, 2009). Even though each scholar has a different idea about the performance of government organizations, most admit that both internal and external factors affect organizational performance. Hence, many have tried to develop a multi-dimensional model for analyzing organizational performance. In order to better understand organizational performance, therefore, it is necessary to specify internal management factors and to clarify various generic management systems and external influences (Moynihan and Pandey, 2004).

Rainey and Steinbauer (1999) indicate that the effectiveness of organizational performance is associated with oversight authorities, stakeholders' characteristics, autonomy, mission valence, organizational culture, task design, technology, human resources, professionalism, and motivation. Similarly, Brewer and Selden (2000) suggest key factors such as organizational culture, human capital and capacity, political support, leadership, red tape, structure of task, motivation, individual performance, and other organizational characteristics. Ingraham, Joyce, and Donahue (2003) point out political support, leadership, and resources as crucial factors influencing organizational performance.

Moreover, Moynihan and Pandey (2004) propose that the organizational performance of government is affected by environmental factors (the support of elected

officials, the influence of clients, the influence of the public) and by organizational factors (culture, centralization of decision authority, goal clarity, barriers to reorganization). According to Boyne (2003), leadership, organizational culture, human resource management, and strategic management affect organizational performance. Grindle and Hilderbrand (1995) emphasize not rules and regulations, but organizational culture, good management practices, and effective communication for effective organizational performance.

Selden and Sowa (2004) test three organizational performance standards (management outcomes, management capacity, and program capacity) based on objective measures (e.g. voluntary turnover, mission statement, annual performance evaluation, diversity of services offered, etc) and perceptual measures (eg. job satisfaction, perceptions on training, feedback, salary, service quality, etc). Chun and Rainey (2005b) find that goal ambiguity negatively affects the managerial effectiveness of government organizations. In this study, the authors examine individual level factors (e.g. tenure, professional status, wage grade), organizational factors (e.g. size, age, location, competing demands, financial publicness), and goal ambiguity dimensions (e.g. mission, directive, evaluative, and priority ambiguity).

Although these researchers have been trying to elucidate the inside of the *black box* of organizational performance, each researcher cannot help but pick up only some of the internal or external factors depending on his or her purpose of research because there are too many factors inside the *black box*. As mentioned above, for these reasons, Moynihan and Pandey (2004) point out that a “better specification” of factors in the *black box* is necessary for plausible theoretical or empirical research design. Nevertheless, most literature did not pay much attention to some crucial factors such as

the personal relationships, organizational conflicts, power struggles, organizational politics, and various psychological factors of employees in pubic organizations. These psychological and relational factors have been neglected in the literature and research on organizational performance in the public sector. This is the reason this study targets research questions on the effects of organizational conflicts, politics, and other variables on the performance of government organizations.[3]

2. Organizational Conflicts

It is very usual that people have different ideas, interests, values, or goals. Therefore, it is also very natural that conflict exists in all organizational processes (Thomas, 1976) and many scholars regard conflict as inevitable in organizational life (Coser, 1956; Lorenz, 1966; Pondy, 1967; Rahim, 2001). De Dreu (1997), moreover, argues that "Too much conflict is certainly to be avoided, but the absence of conflict seems undesirable as well" (13). Thus, it should be the first step to answer why there is conflict in organizations and what are the characteristics of organizational conflicts.

In fact, there have been various explanations of why conflict occurs. According to Pfeffer (1981), the absence of widely accepted goals and norms for decision making and administrative strategies may bring about the use of power, dissensus, and conflicts in organizations. In other words, organizational conflicts come from interdependence,

[3] As many internal and external variables affect organizational performance, measuring organizational performance could be affected by internal and external variables. That is, there are various theorectical and practical limitations in performance measurement of public organizations. In particular, selecting indicators and data management could be politically influenced. Moreover, Schachter (2009) points out that elected officials and citizens mostly would play no role in the performance measurement process of government organizations. Therefore, further research is needed to discuss the politics and democratic operation of performance measurement.

heterogeneous goals, resource scarcity, and disagreement concerning preferences and the technology of organizations[4] (Pfeffer, 1981). Furthermore, Pfeffer (1981) points out the important characteristics of power asymmetry among organizational members or groups so that the use of power for handling organizational conflicts brings about political behaviors by organization members. That is, organizational conflicts have various effects on organizational outcomes and the behaviors of members.

Dahrendorf (1959) defines conflict in terms of goal discrepancies and Schmidt and Kochan (1972) also accepts this definition. Baron (1990) argues that conflict may occur when opposed interests exist among people or groups. Roloff (1987) emphasizes that conflict occurs when members have incompatible expectations toward the services or products of organizations. Kochan, Huber, and Cummings (1975) analyze how differences among the goals, interests, or values and how interdependence and power relationships may bring about conflict. Rahim (2002: 207) also suggests conflict may occur when:

1. A party is required to engage in an activity that is incongruent with his or her needs or interests
2. A party holds behavioral preferences, the satisfaction of which is incompatible with another person's implementation of his or her preferences.
3. A party wants some mutually desirable resource that is in short supply, such that the wants of everyone may not be satisfied fully.
4. A party possesses attitudes, values, skills, and goals that are salient in directing his or her behavior but are perceived to be exclusive of the attitudes, values, skills, and goals held by the other(s).
5. Two parties have partially exclusive behavioral preferences regarding their joint actions.

[4] Pfeffer (1981) explains that these five conditions are fundamental factors activating organizational conflicts and politics. This will be discussed more in this chapter.

6. Two parties are interdependent in the performance of functions or activities.

Based on the above descriptions, this study defines that *conflict may occur when there is incompatibility, dissatisfaction, disagreement, interdependence, and exclusiveness in preferences, values, goals, and attitudes among people.*

The problem is that conflict is generally treated as an obstacle in organizational operation. Conflict decreases goodwill and mutual understanding and hinders the achievement of organizational tasks (Deuthsch, 1969). The conflict causes members to be negative, irritable, suspicious, resentful, and chronic relationship conflicts can have serious detrimental effects on group functions (Coser, 1956). Therefore, it is usual to think that avoiding and controlling conflict is necessary in management and decision making.

On the other hand, many of the conflict studies have examined the benefits of organizational conflicts and the methods for stimulating productive conflict (Pfeffer, 1981; Amason & Schweiger, 1994; Amason, 1996; Jehn, 1994, 1995, 1997, 1999; Van de Vliert & De Dreu, 1994; Pelled, 1996). Amason et al. (1995) points out "over and over during our interviews with team members, we heard that conflict can improve decision making and enhance a team's performance … we also heard, however, that conflict can create more problems than it solves and thus should, in many instances, be avoided altogether" (22). Pfeffer (1981) also argues that organizational conflicts may have constructive functions depending on the different conditions and characteristics of organizations. Moreover, the results of conflict have different effects on performance depending on the types of conflict. Therefore, one needs to see both sides of organizational conflicts.

Two types of conflict appear in conflict studies. Guetzkow and Gyr (1954) propose that both “affective” and “substantive” conflicts exist. Affective conflict refers to conflict in interpersonal relations, while substantive conflict is conflict involving the group’s task. Priem and Price (1991) distinguish organizational conflicts as cognitive task-related conflict and social-emotional conflicts as being characterized by interpersonal disagreements not directly related to the task. Coser (1956) classifies goal-oriented conflict in which individuals pursue specific gains and emotional conflict through which is projected frustration with interpersonal interactions. Pinkley (1990) differentiates between task conflict and relationship dimension conflict. Jehn(1994) finds task-focused and relationship-focused conflicts based on a multidimensional scaling study of conflict.

Table 1. Types of Conflict

Researcher(s) \ Type	Positive conflict	Negative conflict
Amason(1996)	cognitive conflict	affective conflict
Guetzkow and Gyr(1954)	substantive conflict	affective conflict
Priem and Price(1991)	task-oriented conflict	social-emotional conflict
Coser(1956)	goal-oriented conflict	emotional conflict
Pinkley(1990)	task conflict	relationship conflict
Jehn(1997)	Task-focused conflict	relationship-focused conflict

As mentioned above, several scholars have empirically studied these two dimensions of conflict and found that conflict has a positive effect on the quality of decision, service, and performance of organizations (Amason & Schweiger, 1994;

Amason, 1996; Jehn, 1994, 1995, 1997, 1999; Van de Vliert & De Dreu, 1994; Pelled, 1996). They call this kind of positive conflict task conflict (or goal-oriented, neutral, and productive conflict). The other, negative, conflict is called relationship conflict (or emotional, interpersonal, relationship-focused, affective, and individualized conflict).

Eisenhardt, Kahwajy, and Bourgeois (1997) point out that organizational conflicts are inevitable; however, they are also valuable because there are cognitive and positive conflicts. Moreover, they argue that appropriate substantive and cognitive conflict is essential for effective strategic choice[5] (Eisenhardt, Kahwajy, and Bourgeois, 1997). For these reasons, Rahim (2002) asserts that conflict management does not imply reduction, elimination, or termination of conflict. In other words, "contemporary conflict management is not conflict resolution and conflict management does not necessarily imply avoidance and reduction of conflict" (Rahim, 2002, 208). Thus, conflict management aims to increase the potential capacity of organizational performance and to reduce interpersonal affective conflict with various conflict management strategies based on each organization's condition and environment.

Before discussing conflict management strategies, one should recall the research questions in this study. Regarding organizational conflicts, this study tries to test the relationship between effective conflict management and organizational performance. Among order to answer this research question, it is necessary to clarify the level of

[5] The root of the dilemma of two types of conflict can be correlated and aroused by similar conditions, so as teams stimulate cognitive conflict, they may inadvertently trigger affective conflict. (Amason and Sapienza, 1997: 496). Actually, various studies show that two types of conflict are statistically correlated: .39 (Amason, 1996), .34 (De Dreu, 1997), .67 (Freidman, Tidd, Curral, and Tsai, 2000), -.17 (Jehn, 1995), .55 (Jehn and Mnnix, 2001), .40 (Peterson, 1999). Therefore, it is possible that task conflict may increase relationship conflict. Nevertheless, these studies conclude that task conflict positively affects organizational performance and quality of results. Moreover, Simons and Peterson (2000) find that intragroup trust moderates the relationship between task conflict and relationship conflict. In addition, there were some misattributions of task conflict.

conflict. In organizational conflicts, there are interorganizational conflicts (conflicts between organizations) and intraorganizational conflicts (conflicts within an organization). This study aims to study intraorganizational conflicts and to elucidate the impact of intraorganizational conflicts and other factors on organizational performance. Therefore, this study focuses on intraorganizational conflict management styles and strategies.

3. Literature about Organizational conflicts in Public Administration

As discussed above, various studies regarding organizational conflicts have been conducted in the sociology, psychology, business administration, and labor management fields. The literature review in this study relies largely upon previous research in business administration. However, it seems that students of public administration neglect conflict in public organization studies, even though "sporadic studies" have described conflictual situations or cases in public administration (Lan, 1997, 27) and revealed micro-level (individual and organizational) conflict resolution in public organizations (Simon, 1957; Lipsky, 1980; Vizzard, 1995; Lan, 1997). In other words, when public administration literature has extensively focused on NPM, performance improvement, public reform, and effective public management, organizational conflicts and conflict management have been of less interest to students in the field of public administration[6].

Strictly speaking, however, a few studies have been published exploring conflict in public administration (Kochan, Huber, and Cummings, 1975; Mills, 1991; Wondollect,

[6] However, political scientists would emphasize conflict when studying power, the decision making process, bureaucracy, and other topics linked to public administration.

1988; Lee, 1990; 1996; 2002; Manring, 1993; 1994; Carnevale, 1993; Vizzard, 1995; Lan, 1997; Pammer and Killian, 2003).

Kochan, Huber, and Cummings (1975) empirically test a model of organizational conflicts among city government officials in 228 cities. They found that power distribution and goal incompatibility were associated with organizational conflicts. This research was one of the first empirical studies measuring organizational conflicts and its determinants in the public sector. In addition, Lee (1990; 1996; 2002) describes organizational conflicts and the conflict management style of Korean public agencies. He concludes that the authoritative culture of Korean public organizations was significantly associated with conflict management styles and that there were different conflict management strategies based on the relative status of employees (Lee, 2002).

Even though there are several empirical and conceptual studies regarding organizational conflicts in public administration, they have approached conflict resolution strategies focused on specific issues and particular organizations (case studies). Moreover, a handbook of conflict management edited and published by Pammer and Killian (2003) shows exactly how young this field of conflict research is in the study of public organization. The handbook tries to extensively handle the theoretical and practical foundation of organizational conflicts in the public sector; however, it still remains in the idea-building stage, comparing other handbooks on business administration (e.g. De Dreu and Van De Vliert, 1997).

In particular, even though the handbook tries to facilitate discussion about conflicts in educational, organizational, policy, and community settings; however, the foci are too broad to understand the basic concepts and implications of each study in the handbook. The structure of the handbook confuses the purposes of the handbook because there is no

logical flow between chapters. In sum, the handbook does not provide not only the theoretical and practical findings and implications, but also a comprehensive discussion about conflicts.

As Lan (1997) mentioned in mid-1990s, “The paucity of literature on conflict resolution in today’s main stream public administration research calls for more attention to be focused on conflict studies on the part of public administration scholars and practitioners” (28). Thus, it is necessary to pay more attention to study the conflict in government organizations.

As discussed above, moreover, it is hard to find a comprehensive empirical study which examines the relationship between organizational conflict, conflict management, and organizational performance in public administration. Even though organizational conflict could be a critical factor which has an effect on organizational performance, conflict-related variables have been neglected in the public administration literature. Therefore, this study raises the research questions and attempts to fill part of the empirical gap.

4. Styles and Strategies of Conflict Management

Managers spend an estimated 24 percent of their time on managing conflict (Thomas and Schmidt, 1976). This research result shows that conflict management is equally important to strategic planning, budgeting, or decision making. Therefore, it is very significant for managers to choose conflict management styles and modes.

Until the 1990s, conflict behavior had been regarded as an individual reaction and most literature on intraorganizational conflicts suggested a single mode of conflict

management strategy (Euwema, Van de Vliert, and Bakker, 2003). More recently, however, using multiple modes of conflict management and mixing strategy with forcing, problem solving, and accommodating have been emphasized (Fisher and Ury, 1981; Euwema, Van de Vliert, and Bakker, 2003).

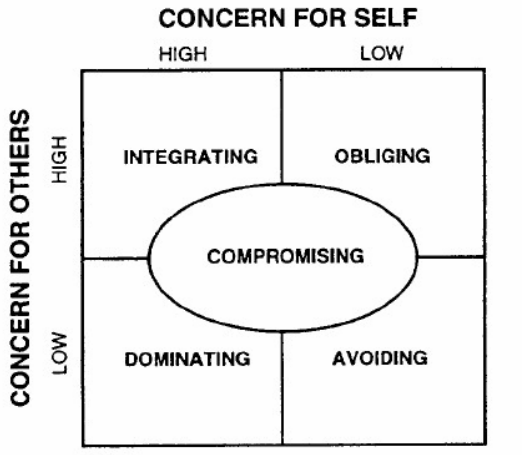
Even though each scholar uses different terminologies, integrating, obliging, dominating, avoiding, and compromising are the most popular modes for handling conflict. As a matter of fact, these five modes of conflict management have been studied for several decades. They were synthesized through various researches in conflict management studies.

Follett (1940) suggests five modes of conflict management: domination, compromise, integration, avoidance, and suppression. Blake and Mouton (1964) categorize conflict management styles as forcing, withdrawing, smoothing, compromising, and problem solving. Thomas (1976) classifies conflict management modes into two big categories: cooperative and assertive approaches. In these two categories, there are five styles of conflict management: avoidance, accommodation, competition, collaboration, and compromising (Thomas, 1976).

Rahim and Bonoma (1979) suggest two basic dimensions of conflict management styles: concern for self and concern for others. These dimensions explain the degree (high/low) to which a person tries to satisfy his own concern or other people's concern. From a combination of the two dimensions, they suggest five modes of conflict management: integrating, obliging, compromising, dominating, and avoiding, as shown in Figure 1. This classification is very similar to Thomas' one. Actually, Thomas and Van de Vliert agree with Rahim's two dimensional approach and five modes of conflict management (Ruble and Thomas, 1976; Van de Vliert and Kabanoff, 1990).

The integrating style is related to problem solving and includes openness, communication, cooperation for seeking alternatives, and commitment for effective implementation of a solution (Rahim, 2002). Blake and Mouton (1964) and Likert and Likert (1967) point out that the integrating style is the most appropriate approach for handling organizational conflicts. Moreover, this evaluation is supported by the research of Pruitt and Carnevale (1993).

Figure 1. Conflict Management Strategies



Source: Rahim, Buntzman, and White (1999, 158)

The obliging style is associated with “attempting to play down the differences and emphasizing commonalities to satisfy the concern of the other party” (Rahim, 2002, 218-219). This strategy is very useful when a person wants to have good relationship with other parties. However, if the other party has unethical purposes, this approach is not appropriate.

The dominating style comes from a “win-lose orientation” and is associated with

competition for having interests or achieving goals or purposes (Rahim, 2002). This kind of competing mode is related to the assertive strategy of conflict management and it is not appropriate when there should be a cooperative effort for making alternative solutions (Volkema and Bergmann, 1995). Furthermore, it may increase organizational conflicts and competition levels.

Table 2. Conflict Management Styles and the Situation Where They are Appropriate or Inappropriate

Conflict Style	Situation where appropriate	Situation where inappropriate
Integrating	1. Issues are complex 2. Synthesis of ideas is needed to come up with better situations. 3. Commitment is needed from other parties for successful implementation. 4. Time is available for problem solving 5. One party alone cannot solve the problem. 6. Resources possessed by different parties are needed to solve their common problems	1. Task or problem is simple. 2. Immediate decision is required 3. Other parties are unconcerned about outcome. 4. Other parties do not have problem-solving skills
Obliging	1. You believe that you may wrong. 2. Issue is more important to the other party 3. You are willing to give up something in exchanging for something from the other party in the future 4. You are dealing from a position of weakness. 5. Preserving relationship is important	1. Issue is important to you. 2. You believe that you are right. 3. The other party is wrong or unethical.
Dominating	1. Issue is trivial. 2. Speedy decision is needed. 3. Unpopular course of action is implemented. 4. Necessary to overcome assertive subordinates. 5. Unfavorable decision by the other party may be costly to you. 6. Subordinates lack expertise to make technical decision. 7. Issue is important to you.	1. Issue is complex. 2. Issue is not important to you. 3. Both parties are equally powerful. 4. Decision does not have to be made quickly. 5. Subordinates possess high degree of competence.
Avoiding	1. Issue is trivial 2. Potential dysfunctional effect of confronting the other party outweighs benefits of resolution. 3. Cooling off period is needed.	1. Issue is important to you. 2. It is your responsibility to make decision. 3. Parties are unwilling to defer issue must be resolved. 4. Prompt attention is needed
Compromising	1. Goals of parties are mutually exclusive. 2. Parties are equally powerful. 3. Consensus cannot be reached. 4. Integrating or dominating style in not successful 5. Temporary solution to a complex problem in needed	1. One party is more powerful. 2. Problem is complex enough needing problem-solving approach.

Source: Rahim (2002, 219)

The avoiding style is related to this in that people regard their conflict situation as trivial or unimportant (Rahim, 2002). Therefore, it is possible to say that avoiding could be used when people are indifferent to the concerns in their organization. However, when the concern is a very important one, this approach is not appropriate. Moreover, the avoiding style may increase conflictual behavior and disputes in organizations (De Dreu, 1997).

The compromising style is to seek a mutually acceptable outcome between conflicting parties (Rahim, 2002). When there are mutually exclusive goals between competing parties, it is very useful in solving complex problems; therefore, this strategy has been frequently employed for negotiation (Rahim, 2002).

Therefore, using appropriate styles for handling organizational conflicts is required for effective conflict management. However, there is no one best conflict management strategy and a one-size-fit-all style for every organization. Therefore, when mangers choose conflict management strategies, they should consider various factors both inside and outside of their organization. This approach is called “contingency (situational) conflict management” (Axelrod, 1984; Hocker and Wilmot, 1991; Rahim, 2002).

The contingency approach allows managers to use appropriate styles of conflict management and provides flexibility to investigate organizational situations and better conflict management approaches. Moreover, Thomas (1992) suggests a time perspective combination approach. That is, a contingency approach could be appropriate for short-term strategy; however, a one-best-way approach is more functional for long-term strategy. For these reasons, there have been hot discussions on organizational conflict studies regarding which approach may be more helpful for effective conflict management. Nevertheless, it is not easy to answer which one is appropriate, although researchers have

been trying to discover appropriate and inappropriate strategies for general situations.

Basically, the integrating style (problem solving) is regarded as the most appropriate approach for effective conflict management (Blake and Mouton, 1964; Likert and Likert, 1976) and many scholars confirm the effectiveness of integrating style. However, some scholars found that even avoiding and dominating styles could be useful depending on the situations of organizations (Thomas, 1977; Rahim and Bonoma, 1979; Rahim, 2001; 2002). In other words, each study reveals rather different results and evaluations for appropriate conflict management strategies because they had different subjects, organizational factors, environments, and other various factors around their organizations.

Gross and Guerrero (2000) find that an integrative conflict management style could be the most appropriate and effective style; however, avoiding and dominating styles are perceived as inappropriate and ineffective. Tjosvold and Sun (2002) examine avoiding style so that they reveal that the avoiding conflict style sometimes could be useful to preserve relationships. Tjosvold, Morishima, and Belsheim (1999) indicate that developing cooperative goals and open-minded negotiation skills can allow people to build integrative conflict management styles in their organizations.

Moreover, trust building helps to decrease affective conflict between organization members (Tidd, McIntyre, and Friedman, 2004). Euwema, Van de Vliert, and Bakker (2003) describe how using dominating (controlling) style is related to substantive relational outcomes, but integrating (problem solving), forcing, and confronting styles are important for relational outcomes.

Rahim (2002) synthesizes these studies, and shows a high positive score on the problem solving index (integrating – avoiding) and a negative score on the bargaining

index (dominating – obliging) are appropriate for effective conflict management. Although there are some differences between research results, in sum, most literature emphasizes cooperative and problem solving approaches.

In sum, conflict management does not necessarily mean a reduction or elimination of organizational conflicts. Depending on the different characteristics and situations of each organization, members may select conflict management strategies such as integrating, avoiding, dominating, obliging, and compromising. However, it is very important to mention that the selection of conflict management styles should be affected by various organizational factors. In particular, the amount and types of conflicts (relationship and task conflicts), political atmosphere, and other various organizational factors may affect the selection of conflict management strategies. For example, it is highly possible that members of organizations having a high level of relationship conflict tend more frequently use the avoiding strategy. Therefore, if problem solving styles of conflict management are appropriate, one can predict which organizational factors have positive effects on the selection of problem solving modes of conflict management. Therefore, it is necessary to examine the relationship between organizational factors and the selection of an effective conflict management mode.

Furthermore, if organizational factors have effects on selection of the effective conflict management strategies, this selection may consecutively affect organizational performance. That is, effective conflict management styles have mediating effects between organizational factors and outcomes. In the previous studies, most researchers have examined the direct effects of organizational factors such as conflicts and politics on organizational performance. Considering the mediating effects of conflict management effectiveness, it is possible to examine the direct and indirect effects of

organizational factors on performance for organizations with consideration of the mediating effects of conflict management effectiveness. Therefore, this study tries to measure conflict management effectiveness and to examine its mediating effects between organizational factors and performance in the public sector.

5. Perception of Organizational Politics

In our everyday life, many people regard politics and power as dirty words (Pfeffer, 1981). However, we can find that politics is everywhere and is one of the most significant phenomena in organizations (Mayes and Allen, 1977; Pfeffer, 1981; 1992; Mintzberg, 1983). Nevertheless, organizational politics has been neglected in the organization literature (Pfeffer, 1981). According to Ferris, Russ, and Fandt (1989), "… systematic inquiry in this area has been sparse and limited, leaving largely unexplored the potential antecedents and consequences of organizational politics … Numerous specific political behaviors have been isolated and studied in the social psychological literature" (143-144). As a matter of fact, organizational politics is a very complicated phenomenon and it is not easy to estimate its effects on organizational outcomes such as performance, job satisfaction, and commitment (Vigoda, 2000b) and most of the scholars in this field have agreed about the paucity of literature. However, recently various conceptual and empirical studies as well as a variety of surveys and projects have been conducted, especially in business administration.

According to Pfeffer (1981), organizational politics is related to activities such as acquiring, developing, and using power and other resources for obtaining one's preferred outcomes under uncertainty or dissensus in organizations. Specifically, Pfeffer (1981)

argues that organizational politics comes from conflict, and there are five conditions for the use of power: interdependence, heterogeneous goals, resource scarcity, and disagreement concerning the preferences and the technology of the organization. Moreover, he adds that organizational politics will be activated only if there is an important or critical issue. Even though Pfeffer (1981) argues the possibility of positive effects from organizational politics, many scholars have been regarding organizational politics as a negative phenomenon.

While some scholars in the early stages of studies on organizational politics define organizational politics as a behavior for influencing decision making (Pettigrew, 1973; Tushman, 1977), many others describe organizational politics in terms of a self-serving behavior in organizations (Burns, 1961; Porter, 1976; Mayes and Allen, 1977; Schein, 1977). Moreover, as Gandz and Murray (1980) and Madison et al. (1980) mention, organizational politics could be defined as a self-serving behavior for achieving self-interests, advantages, and benefits without expense to oneself. Ferris, Russ, and Fandt (1989) similarly define organizational politics as "a social influence process in which behavior is strategically designed to maximize short-term or long-term self interest, which is either consistent with or at the expense of others' interest" (145).

Drory and Romm (1990) describe organizational politics as having three common elements based on an analysis of previous research: self-serving behavior, contrast with organizational goals, and conflict. Ferris, Russ, and Fandt (1989, 147) indicate political behavior could occur when:

1. emotionality or task involvement are moderate or low enough, or other conditions exist, to simulate self-consciousness;
2. the social interaction and work context are not rigidly ritualized, scripted, or

other wise constrained;

3. opportunities or threats create perceptions of instrumentality of political behavior;
4. the employee believes that he or she will be successful;
5. the situation and the potential outcomes are important to the individual;
6. the employee observes relevant others (e.g. supervisor, coworkers) engaging in political behavior, particularly when they do so successfully.

In these perspectives, organizational politics could be viewed subjectively (Witt, Andrews, and Kacmar, 2000). Although Judge and Bretz (1994) argue that organizational politics is a kind of objective behavior, as discussed above, organizational politics stems from individual perception and reaction for self-interests. Gandz and Murray (1980) also find that organizational politics is regarded as a state of mind.

In this perspective, the above definitions of organizational politics are seen to be somewhat narrow because conflict may occur over issues of high principle – where actors have different notions of the public interest and behave in altruistic ways. That is, although political behavior would be regarded as a negative behavior, organizational politics stems from the subjective condition of individuals and from complicated psychological circumstances. Thus, the definition of organizational politics cannot be limited to a behavior of attempting to obtain one's self-interests.

In this regard, "perceptions of organizational politics involve the individual's subjective evaluation of observed situations or behaviors as political. More specifically, perceptions of organizational politics are subjective interpretations of the extent to which the work environment is characterized by co-workers and supervisors who engage in political behaviors or organizational policies that encourage such behaviors" (Harrell-Cook, Ferris, and Dulebohn, 1999, 1095). Therefore, it is very important to study how

these organizational politics perceptions affect organizational outcomes; however, many researchers of the previous studies tend to simply define organizational politics as a negative phenomenon.

Hence, treating organizational politics as a destructive factor in a research model requires researchers to be careful when testing relationships between organizational politics and other organizational factors. Because we have little understanding about relationships between organizational politics, conflicts, and other outcome variables, measures of organizational politics should be tested for clarifying relationships between measures of organizational politics and measures of organizational conflicts[7]. Considering that there is no existing research model including organizational politics and conflicts at the same time, this study treat the perception of organizational politics and organizational conflict as respective independent variables in the research model for this study to examine the relationship between organizational politics and conflicts and to expand the discussion about the relationship and those factors' effects on the performance of government organizations.

6. Literature about Organizational Politics in Business Administration

Regarding the relationship between organizational performance and politics, Pfeffer (1981) is reluctant to define the relationship. He believes that organizational

[7] The POPS scale (Perception of Organizational Politics) designed by Karmar and Ferris (1991) has been widely used for measuring organizational politics. However, it is questionable whether the measures are objective or subjective because they have somewhat negative connotations. In this regard, research models should include other objective indicators for measuring conflictual and political phenomena of organizations. This is the reason why this research considers including organizational politics and conflict variables in the research model at the same time. For this reason, in order to test the relationship between organizational politics and conflict, this study raised the first research question.

politics is probably positively related to performance; however, it may have a negative effect on performance when using power is not necessary (Pfeffer, 1981, 345). Because different situations and strategies of using power may cause different effects on organizational performance, he suggests that future research needs to consider how the various strategies and situations of organizational politics affect organizational performance (Pfeffer, 1981).

Gandz and Murray (1980), based on a survey of 400 respondents, argued that organizational politics was related to job dissatisfaction, low job autonomy, and less opportunity for promotion. Specifically, job dissatisfaction was significantly associated with organizational politics. Based on coded interviews, Madison et al. (1980) found that most respondents perceived that organizational politics was prevalent, and promotion was greatly related to organizational politics. This result has been confirmed by many later stuides (e.g. Gandz and Murray, 1980; Markham, Harlan, and Hackett, 1987; Ferris and Buckley, 1990). Surprisingly, 20% of the survey respondents in the research believed that organizational politics was more important than job performance. Many empirical studies have followed these two early studies.

Most studies show that there is a negative relationship between organizational politics and organizational outcomes using the survey framework and measures suggested by Karmar and Ferris (1991). Parker, Dipboye, and Jackson (1995) find that organizational politics is related to job satisfaction, loyalty, management effectiveness, and positive organizational value. Droy (1993) finds that perceptions of organizational politics have negative effects on job satisfaction and organizational commitment. He concludes that organizational politics is more harmful to low-level employees than to high-level ones. Moreover, organizational politics could bring about frustration on the

part of employees (Droy, 1993).

Ferris et al. (1996) describes how unfair activities could occur in a climate of organizational politics and how employees took negative attitudes on voluntary efforts. Moreover, they find that perceptions of organizational politics negatively affect job satisfaction. Bozeman et al. (1996) also conclude that perceptions of politics have a negative effect on organizational commitment. Furthermore, they indicate that perceptions of organizational politics have an effect on states of mind such as job anxiety and burnout, and these states of mind are also correlated to perceptions of fairness and justice.

Voyer (1994) finds that organizational politics decreases employee satisfaction and organizational effectiveness. Similarly, Kacmar et al. (1999) point out that perceptions of organizational politics have negative effects on job satisfaction, supervisor effectiveness, self appraisal, and organizational satisfaction. Moreover, the perceptions increase job anxiety (Kacmar et al., 1999). This is one of the first studies that employed 'Structural Equation Model' (S.E.M) for examining the relationships between perceptions of the organizational politics and organizational outcome variables based on a survey of 786 employees of a state government agency and of 469 employees of an electric utility cooperation.

Witt (1998) collected 979 workers from 5 organizations and tested the hypothesis that goal congruence would moderate the relationship between organizational politics and job performance. The results indicate that sharing goal priorities between employers and employees moderated organizational politics and positively affected organizational commitment and job performance.

The research of Hochwarter, Witt, and Kacmar (2000) suggests that perceptions of

organizational politics have negative effects on job performance. Valle and Perrewe (2000) find that the centralization of organization and personal influences (e.g. Machiavellianism) also boosts organizational politics. Other research has concluded that there is a negative relationship between perceptions of organizational politics and job satisfaction, commitment, and performance (Valle and Witt, 2001; Witt, Andrews, and Kacmar, 2000; Vigoda and Cohen, 2002).

7. Literature about Organizational Politics in Public Administration

In public administration, only a few studies have empirically examined the relationship between the perceptions of organizational politics and organizational outcome variables such as organizational performance. Vigoda (2000a) mentions that "since the public sector represents classic bureaucracy with high formal structures, many scholars assumed that internal politics played only a secondary role in these organizations and hence paid little attention to the examination of this sector" (203). However, Vigoda (2000a) concludes that internal politics extensively exists and has a large effect on a public administration system.

According to Vigoda (2002a), perceptions of organizational politics in the public sector had negative effects on organizational performance[8]. Vigoda (2002a) explains that, because public sector employees tend to be passive and want to be out of risk, organizational politics decreases their job performance and commitment. The author calls this problem the "*silent enemy*." As a consequence, if there is internal politics among public officials, organizational politics may have a negative effect on entrepreneurial

[8] Vigoda (2002a) also used the POPS measures of Karmar and Ferris (1991).

strategy and creative activity in the public sector. Therefore, the author concludes that organizational politics may be more harmful because it may bring about hazardous consequences both to the public agency and to citizens (Vigoda, 2000a).

Vigoda (2000b) also published another article that examines the relationship between the perceptions of organizational politics and various organizational outcomes. In this study, the author concludes that there was a relatively strong relationship between perception of organizational politics and neglected behaviors. Moreover, the author explains that, because there were various external political influences on public organizations, internal politics may be low and less significant.

Moreover, Vigoda (2001) finds that perceptions of organizational politics were affected by different original cultures. Based on a comparative study between Israel and Britain, British public employees "responded to organizational politics more negatively than Israeli ones and showed higher intentions to leave the organization, higher tendencies of negligent behaviors, lower levels of loyalty, and lower levels of job satisfaction and met expectations," even though overall organizational politics levels between employees of the two countries were similar (Vigoda, 2001, 1509). Because data for most empirical studies in organizational politics were collected from the private sector in one cultural area, the United States, the author argues cultural differences should be considered for future inquiries studying organizational politics (Vigoda, 2001).

In addition, Parker, Dipboye, and Jackson (1995) find public employees perceived organizational politics to have negative and neglectful effects on organizational outcomes such as satisfaction, management effectiveness, innovation, and loyalty. In particular, they mention that the results may differ in nongovernmental organizations. That is, even though many scholars in business administration have conducted empirical studies

regarding organizational politics and its effects on organizational outcomes, as Vigoda (2000b) mentions, organizational settings and conditions in the public sector are different from ones in the private sector, so there should be possibly distinctive effects of organizational politics upon public organizations. However, little research has been done and this question still remains far from fully answered.

8. Summary and implication

In this chapter, I discussed the primary findings and implications of the previous studies regarding organizational performance, politics, and conflicts. Donahue, Selden, and Ingraham (2000) point out that the performance of government organizations consists of complex key factors in the "*black box*" of public administration. This means a number of internal and external factors have effects upon organizational performance in the public sector. Even though the previous studies focused on examining various internal and external factors affecting organizational performance, the researchers have not paid much attention to crucial factors such as organizational politics and conflicts.

Although various studies regarding organizational politics and conflicts have been conducted by scholars in business administration, there are only a few studies in public administration. Even in business administration, few studies have been conducted with consideration for the comprehensive relationships between organizational performance, politics, and conflicts. Worse, many researchers have studied organizational politics and conflicts separately, even though the measures of organizational politics and conflicts should be highly correlated and simultaneously affect each other. Scholars who are interested in organizational politics tend to focus on political behavior and its effects on

organizational outcomes; however, they would not consider organizational conflicts as an important variable in their research models. By contrast, scholars who are interested in organizational conflict tend to focus on conflictual situations; however, they would not pay much attention to political behavior as an important variable and its effect on organizational conflicts and conflict management.

More seriously, there is no study which empirically examines the relationship between organizational politics and conflicts. Therefore, it is necessary to elucidate comprehensive association between these organizational dynamics and other factors for a building an accurate research model and for better understanding about organizational politics, conflicts, and their effects on organizational performance. Therefore, this study tests the relationships and how these organizational politics and conflict measures relate to other variables. Ultimately, this study tests how they relate to the performance of government organizations.

Chapter 3. Research Questions, Hypotheses, and Framework

The study aims to answer four research questions: 1) What relationships are there between organizational politics, conflicts, and other organizational factors? 2) How do organizational conflicts affect conflict management effectiveness and the performance of government organizations? 3) How do perceptions of politics affect conflict management effectiveness and the performance of government organizations? 4) How does conflict management effectiveness affect the performance of government organizations? This chapter describes how the previous studies approached their examination of the relationship between organizational politics, conflicts, and performance. In order to develop a research framework, this study considers which organizational factors should be included in the model. Furthermore, this study raises research hypotheses based on a discussion about the research results and implications of the previous studies.

1. Organizational Politics

Previous studies have shown that a perception of politics is significantly related to various organizational outcomes. Since Ferris, Russ, and Fandt (1989) proposed the 'model of organizational politics perceptions,' a number of empirical studies have supported the model and the authors' conceptual expectations regarding a perception of politics and its effects on organizational outcomes, as this study has previously discussed (e.g., Ferris and Buckley, 1990; Droy, 1993; Ferris et al., 1996; Bozeman et al., 1996;

Voyer, 1994; Gilmore et al., 1996; Kacmar et al., 1999; Witt, 1998; Valle and Witt, 2001; Witt, Andrews, and Kacmar, 2000; Vigoda and Cohen, 2000; 2002). In particular, many studies have concluded that a perception of organizational politics has a negative relationship on organizational outcomes and performance.

As a matter of fact, organizational politics should be correlated to various employee attitudes such as job satisfaction, commitment, anxiety, tension, burnout, and loyalty. For this reason, early works in organizational politics discussed the neglectful characteristics of organizational politics, showing their effects on these attitude variables and organizational outcomes. Kacmar et al. (1999) find that a perception of organizational politics negatively affects job satisfaction and organizational satisfaction, and it increases job anxiety. According to Witt (1998), a perception of politics may reduce cooperation so that a low level of cooperation compromises goal achievement and degrades efficiency. Consequently, a perception of organizational politics negatively affects organizational performance. These results have been supported by the more recent studies of Valle and Witt (2001), Valle and Perrewe (2000), and Huang, Chuang, and Lin (2003), Vigoda (2000a; 2000b), Vigoda (2001)and Vigoda and Cohen (2002).

Especially, Vigoda (2000a) shows a perception of organizational politics has negative effects on organizational outcomes and performance in the public sector as well. He emphasizes that organizational politics may negatively affect entrepreneurship and creative and healthy public administration so that this internal politics hampers various innovative approaches to the management of public organizations. Moreover, Pfeffer (1981) suggests that political activity may, under some circumstances, yield less efficiency.

At the same time, organizational politics may negatively affect conflict

management strategy. In other words, organizational politics may have effects on the selection of negative conflict management mode. Voyer (1994) concludes that organization members would regard organizational politics as an important control mechanism and a coercive power that threatens organizational effectiveness. In this perspective, members of highly political organizations are more likely to use control mechanisms such as dominating and forcing when they have organizational conflicts. Consequently, organizational politics may have direct and indirect negative effects on conflict management effectiveness and on organizational performance consecutively. Therefore, this study raises the following hypotheses:

Hypothesis 1a: Perception of organizational politics is negatively related to perceptual conflict management effectiveness.

Hypothesis 1b: Perception of organizational politics is negatively related to perceived organizational performance.

2. Types and Amount of Organizational conflicts

Managing conflict is very different from resolving conflict. That is, conflict resolution means reduction, elimination, and termination of conflict based on the notion that conflict is inevitably harmful to organizational outcomes (Rahim, 2002). Recent studies in organizational conflicts have shown that conflict is not always detrimental; however, the selection of appropriate conflict management strategies can transform organizational conflicts as a functional process. However, it is possible that emotional conflict may affect the selection of negative styles of conflict management such as

dominating and avoiding. Therefore, contemporary conflict management is not limited to reduction, termination, and elimination of conflict, but aims to minimize the dysfunctional effects of conflicts, to select appropriate strategies of conflict management, and to improve constructive organizational leaning based on effective strategies (Rahim, 2002).

In this perspective, it is necessary to differentiate functional conflict from dysfunctional conflict for effective conflict management. A number of theoretical and empirical studies have shown distinctions between task (positive) conflict and relationship (negative) conflict. As was discussed in Chapter 2, the previous studies found that the impact of task conflict would be positive and linked to increased organizational performance (Amason, 1996; Pelled, Eisenhardt, and Xin, 1999; Shah and Jehn, 1993). By contrast, relationship conflict has negative associations with organizational outcomes including decreased organizational performance.

Moreover, Amason and Schweiger (1994) conclude that task conflict produces high-quality decisions. DeChurch and Marks (2001) find that task conflict improves organizational performance and is connected to the selection of positive conflict management styles such as integrating and obliging. In addition, the positive conflict management strategies have positive effects on organizational performance. On the other hand, disagreeable and passive conflict management styles such as dominating and avoiding negatively affect organizational performance and job satisfaction among group members (DeChurch and Marks, 2001).

In contrast, Gersick (1988) argues that organizations with relationship conflicts have more disagreement and increasing amounts of relationship conflicts. Jehn and Mannix (2001) suggest that high-performing organizations have low levels of

relationship conflict. That is, relationship conflict negatively affects cognitive organizational processes and members' attitudes and behavior, and increases levels of stress and job anxiety (Amason, 1996; Jehn, 1997; Jehn, Northcraft, and Neale, 1999). In sum, Jehn (1997) notes that "relationship conflict causes members to be negative, irritable, suspicious, and resentful" (532). Accordingly, these detrimental effects of relationship conflict would be linked to the selection of ineffective conflict management strategies. Therefore, this study raises the following hypotheses:

Hypothesis 2a: Task conflict is positively related to perceptual conflict management effectiveness.

Hypothesis 2b: Task conflict is positively related to perceived organizational performance

Hypothesis 2c: Relationship conflict is negatively related to perceptual conflict management effectiveness.

Hypothesis 2d: Relationship conflict is negatively related to perceived organizational performance.

3. Organizational Cultures

On the basis of prior research on organizational cultures and these effects on organizational outcomes, organizational culture variables may play significant roles in studying conflict management and organizational performance of government organizations as control variables. Considering that organizational climate and mood have effects on human interactions and organizational outcomes, organizational cultures

help to study organizational politics, conflicts, and these effects on organizational outcomes.

Research in organizational culture has been conducted since business administration scholars borrowed the concept from anthropology (Reichers and Schneider, 1990). Although the research climate has been rich in the management field, it is hard to define organizational culture. However, various conceptual and empirical studies have identified the characteristics and effects of organizational culture.

According to Rainey and Steinbauer (1999), organizational culture refers to a "pattern of shared meanings of organizations" (17). Moreover, Howard (1998) explains that "organizational culture is an abstract composite of assumptions, values, and artifacts shared by its members" (234). Furthermore, organizational culture includes shared "beliefs, symbols, rituals, and myths that evolve over time and function as the glue that holds organizations together" (Hennessey, 1998, 525). In addition, many scholars support that organizational culture is formed by members' shared values and beliefs (Hofstede et al, 1981; Sales and Mirvis, 1984; Schwartz and Davis, 1981; Zammuto and O'Connor, 1992).

These definitions of organizational culture could be explained by Ouchi's (1980) transaction cost concept. Ouchi (1980) argues that "A transaction cost is any activity which is engaged in to satisfy each party to an exchange that the value given and received is in accord with his or her expectations" (130). However, the problem is that there is a difficulty in determining shared values and activities. In other words, a variety of values, meanings, ideologies, and activities among organization members yields a kind of shared organizational pattern and process for meeting each member's expectations and satisfactions.

In this perspective, organizational culture can be determined by how members recognize and understand their organizations and environments. According to Schein (1985), “the term culture should be reserved for the deeper level of basic assumptions and beliefs that are shared by members of an organization, that operate unconsciously, and that define in a basic “taken-for-granted” fashion an organization’s view of itself and its environment. These assumptions are learned responses to a group’s problems of survival in its external environment and its problem of internal integration” (6). That is, organizational culture may reveal important information about organizational conditions, problems, the relationship between members, organizational structure and design as well as other factors. Furthermore, organizational culture may affect various organizational factors including leadership, management strategy, conflict management style, organizational outcomes, and individual and organizational performance.

Therefore, many scholars have focused on studying the relationship between organizational culture and its effect on other organizational factors. Ouchi (1980) reasons the transaction cost concept explains organizational culture. Quinn (1988) suggests a relationship between cultural values, effective leadership styles, and sources of personal power. Moreover, many scholars have proposed relationships between organizational culture, structure, and organizational strategy (Quinn and Hall, 1983), decision making and organizational culture (Reagan and Rohrbaugh, 1990), organizational culture and change (Legge, 1994; Ogbonna, 1993), and cultural values and technology (Zammuto and O’Connor, 1992).

In addition, one of the major beliefs of organizational culture is that organizational culture is related to organizational performance and certain organizational cultures bring about higher performance of organizations (Ouchi, 1981; Peters and Waterman, 1982;

Deal and Kennedy, 1982; Gordon and DiTomaso, 1992; Kotter and Heskett, 1992; Ognonna and Harris, 2000). That is, "many academics and practitioners argue that the performance of an organization is dependent on the degree to which the values of the culture are widely shared, that is, are strong" (Ognonna and Harris, 2000, 769). Furthermore, DeIulio (1994) finds that cultural factors have significant effects on organizational performance and several other studies empirically show significant relationships between organizational culture and performance (Fisher, 1997; Thompson, 1996; Brewer and Selden, 2000; Pandey and Garnett, 2006)

In sum, different patterns of shared values, assumptions, and interpretations define organizational cultures, and they are linked to strategic, political, interpersonal, and institutional aspects of organizational life including organizational performance (Denison and Spreitzer, 1991). At this point, therefore, the major research question of this study is which organizational cultures are critical to organizational performance.

Quinn's (Quinn and Rohrbaugh, 1981; 1983; Quinn, 1988) competing values model provides how different organizational value orientations affect organizational culture and effectiveness: 1) organizational focus (people versus the organization); 2) structural preferences (control and flexibility); and 3) organizational process and outcomes (means and ends). Moreover, based on Quinn's value competing model, Zammuto and Krakower (1991) operationalize four organizational culture types: group, development, hierarchical, and rational organizational culture.

The group culture emphasizes people, flexibility, and core values for maintaining the group such as trust, belonging, participation, cohesivenss, membership, and morale. The development culture is associated with emphases on flexibility, change, growth, resource acquisition, and adaptation to the external environment. The rational culture

tends to focus on goals, control, efficiency, competition, directiveness, and instrumental and functional structure. Finally, the hierarchical culture emphasizes regulation, security, order, managing communication, stability, efficiency, and control.

As Zammuto and Krakower (1991) mention, organizations do not fall into a single cultural type. Instead, most organizations tend to have a combination of values with certain values emphasized more strongly than others (Quinn and Kimberly, 1984). Moynihan and Pandey (2004) find that the developmental culture has a positive effect on organizational effectiveness. Even though the hierarchical, rational, and group cultures are not statistically significant, it is possible that these culture types may have effects on organizational performance. In particular, Pandey, and Garnett (2006) explain that "hierarchical culture is a kin to the classic bureaucratic culture, which lays great emphasis on stability and control" (42). Accordingly, it is possible to assume that the hierarchical culture has a negative effect on organizational performance.

Furthermore, organizational culture may affect conflict management effectiveness as well. The hierarchical culture emphasizes control, regulation, and order. That is, organizations with high levels of hierarchical culture are more likely to use control mechanisms such as dominating and forcing when they have organizational conflicts. By contrast, the developmental culture emphasizes flexibility, change, growth, and adaptation. Organizations with high levels of hierarchical culture are more likely to use collaborative mechanisms such as integrating. Therefore, this study raises the following hypotheses:

Hypothesis 3a: Hierarchical organizational culture is negatively related to perceptual conflict management effectiveness.

Hypothesis 3b: Hierarchical organizational culture is negatively related to perceived organizational performance.

Hypothesis 3c: Developmental organizational culture is positively related to perceptual conflict management effectiveness.

Hypothesis 3d: Developmental organizational culture is positively related to perceived organizational performance.

4. Goal Ambiguity

Regarding goal ambiguity, Chun and Rainey (2005b) argue that "vague, hard-to-measure goals influence structural dimensions, attitudes, behaviors, and organizational outcomes in public organizations and make them different from business firms on these characteristics" (529). In fact, public organizations have difficulties in setting organizational goals and in communicating missions and action plans. Therefore, a clear goal allows organizations not only to reduce potential confusion, misunderstanding, and conflict, but also to improve organizational performance.

According to Wright (2001), "successful communication of clear goals leads to higher performance and a clear task allows the organizations to communicate goals easily, develop a mission-oriented culture, and reduce contradictory management systems and actions because of conflict goals" (7). Chun and Rainey (2005b) find that goal ambiguity is negatively associated with organizational performance. Moynihan and Pandey (2004) conclude that clarity of the organizational goal positively affects organizational effectiveness.

Furthermore, disagreement on organizational values among organizational

members has a negative effect on amount of the organizational conflicts (Jehn, 1994; Jehn, Northcraft, and Neale, 1999; Jehn and Mannix, 2001). If organizations have unclear goals and mission statements, they will have potential conflicts between organization members. This implies that goal clarity leads to easy communication and enhances interpersonal relationships. Therefore, it is assumed that goal ambiguity brings about the selection of ineffective conflict management strategies such as dominating and avoiding. Therefore, this study raises the following hypotheses:

Hypothesis 4a: Goal ambiguity is negatively related to perceptual conflict management effectiveness.

Hypothesis 4b: Goal ambiguity is negatively related to perceived organizational performance.

5. Decentralization

Empowerment and deregulation have been essential components of the New Public Management movement (Osborne and Gaebler, 1992). As shown by the famous catchphrase, *Let managers manage*, managerial flexibility has been emphasized since the 1990s in the name of New Public Management (NPM). Because traditional bureaucracy was too centralized and formalized, bureaucratic organizational circumstances decreased participation, communication, and interaction among organization members. Moreover, centralization and formalization stuck public officials in heavy paperwork, red tapes, rule, and regulations (Osborne and Gaebler, 1992). In addition, centralized office environments increased the use of the control mechanism of conflict management.

Therefore, the result of bureaucratic centralization in the public sector was poor performance.

However, Wang and Berman (2000) argue that decentralization increases the flexibility and authority of front-line managers and elimination of various administrative rules and regulation which increases the efficiency of the organization. Organizations with high levels of empowerment are positively related to high organizational performance (Peterson and Waterman, 1982; Hale, 1996; Osborne and Gaebler, 1992). Furthermore, Moynihan and Pandey (2005) find that centralization negatively affects organizational effectiveness. Therefore, this study raises the following hypotheses:

Hypothesis 5a: A decentralized organization process is positively related to perceptual conflict management effectiveness.

Hypothesis 5b: A decentralized organization process is positively related to perceived organizational performance.

6. Conflict Management Effectiveness

As discussed above, there are five general conflict management styles: integrating, avoiding, dominating, obliging, and compromising. According to Rahim (2002), contemporary conflict management emphasizes the contingency approach which has replaced the ‘one best’ approach. Therefore, selecting appropriate conflict management styles should be based on the consideration of both inside and outside conditions and the situations of organizations because there are various factors affecting the selection of conflict management styles. This is the reason why this research addresses hypotheses

the examining which organizational factors have positive or negative effects on the selection of effective conflict management styles. Therefore, even though the integrating style has been known as the most appropriate approach for conflict management (Blake and Mouton, 1964; Likert and Likert, 1976; Rahim, 2002), the integrating style may not be the best one depending on the situation and circumstances. Thus, it is true that the use of multiple styles of conflict management is common (Euwema, Van de Vliert, and Bakker, 2003).

The literature on conflict management basically suggests that the problem solving style (=integrating–dominatin) is the most appropriate for effective conflict management (Rahim, 2002; Rahim, 2001). At the same time, the problem solving style increases the satisfaction of members and organizational learning. Moreover, Euwema, Van de Vliert, and Bakker (2003) find that the problem solving style of conflict management has positive effects on substantive and relational outcomes; however, the forcing and confronting styles are negatively related to the outcomes. Gross and Guerrero (2000) also reason that the integrating style is perceived as the most appropriate and effective style for conflict management. In contrast, the dominating style is perceived as the most inappropriate conflict management style.

In addition, the problem solving style allows organizations to have cooperative relationships among members so that organizations with high levels of problem solving styles have higher organizational outcomes and performance (Burke, 1970; Rahim, Magner, and Shapiro, 2000; Rahim, 2001; Rahim, 2002). As DeChurch and Marks (2001) conclude, active and agreeable conflict management has a positive effect on maximizing organizational performance and satisfaction.

In this regard, effective conflict management should be a factor affecting

organizational performance. At the same time, conflict management effectiveness is affected by various organizational factors as this study raises the hypotheses. That is, conflict management effectiveness should be a mediating factoring in the relationship between organizational dynamics and performance. Therefore, in order to examine the direct and indirect effects of organizational politics and conflicts on organizational performance, it is necessary to build a research model including conflict management effectiveness as a mediating variable.

On the other hand, few studies approach to empirically analyze the relationship between conflict management effectiveness and organizational performance. Furthermore, there is no congruence of views on how to measure conflict management effectiveness. Only Rahim (2002) suggests conflict management effectiveness scales, the problem solving scale and the bargaining scale, based on the Rahim Organizational Conflicts Inventory – II (ROCI-II). Therefore, this study aims to measure conflict management effectiveness, to reveal its relationship with organizational factors such as politics and conflict, and to test its effects on organizational performance. Accordingly, this study raises the following hypothesis:

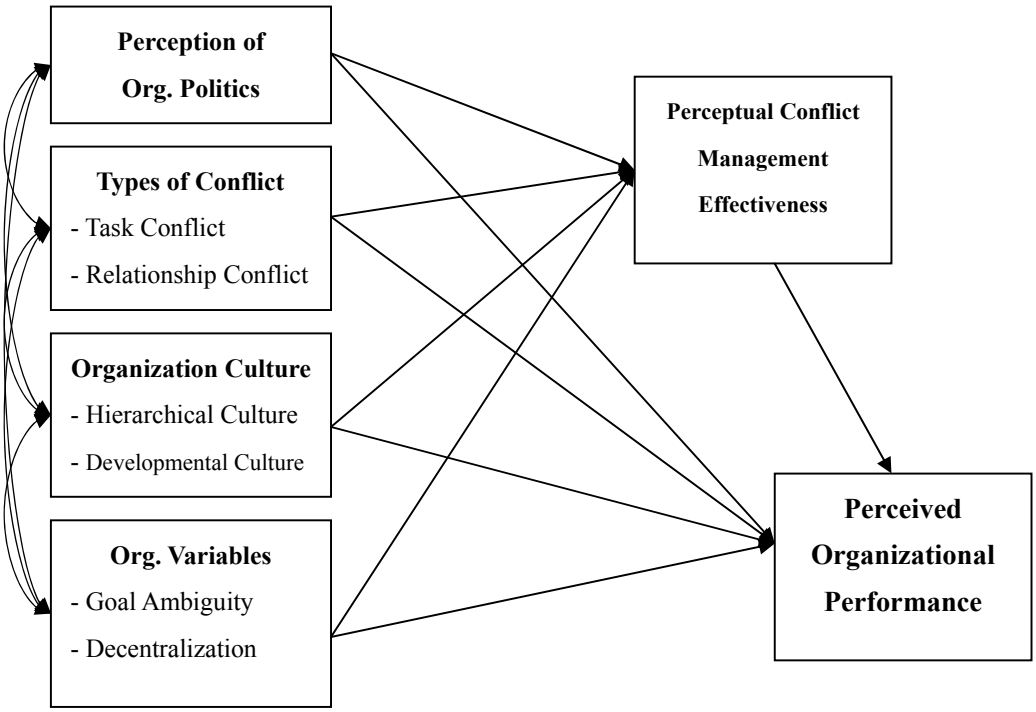
Hypothesis 6: Effective conflict management is positively related to higher perceived organizational performance.

7. Summary and Research Framework

The main purpose of this study is how organizational politics and conflicts affect the performance of government organizations. In this chapter, I raised the research

hypotheses and what relationships this study will examine for answering the research questions. Figure 2 describes the research framework of this study. In the model, there are four kinds of variables. Organizational politics and conflicts are the key independent variables. This study will examine the relationships of the independent variables and their effects on the selection of conflict management styles and organizational performance. The dependent variable is organizational performance. In addition, this study includes a mediating variable: conflict management effectiveness. Organizational politics and conflicts have effects on the selection of effective conflict management styles and organizational performance is affected by the selection of conflict management strategies. That is, conflict management effectiveness has a mediating effect on the relationship between these organizational dynamics and performance.

Figure 2. Research Model



As the hypotheses described, there are three kinds of control variables: organizational culture, goal ambiguity, and decentralization. Based on the previous research, these variables are strongly related with organizational politics and have effects on conflict management effectiveness and organizational performance at the same time. In fact, one can ask why other organizational or individual factors (demographics) have not been included. That is, this study ultimately aims to study organizational politics and conflicts and their effects on organizational performance with special attention to the mediating effects of effective conflict management. In order to examine the mediating effects of conflict management effectiveness, structural equation modeling should provide appropriate methodological framework for this study.

In addition, this study parsimoniously considers control variables to develop an appropriate structural equation modeling. Kim (2007) argues that complicated structural equation modeling may contaminate the 'parsimony' assumption of the method and that researchers may have difficulties when interpreting the results if there are too may factors in a model. That is, in order to appropriately analyze causal relationships employing structural equation modeling, there should be an appropriate number of factors and the total number of factors should not exceed 20, at best (Kim, 2007). Moreover, the unit of analysis of the study is public organizations because this study focuses on an organization-level phenomenon. This is another reason why the research framework does not include individual factors. Lastly, the conceptual framework shows a correlated association between independent and control variables and the logical flow of the structural equation modeling.

Chapter 4. Methodology

This chapter outlines the methods, sampling, measurements of variables, survey questionnaire design, data collection, and data analysis processes. The quantitative methodology used in this study is for testing the hypotheses in a cross-sectional study employing structural equation modeling.

1. Unit of Analysis

According to Babbie (2001), ambiguity about the unit of analysis increases the risk of drawing an incorrect conclusion. This occurs assertions about one unit of analysis are actually based on the examination of another. The unit of analysis in this study is defined as “organizations” of the public sector in the United State of America. This study mostly obtained data and information from high-ranking public administrators in New Jersey state and local governments including state commissioners and administrators, city managers, local government clerks, budget directors, managers of departments, and managing directors in each sub-department.

The inherent assumptions are that individual administrators have extensive knowledge about the variables in this research and that they are affected by organizational dynamics, and in turn they coordinate management processes and organizational outcomes. Moreover, manager/supervisor-level administrators have authority to lead the management process and to change the overall organizational climate. In particular, they actively participate in conflict management processes and have a responsibility to keep their organizations in good condition so they need not only

to take appropriate actions for managing organizational conflicts and outcomes, but also to change management strategies by choosing an appropriate process and the design of a matching structure (Andrew, 1971). Designed as a type of organizational behavior research by measuring administrators' perceptions of organizational politics and conflicts, conflict management effectiveness, other organizational dynamics, and organizational performance, this study intends to explore the relationship between organizational politics, conflict, conflict management effectiveness, and organizational performance.

2. Population and Sampling

Ideally, the most appropriate sample for this study is U.S. public administrators; however, this study cannot help but select a somewhat narrower sample due to access and budget limitations. Therefore, this study surveyed a random sample of public administrators in New Jersey state and local governments. They could be easily generalized into a population of administrators in the general field of public organization. In particular, this study aims to study the internal dynamics of public organizations; therefore, the state and local government officials could be representative of all U.S. public administrators. In order to collect its sample from different types of organizations, this study tried to survey diverse types of public administrators.

The sample frame was a database obtained from two mailing lists constructed by the School of Public Affairs and Administration (SPAA), Rutgers University-Newark. The first mailing lists contain contact information such as names, organizations, titles, mailing addresses, telephone numbers, and email addresses of New Jersey State and local government officials. To do a mailing survey, this study randomly selected 500 of those

9,099 New Jersey State and local government officials from the first mailing list constructed by the staff of SPAA, Rutgers University – Newark[9]. To do an Internet-based survey, email addresses of public officials of the State government were obtained from the websites of various departments or working units such as Department of Community affairs, Department of Banking and Insurance, and Office of the Governor from December 15th, 2009 to January 10th, 2010.[10] In addition, email addresses and mailing information for local governments in New Jersey were obtained from the first mailing list and from the other mailing list constructed by the author of this study from December 15th, 2009 to January 10th, 2010. The contact information of the second mailing list was collected from each local government's website, and included various types of New Jersey local governments such as counties, cities, towns, townships, boroughs, and school districts.

Ultimately, the sample size for the online survey was 2,141 (state officials: 247, local officials: 1,984). Therefore, the total sample size was 2,641 (mailing: 500, online: 2,141). Regarding the sample size, at least, 200 completed responses should be received, which would suffice for a regression, a factor analysis, and a structural equation analysis.

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[9] The first mailing list contains contact information of 9,099 New Jersey State and local government administrators from the State departments and various local government types such as counties, cities, towns, townships, boroughs, and school districts. The list was constructed by the staff of School of Public Affairs and Administration at Rutgers University - Newark for various purposes including conducting surveys for academic and professional purposes, informing and advertising MPA and other academic and professional programs of the school to NJ state and local administrators, encouraging to join online discussions, and sending magazines, brochures, newsletters, and advertising postcards of the school. In this study, we randomly selected 500 administrators to send the invitation and survey questionnaire without consideration of locations, government types, ranks and positions, gender, and working areas.

[10] The contact information of the State administrators came from various departments and working units including Department of Agriculture, Department of Community Affairs, Department of Transportation, Department of Military and Veterans' Affairs, Department of Labor and Workforce, Department of Health and Environment, Department of Children and Families, Department of Banking and Insurance, Office of Governor, Office of Secretary of State, Office of the Chief Financial Officer, Office of Administrative Law, Division of Taxation, Casino Control Commission, Commission of Higher Education, Human Development Institute, State Library, etc.

Considering the total sample size, this study should have a response rate of at least 10% or more for the appropriate statistical analyses.

3. Survey Instrument

This study chose a 7-point Likert scale rather than 5-point scale. According to Peterson (2000), "as the number of rating scale categories decreases, so does the correlation coefficient, apart from any inherent relationship between the variables being correlated" (65). In the case of questions measuring conflict management effectiveness, this study used a 5-point scale because the inventor of the scale recommends using a 5-point scale (Rahim, 2002). Even though there is no best number of rating scale categories for universal research (Cox, 1980), two thirds of quantitative studies have adopted five- or seven-point scales (Perterson, 2000). Moreover, because complex psychological perceptions are not easily captured by a single question, this study used multiple questions to increase the reliability and validity of the survey response. Therefore, this study used summative index variables for testing the hypotheses employing the structural equation model.

In order to reduce time and budget, this study conducted an Internet-based survey using a customized survey web-solution provided by www.SurveyMonkey.com from January 2nd, 2010 to February 15th, 2010. As a first step, I sent greeting emails that described the study's objectives, indicated the voluntary nature of the study, invited participation for the online survey, and provided contact details in case further information or clarification was needed. A second wave of survey solicitations was conducted using a mailing survey from January 25th, 2010 to February 15th, 2010. The

mailing included a cover letter, a questionnaire, and pre-paid self-addressed return envelope. In order to obtain sufficient samples and data, this study conducted the Internet-based survey first, and then the mailing survey followed. The total number of survey items was 74.

4. Measurement Variables

Perception of Organizational Politics (*Coded as POPS*)

Since Kacmar and Ferris (1991) suggested the *Perception of Organizational Politics Scale* (POPS), the POPS has been employed in most organizational politics studies (ex. Kacmar and Ferris, 1991; Ferris and Kacmar, 1992; Parker, Dipboye, and Jackson, 1995; Harrell-Cook, Ferris, and Dulebohn, 1999; Vigoda, 2000a; 2000b; Valle and Perrewe, 2000; Valle and Witt, 2001; Vigoda, 2001; Vigoda and Cohen, 2002; Huang, Chuang, and Lin, 2003). The original scale of POPS contained six-item questionnaires. Kacmar and Carlson (1997) examined the original scale and suggested a parsimonious 12-item scale. For this study, the variable was measured by a six-item scale carefully chosen based on previous research. The respondents were asked for the extent of their agreement/disagreement with the following questions:

Perception of Organizational Politics (Coded as POPS)

- Favoritism rather than merit determines who gets ahead around here.
- Rewards come only to those who work hard in this organization (reverse item).
- There is a group of people in my organization who always get things their way

because no one wants to challenge them.

- People in this organization attempt to build themselves up by tearing others down.
- I have seen changes made in policies here that only serve the purposes of a few individuals, not the work unit or the organization.
- People here usually don't speak up for fear of retaliation by others.

As discussed above, the POPS scale is a subjective measure and has a somewhat negative connotation. Even though the scale has been widely used in most organizational politics studies, there are few studies which have tried to test relationships between the scale and objective measures of organizational conflicts. Therefore, this study attempts to build a comprehensive research model considering measures of organizational politics and conflicts in a model simultaneously to examine the effects of the two kinds of factors and their relationships to each other.

Types of Conflict (*Coded as RC and TC*)

Many previous empirical studies in organizational conflicts have relied on Jehn's (1995) *Intragroup Conflict Scale* to measure the type and amount of conflict (ex. Jehn, 1995; Friedman, Tidd, Currall, and Tsai, 2000; Simons and Peterson, 2000; Jehn and Mannix, 2001; Tidd, Mcintyre, and Friedman, 2004). The four-item summative scale has been used to assess task and relationship conflict. According to Tidd, Mcintyre, and Friedman (2004), the scale is useful when the unit of analysis is the organization (team or group) because the individual items of the scale refer to conflict "in your work group." Therefore, using the scale was appropriate because the unit of analysis of this study is the

organization of local governments.

Thus, slightly modified versions of Jehn's (1995) four-item scales were used to assess task conflict in this study. However, this study relied on Cox's (1998; 2003) *Organizational Conflicts Scale* to measure relationship conflict. Friedman, Tidd, Currall, and Tsai (2000) argue that Cox's scale emphasizes the active hostility found in relationship conflict and deals more with perceptions of active conflict behavior rather than with perceptions of an overall condition of conflict. Accordingly, Cox's five-item scale (Cox, 1998; 2003) was used to measure relationship conflict in this study.

Task Conflict (Coded as TC)

- How often do people you work with disagree about opinions regarding the work being done?
- How much conflict about the work you do is there among the people you work with?
- How frequently are there conflicts about ideas among people you work with?
- To what extent are there differences of opinion among those you work with?

The respondents were asked for the extent of their agreement/disagreement with the following questions:

Relationship conflict (Coded as RC)

- The atmosphere here is often charged with hostility.
- Backbiting is a frequent occurrence.
- One party frequently undermines another.
- Much "plotting" takes place "behind the scenes."

Organizational Culture *(Coded as DC and HC)*

Organizational culture (hierarchical and developmental culture) is measured based on the *competing values model* of Quinn and Rohrbaugh (1981), which was reexamined and operationalized by Zammuto and Krakower (1991). The questionnaire has been modified and used in recent public administration research such as by Moynihan and Pandey (2005) and by Pandey and Garnett (2006). The respondents were asked for the extent of their agreement/disagreement with the following questions:

Developmental Culture (Coded as DC)

- My organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.
- The glue that holds my organization together is commitment to being proactive and development of new ideas or methods for service delivery. There is an emphasis on being first.
- My organization emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.

Hierarchical Culture (Coded as HC)

- My organization is a very formalized and structured place. Bureaucratic procedures generally govern what people do.
- The glue that holds my organization together is formal rules and policies. Maintaining a smooth-running organization is important here.

- My agency emphasizes permanence and stability.

Goal Ambiguity (*Coded as GA)*

Chun and Rainey (2005a; 2005b) classify goal ambiguity into mission ambiguity, directive ambiguity, evaluative ambiguity, and priority ambiguity. They find that these goal ambiguities have negative effects on organizational performance. Even though they used very specific measures for each type of goal ambiguity, this study used a summative index based on Rainey's (1983) scale. That is, goal ambiguity is not a key independent variable, but a kind of control variable that affects organizational performance in this study. The respondents were asked for the extent of their agreement/disagreement with the following questions:

Goal Ambiguity (reverse items)

- It is easy to explain the goal of this organization to outsiders.
- The organization has clearly defined goals.

Decentralization *(Coded as DCT)*

Decentralization was measured by the three-item scale developed by Aiken and Hage (1968) and modified by Moynihan and Pandey (2005). Wang and Berman (2000) suggest that decentralization can be measured by member participation and decision making patterns in budgeting, personnel, and procurement systems. However, in order to measure the general state of decentralization of organizations, this study used a

summative index adopted from Moynihan and Pandey's (2005) three questions. The respondents were asked for the extent of their agreement/disagreement with the following questions:

Decentralization (reverse items)

- There can be little action taken here until a supervisor approves a decision.
- In general, a person who wants to make his own decisions would be quickly discouraged in this organization.
- Even small matters have to be referred to someone higher up for a final answer.

Perceptual Conflict Management Effectiveness *(Coded as CME)*

Even though many conflict management studies emphasize effective conflict management, few studies have tried to measure conflict management effectiveness. Instead, a few studies have developed index variables representing conflict management styles for analyzing the relationship between conflict management strategy and its impacts on organizational outcomes: the assertive index and cooperative index (Volkema and Bergmann, 1995); the activeness and agreeableness index (Chanin and Schneer, 1984; DeChurch and Marks, 2001); and the problem solving and bargaining index (Rahim, 2002)[11]. That is, Kabanoff (1987) argues that it is very difficult to translate styles into their behavioral equivalents; therefore, scholars used to choose common dimensions for styles to study conflict behavior and conflict management patterns.

[11] Assertiveness = (Competing + Collaborating) – (Avoiding + Accommodating)
Cooperativeness = (Collaborating + Accommodating) – (Competing + Avoiding)
Activeness = (Competing + Collaborating) – (Avoiding + Accommodating)
Agreeableness = (Collaborating + Accommodating) – (Competing + Avoiding)

In order to develop these index variables, the authors have used several instruments to measure conflict management styles. In particular, Volkema and Berman (1995) use the Thomas-Kilman Conflict MODE instrument (Thomas and Kilman, 1974). Chanin and Schneer (1984) and Dechurch and Marks (2001) use Blake and Mouton (1964)'s conflict management scale. Rahim and his colleagues use the Rahim Organizational Conflicts Inventory-II (ROCI-II) instrument (Rahim, 1983a; 1983b; 1983c). Among them, ROCI-II frequently has been used for measuring conflict management styles (e.g. Rahim, 1983a; 1983b; 1983c; 2001; 2002; Frone, 2000; Gross and Guerrero, 2000; Lee, 2002; Desivilya and Eizen, 2005). Even though these studies tried to figure out relationship between conflict management styles and organizational factors, it is hard to find studies that have attempted to develop indicators of conflict management effectiveness[12].

Since there is no indicator which assesses the effectiveness of conflict management, this study attempts to create an index variable using conflict management style indicators based on the ROCI-II instrument.[13] Generally, the acooperative and problem solving styles of conflict management are regarded as appropriate styles, while dominating and avoiding styles of conflict management are regarded as negative styles. From these perspectives, Rahim (2002) suggests that conflict management effectiveness can be measured by the problem solving index (PS) and the bargaining index (BA) based on the ROCI-II instrument.

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[12] For this reason, we contacted professor Rahim to ask whether there are some existing studies that developed an instrument or measurement of conflict management effectiveness. Professor Rahim replied that "I don't know if there is any measure of effectiveness of conflict management. But, let me say that a positive score of PS plus a negative score in BA is an indicator of good conflict management" (Feb. 25th, 2009).

[13] The ROCI-II instrument has been used with permission from the © Center for Advanced Studies in Management. Further use or reproduction of the instrument without written permission is prohibited.

Rahim (2002) explains that the problem solving (PS) and bargaining (BA) indices can be calculated from the conflict-style scores for the integrating (IN), obliging (OB), dominating (DO), avoiding (AV), and compromising (CO) styles as follows:

PS = IN – AV

BA = DO – OB

Specifically, there are three survey items using 5-point Likert scale for measuring each conflict management style. Then, the responses to the three survey items are averaged to create subscale and a higher score indicates more frequent use of a conflict management style (Rahim, 2002). Consequently, each conflict management style ranges between 1 and 5. Now, it is possible to calculate PS and BA index scores based on the formulas above. Therefore, each PS and BA index ranges between +4 and – 4 (Rahim, 2002).

Regarding the PS and BA indices, Rahim (2002) concludes that a positive score on the PS index and a negative score on the BA index are appropriate indicators for effective conflict management. Accordingly, one can create an index variable for conflict management effectiveness as follows:

Perceptual Conflict Management Effectiveness (*CME*) = PS – BA

Therefore, this study uses slightly modified versions of the ROCI-II instrument for measuring conflict management effectiveness. The respondents were asked for the extent of their agreement/disagreement with the following questions:

Integrating (Coded as IN)

- My organization members try to investigate an issue to find a solution acceptable to me and the members.
- My organization members exchange accurate information each other to solve a problem together.
- My organization members try to bring all our concerns out in the open so that the issues can be revolved in the best possible way.

Avoiding (Coded as AV)

- My organization members try to stay away from disagreement with each other.
- My organization members try to keep their disagreement to avoid hard feeling.
- My organization members generally avoid an argument each other.

Dominating (Coded as DO)

- My organization members use their influence to get their ideas accepted.
- My organization members use their authority to make a decision in their favor.
- My organization members sometimes use their power to win a competitive situation.

Obliging (Coded as OB)

- My organization members usually accommodate the wishes of the members.
- My organization members give in to the wishes of the members.
- My organization members try to satisfy the expectations of the members.

Compromising (Coded as CO)

- My organization members usually propose a middle ground for breaking deadlocks.
- My organization members negotiate with each other so that a compromise can be reached.
- My organization members use "give and take" so that a compromise can be made.

Perceived Organizational Performance *(Coded as OP)*

Organizational performance in the public sector tends to be subjective, complex, and hard to measure by objective indicators (Au, 1996; Anspach, 1991; Brewer and Selden, 2000). Chun and Rainey (2005b) also argue that common, relatively objective or quantifiable measures of performance in the public sector rarely exist, making it difficult to assess organizational performance. Therefore, many studies have relied on perceptual measures of organizational performance (Brewer and Selden, 2000; Seldon and Sowa, 2004; Moynihan and Pandey, 2005; Chun and Rainey, 2005b).

Furthermore, research evidence shows that perceptual organizational performance measures are strongly related to objective measures of organizational performance (Dess and Robinson, 1984; Delaney and Huselid, 1996; Seldon and Sowa, 2004). Therefore, this study carefully selected survey questions from previous studies – the first three questions from Brewer and Seldon (2000) and the last two questions from Chun and Rainey (2005b) – and slightly modified them for this study. The respondents were asked for the extent of their agreement/disagreement with the following questions:

Perceived Organizational Performance (Coded as OP)

- My organization has made good use of the members' knowledge and skills in looking for ways to become more efficient.
- The work performed by my organization provides the public a worthwhile return on its tax dollars.
- In the past 2 years, the productivity of my organization has improved.
- My organization members communicate the organization's mission, vision, and values.
- In my organization, corrective actions are taken when employees do not meet performance standards.

Summary

Table 3 summarizes the description of variables and survey questions. This study tried to design the survey questionnaire based on previous studies. For this reason, all of the survey items have been developed based on previous studies because they have been widely used in organizational behavior studies in the public and business administration fields. Because the survey items come from different studies, minor modifications have been required for standardization of terminologies and consistency of wordings (e.g. The organization members → My organization employees).

Table 3. Description of Variables and Survey Questions

Var. Code	Question
POPS	Favoritism rather than merit determines who gets ahead around here.
	Rewards come only to those who work hard in this organization (reverse item).
	There is a group of people in my organization who always get things their ways because no one wants to challenge them.
	Employees in this organization attempt to build themselves up by tearing others down.
	I have seen changes made in policies here that only serve the purposes of a few individuals, not the work unit or the organization.
	Employees here usually don't speak up for fear of retaliation by others.
TC	How often do employees you work with disagree about opinions regarding the work being done?
	How much conflict about the work you do is there among the employees you work with?
	How frequently are there conflicts about ideas among employees you work with?
	To what extent are there differences of opinion among those you work with?
RC	The atmosphere here is often charged with hostility
	Backbiting is a frequent occurrence
	One party frequently undermines another
	Much "plotting" takes place "behind the scenes."
DC	My organization is a very dynamic and entrepreneurial place. Employees are willing to stick their necks out and take risks
	The glue that holds my organization together is commitment to being proactive and development of new ideas or methods for service delivery. There is an emphasis on being first.
	My organization emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.
HC	My organization is a very formalized and structured place. Bureaucratic procedures generally govern what people do.
	The glue that holds my organization together is formal rules and policies. Maintaining a smooth-running organization is important here.
	My agency emphasizes permanence and stability.
GA	It is easy to explain the goal of this organization to outsiders(reverse item).
	The organization has clearly defined goals (reverse item).
DCT	There can be little action taken here until a supervisor approves a decision (reverse item).

	In general, a person who wants to make his own decisions would be quickly discouraged in this organization (reverse item).
	Even small matters have to be referred to someone higher up for a final answer (reverse item).
IN	My organization employees try to investigate an issue to find a solution acceptable to me and the members.
	My organization employees exchange accurate information each other to solve a problem together.
	My organization employees try to bring all our concerns out in the open so that the issues can be revolved in the best possible way.
AV	My organization employees try to stay away from disagreement with each other.
	My organization employees try to keep their disagreement to avoid hard feeling.
	My organization employees generally avoid an argument each other.
DO	My organization employees use their influence to get their ideas accepted.
	My organization employees use their authority to make a decision in their favor.
	My organization employees sometimes use their power to win a competitive situation.
OB	My organization employees usually accommodate the wishes of the members.
	My organization employees give in to the wishes of the members.
	My organization employees try to satisfy the expectations of the members.
CO	My organization employees usually propose a middle ground for breaking deadlocks.
	My organization employees negotiate with each other so that a compromise can be reached.
	My organization employees use “give and take” so that a compromise can be made.
OP	My organization has made good use of the employees’ knowledge and skills in looking for ways to become more efficient.
	The work performed by my organization provides the public a worthwhile return on its tax dollars.
	In the past 2 years, the productivity of my organization has improved comparing other similar public organizations’ productivity.
	My organization members communicate the organization’s mission, vision, and values.
	In my organization, corrective actions are taken when employees do not meet performance standards.

Chapter 5. Response, Reliability, and Initial Findings

This chapter summarizes the survey results and conducts preliminary statistical analyses. Four subsections are included in this chapter: descriptive statistics, the reliability test for the questionnaire, tests for undimensionality for creating statistically appropriate index variables, and regression analyses for testing linear relationship between variables.

1. Sample Description

From the sample of 2,141 for the online survey, this study obtained 287 questionnaires. The response rate was 13.4% for the online survey. On the one hand, of the 500 questionnaires that initially were mailed, 67 were returned because the selected respondents were no longer employed by their organizations. From the reduced sample of 433, this study obtained 56 usable questionnaires, for a response rate of 12.93%. Thus, this study eventually obtained 343 questionnaires and the overall response rate was 13.32%.

As mentioned in chapter 4, this study should have at least 200 responses for appropriate statistical analyses. This study obtained 340 responses. However, it is necessary to discuss further the relatively low response rate. Because this study mainly obtained the data from the online survey, there may be lower response rate when comparing it to face-to-face interviews, mailing surveys, and telephone surveys (Cook, Heath, and Thompson, 2000). Moreover, length of the survey may be another possible reason for the low response rate (Cook, Heath, and Thompson, 2000) because the survey

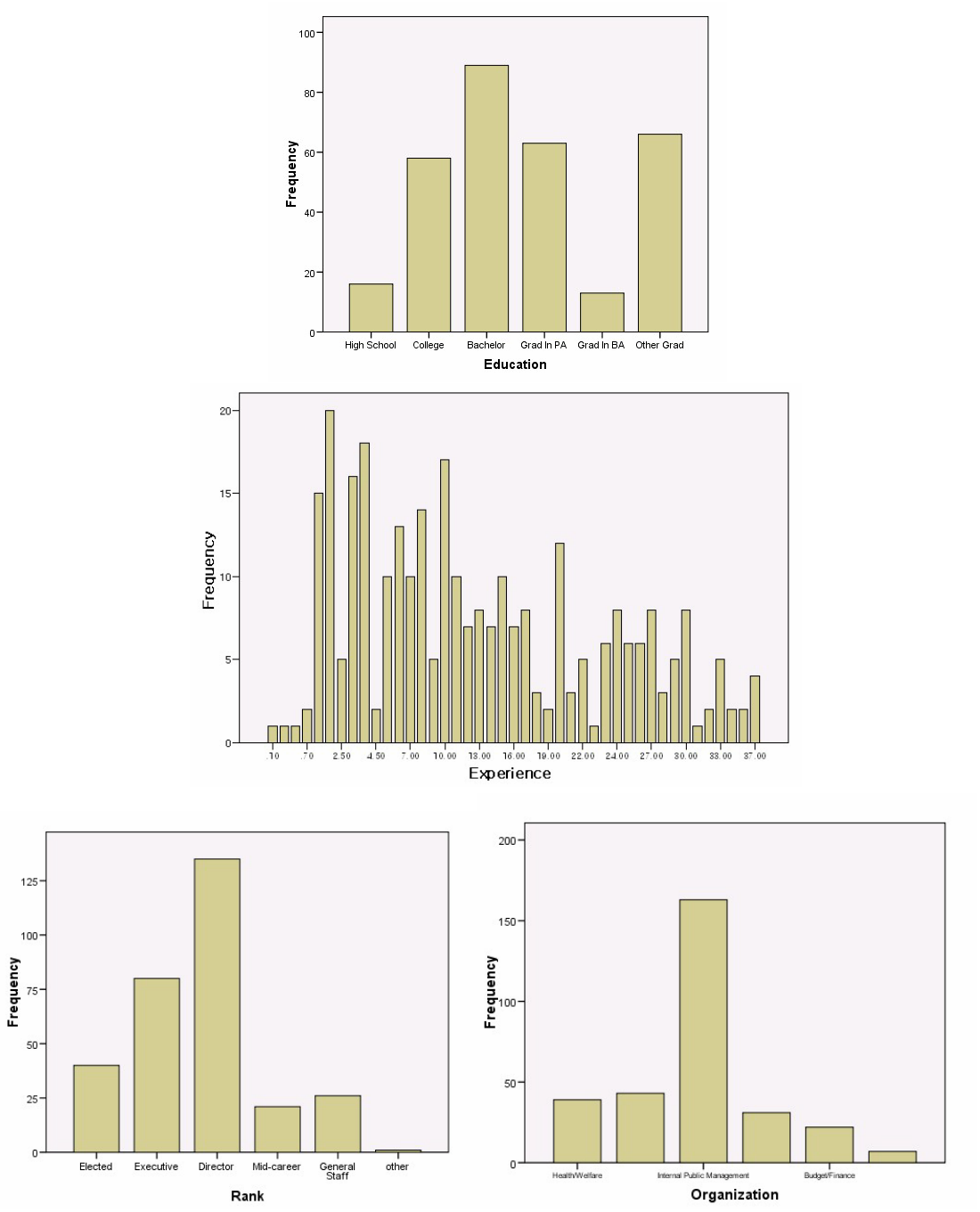
contains relatively many survey items (74 questions). Although it was successful enough to obtain sample size to conduct statistical analyses, the relatively low response rate raises some possibility of a nonresponse bias.

According to Sax, Gilmartin, and Bryant (2003), low response rates may have biasing effects on the data. That is, a nonresponse bias may decrease representativeness of the survey. However, it is not easy to determine whether there is a nonresponse bias or not because this study do not have demographic information for the nonresponse sample. For this reason, if the characteristics of respondents are representative, a low response rate does not necessarily yield a nonresponse bias (Dillman, 1991; Krosnick, 1999; Sax, Gilmartin, and Bryant, 2003). Moreover, various studies conclude that lower response rate do not automatically lead nonresponse bias (Merkel and Edelman, 2002; Krosnick, 1999; Sax, Gilmartin, and Bryant, 2003; Weisberg, 2005). Therefore, random sampling and systematic survey design (length, format, modes, etc) have been suggested for decreasing the possibility of a nonresponse bias due to a low response rate (Weisberg, 2005; Sax, Gilmartin, and Bryant, 2003). Considering this possibility of a nonresponse bias, this study tried to construct the database for the surveys based on random selections without checking demographic or socioeconomic information of the respondents.

Regarding sample descriptions of the survey, responses came from more males (66.4%) than from females (33.6%). A majority of respondents were non-Hispanic Caucasian (87.5%), and African American and Hispanic respondents were 5.6% and 3.3% respectively. Regarding experience in public organizations, the respondents were equally distributed. 30.4% of the respondents have worked in public organizations for less than 5 years and 29.1% of the respondents have worked in government organizations for over 20 years. 19.8% have worked for six to ten years in public organizations and

20.7% have worked for 11 to 19 years in government organizations.

Figure 3. Descriptive Statistics: Education, Rank, Experience, Organization Types



Regarding education, 75.7% of the respondents have earned a Bachelors or higher degree. Especially, 29.2% have received graduate degrees in the public administration field such as MPA and MPP. A majority of the respondents (53.4%) have worked for internal public management working units. Public officials working for public health/welfare and public safety/law enforcement were 12.8% and 14.1% respectively. Executive and director level officials were the majority ranks of the respondents (84.2%). Full information about the sample descriptions is summarized in Appendix B.

2. Missing Values

There are various methods for handling missing values such as mean substitution, mean imputation, multiple imputation, regression imputation, EM (Expectation Maximization) algorithm, and FIML (Full Information Maximum Likelihood). These methods would estimate missing values by imputing from the other values within the latent variables. However, by having a large enough sample size, it should be appropriate to eliminate observations that have missing values. Therefore, this study eliminated 33 observations which have missing values for the Structural Equation Modeling analysis, although this study used the full information for the descriptive statistics, the reliability test, the undimensionality test, and the regression analyses. As a result, the reduced sample size for the structural equation model is 307.

3. Tests for Reliability and Undimensionality (Confirmative Factor Analyses)

In social science, it is not easy to observe and measure variables for human

behaviors, attitudes, preferences, perceptions, and other various individual, organizational, and social factors. As a result, directly observed variables are very few and most variables in social science are latent variables that cannot be measured and observed directly. Therefore, these latent variables can be measured by means of observable indicators using secondary statistics and survey questionnaires constructed to quantify those variables (Vermunt and Magidson, 2003). Moreover, latent variables may not be measured by a single item so most studies would use multiple survey items for measuring a latent variable.

For these reasons, it is necessary to test the reliability or internal consistency of each composite variable. The Cronbach Alpha test has been widely employed to test the reliability of survey items. In general, an Alpha value 0.7 or above might be considered desirable. Moreover, confirmatory factor analysis has been employed to test the construct validity of items of latent variables so that it is possible to deduce survey item(s) by factor loading and grouping survey items. Even though there is no absolute standard cutoff value for factor loading, Garson (2010) suggests only 0.6 or above would be considered high enough. Furthermore, MacCallum et al. (1999) also recommends that the communalities value needs to be higher than 0.6 and acceptable at 0.5. For the confirmative factor analyses, this study employed a Principal Factor Analysis with the Varimax rotation method and test KMO statistics (Kaiser-Meyer-Olkin) and Bartlett's statistics of sphericity for checking sampling adequacy and factor model appropriateness[14].

[14] If a KMO statistic is under 0.6, the correlation matrix is not appropriate. It means that the factor analysis is not appropriate. In addition, Bartlett's test examines whether the correlation matrix is an identity matrix. If the statistics are significant at the .05 level, it is possible to verify the factor model is appropriate.

Perception of Organizational Politics

Table 4 shows descriptive statistics and results of the reliability and factor analysis of the perception of organizational politics (POPS) variables of the sample. The mean of the index variable calculated by the six survey items is 3.74 (SD: 1.50). According to the Cronbach Alpha test, the Alpha value is .888 for the variable. It means there is significant internal consistency among the survey items.

Table 4. Descriptive Statistics and Factor Analysis Result for POPS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
pop1	334	1.00	7.00	3.4820	2.03232
pop2	334	1.00	7.00	4.3892	1.66162
pop3	334	1.00	7.00	3.9401	1.89103
pop4	334	1.00	7.00	3.6078	1.78887
pop5	334	1.00	7.00	3.4251	1.96793
pop6	334	1.00	7.00	3.6287	1.92031
POP	333	1.00	7.00	3.7407	1.50407
Valid N (listwise)	333				

Reliability Statistics

Cronbach's Alpha	N of Items
.888	6

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.861	64.345	64.345	3.861	64.345	64.345
2	.781	13.020	77.365			
3	.419	6.989	84.355			
4	.361	6.009	90.364			
5	.316	5.265	95.629			
6	.262	4.371	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
pop1	1.000	.753
pop2	1.000	.343
pop3	1.000	.647
pop4	1.000	.633
pop5	1.000	.757
pop6	1.000	.729

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
pop1	.868
pop2	.585
pop3	.804
pop4	.795
pop5	.870
pop6	.854

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Reliability Statistics

Cronbach's Alpha	N of Items
.901	5

The KMO statistic (0.892) and Bartlett's test (< 0.00) indicate the factor analysis is appropriate. Even though all factor loadings are higher than 0.5, pop2 has the lowest communalities (0.343). Therefore, pop2 has been discarded. The Alpha value without pop2 can be improved from 0.888 to 0.901.

Relationship Conflict

Table 5 shows descriptive statistics and results of the reliability and factor analysis of the relationship conflict (RC) variables of the sample. The mean of those four survey items is 3.47 (SD: 1.79). The Alpha value is 0.952 and the results of the factor analysis indicate that all factor loadings are high enough so that there no item should be discarded. The KMO statistic is 0.855 and Bartlett's test is significant at the 0.001 level.

Table 5. Descriptive Statistics and Factor Analysis Result for RC

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
rc1	315	1.00	7.00	3.2032	1.84166
rc2	315	1.00	7.00	3.5175	1.87224
rc3	315	1.00	7.00	3.4984	1.95226
rc4	315	1.00	7.00	3.6730	2.00582
RC	315	1.00	7.00	3.4730	1.79538
Valid N (listwise)	315				

Reliability Statistics

Cronbach's Alpha	N of Items
.952	4

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.505	87.614	87.614	3.505	87.614	87.614
2	.237	5.917	93.530			
3	.149	3.721	97.251			
4	.110	2.749	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
rc1	1.000	.846
rc2	1.000	.886
rc3	1.000	.912
rc4	1.000	.860

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
rc1	.920
rc2	.942
rc3	.955
rc4	.928

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Task Conflict

Table 6 shows descriptive statistics and results of the reliability and factor analysis of the task conflict (TC) variables of the sample. The mean of those four survey items is 3.39 (SD: 1.35). The Alpha value is 0.897 and the results of the factor analysis indicate

that all factor loadings are higher than 0.8 so there is no item discarded. The KMO statistic is 0.83 and Bartlett's test is significant at the 0.001 level.

Table 6. Descriptive Statistics and Factor Analysis Result for TC

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
tc1	308	1.00	7.00	3.6916	1.50320
tc2	309	1.00	7.00	3.0162	1.61257
tc3	308	1.00	7.00	3.2695	1.59461
tc4	308	1.00	7.00	3.5649	1.46812
TC	308	1.00	7.00	3.3872	1.35122
Valid N (listwise)	308				

Reliability Statistics

Cronbach's Alpha	N of Items
.897	4

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.060	76.502	76.502	3.060	76.502	76.502
2	.393	9.830	86.332			
3	.327	8.182	94.514			
4	.219	5.486	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
tc1	1.000	.719
tc2	1.000	.767
tc3	1.000	.824
tc4	1.000	.749

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
tc1	.848
tc2	.876
tc3	.908
tc4	.866

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Hierarchical Culture

Table 7 shows descriptive statistics and results of the reliability and factor analysis of the hierarchical culture (HC) variables of the sample. The mean of those three survey

items is 4.84 (SD: 1.32). The Alpha value is 0.763 and the results of the factor analysis indicate that all factor loadings are higher than 0.7. There is no item discarded. The KMO statistic is 0.568 and it is rather low and close to the marginal value (0.6). However, Bartlett's test is significant at the 0.001 level. Therefore, I can conclude that the factor analysis is acceptable.

Table 7. Descriptive Statistics and Factor Analysis Result for HC

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
hc1	336	1.00	7.00	4.9732	1.68997
hc2	334	1.00	7.00	4.8204	1.64693
hc3	334	1.00	7.00	4.7186	1.48420
HC	334	1.00	7.00	4.8373	1.32674
Valid N (listwise)	334				

Reliability Statistics

Cronbach's Alpha	N of Items
.763	3

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.042	68.065	68.065	2.042	68.065	68.065
2	.699	23.305	91.370			
3	.259	8.630	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
hc1	1.000	.675
hc2	1.000	.843
hc3	1.000	.524

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
hc1	.822
hc2	.918
hc3	.724

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Developmental Culture

Table 8 shows descriptive statistics and results of the reliability and factor analysis of the developmental culture (DC) variables of the sample. The mean of those three survey items is 3.71 (SD: 1.53). The Alpha value is 0.859 and the results of the factor analysis indicate that all factor loadings are higher than 0.8 so there is no item discarded. The KMO statistic is 0.718 and Bartlett's test is significant at the 0.001 level.

Table 8. Descriptive Statistics and Factor Analysis Result for DC

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
dc1	340	1.00	7.00	3.3088	1.73679
dc2	340	1.00	7.00	3.7206	1.74178
dc3	338	1.00	7.00	4.0710	1.73145
DC	338	1.00	7.00	3.7071	1.53281
Valid N (listwise)	338				

Reliability Statistics

Cronbach's Alpha	N of Items
.859	3

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.343	78.086	78.086	2.343	78.086	78.086
2	.396	13.216	91.302			
3	.261	8.698	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
dc1	1.000	.758
dc2	1.000	.832
dc3	1.000	.753

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
dc1	.870
dc2	.912
dc3	.868

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Goal Ambiguity

For the goal ambiguity (GA) variable in Table 9, the mean of those two survey items is 2.91 (SD: 1.53). The Alpha value is 0.816 and the results of the factor analysis indicate that all factor loadings are higher than 0.9 so there is no item discarded. The KMO statistic is 0.5 and Bartlett's test is significant at the 0.001 level. Even though the KMO statistic is lower than a marginal value of 0.6, more careful consideration was required. That is, the two survey items have been developed and used in important previous studies (Rainey, 1983; Chun and Rainey, 2005a; 2005b; Moynihan and Pandey, 2004). Therefore, it seems that using those two survey items is appropriate and useful to test relationships with other variables.

Table 9. Descriptive Statistics and Factor Analysis Result for GA

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ga1	334	1.00	7.00	2.8743	1.62259
ga2	334	1.00	7.00	2.9641	1.69752
GA	334	1.00	7.00	2.9192	1.52587
Valid N (listwise)	334				

Reliability Statistics

Cronbach's Alpha	N of Items
.816	2

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.690	84.479	84.479	1.690	84.479	84.479
2	.310	15.521	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
ga1	1.000	.845
ga2	1.000	.845

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
ga1	.919
ga2	.919

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Decentralization

Table 10 shows descriptive statistics and results of the reliability and factor analysis of the decentralization (DCT) variables of the sample. The mean of those three survey items is 3.95 (SD: 1.51). The Alpha value is 0.838 and the results of the factor analysis indicate that all factor loadings are higher than 0.8 so there is no item discarded. The KMO statistic is 0.72 and Bartlett's test is significant at the 0.001 level.

Table 10. Descriptive Statistics and Factor Analysis Result for DCT

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
dct1	334	1.00	7.00	3.4491	1.69670
dct2	334	1.00	7.00	4.1108	1.72676
dct3	334	1.00	7.00	4.2934	1.79526
DCT	334	1.00	7.00	3.9511	1.51225
Valid N (listwise)	334				

Reliability Statistics

Cronbach's Alpha	N of Items
.838	3

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.266	75.543	75.543	2.266	75.543	75.543
2	.418	13.938	89.480			
3	.316	10.520	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
dct1	1.000	.714
dct2	1.000	.772
dct3	1.000	.780

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
dct1	.845
dct2	.879
dct3	.883

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Conflict Management Styles

In order to create an index variable for conflict management effectiveness based on Rahim's suggestion discussed above, this study first collected data regarding five styles of conflict management: Integrating (IN), Avoiding (AV), Dominating (DO), Obliging (OB), Compromising (CO). Each style has three survey items and it is necessary to test the internal consistency of the items and to conduct factor analyses to calculate conflict management effectiveness.

-Integrating (IN)

The IN variable was measured by three survey items. As Table 11 shows, the Alpha value is 0.877 and all factor loadings are higher than 0.8. Therefore, there is no item discarded. The KMO statistic is 0.742 and Bartlett's test is significant at the 0.001 level.

Table 11. Reliability test and Factor Analysis Result for IN

Reliability Statistics

Cronbach's Alpha	N of Items
.877	3

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.411	80.377	80.377	2.411	80.377	80.377
2	.319	10.640	91.017			
3	.269	8.983	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
in1	1.000	.813
in2	1.000	.814
in3	1.000	.785

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
in1	.901
in2	.902
in3	.886

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

- Avoiding (AV)

Table 12 shows results of the Reliability test and Factor analysis. The Alpha value is 0.852 and all factor loadings are higher than 0.8. Therefore, there is no item discarded. The KMO statistic is 0.730 and Bartlett's test is significant at the 0.001 level.

Table 12. Reliability test and Factor Analysis Result for AV

Reliability Statistics

Cronbach's Alpha	N of Items
.852	3

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.319	77.288	77.288	2.319	77.288	77.288
2	.374	12.475	89.763			
3	.307	10.237	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
av1	1.000	.747
av2	1.000	.790
av3	1.000	.781

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
av1	.864
av2	.889
av3	.884

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

- Dominating

Table 13 shows the results of the Reliability test and Factor analysis. The Alpha value is 0.817 and all factor loadings are higher than 0.7. Therefore, there is no item discarded. The KMO statistic is 0.663 and Bartlett's test is significant at the 0.001 level.

Table 13. Reliability test and Factor Analysis Result for DO

Reliability Statistics

Cronbach's Alpha	N of Items
.817	3

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.196	73.198	73.198	2.196	73.198	73.198
2	.565	18.833	92.030			
3	.239	7.970	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
do1	1.000	.587
do2	1.000	.817
do3	1.000	.791

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
do1	.766
do2	.904
do3	.889

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

- Obliging (OB)

As Table 14 shows, the Alpha value is 0.648 and all factor loadings are higher than 0.5. However, ob2 has a relatively low factor loading (0.565). If the item is removed, the Alpha value increases to 0.763 and communalities of ob1 and ob2 can be improved. Nevertheless, eliminating a survey item should be carefully considered because the latent variables of conflict management effectiveness are very import to this study. Moreover, the coefficient Alpha (0.648) is acceptable to use regarding the index variable. Therefore, it is inappropriate to discard ob2 for measuring conflict management effectiveness. The KMO statistic is 0.574 and Bartlett's test is significant at the 0.001 level.

Table 14. Reliability test and Factor Analysis Result for OB

Reliability Statistics

Cronbach's Alpha	N of Items
.648	3

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.790	59.677	59.677	1.790	59.677	59.677
2	.829	27.631	87.308			
3	.381	12.692	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
ob1	1.000	.745
ob2	1.000	.320
ob3	1.000	.726

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
ob1	.863
ob2	.565
ob3	.852

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

- Compromising (CO)

As Table 15 shows, the Alpha value is 0.860 and all factor loadings are higher than 0.8. Therefore, there is no item discarded. The KMO statistic is 0.689 and Bartlett's test is significant at the 0.001 level.

Table 15. Reliability Test and Factor Analysis Result for CO

Reliability Statistics

Cronbach's Alpha	N of Items
.860	3

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.347	78.229	78.229	2.347	78.229	78.229
2	.455	15.169	93.398			
3	.198	6.602	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
co1	1.000	.683
co2	1.000	.857
co3	1.000	.807

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
co1	.826
co2	.926
co3	.898

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Table 16 shows descriptive statistics and results of the reliability tests and factor analysis of the conflict management styles. The factor analysis result also supports the results of the factor analyses for each style as discussed above.

Table 16. Descriptive Statistics and Factor Loadings of the Styles

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
in1	314	1.00	5.00	3.4586	1.01421
in2	314	1.00	5.00	3.5127	1.00549
in3	314	1.00	5.00	3.1943	1.06521
av1	313	1.00	5.00	2.8562	.91029
av2	313	1.00	5.00	2.7604	.88620
av3	313	1.00	5.00	2.9010	.95396
do1	313	1.00	5.00	3.3387	1.01606
do2	313	1.00	5.00	3.1597	1.14356
do3	313	1.00	5.00	3.1278	1.15037
ob1	313	1.00	5.00	3.2396	.85678
ob2	313	1.00	5.00	2.7668	.88066
ob3	313	1.00	5.00	3.3419	.92754
co1	313	1.00	5.00	3.1310	.90517
co2	313	1.00	5.00	3.2204	.97696
co3	313	1.00	5.00	3.2173	1.02411
IN	314	1.00	5.00	3.3885	.92175
AV	313	1.00	5.00	2.8392	.80599
DO	313	1.00	5.00	3.2087	.94531
OB	313	1.00	4.67	3.1161	.68069
CO	313	1.00	5.00	3.1896	.85751
Valid N (listwise)	313				

Component Matrix

		Component				
	Alpha	1	2	3	4	5
in1		**.808**	.030	.076	.177	-.300
in2	**0.877**	**.801**	.015	.132	.128	-.312
in3		**.793**	-.053	.038	.174	-.272
av1		.089	**.830**	-.223	.041	.120
av2	**0.852**	.164	**.855**	-.165	.021	.048
av3		.230	**.843**	-.117	.023	.060
do1		-.366	.305	**.595**	.315	-.150
do2	**0.817**	-.658	.260	**.538**	.098	-.075
do3		-.624	.130	**.602**	.120	.019
ob1		.679	.118	.206	**-.326**	-.150
ob2	**0.648**	.138	.110	.449	**-.776**	.112
ob3		.742	.116	.147	**-.270**	-.178
co1		.700	-.077	.177	.090	**.418**
co2	**0.860**	.805	-.104	.239	.222	**.296**
co3		.742	-.111	.265	.196	**.365**

Extraction Method: Principal Component Analysis

Perceived Organizational Performance

Table 17 shows descriptive statistics and results of the reliability and factor analysis of the perceived organizational Performance (OP) variables of the sample. The mean of those four survey items is 4.72 (SD: 1.38). The Alpha value is 0.864 and the results of the factor analysis indicate that all factor loadings are higher than 0.7. So, no item is discarded. The KMO statistic is 0.862 and Bartlett's test is significant at the 0.001 level.

Table 17. Descriptive Statistics and Factor Analysis Result for OP

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
op1	334	1.00	7.00	4.6018	1.75019
op2	333	1.00	7.00	5.5315	1.61032
op3	332	1.00	7.00	4.9910	1.68786
op4	333	1.00	7.00	4.3514	1.68613
op5	334	1.00	7.00	4.1527	1.80690
OP	330	1.00	7.00	4.7182	1.37903
Valid N (listwise)	330				

Reliability Statistics

Cronbach's Alpha	N of Items
.864	5

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.263	65.260	65.260	3.263	65.260	65.260
2	.620	12.395	77.654			
3	.435	8.704	86.358			
4	.348	6.967	93.325			
5	.334	6.675	100.000			

Extraction Method: Principal Component Analysis.

Communalities

	Initial	Extraction
op1	1.000	.683
op2	1.000	.646
op3	1.000	.707
op4	1.000	.723
op5	1.000	.504

Extraction Method: Principal Component Analysis.

Component Matrix [a]

	Component
	1
op1	.826
op2	.804
op3	.841
op4	.850
op5	.710

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

4. Correlation Analysis

A correlation analysis is conducted to reveal basic relationships among variables, with special attention to the three key variables, POPS, TC, and RC. Table 18 shows the results of the analysis.

Table 18. Intercorrelation Matrix for the Variables

	POPS	RC	TC	HC	DC	GA	DCT	CME	OP
POPS	1								
RC	.772**	1							
TC	.487**	.546**	1						
HC	-.203**	-.289**	-.159**	1					
DC	-.573**	-.551**	-.319**	.207**	1				
GA	.496**	.571**	.348**	-.486**	-.550**	1			
DCT	-.615**	-.445**	-.290**	-.065	.418**	-.322**	1		
CME	-.704**	-.643**	-.327**	.255**	.534**	-.502**	.494**	1	
OP	-.681**	-.694**	-.442**	.363**	.631**	-.695**	.413**	.661**	1

** Significant at the 0.01 level

The first research question of this study is to examine basic relationships between organizational politics, conflict, and other organizational factors. Since there are few

studies which attempted to test these factors in a research model at the same time, the correlation analysis provides important implication for future study for examining the relationships. Moreover, the measure of organizational politics could be compared and tested with the conflict measures.

Interestingly, POPS is positively related to RC and TC. As was mentioned above, there is no study which examines the relationship between two measures of organizational politics and conflicts. Because previous studies in organizational politics mostly have used the POPS scales developed by Karmar and Ferris (1991), organizational politics measures in previous studies would have a somewhat negative connotation. For this reason, this study also raises the hypotheses under the assumption of a negative perspective of organizational politics based on the previous studies. However, Harrell-Cook, Ferris, and Dulebohn (1999) argue that POPS is an individual's subjective interpretation of the work environment and political climate of organizations. Considering the subjectivity of POPS measures, comparing POPS measures with objective measures of organizational conflicts provides fundamental methodological implications when designing a research model. That is, if this study defines organizational politics as a negative phenomenon in organizational life based on the previous studies, including two objective variables of organizational conflicts in the research model provide a more applicable research framework for studying the various aspects of organizational dynamics and their effects on organizational performance. In this regard, survey items of RC are for measuring negative and emotional conflict between organizational members; hence, there is a somewhat higher correlation coefficient between POPS and RC (.772). However, the coefficient between POPS and TC is rather lower (.487).

In terms of organizational conflict variables, RC and TC are positively related as previous studies have found (e.g. Amason, 1996; De Dreu, 1997; Freidman, Tidd, Curral, and Tasi, 2000; Jehn and Mannix, 2001; Peterson, 1999). Therefore, the two types of organizational conflicts might affect each other and further examination is required to test the relationships between the two organizational conflicts and organizational outcomes.

In addition, POPS, RC, and TC are positively related to goal ambiguity and negatively related to decentralization. These results indicate that, if an organization has higher level of goal ambiguity, there might be higher level of organizational politics and conflicts. Moreover, organizational politics and conflicts have negative relationship with decentralization because decentralization could be hampered by political and bureaucratic climates of public organizations. This argument may be supported by the correlation results that DCT have negative relationship with GA and HC. Lastly, GA and DCT are significantly related to CME and OP.

In terms of CME and OP, the result of the correlation analysis demonstrates that all variables are significantly related to CME and OP. In particular, POPS, RC, TC, and GA are negatively related with OP and CME. This negative sign of most of the relationships is largely consistent with prior studies and the hypotheses of this study. However, the relationships of TC and HC with CME and OP are not consistent with the hypotheses. This study hypothesizes that TC is positively related to CME and OP, and HC is negatively related to CME and OP. Even though the correlation coefficients are rather weak, TC is negatively related to CME and OP and HC is positively related to CME and OP.

On the one hand, CME is negatively related to the POPS, RC, and TC, although

CME is positively related to OP. These conditions suggest that CME may have mediating effects in the middle of the relationship between organizational factors and performance. That is, using positive conflict management styles is positively related to OP, but organizational politics and conflicts are negatively related to the use of positive conflict management styles. Consequently, organizational politics and conflicts are positively related to the use of negative conflict management styles, and then the use of negative conflict management styles is negatively related to organizational performance. Therefore, this result suggests comprehensive examinations of the relationship among POPS, RC, TC, and organizational performance employing structural equation model with consideration of mediating effects of conflict management effectiveness. Moreover, because the correlation analysis just provides simple bivariate correlation coefficients, it is not possible to define causal relationships between variables based on the correlation coefficients. Therefore, in order to examine the hypotheses, it is necessary to conduct further statistical analyses such as regression and structural equation modeling analyses.

5. Regression Analyses

Normality Tests

For regression analyses and structural equation modeling analyses, the data should be normally distributed. In order to test the normality of the data, skewness and kurtosis are usually used. Skewness and kurtosis are within +2 to -2 rage when the data are normally distributed. More conservative researchers sometimes use +1 to -1 for a stricter standard. Table 19 shows the skewness and kurtosis of the data.

Table 19. Skewness and Kurtosis for the Test of Normality

Descriptive Statistics

	N	Mean	Std.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
DC	338	3.7071	1.53281	.018	.133	-.912	.265
HC	334	4.8373	1.32674	-.715	.133	.236	.266
GA	334	2.9192	1.52587	.845	.133	.024	.266
DCT	334	3.9511	1.51225	-.085	.133	-.787	.266
OP	332	4.7247	1.37742	-.706	.134	-.111	.267
RC	315	3.4730	1.79538	.303	.137	-1.003	.274
TC	308	3.3872	1.35122	.525	.139	-.486	.277
CME	313	.4611	2.07481	-.459	.138	.617	.275
POPS	333	3.6108	1.62358	.314	.134	-.779	.266
Valid N (listwise)	307						

Table 20. Shapiro-Wilk Statistics for the Test of Normality

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
DC	.081	307	.000	.970	307	.000
HC	.106	307	.000	.956	307	.000
GA	.172	307	.000	.913	307	.000
DCT	.085	307	.000	.974	307	.000
OP	.116	307	.000	.947	307	.000
RC	.104	307	.000	.941	307	.000
TC	.111	307	.000	.958	307	.000
CME	.102	307	.000	.977	307	.000
POPS	.097	307	.000	.963	307	.000

a. Lilliefors Significance Correction

Skewness and kurtosis of the variables are within the +1 to -1 range; therefore, these analyses indicate that the data are normally distributed. Moreover, it is possible to test the normality of the data employing Kolomogorov-Smirnov's D statistics (K-S D test) and Shapiro-Wilk statistics. If one has a large sample size of over 2,000, one can use K-S D test; however, since the sample size of this study is less than 2,000, one can test normality of the data using Shapiro-Wilk statistics. Table 20 shows the results of

Shapiro-Wilk statistics. When Shapiro-Wilk statistics are 1.00, the given data are perfectly normal in distribution. According to the test result, the statistics of the variables are very close to 1.00. Based on the results of the three normality tests, therefore, I can conclude that all latent variables are normally distributed.

Test for Linear Relationship

For preliminary purposes two multiple regression analyses were performed. From the analyses, it was possible to predict a linear relationship between dependent variable and independent variables for the structural equation modeling of the study. Based on the hypotheses, two dependent variables (CME and OP) and seven independent variables (POPS, RC, TC, HC, DC, DCT, GA) are included in the regression analyses.

Conflict management effectiveness (CME) and organizational performance (OP) should have a relationship through internal organizational factors such as POPS, RC, TC, HC, DC, DCT, and GA. Therefore, the two models could be described as below:

$$CME = \beta_0 + \beta_1 * POPs + \beta_2 * RC + \beta_3 * TC + \beta_4 * HC + \beta_5 * DC + \beta_6 * DCT + \beta_7 * GA$$

$$OP = \beta_0 + \beta_1 * POPs + \beta_2 * RC + \beta_3 * TC + \beta_4 * HC + \beta_5 * DC + \beta_6 * DCT + \beta_7 * GA$$

Table 20 shows the results of the regression analysis. The two regression analysis models are significant and predict organizational factors contributing toward conflict management effectiveness and organizational performance. Moreover, the values of R-squared in the two models are impressive. 56% of CME and 69% of OP can be explained

by the independent variables. That is, POPS and conflict factors are fundamental factors for studying conflict management effectiveness and organizational performance.[15]

Table 21. Regression Results

	Model of CME		**Model of OP**	
Variables	Coefficient	Std. Err.	Coefficient	Std. Err.
POPS	**-.518*** **	.094	**-.219*** **	.053
RC	**-.244*** **	.078	**-.134*** **	.044
TC	**.135***	.071	-.043	.040
HC	**.140***	.072	.061	.040
DC	**.147****	.069	**.176*** **	.039
DCT	**.146****	.071	-.018	.040
GA	-.090	.076	**-.298*** **	.043
Observation (N)	307		308	
F-Score	54.76***		93.49***	
R-Squared	**0.5618**		**0.6857**	
Adj R-Squared	0.5515		0.6783	
Mean VIF	2.22		2.21	
Breusch-Pagan/Cook-Weisberg	1.91		1.27	
(Chi-Squared)	(Prob > Chi2 = 0.1672)		(Prob > Chi2 = 0.2595)	

* significant at the 0.1 level ** significant at the .05 level *** significant at the .01 level

[15] In the second regression model, one can argue that CME could be included as an independent variable in terms of a predictor for OP. However, including CME in the second model is a serious violation of the regression assumptions. In a multiple regression analysis, according to the Gauss-Markov assumptions (Wooldridge, 2006), one assume that the residual of the model is zero, and there is no linear relationship between the residual and independent variables. Simply, we assume that there should no relationship between independent variables in a multiple regression model. In the first regression model, we tested the relationship between CME and various organizational factors (the independent variables). If CME is included in the second model as an independent variable, we violate the assumption that there is no relationship between the independent variables. This is related to the multicollinearilty and endogeneousity problems of the multiple regression assumption. Even though there should be no regression model having perfectly exogenous independent variables, based on theories and previous studies, we can test and verify a research model and framework. However, it is necessary to follow the Gaus-Markov assumptions of a multiple regression analysis. Therefore, in order to test the relationship between POPS, TC, RC, CME, and OP, structural equation modeling is an appropriate statistical method considering the mediating effects of CME.

In terms of individual relationship between variables in the first model, POPS and RC are significantly, negatively related with CME. That is, organizational politics and relationship conflict have significant negative effects on selection of positive and effective conflict management style such as integrating. However, TC, DC, and DCT are significantly, positively related with CME. In particular, task conflict has a positive effect on conflict management; therefore, I can confirm that task conflict is positive conflict. The regression model satisfied all linear regression assumptions and there are no multicollinearity and heteroskedasticity problems. All VIF (variance inflation factor) values are much lower than 10.0, even lower than 4.0, and the mean VIF is 2.22. In addition, the chi-square value of the Breusch-Pagan/Cook-Weisberg Test (1.91) indicates heteroskedasticity is not a problem because the value is small.

For the second model, POPS and RC also significantly, negatively affect OP. That is, organizational politics has a negative effect on organizational performance. Moreover, DC has a significant positive effect on OP and GA is significantly, positively related to OP. All VIF (variance inflation factor) values are much lower than 10.0, even lower than 4.0, and the mean VIF is 2.21. Moreover, the chi-square value of the Breusch-Pagan/Cook-Weisberg Test (1.27) indicates that heteroskedasticity is not a problem for the model because the value is small. Full information about the regression analyses is summarized in Appendix C.

Chapter 6. Structural Equation Modeling and Analysis

This chapter describes the results of the structural equation modeling and testing of the hypotheses. This was performed using AMOS 7.0 with maximum likelihood estimation (ML). In order to build an appropriate structural equation model, this study tested the measurements of the variables based on model specification information provided by the AMOS 7.0 program. Therefore, this study conducted a confirmatory factor analysis (CFA) to find a best measurement model, and then this study modified the structural equation model based on the model fit indices and modification information from the AMOS 7.0 program. Lastly, this study conducted the structural equation modeling and testing of the hypotheses.

1. Methodological Concern: Why Structural Equation Modeling?

In a social science research, a research model should be carefully designed based on theories and previous studies. Researchers need to exercise careful consideration when setting the independent variables and the dependent variable. In this regard, it is necessary to discuss further both a mediating variable in the research model (conflict management effectiveness, CME) and why this study employs structural equation modeling.

Regarding the mediating variable, this study tests the relationships between CME and other variables based on the correlation analysis in Chapter 5. Based on the results, it is possible to recognize the mediating effects of CME in the research model. This study has explained why CME cannot be an independent variable in the regression analysis

(please see footnote 13). Nevertheless, it is necessary to check the relationships between CME and the independent variables to confirm the mediating effects of CME before going forward to construct the structural equation model for testing the hypotheses.

In this study, there are five types of conflict management strategies: integrating (IN), avoiding (AV), dominating (DO), obliging (OB), and compromising (CO). In order to create a conflict management effectiveness variable (CME), this study calculated a problem solving index (PS) and bargaining index (BA). Therefore, the CME has been calculated by using the formula PS – BA (Rahim, 2002). Now, it is necessary to consider what the CME means. Based on this calculation, a higher score of CME means more frequent use of IN and OB than of AV and DO. Similarly, a lower value of CME means more frequent use of AV and DO than of IN and OB. In sum, this calculation for a creating conflict management effectiveness variable is under the assumption that selecting conflict management strategies may be affected by various organizational dynamics such as organizational politics and conflicts. Based on this assumption, this study raised the hypotheses.

Table 22 shows how POPS, RC, and TC have effects on each strategy of conflict management and sub-CME indices. In terms of IN, POPS significantly, negatively affects IN. It means that members of organizations having a higher level of POPS less frequently use integrating strategy for managing organizational conflict. In contrast, POPS significantly, positively affects AV and DO. It means members of organizations having a higher level of POPS more frequently use avoiding and dominating strategies for managing organizational conflicts. In the same manner, this study can interpret the relationships between POPS, RC, TC, and conflict management effectiveness indices. Therefore, this study can conclude that POPS and RC decrease the use of effective types

of conflict management such as integrating, while increase the use of negative strategies of conflict management such as dominating.

The result is consistent with the results of the correlation analysis and the regression analyses. In other words, considering the key independent variables (POPS, RC, TC) as being important predictors of organizational performance, it is necessary to consider the mediating effects of CME because the key independent variables have significantly effects on CME. If one is testing the medicating effects of CME in the middle of the relationship between the independent variables and the dependent variable, structural equation modeling could be the best methodology for this study.

Table 22. Regression Results of the Models of CME (Std. Beta)

	IN	AV	DO	OB	PS[a]	BA[b]	Positive[c]	Negative[d]	CME[e]
POPS	-.17**	.22**	.52**	-.04	-.28**	.39**	-.13*	.527*	-.40**
RC	-.42**	-.28**	.09	-.29**	-.13	.22**	-.41**	-.11	-.21**
TC	-.06	-.23**	-.02	.05	.19**	-.04	-.02	-.17*	.09*
HC	.06	-.06	-.05	.06	.09	-.07	.06	-.07	.09*
DC	.14**	-.08	.02	.11	.15**	-.05	.13**	-.03	.11**
DCT	.04	-.04	-.09	.10	.06	-.12**	.08	-.09	.11**
GA	-.12**	-.02	-.01	-.08	-.08	.04	-.16	-.01	-.07
F	66.92	4.16	29.14	14.52	20.59	41.79	55.95	13.34	54.76
R^2	.61	.10	.41	.25	.33	.50	.57	.23	.56
Adj R^2	.60	.08	.39	.24	.31	.48	.56	.22	.55

[a] PS = IN – AV (Positive score means higher conflict management effectiveness)

[b] BA = DO – OB (Negative score means higher conflict management effectiveness)

[c] Positive = IN + OB (Positive score means higher conflict management effectiveness)

[d] Negative = DO + AV (Negative score means higher conflict management effectiveness)

[e] CME = PS – BA = (IN –AV) – (DO – OB) = IN – AV – DO + OB

* Significant at .10 level ** Significant at .05 level

In sum, this study aims to study the relationships between organizational dynamics, such as politics and conflicts, and organizational performance. Therefore, the dependent variable is organizational performance and the key independent variables are organizational politics and conflicts (RC and TC). At the same time, it is necessary to consider control variables so this study added several control variables such as organizational culture, goal ambiguity, and decentralization. In addition, this study found that there is a very important mediating factor between organizational dynamics and performance: conflict management effectiveness (CME). Considering the importance of the mediating effects of conflict management effectiveness in the relationship between the independent variables and dependent variables, structural equation modeling can analyze the direct and indirect effects of the independent variables with consideration for the mediating effects of CME on organizational performance.

In order to conduct the appropriate structural equation modeling, based on the recommendation of Anderson and Gerbing (1988), this study conducted a two-step approach in the covariance structure analysis: 1) Confirmative Factor Analysis (CFA); 2) model specification based on the CFA, model fit, and modification indices; 3) testing and comparing a full and re-specified model; 4) conducting a structural equation model (SEM) analysis with the final model; 5) testing the hypotheses. Therefore, this study first have conducted the confirmatory factor analysis (CFA) of all measurement items and the measurement model for a model re-specification. And then, this study examined the structural equation model constructed based on the above hypotheses.

2. Model Re-Specification: CFA and Testing the Initial Measurement Model

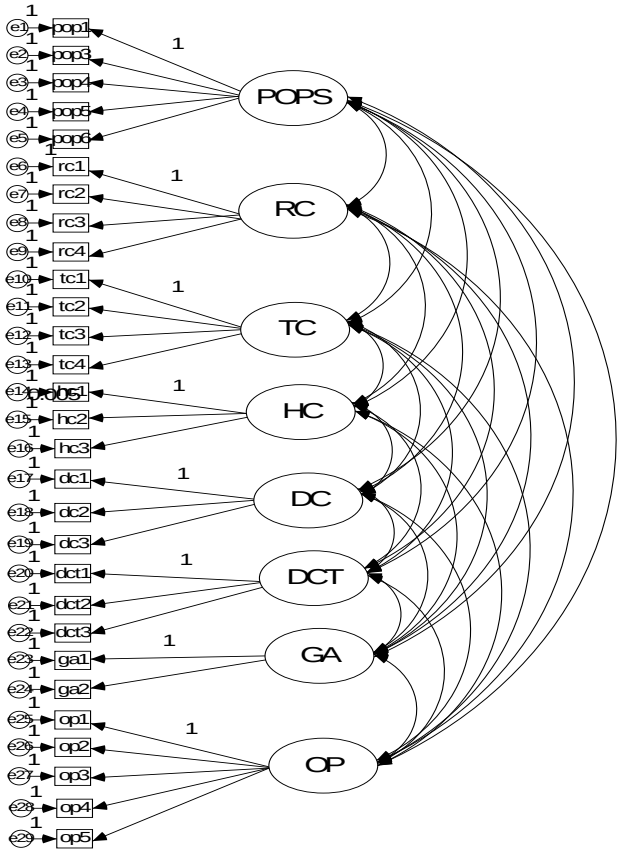
Figure 4 describes the initial measurement model for the confirmatory factor analysis (CFA) as the first step of the SEM analysis[16]. In this study, I conducted surveys for measuring variables. In the structural equation model, one calls these variables as latent factors or latent variables. Each latent variable consists of observed factors. For example, there are six observed measures (survey items) for creating the latent variable, POPS. In other words, the latent variable, POPS, has been measured by the six observed items. Therefore, there should be some measurement error in each observed measures. In the structural equation model analysis, the CFA process calculates the factor score between the observed measures and the latent variables with consideration of the measurement errors. Consequently, it is possible to discard measurement items having low factor score in each latent variable because including problematic items decreases constructive reliability of the model.

In Figure 4, an oval icon means a latent variable, a rectangle means an observed item, and a small circle including "e" means a measurement error. For example, POPS (latent variable) has been measured by six observed items and each observed item has measurement errors. The AMOS program analyzed internal reliability, whether the observed items are appropriate for constructing the latent variables. In addition, the latent variables are connected to each other by interactive arrows. The latent variables were developed based on the theoretical foundation, and one assumes that there should be a relationship between the latent variables when developing the research model for examining the hypotheses. By testing the relationship between the latent variables based

[16] Full information regarding the confirmatory factor analysis is summarized in Appendix E.

in the CFA process, it was possible to confirm whether the measurement model was appropriate for structural equation modeling. The AMOS program provides construct validity indices and discriminate values so that it was possible to remove inappropriate observed items and latent variables to modify the structural equation model.

Figure 4. The Initial Measurement Model



In the initial measurement model, this study tested any estimated error for the observed indicators and the latent variables. The output indicated that there was a negative error variance (hc1, e15= -.113). For this reason, the AMOS program made an error so that this study could not calculate Chi-square statistics and go further for the

SEM analysis. This type of illogical value is called a “Heywood case.”

A Heywood case could be caused by various factors such as a small sample size, outliers in the data, a misspecification of the model, a small number of indictors per latent variable (usually two indicators), population correlations close to 1 or 0, or inappropriate starting values of maximum likelihood estimation (Kline, 2005; Garson, 2010). To solve this problem, one can delete the item from the model for a better model fit; however, it is possible to set the error variance estimate very close to zero in order to use the item (Kim, 2007). Therefore, it is necessary to constrain the error variance estimate by specifying a small positive value (e15 ---> hc1: 0.005). As a result, this study can eliminate the problem of the Heywood case.

In the initial measurement model, the Chi-square value is 607.734 (df = 350) and it is significant at the 0.000 level. Therefore, even though one reject the null hypothesis that the model is appropriate, it would happen frequently enough that it is necessary to check model fit information provided by the AMOS program. Table 23 shows various model fit indices of the measurement model. According to the results, the information indicates that the model fit is good and statistically well estimated.

Table 23. The Model Fit Information for the Initial Measurement Model

Index	CMIN ($\chi 2$)	DF	CMIN/DF	TLI	NFI	CFI	RMSEA
Value	607.704	350	1.736	.954	.913	.961	.049
Marginal value			< 2.0	> .90	> .90	> .90	< .05

Among the model fit test indices, TLI (Tucker-Levis Index) and RMSEA (Root Mean Square Error of Approximation) are some of the most suggested indices for testing a model fit of a structural equation model analysis because the two indices are less

sensitive to sample size and consider the parsimony of a model (Sung, 2007). In contrast, NFI (Normed Fit Index) and GFI (Goodness of Fit Index) are sensitive to sample size and do not consider the parsimony of a model.

Table 24. The Modification Indices for the Measurement Model

	MI	PC
e2 <--> TC	4.263	.158
e2 <--> e29	5.039	-.238
e2 <--> e23	11.428	-.280
e2 <--> e8	7.549	-.158
e2 <--> e7	9.137	.195
e3 <--> RC	25.850	.316
e3 <--> e20	5.302	.197
e3 <--> e8	10.767	.166
e6 <--> RC	11.447	-.163
e6 <--> e19	5.759	-.141
e6 <--> e11	4.259	.107
e6 <--> e9	10.782	-.159
e6 <--> e8	5.477	-.089
e6 <--> e7	9.618	.135
e10 <--> OP	4.702	.105
e10 <--> GA	5.910	.119

	MI	PC
e10 <--> GA	5.910	.119
e10 <--> DC	4.154	.126
e10 <--> RC	4.624	.118
e10 <--> e26	5.009	.152
e10 <--> e23	5.260	.147
e16 <--> DCT	6.004	-.166
e16 <--> DC	5.706	.182
e16 <--> HC	10.729	-.229
e16 <--> RC	4.821	-.148
e16 <--> e17	4.172	.172
e17 <--> HC	4.042	-.132
e17 <--> e27	6.192	-.190
e17 <--> e22	4.858	-.170
e17 <--> e21	7.539	.212
e26 <--> DC	4.960	-.158
e26 <--> e27	18.404	.323

In order to model re-specification, this study can use information regarding modification indices. Table 24 shows modification indices for the initial measurement model[17]. The modification indices specify observed items, error terms, latent variables

[17] Full information about the modification indices is summarized in Appendix D.

and those relationships which need statistical treatments for decreasing the Chi-square statistics and decrease the goodness of the model fit. Based on the modification indices, this study can delete problematic items for better model specification. For example, the modification index of [e2 < -- > TC] is 4.263. That is, if one sets a covariance relationship between e2 and TC, one can decrease Chi-square statistics by 4.263. Therefore, if one eliminates 'e2' in this case, one can decrease the Chi-square statistics by 4.263 and the model can be improved. Consequently, if this study eliminate any item or set a covariance relationship based on the modification indices, the model can be improved. Based on the modification indices, if this study eliminates the observed items including the error terms, e2, e3, e6, e10, e16, e17, and e26, this study can have a better model specification and an improved goodness of model fit.

As we can see in Table 25, the goodness of the model fit indices of the re-specified model has been improved after eliminating the seven observed items including those error terms. The Chi-square statistics have been decreased from 607.704 to 293.586, and the TLI and RMSEA have been improved to 0.984 and 0.032, respectively. Therefore, the re-specified measurement model should be more appropriate for future structural equation modeling. Full information abouts the re-specified measurement model is summarized in Appendix E.

Table 25. Comparing the Initial and the Re-Specified Model

Index	CMIN ($\chi 2$)	DF	CMIN/DF	TLI	NFI	CFI	RMSEA
Initial	607.704	350	1.736	.954	.913	.961	.049
Re-Specified	**239.586**	**182**	**1.316**	**.984**	**.951**	**.988**	**.032**
Marginal value			< 2.00	> .90	> .90	> .90	< .05

The next step is to calculate and examine ‘composite reliability (CR)’ and ‘average extracted estimates (AVE)’ for the re-specified measurement model. Composite reliability (CR) and average extracted estimates (AVE) tests are similar to Cronbach’s Alpha test for the examining reliability of measurements. According to Kim (2007), composite reliability value is desirable at a level higher than 0.7 or needs to be close to 0.7. Moreover, the AVE value should be greater than .5 or need to be close to 0.5 (Kim, 2007).

The composite reliability (CR) can be calculated as shown below:

$$(\Sigma \text{ Standard Regression Weight})^2 \,/\, [(\Sigma \text{ Standard Regression Weight})^2 + (\Sigma \text{ variance of errors})]$$

Furthermore, average extracted estimates (AVE) can be calculated as shown below:

$$(\Sigma \text{ Standard Regression Weight}^2) \,/\, [(\Sigma \text{ Standard Regression Weight}^2) + (\Sigma \text{ variance of errors})]$$

Table 26 shows values for the composite reliability (CR) and average extracted estimates (AVE). Based on the results, all variables of the tests are acceptable except for the AVE values for DCT and OP. The AVE values for DCT (0.366) and OP (0.321) are less than the suggested value, 0.5. However, this is not a serious problem because AVE values are sometimes below than 0.5 as long as the reliability values are acceptable. Hatcher (1994) explains that the AVE value is a very conservative indicator and can sometimes have a low value, even though there is constructive reliability among measurement items in fact. Therefore, this study can conclude that the latent variables have been appropriately constructed by reliable observed indicators.

Table 26. Composite Reliability (CR) and Average Extracted Estimates (AVE)

Latent Variable	Items	St. Reg. Weight	Variance of Err	CR	AVE
POPS	pop1	.823	1.332	0.644	0.558
	pop4	.856	1.035		
	pop5	.831	1.125		
RC	rc2	.896	.695	0.822	0.606
	rc3	.962	.285		
	rc4	.912	.680		
TC	tc2	.806	.908	0.761	0.526
	tc3	.921	.732		
	tc4	.813	.384		
HC	hc1	.692	1.544	0.648	0.488
	hc2	.999	.005		
DC	dc2	.841	.812	0.627	0.458
	dc3	.853	.890		
DCT	dct1	.706	1.463	0.632	0.366
	dct2	.821	1.000		
	dct3	.861	.844		
GA	ga1	.776	1.030	0.652	0.485
	ga2	.912	.487		
OP	op1	.813	1.053	0.654	0.321
	op3	.764	.901		
	op4	.826	1.202		
	op5	.660	1.843		

Moreover, as Table 27 shows, the results of the discriminant validity tests also support the internal consistency and the reliability of the measurement model. The squared multiple correlation (SMC) coefficients (R^2) are calculated by the squared values of the correlation coefficient between the latent variables. For testing the discrimination

between measurement items, the average extracted estimates (AVE) values need to be greater than the SMC coefficients of each relationship between the latent variables. In other words, the discriminant validity test is for examining whether each latent variable is differentiated from each other. If a squared multiple correlation (SMC) coefficient is much higher than the average extracted estimates (AVE) in the correlation matrix for the latent variables, it is possible that the latent variable having a much higher SMC value than the AVE value might be measured using problematic indicators. Therefore, it is necessary to check the relationship between the variables based on theoretical foundations and existing research frameworks which have been already developed and tested. The test results for the re-specified model allow us to conclude that the latent variables have discriminate validity and are measured by items which have internal consistency because the AVE values are generally greater than the SMC coefficients.

Table 27. Discriminant Validity Tests (SMC[a] test)

	POPS	RC	TC	HC	DC	DCT	GA	OP
POPS	**.56***							
RC	.63	**.60***						
TC	.26	.30	**.53***					
HC	.06	.08	.04	**.49***				
DC	.43	.34	.14	.08	**.46***			
DCT	.57	.26	.12	.01	.24	**.37***		
GA	.37	.39	.13	.32	.42	.15	**.49***	
OP	.60	.56	.24	.19	.59	.25	.70	**.32***

* AVE (average extracted estimates) values [a] SME: Squared Multiple Correlation

In fact, there is one suspicious squared multiple correlation (SMC) coefficient

between GA and OP (0.70). The SMC value is somewhat higher than the average extracted estimates (AVE) value of POPS (0.49). However, one cannot conclude that GA and OP is not a different concept. That is, because the two variables have relatively high, negative correlation coefficient (-0.834) so that it is very natural that the SMC coefficient is higher than the AVE value. Therefore, this study cannot delete or modify latent variables only based on the test results. Moreover, the test results mostly support the discriminate validity of the latent variables, and the results of the Cronbach Alpha test and the factor analyses in Chapter 5 support construct the reliability of the measurement model as was discussed above. Therefore, the re-specified measurement model is statistically well-specified and can be used for future structural equation model analyses.

In sum, this study conducts the confirmative factor analysis for testing the internal and constructive validity of the measurements of the latent variables. Based on the modification and model specification information from the AMOS program, there were some inappropriate observed indicators; thus, this study discarded those items for better model specification. Moreover, the re-specified model was tested by construct reliability (CR), average extracted estimates (AVE), and discriminant tests. The results of the tests indicated that the re-specified model is more statistically appropriate for structural equation modeling.

3. Structural Equation Modeling

Structural equation modeling is employed to study the causal relationships between variables and test the hypotheses. Based on the final measurement model, this study tests the initially proposed model using the AMOS program[18]. First, it needed to check the modification indices (MI). The modification indices provide which factor increases the Chi-square value and decreases the goodness of the model fit. Therefore, if there is a factor inflating the Chi-square, the factor could be removed for increasing the goodness of model fit. In this study, every MI is under 10.0. Therefore, it is not necessary to remove any factors and to use error correlation technique[19]. The model fit indices indicate the model has a very good fit. The RMSEA is 0.041 and the TLI is 0.973 (Please see Table 29).

The graphical output for the proposed model is presented in Figure 5. In the diagram, the oval icons represent the latent variables. The rectangles are the observed variables and the small circles including "e" are measurement errors. Each latent variable has been constructed based on the observed variables and each observed variable has measurement errors. With consideration for these measurement errors, the AMOS program analyzes the relationship between variables including independent, mediating, and dependent variables and calculates the coefficients between variables.

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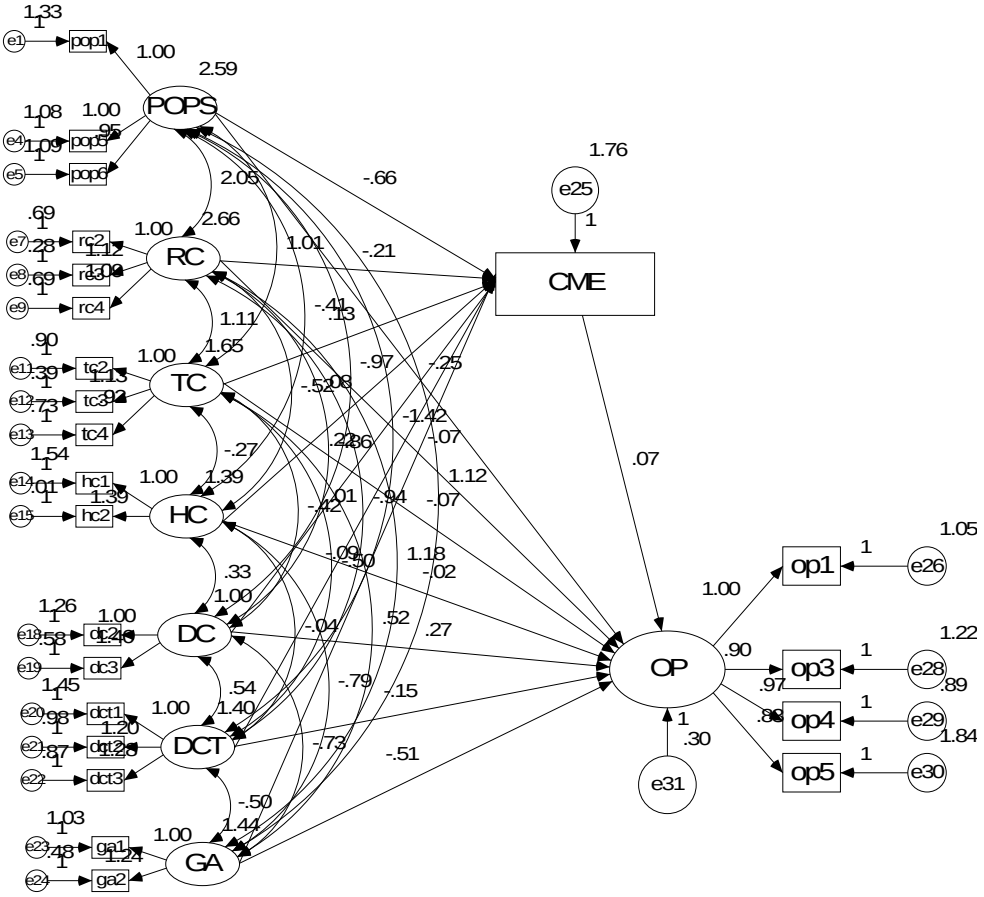
[18] Full information about the initial proposed model is summarized in Appendix F.

[19] Regarding correlated errors and model improvement by adding error correlation, several scholars have discussed the issue in an article of Journal of Psychology (Netemeyer et al., 2001). Based on the discussion of the journal article, it is suggested that error correlation should be based on a specific theory or a well-grounded justification, if necessary. If there are too many correlated errors, the model needs to be redesigned for better specification based on theory. Moreover, Anderson and Gerbing (1992) argue that the model improved by error correlation may cause high risk of misspecification of a model. Therefore, using error correlation for model improvement should be carefully done based on theoretical justification.

Figure 5. AMOS Graphical Output for the Initial Structural Equation Model



For example, POPS has been constructed from three observed items (POP1, POP5, POP6) with consideration of the measurement errors for each observed variables. In addition, the independent variables are connected to each other by interactive arrows. That is, the AMOS program considers intercorrelated relationship between independent variables when calculating the coefficient statistics of the model. Lastly, POPS is negatively related with CME and OP, respectively. In Figure 5, it is not possible to display coefficients, indirect/direct effects, significant levels, model fit indices, and other

results; therefore, it is necessary to see the text output and results.

Table 28. Path Coefficients of the Initial Analysis Model

	Estimate	S.E.	C.R.	P	Final Model
CME <--- POPS	-.658	.165	-3.992	.000	
CME <--- RC	-.210	.105	-2.004	.045	
CME <--- TC	.125	.081	1.554	.120	Drop
CME <--- HC	.080	.091	.872	.383	Drop
CME <--- DC	.220	.136	1.612	.107	
CME <--- DCT	.015	.145	.102	.919	Drop
CME <--- GA	-.092	.130	-.708	.479	Drop
OP <--- POPS	-.248	.107	-2.307	.021	
OP <--- RC	-.073	.064	-1.131	.258	Drop
OP <--- TC	-.071	.050	-1.413	.158	
OP <--- HC	-.023	.058	-.387	.699	Drop
OP <--- DC	.274	.087	3.131	.002	
OP <--- DCT	-.146	.089	-1.630	.103	
OP <--- GA	-.511	.090	-5.651	.000	
OP <--- CME	.073	.039	1.838	.066	

As one can see, the initially proposed model needs to be modified based on the significance of the path coefficients of the model. Table 28 indicates the path coefficients and significance levels. According to the results, the path coefficients of TC, HC, DC, DCT, and GA on CME are not significant. The path coefficients of RC, TC, and HC have an insignificant impact on OP. Therefore, I decided to drop the paths TC, HC, DCT, GA -> CME and RC, HC -> OP from the initial model. As a result, the final structural equation model was developed through the CFA and testing the initial proposed model.

Full information about the final structural equation model is summarized in Appendix G.

Table 29. The Model Fit Indices of the Initial Proposed Model

Index	CMIN (χ2)	DF	CMIN/DF	TLI	NFI	CFI	RMSEA
Initial	299.898	197	1.522	0.973	0.942	0.979	0.041
Final	**306.750**	**203**	**1.511**	**0.974**	**0.941**	**0.979**	**0.041**
Marginal value			< 2.0	> .90	> .90	> .90	< .05

Regarding the model fit, dropping the insignificant paths does not damage the goodness of the model fit. Table 29 indicates the model fit indices of the initial and final analysis models. The χ^2/df ratio (CMIN/DF) is 1.51, which meets the informal criterion of being below 2.0; the Tucker-Lewis index (0.974) and Comparative fit index (0.979) are greater than 0.9; and the value of root mean square error of approximation (RMSEA) is 0.041.

Table 30 shows the path coefficients of the final structural equation model. All relationships are significant statistically because insignificant relationships have been removed. In particular, the SMR statistics (R^2) are very high so the final model explains those relationships between organizational factors (internal politics, conflict, and other factors), conflict management effectiveness, and organizational performance.

Table 30. Path Coefficients of the Final Structural Equation Model

		Estimate [a]	S.E.	C.R.	P	SMR(R^2)
CME	<--- POPS	-.647	.109	-5.932	***	.560
CME	<--- RC	-.197	.092	-2.141	.032**	
CME	<--- DC	.299	.123	2.425	.015**	
OP	<--- POPS	-.312	.088	-3.557	***	.837
OP	<--- TC	-.089	.048	-1.850	.064*	
OP	<--- DC	.277	.089	3.113	.002***	
OP	<--- DCT	-.169	.082	-2.069	.039**	
OP	<--- GA	-.500	.075	-6.640	***	
OP	<--- CME	.074	.039	1.926	.054*	

* Significant at the .10 level ** Significant at the .05 level *** Significant at the .01 level

a. The coefficients are unstandardized path coefficients.

On the one hand, in a regression analysis, it is not possible to analyze direct and indirect effects of relationships. However, one can obtain the direct, indirect, and total effects between respective relationships from the final structural equation modeling. Moreover, the AMOS program provides the significance level of each effect; therefore, it is possible to analyze whether or not each total, direct, and indirect effect is statistically significant. In order to obtain significant levels of the effects, it is necessary to conduct a resampling of the bootstrapping method with the maximum likelihood estimation of the AMOS program (number of bootstrap samples: 2,000). Table 31 shows the results of the standardized direct, indirect, and total effects.

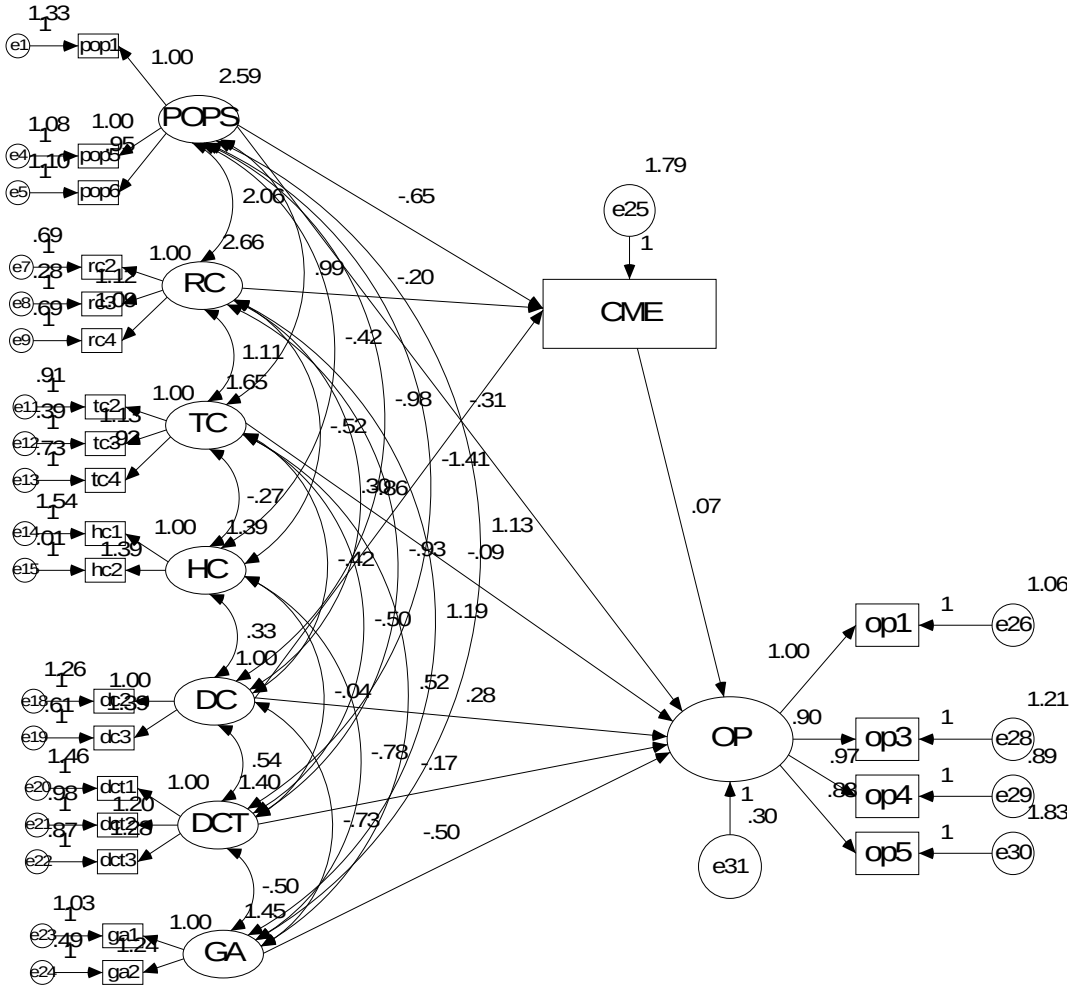
Table 31. Summary of Standardized Direct and Indirect Effects

	CME	OP		
	Direct	**Direct**	**Indirect**	**Total**
POPS	-.516***	-.370***	-.057**	-.428***
RC	-.159*		-.018*	-.018*
TC		-.085		-.085
DC	.148**	.204***	.016**	.221***
DCT		-.147*		-.147*
GA		-.443***		-.443***
CME		.111**		.111**

* Significant at the .10 level ** Significant at the .05 level *** Significant at the .01 level

All effects are statistically significant except for the effects of TC. In the final model TC is significant at the .10 level, but it is not significant in the analysis. However, CME is significant at the .05 level, although it is significant at the .10 level in the final model. The results of the final structural model are presented in Figure 6. However, Figure 6 is rather difficult to read. Figure 7 is a simplified diagram of the results. In Chapter 7, the hypotheses will be tested and the results, implications, and contributions, and limitations of the research will be discussed.

Figure 6. AMOS Graphical Output for the Final Structural Equation Model



Chapter 7. Discussion and Conclusion

1. Discussion and Implications

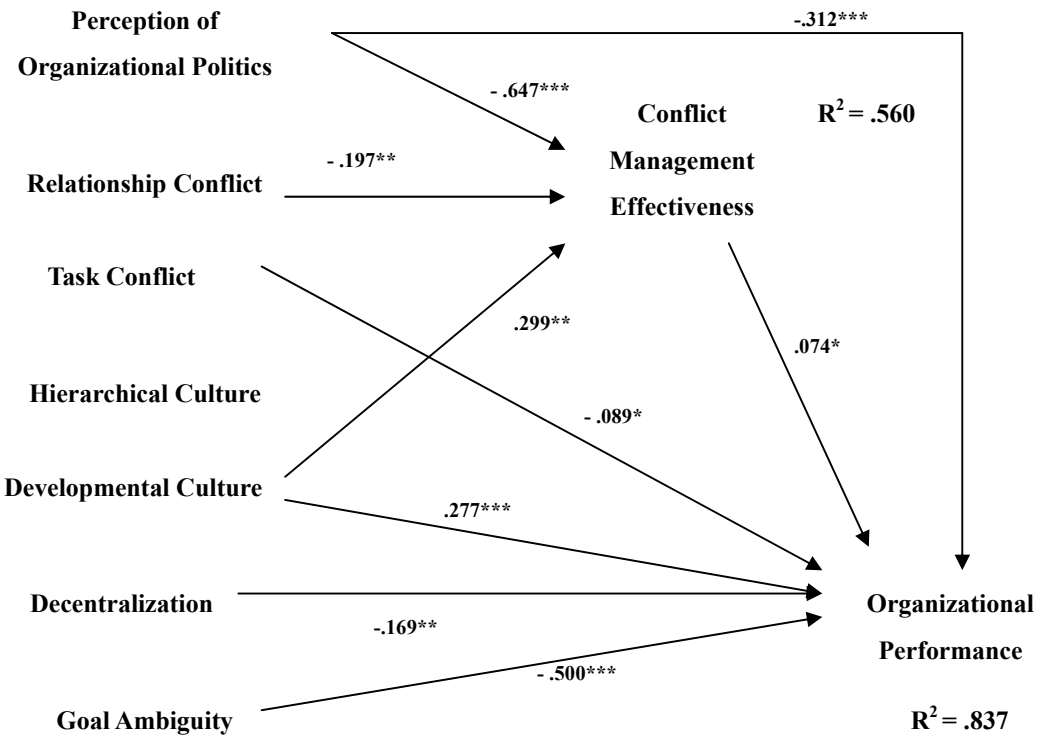
The key objective of this study is to examine 1) what relationships there are between organizational politics, conflicts, and other organizational factors; 2) how organizational conflicts affect conflict management effectiveness and the performance of government organizations; 3) how the perception of politics affect conflict management effectiveness and the performance of government organizations; and 4) how conflict management effectiveness affects the performance of government organizations. Although many studies have tried to clarify the inside of the *black box* of organizational performance, factors such as internal politics, conflict, and conflict management effectiveness have been somewhat disregarded by researchers when they designed research models.

Figure 7 presents the results of the final structural equation model. As was discussed above, the model explains 56 percent of the data variation for conflict management effectiveness and 83.7 percent for organizational performance. The R^2 of the regression analyses in Chapter 5 and the R^2 of the structural model confirm that the performance of government organizations can be explained by internal politics, organizational conflicts, and other factors such as organizational culture, decentralization, and goal ambiguity.

In terms of the perception of organizational politics (POPS), this study hypothesized that POPS is negatively related to conflict management effectiveness (CME/H1a) and organizational performance (OP/H1b). In the regression analyses, POPS

is significantly, negatively related to CME (β = -.518***) and OP (β = -.219***). Moreover, in the structural model, POPS is a very important predictor for CME (β = -.647***) and OP (β = -.319***). These results consistently support the Hypotheses 1a and 1b. These results indicate that organization having higher levels of organizational politics more frequently use negative conflict management styles such as dominating and avoiding. Moreover, POPS has negative effects on organizational performance.

Figure 7. The Final Structural Equation Model



* Significant at the .10 level ** Significant at the .05 level *** Significant at the .01 level

In terms of relationship conflict (RC), this study hypothesized that RC is negatively related to CME (H2c) and OP (H2d). The regression analyses show that RC has significant negative effects on CME (β = -.244***) and OP (β = -.134***). However, in the structural equation model, RC is not a significant predictor for OP, even though RC is significantly, negatively related with CME (β = -.197**). Therefore, Hypothesis 2c is confirmed both by the results of the regression analyses and by the structural equation model; however, Hypothesis 2d is confirmed by the regression analyses, but not by the structural model.

Table 32. Revisited Regression Results

	Model of CME		**Model of OP**	
Variables	Coefficient	Std. Err.	Coefficient	Std. Err.
POPS	**-.518*** **	.094	**-.219*** **	.053
RC	**-.244*** **	.078	**-.134*** **	.044
TC	**.135***	.071	-.043	.040
HC	**.140***	.072	.061	.040
DC	**.147****	.069	**.176*** **	.039
DCT	**.146****	.071	-.018	.040
GA	-.090	.076	**-.298*** **	.043
Observation (N)	307		308	
F-Score	54.76***		93.49***	
R-Square	**0.5618**		**0.6857**	
Adj R-Square	0.5515		0.6783	
Mean VIF	2.22		2.21	
Breusch-Pagan/Cook-Weisberg	1.91		1.27	
(Chi-Square)	(Prob > Chi2 = 0.1672)		(Prob > Chi2 = 0.2595)	

* Significant at the 0.1 level ** Significant at the .05 level *** Significant at the .01 level

Regarding task conflict (TC), this study hypothesized that TC is positively related to CME (H3a) and OP (H3b). In the regression analyses, TC is significantly, positively associated with CME (β = .135*) but is not significantly related to OP. These results are not consistent with the results from the structural equation model. Interestingly, TC is significantly, negatively related to OP (β = -.089*) and the relationship between TC and CME is not significant. Therefore, Hypothesis 2c is confirmed by the regression analysis; however, the two hypotheses are not supported by the structural equation model.

In terms of hieratical (HC) and developmental culture (DC), this study hypothesized that HC is negatively related with CME and OP, and that DC is positively related to CME and OP. However, HC has been dropped because it was not statistically significant in the structural model and inflated the Chi-square statistics of the model. In the regression model, HC is significantly, positively related to CME (β = .140*). However, the direction of the result is not consistent with the hypotheses. Therefore, Hypothesis 3a and 3b are not confirmed[20]. On the other hand, DC is significantly, positively related to CME and OP in the regression analysis (CME: β = .147**, OP: β = .176***) and in the structural model (CME: β = .299**, OP: β = .277***). The positive effects of DC on CME and OP are in line with Hypotheses 3c and 3d.

[20] Considering the results of the factor analyses, modification indices, and construct reliability and AVE statistics, HC has been measured by problematic questionnaire, although the survey items stem from the classical studies about organizational culture. It will be discussed more in Chapter 7 as a limitation of this study.

Table 33. Summery of the Hypothesis Test Results

	Hypotheses C: Confirmed NC: Not Confirmed	Result	
		Reg	SEM
H1a	Perception of organizational politics is negatively related to perceptual conflict management effectiveness.	**C**	**C**
H1b	Perception of organizational politics is negatively related to perceived organizational performance.	**C**	**C**
H2a	Task conflict is positively related to perceptual conflict management effectiveness.	**C**	NC
H2b	Task conflict is positively related to perceived organizational performance.	NC	NC
H2c	Relationship conflict is negatively related to perceptual conflict management effectiveness.	**C**	**C**
H2d	Relationship conflict is negatively related to perceived organizational performance.	**C**	NC
H3a	Hierarchical organizational culture is negatively related to perceptual conflict management effectiveness.	**C**	NC
H3b	Hierarchical organizational culture is negatively related to perceived organizational performance.	NC	NC
H3c	Developmental organizational culture is positively related to perceptual conflict management effectiveness.	**C**	**C**
H3d	Developmental organizational culture is positively related to perceived organizational performance.	**C**	**C**
H4a	Goal ambiguity is negatively related to perceptual conflict management effectiveness.	NC	NC
H4b	Goal ambiguity is negatively related to perceived organizational performance.	**C**	**C**
H5a	A decentralized organization process is positively related to perceptual conflict management effectiveness.	**C**	NC
H5b	A decentralized organization process is positively related to perceived organizational performance.	NC	NC
H6	Effective conflict management is positively related to higher perceived organizational performance.	-	**C**

The Hypotheses 4a and 4b stated that goal ambiguity (GA) is negatively related to CME and OP. In the regression model, GA is not significantly associated with CME; however, GA has significant and positive effects on OP (β = -.298***). These results are very consistent with the results of the structural equation model. GA is significantly, negatively associated with OP (β = -.500***), but the relationship between GA and CME is not significant. Therefore, Hypothesis 4b is confirmed by the results of the regression and structural model. By contrast, Hypothesis 4a is not supported.

In terms of decentralization (DCT), this study hypothesized that DCT is positively related with CME and OP. According to the results of the regression models, DCT is significantly, positively related to CME (β = .146***). However, there is no significant relationship between DCT and OP. Surprisingly, in the structural model, DCT is significantly, negatively related with OP (β = -.169**). Thus, DCT does not have significant effects on OP.

Regarding conflict management effectiveness (CME), this study hypothesized that effective conflict management is positively related to higher organizational performance. Based on the result of the structural model, CME is significantly, positively related to organizational performance. Therefore, Hypothesis 6 is confirmed. Table 33 summarizes the results of the hypothesis tests.

The research results of this study indicate strong overall support for the research model. In particular, the regression and the structural model can explain much of the inside of the *black box* of the performance of government organizations. The R^2 statistics of the regression and the structural models demonstrate that those internal politics and organizational conflict variables should be considered when studying the organizational performance of governments. Moreover, the key variables such as perception of

organizational politics, task and relationship conflict, and perceptual conflict management effectiveness all have a significant relationship with the performance of government organizations.

Since Pfeffer (1981) stimulated research regarding the power and politics of organizations, some empirical studies have been conducted for examining the relationship between internal politics and the performance of private organizations. In public administration, however, only a few studies have been conducted and political behaviors in public organizations have received little treatment as an important variable when studying public performance.

In this study, a perception of organizational politics significantly, negatively affects perceptual conflict management effectiveness and perceived organizational performance. These findings are in line with the results of the previous studies and show that a perception of organizational politics is a critical element related to organizational performance. Vigoda (2000a) concludes that "organizational politics my function as the silent enemy with organizations and can be even more destructive for public administration systems than for private organizations… silent effect of internal politics can spill over beyond the formal boundaries of public organizations… to exercise lower level of performance" (204). That is, employees of public organizations may experience higher levels of organizational politics and respond with more passive behavior like neglect or apathy, which are less risky (Vigoda, 2000a).

As Vigoda concluded, it is important to note that this negative effect of organizational politics may bring about less motivation and job satisfaction among public employees; hence, they may have negative reactions regarding the internal politics of government organizations. In particular, many citizens have experienced passive and

neglectful behaviors from public employees. These negative effects of internal politics may hamper both public service improvement and innovation in the public sector.

Furthermore, as far as could be found, the study by Hochwarter, Witt, and Kacmar (1999) and a couple of studies by Vigoda (2000b; 2002a) were the only ones that examined the relationship between the perception of organizational politics and organizational performance. Since Ferris, Russ, and Fandt (1989) suggested the basic model of organizational politics, only a few studies have empirically tested the effects of organizational politics on organizational performance. The strong results of this study indicate that the relationship exists and such an internal politics factor will be considered when explaining organizational performance.

Another contribution of this study is its elaboration of the relationship between the perception of organizational politics and conflict management effectiveness. As was mentioned above, there is no previous research which tried to measure conflict management effectiveness. Based on the suggestion of Rahim (2002), this study initially developed an indicator for measuring conflict management effectiveness based on the survey. The results indicate that perceptions of organizational politics have negative effects on conflict management effectiveness. The regression analysis and structural equation model points the negative effects of a perception of organizational politics upon conflict management effectiveness. Moreover, the indirect effect of organizational politics in the structural model is significant and negatively affects organizational performance (- .057**).

As a control mechanism, the existence of a higher level of organizational politics may bring about passive and coercive conflict management processes. That is, the findings portray a more complex relationship between internal politics, conflict

management, and organizational performance. In particular, dominating conflict management strategies may be frequently used in organizations having higher levels of organizational politics. This is due to the specific characteristics of the political behavior of employees having power and authority. As a result, employees perceiving internal politics may avoid those conflict situations and thus organizational outcomes may be decreased. Therefore, internal politics may increase the use of passive and coercive conflict management mechanisms and decrease organizational performance as a result through the interactive process of organizational politics, conflicts, and using passive and coercive conflict management strategies. In sum, organizational politics negatively affects the selection of effective conflict management styles. Moreover, from the results of this study, the mediating effects of conflict management effectiveness can be established in the middle of the relationship between organizational politics and performance.

Furthermore, as Pfeffer (1981) argues that organizational politics stems from conflict. Perceptions of organizational politics need to be related to organizational conflicts. This study designed the research model with consideration for the simultaneous relationship between organizational politics and conflict. That is the reason why it employed the structural equation model. As a result, this study can find that organizational politics has negative effects on conflict management effectiveness and organizational performance. This is a major contribution of this study.

This study also finds that organizational conflicts basically have negative effects on conflict management effectiveness and on organizational performance. Based on the results of the previous research into organizational conflicts, this study classified organizational conflicts into relationship conflict and task conflict. It was expected that

task conflict would have positive effects on organizational performance based on the previous studies (Amason and Schweiger, 1994; DeChurch and Marks, 2001); however, the result does not support that hypothesis.

Even though the previous studies found that there are positive effects of task conflict on organizational performance, as many researchers had argued, task and relationship conflict can be correlated and arouse negative aspects of organizational conflicts in each other (Amason and Sapienza, 1997). It is possible that some people may confuse task conflict as having relationship conflict. Furthermore, the negative relationship between task conflict and organizational performance is somewhat plausible considering less constructive aspects of the mutually correlated two types of organizational conflicts. Simons and Peterson (2000) conclude that the benefit of task conflict would be increased with a minimal danger of relationship conflict. In addition, they are concerned that "the stimulation of task conflict as a primary intervention runs a high risk of unintentionally triggering relationship conflict, with all its attendant negative consequences" (Simons and Peterson, 2000, 109). Moreover, Amason and Schweiger (1997) point out that "encouraging disagreement may yield results that no better and may well be worse than avoiding conflict altogether" (108). Therefore, the result of this study suggests that, even though the distinction between the two types of organizational conflicts may provide more vivid descriptions and more appropriate prescriptions for managing conflicts, the effects of the two types of organizational conflicts are different depending on the specific characteristics of each workplace.

However, this study finds that there are positive effects of task conflict on conflict management effectiveness. The results of this study's regression analyses also indicate that task conflict has significant, positive effects on conflict management effectiveness. It

shows that task conflict may stimulate the frequent use of problem solving mechanisms of conflict management such as integrating and obliging. Because there is no previous research examining the relationship types of organizational conflicts and the use of conflict management strategies, further studies are needed to elucidate effects of the two types of conflict on conflict management strategies.

As expected, relationship conflict has negative effects on conflict management effectiveness and indirectly, negatively affects organizational performance (- .018*). That is, the detrimental effects of affective conflict are linked to frequent use of coercive and passive mechanisms of conflict management. This result is in line with the results of the previous studies (Jehn and Mannix, 2001; Jehn, 1997). In order to study the specific effects of two types of organizational conflicts, further studies employing multiple regression models and other statistical models including each conflict management style as a dependent variable are needed.

In terms of conflict management effectiveness, the results of this study indicate significant, positive effects of conflict management effectiveness on organizational performance. This is an important contribution of this study because there is no previous research that measured conflict management effectiveness and tested its relationship with organizational performance. Most conflict management literature basically suggests the problem solving style is the most appropriate style for effective conflict management (e.g. Rahim, 2001; 2002, Euwema, Van de Vliert, and Bakker, 2003; Gross and Guerroro, 2000). The positive effects of conflict management effectiveness on organizational performance suggest the integrating and obliging conflict management styles yield higher organizational performance than do the dominating and avoiding styles.

In this regard, task conflict, developmental and hierarchical culture, and

decentralization are positively related with conflict management effectiveness in the regression model. In contrast, perceptions of politics and relationship conflict have negative effects on conflict management effectiveness. These research results can describe which organizational factors increase the frequent use of each conflict management style. From this process, public employees can analyze the level of organizational factors and the use of conflict management styles so that they can initiate organizational learning through a deliberative process of problem solving approaches. In this perspective, future studies need to consider organizational learning, organizational citizenship behavior, and organizational deliberation as fundamental variables in a research model.

In terms of organizational culture, c. Considering organizational culture as a "pattern of shared meanings of organizations" (Rainey and Steinbauer, 1999), developmental culture emphasizes growth, flexibility, change, and adaptation (Zammuto and Krakower, 1991). Therefore, public organizations having higher levels of developmental culture may have higher conflict management and organizational performance.

In contrast, hierarchical culture focuses on organizational control and control-oriented internal process (Zammuto and Krakower, 1991). Therefore, I can expect that hierarchical culture may yield less effective conflict management and organizational performance. In the regression model, however, hierarchical culture positively affects conflict management effectiveness. Nevertheless, the variable was insignificant and dropped in the structural equation model. Based on the statistics of the structural equation model, including the modification indices, the variable inflated the Chi-square and had potentially higher correlation coefficients with other error terms and

observed/unobserved variables. This means the indicators of the variable might be inappropriate for measuring the variable, even though all the indicators were developed based on items which were widely used in the previous studies. This is the reason why the variable was dropped. For this reason, only developmental culture is a significant variable regarding organizational culture in the structural model.

As control variables, decentralization and goal ambiguity have negative effects on organizational performance in the structural model. These variables are important predictors when explaining organizational outcomes because decentralization and goal clarity have been included when studying public performance and improving managerial effectiveness.

Decentralization has positive effects on conflict management effectiveness and is insignificant on organizational performance in the regression model. However, the variable has negative effects on organizational performance in the structural model. This result is not consistent with the previous research (e.g. Moynihan and Pandey, 2005; Wang and Berman, 2000; Chun and Rainey, 2005b). This result might have happened by using inaccurate survey indicators for the variable. The variable was measured by three items: dct1, dct2, and dct3. Among them, the mean of dct1 (3.44) was relatively lower than the mean of dct2 (4.11) and dct3 (4.29)[21]. Even though there was no problem in the reliability tests and modification indices in the structural model, it would seem better to discard the first item (dct1) for better model specification. However, removing a survey item should be carefully considered so that this study did not discard the item. The measurement problem may be a limitation of this study and these kinds of methodological concerns are very important implications for research design of future

[21] Table 10 shows the descriptive statistics of the variable.

study.

Regarding goal ambiguity, the variable has negative effects on organizational performance in the regression and structural models. These results are in line with the results of the previous studies (e.g. Chun and Rainey, 2005b). For future study, it is possible to include more organizational factors as control variables; however, researchers should be careful not to include too many control variables because it may weaken the model fit indices and statistical robustness of models, depending on the characteristics of the statistical techniques.

2. Conclusion, Study Limitations, and Future Research

The primary purpose of this study is to examine the relationships between politics, conflict, and the performance of government organizations. Moreover, this study also aims to explore conflict management effectiveness and its relationships with organizational performance and other organizational factors. For this purpose, the study employed various statistical techniques including descriptive statistics, confirmative factor analyses, multiple regression analyses, reliability tests, and structural equation modeling for building and testing the research model. In general, it provides sufficient evidence for testing the hypotheses. The empirical evidence indicates that organizational politics and conflicts have negative effects on conflict management effectiveness and on organizational performance. Furthermore, based on the research result, this study can conclude that public organizations with higher conflict management effectiveness have higher organizational performance.

Considering the existence of a number of previous studies on public performance,

few studies have focused on organizational politics, conflicts, conflict management, and their effects on organizational performance. Even though politics and conflict are common in public organizations, we have little knowledge and understanding of their effects on organizational outcomes considering importance of politics and conflicts in the public sector. In particular, there has been no study that treated internal politics and organizational conflicts as respective factors in a model and tested their simultaneous effects on organizational performance. Moreover, in spite of a number of studies in conflict management, there has been no previous study that tried to develop indicators for measuring conflict management effectiveness. In this regard, 1) testing the relationships between politics, conflict, and the performance of government organizations; 2) developing indicators for measuring conflict management effectiveness; and 3) testing the effects of conflict management effectiveness on organizational performance are fundamental contributions of this study. In sum, this study highlights the importance of an integrated and compositional approach to the study of the organizational politics, conflicts, conflict management, and performance of government organizations.

At the same time, this study contains some limitations. In particular, the empirical evidence is based on self-reporting data by New Jersey state and local government employees. It is possible that the perspective of the respondents may be limited by the particular conditions that they have experienced. Furthermore, because this study used perceived indicators for measuring key variables, it may raise the concern of measurement validity. For example, hierarchical culture was dropped and decentralization yielded an unexpected research result. In general, however, the survey questionnaire and indicators are based on previous studies, tested by thorough statistical

techniques, and the analyses provide results consistent with previous studies relevant to out research hypotheses.

In addition, the low response rate (13.32%) should be discussed more as a study limitation. Even though a number of studies conclude that low response rate do not necessarily lead nonresponse bias (e.g. Merkel and Edelman, 2002; Krosnick, 1999; Weisberg, 2005), improving response rate should be helpful to obtain more representative data and to conduct more appropriate statistical analyses. Because the surveys were self-reporting, perception-based ones, it is possible that public administrators had somewhat negative feelings in sharing information about internal politics and conflicts of their organizations, even though there is no identifier in the survey package. Since the survey items regarding organizational politics and conflicts have negative connotations, public administrators may be uncomfortable with the questionnaire. In order to increase response rate, the survey invitation should have included more explanations regarding the IRB (Internal Review Board) process and its privacy protection policy. At the same time, due to negative nuance of the questionnaire, it is possible for respondents to skip survey items; therefore, it made some missing data of the study. This problem also came from self-reporting survey. In order to overcome these survey constraints, future research should consider modification of survey items and qualitative research for capturing more vivid descriptions and information regarding organizational politics and conflicts.

For future research, the question of how to improve organizational performance by appropriate conflict management strategies deserves greater attention. This study does not answer the question, but it lays a foundation for this type of inquiry and suggests continuous studies on the relationship between conflict management, organizational

performance, and other organizational factors, including trust, motivation, and satisfaction. Particularly, further study should consider organizational learning and organizational citizenship behaviors as research variables for testing relationships with organizational politics, conflict, and performance. In addition, we need to know more about the effects of the two types of conflicts and their effects on conflict management strategies and organizational performance. Another question deserving of inquiry is how to further enhance conflict management effectiveness in public organizations. In fact, there was no previous study which tied to measure conflict management effectiveness and its effects on organizational outcomes. Moreover, few studies have paid attention to examine determinants of conflict management effectiveness. Therefore, it is necessary to study which organizational factors positively and negatively affect conflict management effectiveness. In addition, even though this study measured conflict management effectiveness as a variable, future study needs to develop a research model to know the effectiveness of each conflict management strategy (integrating, avoiding, obliging, dominating, and compromising) and to test the relationships between each strategy and various organizational factors. This future research will provide academic and practical implications for building effective conflict management system. Lastly, it is possible to consider comparative studies with consideration of various organizational cultures and different circumstances in the public sector of each country. In particular, Asian countries have higher level of hierarchy and bureaucracy than western countries have. Therefore, considering cultural differences in the public sector among countries, future study can examine the relationship between cultural differences and these effects on organizational politics, conflicts, and performance of government organizations.

In conclusion, public performance is affected by various determinants both from

inside and from outside of public organizations. However, organizational politics, conflicts, and conflict management have been little considered. Conflict management matters to the performance of government organizations. The nature of public performance improvement increasingly requires the effective management of internal politics and organizational conflicts. Information generated from this study would help to improve the management of organizational politics and conflicts, and further studies should refine and improve the research results.

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Appendix A. Survey Instrument

RUTGERS
School of Public Affairs and Administration

Dear Respondent,

I am inviting you to participate in a research study to investigate how conflict management affects organizational performance. I hope that the results of the survey will be useful for exploring the comprehensive relationship between conflict management and organizational performance.

This study is conducted by Jong One Cheong under Prof. Frank J. Thompson's supervision and sponsored by the School of Public Affairs and Administration, Rutgers University-Newark. The information you provide is very important for my dissertation project and your help is highly appreciated.

Filling out this survey will not compromise your privacy or subject you to any known risks. No identifiers are included in the questionnaires. The information in the study will be kept strictly confidential and data will be stored securely. If you would like to have a copy of survey results, you will have to provide your name and address by sending email me.

If you have any questions about the survey, or about being in this study you may email me at jongone@pegasus.rutgers.edu, or contact me by mail to 111 Washington St. School of Public Affairs and Administration, Rutgers University – Newark, Newark, 07102, New Jersey. You can call me at 201-916-0186. If you have any questions about your rights as a subject, you may contact the Institutional Review Board (a committee that reviews research studies in order to protect those who participate). Please contact the IRB administrator at Rutgers University, the State University of New Jersey, Institutional Review Board for the Protection of Human Subjects, Office of Research and Sponsored Programs, 3 Rutgers Plaza, New Brunswick, NJ 08801-8559. (Tel: 732-932-0150 (ext. 2104), Email: humnasubjects@orsp.rutgers.edu)

I would greatly appreciate your completing the survey. The survey should take you about 15 minutes to complete. Because a relatively small number of people are being surveyed, your response is very important.

Thank you in advance for your time and effort!

Sincerely,

Jong One Cheong
PhD Candidate, SPAA, Rutgers University - Newark

*** Please indicate the extent to which you agree with each of the following statements.**
(1 – Strongly Disagree / 7 – Strongly Agree)

Questionnaires	Disagree ←→ Agree
1. My organization is a very dynamic and entrepreneurial place. Employees are willing to stick their necks out and take risks	① ② ③ ④ ⑤ ⑥ ⑦
2. The glue that holds my organization together is commitment to being proactive and development of new ideas or methods for service delivery. There is an emphasis on being first.	① ② ③ ④ ⑤ ⑥ ⑦
3. My organization emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.	① ② ③ ④ ⑤ ⑥ ⑦
4. My organization is a very formalized and structured place. Bureaucratic procedures generally govern what people do.	① ② ③ ④ ⑤ ⑥ ⑦
5. The glue that holds my organization together is formal rules and policies. Maintaining a smooth-running organization is important here.	① ② ③ ④ ⑤ ⑥ ⑦
6. My agency emphasizes permanence and stability.	① ② ③ ④ ⑤ ⑥ ⑦
7. It is easy to explain the goal of this organization to outsiders.	① ② ③ ④ ⑤ ⑥ ⑦
8. The organization has clearly defined goals.	① ② ③ ④ ⑤ ⑥ ⑦
9. There can be little action taken here until a supervisor approves a decision.	① ② ③ ④ ⑤ ⑥ ⑦
10. In general, a person who wants to make his own decisions would be quickly discouraged in this organization.	① ② ③ ④ ⑤ ⑥ ⑦
11. Even small matters have to be referred to someone higher up for a final answer.	① ② ③ ④ ⑤ ⑥ ⑦
12. Favoritism rather than merit determines who gets ahead around here.	① ② ③ ④ ⑤ ⑥ ⑦
13. Rewards come only to those who work hard in this organization	① ② ③ ④ ⑤ ⑥ ⑦
14. There is a group of employees in my organization who always get things their ways because no one wants to challenge them.	① ② ③ ④ ⑤ ⑥ ⑦
15. Employees in this organization attempt to build themselves up by tearing others down.	① ② ③ ④ ⑤ ⑥ ⑦
16. I have seen changes made in policies here that only serve the purposes of a few individuals, not the work unit or the organization.	① ② ③ ④ ⑤ ⑥ ⑦
17. Employees here usually don't speak up for fear of retaliation by others.	① ② ③ ④ ⑤ ⑥ ⑦
18. My organization has made good use of the members' knowledge and skills in looking for ways to become more efficient.	① ② ③ ④ ⑤ ⑥ ⑦
19. The work performed by my organization provides the public a worthwhile return on its tax dollars.	① ② ③ ④ ⑤ ⑥ ⑦
20. In the past 2 years, the productivity of my organization has improved comparing other	① ② ③ ④ ⑤ ⑥ ⑦

similar public organizations' productivity.

21. My organization employees communicate the organization's mission, vision, and values.	① ② ③ ④ ⑤ ⑥ ⑦
22. In my organization, corrective actions are taken when employees do not meet performance standards.	① ② ③ ④ ⑤ ⑥ ⑦

Questionnaires	**Disagree ←→ Agree**
23. My organization employees try to investigate an issue to find a solution acceptable to me and the members.	① ② ③ ④ ⑤
24. My organization employees exchange accurate information each other to solve a problem together.	① ② ③ ④ ⑤
25. My organization employees try to bring all our concerns out in the open so that the issues can be revolved in the best possible way.	① ② ③ ④ ⑤
26. My organization employees try to stay away from disagreement with each other.	① ② ③ ④ ⑤
27. My organization employees try to keep their disagreement to avoid hard feeling.	① ② ③ ④ ⑤
28. My organization employees generally avoid an argument each other.	① ② ③ ④ ⑤
29. My organization employees use their influence to get their ideas accepted.	① ② ③ ④ ⑤
30. My organization employees use their authority to make a decision in their favor.	① ② ③ ④ ⑤
31. My organization employees sometimes use their power to win a competitive situation.	① ② ③ ④ ⑤
32. My organization employees usually accommodate the wishes of the members.	① ② ③ ④ ⑤
33. My organization employees give in to the wishes of the members.	① ② ③ ④ ⑤
34. My organization employees try to satisfy the expectations of the members.	① ② ③ ④ ⑤
35. My organization employees usually propose a middle ground for breaking deadlocks.	① ② ③ ④ ⑤
36. My organization employees negotiate with each other so that a compromise can be reached.	① ② ③ ④ ⑤
37. My organization employees use "give and take" so that a compromise can be made.	① ② ③ ④ ⑤
38. The atmosphere here is often charged with hostility.	① ② ③ ④ ⑤ ⑥ ⑦
39. Backbiting is a frequent occurrence.	① ② ③ ④ ⑤ ⑥ ⑦
40. One party frequently undermines another.	① ② ③ ④ ⑤ ⑥ ⑦
41. Much "plotting" takes place "behind the scenes."	① ② ③ ④ ⑤ ⑥ ⑦

42. How often do employees you work with disagree about opinions regarding the work being done?	**Never ←→ Always** ① ② ③ ④ ⑤ ⑥ ⑦
43. How much conflict about the work you do is there among the employees you work with?	**Not at all ←→ Very much** ① ② ③ ④ ⑤ ⑥ ⑦
44. How frequently are there conflicts about ideas among employees	**Not frequently ←→ Frequently**

you work with?	① ② ③ ④ ⑤ ⑥ ⑦
45. To what extent are there differences of opinion among those you work with?	**Not at all ←→ Very much** ① ② ③ ④ ⑤ ⑥ ⑦
46. How much do you trust your fellow group members?	**Not at all ←→ Very much** ① ② ③ ④ ⑤ ⑥ ⑦
47. How comfortable do you feel delegating to your group members?	**Not at all ←→ Very much** ① ② ③ ④ ⑤ ⑥ ⑦
48. We absolutely respect each other's competence.	**Not at all ←→ Very much** ① ② ③ ④ ⑤ ⑥ ⑦

Questionnaires	**Disagree ←→ Agree**
49. Meaningful public service is very important to me.	① ② ③ ④ ⑤ ⑥ ⑦
50. I am not afraid to go to bat for the rights of others even if it means be ridiculed.	① ② ③ ④ ⑤ ⑥ ⑦
51. Making a difference in society means more to me than personal achievement.	① ② ③ ④ ⑤ ⑥ ⑦
52. I am often reminded by daily events about how dependent we are on one another.	① ② ③ ④ ⑤ ⑥ ⑦
53. I am prepared to making enormous sacrifices for the good of society.	① ② ③ ④ ⑤ ⑥ ⑦
54. My organization employees willingly share their expertise with other members.	① ② ③ ④ ⑤ ⑥ ⑦
55. My organization employees willingly give of their time to help members who have work-related problems.	① ② ③ ④ ⑤ ⑥ ⑦
56. My organization employees encourage each other when someone is down.	① ② ③ ④ ⑤ ⑥ ⑦
57. My organization employees provide constructive suggestions about how members can improve organizational effectiveness.	① ② ③ ④ ⑤ ⑥ ⑦
58. My organization employees attend and actively participate in team meetings.	① ② ③ ④ ⑤ ⑥ ⑦
59. There are too many management levels in my organization.	① ② ③ ④ ⑤ ⑥ ⑦
60. I really care about the fate of this organization.	① ② ③ ④ ⑤ ⑥ ⑦
61. I am proud of to tell others that I am part of this organization.	① ② ③ ④ ⑤ ⑥ ⑦
62. I would accept almost any type of job assignment in order to keep working for the organization.	① ② ③ ④ ⑤ ⑥ ⑦
63. How satisfied are you with your current job?	① ② ③ ④ ⑤ ⑥ ⑦
64. My organization is a very personal place.	① ② ③ ④ ⑤ ⑥ ⑦
65. My organization is an extended family.	① ② ③ ④ ⑤ ⑥ ⑦
66. Employees seem to share a lot of themselves.	① ② ③ ④ ⑤ ⑥ ⑦
67. My organization is very production oriented.	① ② ③ ④ ⑤ ⑥ ⑦
68. A major concern is with getting the job done.	① ② ③ ④ ⑤ ⑥ ⑦
69. Employees aren't very personally involved.	① ② ③ ④ ⑤ ⑥ ⑦

70. How satisfied are you with your current job?	**Not at all ←→ Very much** ① ② ③ ④ ⑤ ⑥ ⑦
71. How satisfied are you with your coworkers?	**Not at all ←→ Very much** ① ② ③ ④ ⑤ ⑥ ⑦

72. Gender: Male ___ Female ___

73. Ethnicity: 1) American Indian and Natives 2) African American 3) White (non-Hispanic) 4) Hispanic 5) Asian and Pacific Islander 6) Other: _____

73. Educational Level: High School Diploma ___ Some College ___ Bachelor's Degree ___
Graduate Degree in Public Administration (MPA, MPP, PhD, DPA, etc) ___
Graduate Degree in Business Administration (MBA, PhD, DBA, etc) ___
Other Graduate Degree (MA, MS, JD, MD, PhD, etc) ___

74. How long have you worked for the organization? _____ years

75. What kind of organization are you currently working for?

____ Public health and social welfare ____ Public safety and law enforcement
____ Internal public management ____ Engineering and community planning
____ Budget and finance ____ Education
____ Other (Specify): _____

76. Rank (Position)

____ Political Representatives (e.g. mayor, council member)
____ Executive Level (e.g. city manager, administrator, state commissioner)
____ Director/Manager/Supervisor level
____ Mid-Career Official level
____ General Staff/Official
____ Other (Specify): _____

* If you would like to have a copy of survey results, please email me to provide your name and email address. Email: jongone@pegasus.rutgers.edu

Thank you so much

Appendix B. Descriptive Statistics

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	103	30.3	33.6	33.6
	Male	204	60.0	66.4	100.0
	Total	307	90.3	100.0	
Missing	System	33	9.7		
Total		340	100.0		

Rank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Elected	40	11.8	13.2	13.2
	Executive	80	23.5	26.4	39.6
	Director	135	39.7	44.6	84.2
	Mid-career	21	6.2	6.9	91.1
	General Staff	26	7.6	8.6	99.7
	other	1	.3	.3	100.0
	Total	303	89.1	100.0	
Missing	System	37	10.9		
Total		340	100.0		

Organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Health/Welfare	39	11.5	12.8	12.8
	Public Safety	43	12.6	14.1	26.9
	Internal Public Management	163	47.9	53.4	80.3
	Engineering/Planning	31	9.1	10.2	90.5
	Budget/Finance	22	6.5	7.2	97.7
	Education	7	2.1	2.3	100.0
	Total	305	89.7	100.0	
Missing	System	35	10.3		
Total		340	100.0		

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Native American	4	1.2	1.3	1.3
	African American	17	5.0	5.6	6.9
	Non-Hispanic White	266	78.2	87.5	94.4
	Hispanic	10	2.9	3.3	97.7
	Asian	5	1.5	1.6	99.3
	other	2	.6	.7	100.0
	Total	304	89.4	100.0	
Missing	System	36	10.6		
Total		340	100.0		

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School	16	4.7	5.2	5.2
	College	58	17.1	19.0	24.3
	Bachelor	89	26.2	29.2	53.4
	Grad In PA	63	18.5	20.7	74.1
	Grad In BA	13	3.8	4.3	78.4
	Other Grad	66	19.4	21.6	100.0
	Total	305	89.7	100.0	
Missing	System	35	10.3		
Total		340	100.0		

Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.10	1	.3	.3	.3
	.20	1	.3	.3	.7
	.40	1	.3	.3	1.0
	.70	2	.6	.7	1.7
	1.00	15	4.4	5.0	6.7
	2.00	20	5.9	6.7	13.4
	2.50	5	1.5	1.7	15.1
	3.00	16	4.7	5.4	20.4
	4.00	18	5.3	6.0	26.4
	4.50	2	.6	.7	27.1
	5.00	10	2.9	3.3	30.4
	6.00	13	3.8	4.3	34.8
	7.00	10	2.9	3.3	38.1
	8.00	14	4.1	4.7	42.8
	9.00	5	1.5	1.7	44.5
	10.00	17	5.0	5.7	50.2
	11.00	10	2.9	3.3	53.5
	12.00	7	2.1	2.3	55.9
	13.00	8	2.4	2.7	58.5
	14.00	7	2.1	2.3	60.9
	15.00	10	2.9	3.3	64.2
	16.00	7	2.1	2.3	66.6
	17.00	8	2.4	2.7	69.2
	18.00	3	.9	1.0	70.2
	19.00	2	.6	.7	70.9
	20.00	12	3.5	4.0	74.9
	21.00	3	.9	1.0	75.9
	22.00	5	1.5	1.7	77.6
	22.50	1	.3	.3	77.9
	23.00	6	1.8	2.0	79.9
	24.00	8	2.4	2.7	82.6
	25.00	6	1.8	2.0	84.6
	26.00	6	1.8	2.0	86.6
	27.00	8	2.4	2.7	89.3
	28.00	3	.9	1.0	90.3
	29.00	5	1.5	1.7	92.0
	30.00	8	2.4	2.7	94.6
	31.00	1	.3	.3	95.0
	32.00	2	.6	.7	95.7
	33.00	5	1.5	1.7	97.3
	34.00	2	.6	.7	98.0
	36.00	2	.6	.7	98.7
	37.00	4	1.2	1.3	100.0
	Total	299	87.9	100.0	
Missing	System	41	12.1		
Total		340	100.0		

Appendix C. The Regression Analyses

```
. reg  cme pops rc tc hc dc dct ga

      Source |       SS       df       MS              Number of obs =     307
-------------+------------------------------           F(  7,   299) =   54.76
       Model |  749.310095     7  107.044299            Prob > F      =  0.0000
    Residual |  584.468389   299  1.95474378            R-squared     =  0.5618
-------------+------------------------------           Adj R-squared =  0.5515
       Total |  1333.77848   306  4.35875322            Root MSE      =  1.3981

------------------------------------------------------------------------------
         cme |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        pops |  -.5182187   .0940429    -5.51   0.000    -.7032884   -.333149
          rc |  -.2441229   .0787995    -3.10   0.002    -.3991947   -.089051
          tc |   .1358197   .0711038     1.91   0.057    -.0041076    .275747
          hc |   .1407115   .0721471     1.95   0.052    -.0012689   .2826919
          dc |   .1474314   .0693254     2.13   0.034     .0110039   .2838589
         dct |   .1464541   .0714451     2.05   0.041     .0058551   .2870531
          ga |  -.0906609   .0762577    -1.19   0.235    -.2407307   .0594088
       _cons |    1.18686   .8377885     1.42   0.158    -.4618489   2.835569
------------------------------------------------------------------------------

. vif

    Variable |       VIF       1/VIF
-------------+----------------------
        pops |      3.66    0.273422
          rc |      3.15    0.317053
          ga |      2.13    0.468448
         dct |      1.88    0.532350
          dc |      1.80    0.556088
          hc |      1.47    0.680718
          tc |      1.45    0.689803
-------------+----------------------
    Mean VIF |      2.22
```

```
. estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of cme

         chi2(1)      =     1.91
         Prob > chi2  =   0.1672
```

```
. reg   op pops rc tc hc dc dct ga

      Source |       SS       df       MS              Number of obs =     308
-------------+------------------------------           F(  7,   300) =   93.49
       Model |  409.324275     7  58.4748964            Prob > F      =  0.0000
    Residual |  187.646509   300  .625488362           R-squared     =  0.6857
-------------+------------------------------           Adj R-squared =  0.6783
       Total |  596.970783   307  1.94453024           Root MSE      =  .79088

------------------------------------------------------------------------------
          op |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        pops |  -.2196541   .0530577    -4.14   0.000    -.3240665   -.1152416
          rc |  -.1343062   .0443961    -3.03   0.003    -.2216735    -.046939
          tc |  -.0439643   .0402212    -1.09   0.275    -.1231157    .0351871
          hc |   .0618174   .0408094     1.51   0.131    -.0184915    .1421262
          dc |   .1767556   .0392082     4.51   0.000     .0995976    .2539135
         dct |  -.0184376   .0404014    -0.46   0.648    -.0979437    .0610685
          ga |  -.2989277   .0430599    -6.94   0.000    -.3836655   -.2141899
       _cons |   6.127684    .473506    12.94   0.000     5.195871    7.059498
------------------------------------------------------------------------------

. vif

    Variable |       VIF       1/VIF
-------------+----------------------
        pops |      3.64    0.274732
          rc |      3.13    0.319273
          ga |      2.13    0.469531
         dct |      1.88    0.532694
          dc |      1.80    0.556292
          hc |      1.47    0.680742
          tc |      1.45    0.689797
-------------+----------------------
    Mean VIF |      2.21
```

```
. estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of op

         chi2(1)      =     1.27
         Prob > chi2  =   0.2595
```

Appendix D. The CFA Results for the Initial Measurement Model

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 435
Number of distinct parameters to be estimated: 85
Degrees of freedom (435 - 85): 350

Result (Default model)

Minimum was achieved
Chi-square = 607.734
Degrees of freedom = 350
Probability level = .000

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
pop1 <--- POPS	1.000				
pop3 <--- POPS	.860	.058	14.702	***	
pop4 <--- POPS	.839	.054	15.648	***	
pop5 <--- POPS	1.005	.058	17.426	***	
pop6 <--- POPS	.962	.056	17.087	***	
rc1 <--- RC	1.000				
rc2 <--- RC	1.036	.041	25.016	***	
rc3 <--- RC	1.125	.040	27.811	***	
rc4 <--- RC	1.096	.045	24.356	***	
tc1 <--- TC	1.000				
tc2 <--- TC	1.144	.074	15.459	***	
tc3 <--- TC	1.224	.073	16.822	***	
tc4 <--- TC	1.024	.068	15.129	***	

	Estimate	S.E.	C.R.	P	Label
hc1 <--- HC	1.000				
hc2 <--- HC	1.390	.083	16.719	***	
hc3 <--- HC	.683	.073	9.390	***	
dc1 <--- DC	1.000				
dc2 <--- DC	1.105	.068	16.254	***	
dc3 <--- DC	1.017	.067	15.152	***	
dct1 <--- DCT	1.000				
dct2 <--- DCT	1.204	.093	12.980	***	
dct3 <--- DCT	1.282	.097	13.250	***	
ga1 <--- GA	1.000				
ga2 <--- GA	1.228	.077	15.885	***	
op1 <--- OP	1.000				
op2 <--- OP	.836	.060	14.030	***	
op3 <--- OP	.928	.061	15.277	***	
op4 <--- OP	.971	.059	16.424	***	
op5 <--- OP	.826	.068	12.164	***	

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
POPS <--> RC	2.275	.237	9.581	***	
POPS <--> TC	1.036	.149	6.966	***	
POPS <--> HC	-.452	.125	-3.613	***	
POPS <--> DC	-1.506	.191	-7.892	***	
POPS <--> DCT	-1.505	.187	-8.036	***	
POPS <--> GA	1.227	.169	7.265	***	
POPS <--> OP	-1.827	.208	-8.765	***	
RC <--> TC	1.115	.147	7.594	***	
RC <--> HC	-.598	.126	-4.745	***	
RC <--> DC	-1.382	.177	-7.790	***	
RC <--> DCT	-1.032	.154	-6.710	***	

		Estimate	S.E.	C.R.	P	Label
RC	<--> GA	1.327	.167	7.929	***	
RC	<--> OP	-1.799	.198	-9.088	***	
TC	<--> HC	-.266	.087	-3.056	.002	
TC	<--> DC	-.589	.115	-5.122	***	
TC	<--> DCT	-.496	.102	-4.841	***	
TC	<--> GA	.556	.106	5.223	***	
TC	<--> OP	-.829	.127	-6.541	***	
HC	<--> DC	.404	.107	3.755	***	
HC	<--> DCT	.001	.089	.016	.987	
HC	<--> GA	-.846	.122	-6.916	***	
HC	<--> OP	.745	.124	6.016	***	
DC	<--> DCT	.828	.134	6.180	***	
DC	<--> GA	-1.120	.149	-7.504	***	
DC	<--> OP	1.458	.175	8.356	***	
DCT	<--> GA	-.587	.115	-5.105	***	
DCT	<--> OP	.860	.137	6.263	***	
GA	<--> OP	-1.482	.171	-8.687	***	

Modification Indices (Group number 1 - Default model)

Covariances: (Group number 1 - Default model)

	M.I.	Par Change
e29 <--> HC	6.621	.203
e28 <--> DC	4.399	.134
e27 <--> OP	4.397	.109
e26 <--> DC	4.960	-.158
e26 <--> e27	18.404	.323
e22 <--> e23	5.294	-.166
e19 <--> HC	8.670	.186
e19 <--> e27	8.237	.210

	M.I.	Par Change
e18<-->e28	5.004	.141
e17<-->HC	4.042	-.132
e17<-->e27	6.192	-.190
e17<-->e22	4.858	-.170
e17<-->e21	7.539	.212
e16<-->GA	4.809	-.132
e16<-->DCT	6.004	-.166
e16<-->DC	5.706	.182
e16<-->HC	10.729	-.229
e16<-->RC	4.821	-.148
e16<-->e17	4.172	.172
e15<-->e19	7.740	.177
e14<-->OP	5.695	-.142
e14<-->DC	4.925	-.168
e14<-->e17	4.090	-.169
e13<-->e14	4.321	-.139
e12<-->e13	4.089	.091
e10<-->OP	4.702	.105
e10<-->GA	5.910	.119
e10<-->DC	4.154	.126
e10<-->RC	4.624	.118
e10<-->e26	5.009	.152
e10<-->e23	5.260	.147
e9 <-->e11	4.552	-.116
e8 <-->e9	12.218	.138
e7 <-->e10	4.077	.101
e6 <-->RC	11.447	-.163
e6 <-->e19	5.759	-.141
e6 <-->e11	4.259	.107
e6 <-->e9	10.782	-.159
e6 <-->e8	5.477	-.089
e6 <-->e7	9.618	.135

	M.I.	Par Change
e5 <--> HC	4.604	.137
e4 <--> e28	4.581	.148
e3 <--> RC	25.850	.316
e3 <--> e20	5.302	.197
e3 <--> e8	10.767	.166
e2 <--> TC	4.263	.158
e2 <--> e29	5.039	-.238
e2 <--> e23	11.428	-.280
e2 <--> e8	7.549	-.158
e2 <--> e7	9.137	.195
e1 <--> HC	4.881	-.156
e1 <--> RC	6.486	-.172
e1 <--> e7	4.443	-.131
e1 <--> e4	5.704	.196

Regression Weights: (Group number 1 - Default model)

	M.I.	Par Change
op5 <--- HC	5.293	.156
op5 <--- hc3	4.306	.112
op5 <--- hc2	5.299	.112
op3 <--- op2	7.857	.112
op2 <--- op3	6.369	.099
ga1 <--- tc1	5.065	.094
ga1 <--- pop3	4.764	-.072
dct3 <--- TC	5.660	-.140
dct3 <--- RC	5.430	-.094
dct3 <--- op3	4.328	.080
dct3 <--- op2	6.189	.100
dct3 <--- ga1	6.778	-.106
dct3 <--- tc4	5.249	-.102

	M.I.	Par Change
dct3 <--- tc3	5.508	-.097
dct3 <--- tc2	4.019	-.082
dct3 <--- rc3	6.068	-.083
dct3 <--- rc1	5.658	-.084
dct1 <--- TC	4.933	.147
dct1 <--- hc1	6.508	-.109
dct1 <--- tc3	4.770	.101
dct1 <--- tc2	4.535	.098
dct1 <--- rc3	4.508	.080
dct1 <--- pop4	6.720	.108
dct1 <--- pop1	5.559	.086
dc3 <--- HC	9.827	.170
dc3 <--- op3	6.270	.095
dc3 <--- hc2	9.844	.122
dc1 <--- hc1	6.802	-.102
hc3 <--- OP	30.395	.288
hc3 <--- GA	25.489	-.304
hc3 <--- DCT	5.995	.155
hc3 <--- DC	34.915	.324
hc3 <--- TC	9.934	-.203
hc3 <--- RC	33.223	-.255
hc3 <--- POPS	23.951	-.219
hc3 <--- op5	17.433	.165
hc3 <--- op4	26.943	.221
hc3 <--- op3	9.629	.131
hc3 <--- op2	7.637	.121
hc3 <--- op1	21.990	.190
hc3 <--- ga2	20.920	-.193
hc3 <--- ga1	22.707	-.212
hc3 <--- dc3	17.619	.174
hc3 <--- dc2	28.073	.217
hc3 <--- dc1	30.802	.228

	M.I.	Par Change
hc3 <--- tc4	6.957	-.129
hc3 <--- tc3	7.041	-.119
hc3 <--- tc2	7.658	-.123
hc3 <--- rc4	27.931	-.189
hc3 <--- rc3	29.137	-.198
hc3 <--- rc2	28.852	-.205
hc3 <--- rc1	28.844	-.208
hc3 <--- pop6	13.450	-.138
hc3 <--- pop5	17.258	-.151
hc3 <--- pop4	17.844	-.171
hc3 <--- pop3	11.207	-.126
hc3 <--- pop1	16.174	-.142
hc2 <--- DCT	4.670	.108
hc2 <--- op5	5.085	.070
hc2 <--- op2	4.189	.071
hc2 <--- dct2	4.797	.070
hc2 <--- dc3	6.385	.083
hc2 <--- pop1	4.587	-.059
hc1 <--- OP	39.426	-.326
hc1 <--- GA	20.978	.274
hc1 <--- DCT	29.698	-.343
hc1 <--- DC	42.374	-.354
hc1 <--- TC	11.840	.220
hc1 <--- RC	29.233	.238
hc1 <--- POPS	38.303	.275
hc1 <--- op5	19.193	-.172
hc1 <--- op4	27.675	-.222
hc1 <--- op3	28.183	-.222
hc1 <--- op2	21.027	-.200
hc1 <--- op1	29.446	-.219
hc1 <--- ga2	17.095	.173
hc1 <--- ga1	6.468	.112

	M.I.	Par Change
hc1 <--- dct3	17.518	-.165
hc1 <--- dct2	18.952	-.176
hc1 <--- dct1	22.015	-.195
hc1 <--- dc3	28.633	-.220
hc1 <--- dc2	28.074	-.216
hc1 <--- dc1	35.870	-.244
hc1 <--- tc3	8.890	.133
hc1 <--- tc2	11.094	.147
hc1 <--- tc1	8.518	.138
hc1 <--- rc4	22.829	.169
hc1 <--- rc3	27.012	.189
hc1 <--- rc2	20.613	.172
hc1 <--- rc1	23.827	.188
hc1 <--- pop6	24.774	.186
hc1 <--- pop5	27.112	.188
hc1 <--- pop4	19.218	.176
hc1 <--- pop3	22.217	.177
hc1 <--- pop1	24.508	.173
rc1 <--- HC	5.426	-.102
rc1 <--- op2	4.212	-.065
rc1 <--- dc3	6.878	-.079
rc1 <--- hc2	5.425	-.073
rc1 <--- tc2	5.689	.077
pop6 <--- HC	6.204	.137
pop6 <--- hc2	6.202	.098
pop4 <--- RC	5.636	.097
pop4 <--- dct1	5.746	.093
pop4 <--- rc4	6.233	.083
pop4 <--- rc3	9.236	.103
pop4 <--- rc2	6.172	.088
pop3 <--- ga1	9.193	-.141
pop1 <--- HC	7.924	-.172

	M.I.	Par Change
pop1 <--- hc2	7.922	-.123

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	85	607.734	350	.000	1.736
Saturated model	435	.000	0		
Independence model	29	6962.420	406	.000	17.149

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.220	.880	.851	.708
Saturated model	.000	1.000		
Independence model	1.344	.159	.099	.148

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.913	.899	.961	.954	.961
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI

Model	PRATIO	PNFI	PCFI
Default model	.862	.787	.828
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	257.734	193.199	330.132
Saturated model	.000	.000	.000
Independence model	6556.420	6289.168	6830.078

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	1.986	.842	.631	1.079
Saturated model	.000	.000	.000	.000
Independence model	22.753	21.426	20.553	22.321

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.049	.042	.056	.586
Independence model	.230	.225	.234	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	777.734	796.212	1094.516	1179.516
Saturated model	870.000	964.565	2491.179	2926.179
Independence model	7020.420	7026.724	7128.499	7157.499

ECVI

Model	ECVI	LO 90	HI 90	MECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	2.542	2.331	2.778	2.602
Saturated model	2.843	2.843	2.843	3.152
Independence model	22.943	22.069	23.837	22.963

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	199	209
Independence model	20	21

Appendix E. The CFA of the Re-Specified Model

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	253
Number of distinct parameters to be estimated:	71
Degrees of freedom (253 - 71):	182

Result (Default model)

Minimum was achieved
Chi-square = 239.586
Degrees of freedom = 182
Probability level = .003

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
pop1 <--- POPS	1.000				
pop5 <--- POPS	1.005	.057	17.677	***	
pop6 <--- POPS	.947	.056	16.954	***	
rc2 <--- RC	1.000				
rc3 <--- RC	1.120	.039	28.701	***	
rc4 <--- RC	1.088	.043	25.222	***	
tc2 <--- TC	1.000				
tc3 <--- TC	1.131	.065	17.462	***	
tc4 <--- TC	.919	.058	15.794	***	
hc1 <--- HC	1.000				

	Estimate	S.E.	C.R.	P	Label
hc2 <--- HC	1.390	.083	16.722	***	
dc2 <--- DC	1.000				
dc3 <--- DC	1.003	.068	14.749	***	
dct1 <--- DCT	1.000				
dct2 <--- DCT	1.194	.093	12.891	***	
dct3 <--- DCT	1.291	.097	13.274	***	
ga1 <--- GA	1.000				
ga2 <--- GA	1.237	.078	15.793	***	
op1 <--- OP	1.000				
op3 <--- OP	.905	.061	14.808	***	
op4 <--- OP	.971	.059	16.462	***	
op5 <--- OP	.831	.068	12.275	***	

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
POPS <--> RC	2.231	.239	9.345	***	
POPS <--> TC	1.099	.165	6.671	***	
POPS <--> HC	-.481	.129	-3.724	***	
POPS <--> DC	-1.608	.205	-7.854	***	
POPS <--> DCT	-1.523	.190	-8.019	***	
POPS <--> GA	1.275	.173	7.356	***	
POPS <--> OP	-1.865	.213	-8.762	***	
RC <--> TC	1.186	.162	7.328	***	
RC <--> HC	-.580	.127	-4.553	***	
RC <--> DC	-1.434	.189	-7.585	***	
RC <--> DCT	-1.041	.156	-6.665	***	
RC <--> GA	1.318	.169	7.811	***	
RC <--> OP	-1.805	.201	-8.984	***	
TC <--> HC	-.297	.097	-3.062	.002	
TC <--> DC	-.706	.137	-5.139	***	

		Estimate	S.E.	C.R.	P	Label
TC	<--> DCT	-.546	.114	-4.812	***	
TC	<--> GA	.590	.117	5.060	***	
TC	<--> OP	-.903	.141	-6.422	***	
HC	<--> DC	.496	.118	4.199	***	
HC	<--> DCT	.002	.089	.025	.980	
HC	<--> GA	-.841	.122	-6.897	***	
HC	<--> OP	.738	.125	5.928	***	
DC	<--> DCT	.873	.143	6.118	***	
DC	<--> GA	-1.188	.158	-7.523	***	
DC	<--> OP	1.616	.188	8.588	***	
DCT	<--> GA	-.585	.115	-5.109	***	
DCT	<--> OP	.857	.138	6.197	***	
GA	<--> OP	-1.497	.172	-8.695	***	

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	71	239.586	182	.003	1.316
Saturated model	253	.000	0		
Independence model	22	4906.993	231	.000	21.242

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.187	.936	.912	.674
Saturated model	.000	1.000		
Independence model	1.337	.204	.128	.186

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.951	.938	.988	.984	.988
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.788	.749	.778
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	57.586	21.492	101.780
Saturated model	.000	.000	.000
Independence model	4675.993	4451.812	4907.427

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.783	.188	.070	.333
Saturated model	.000	.000	.000	.000
Independence model	16.036	15.281	14.548	16.037

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.032	.020	.043	.998
Independence model	.257	.251	.263	.000

AIC

Model	AIC	BCC	BIC	CAIC

Model	AIC	BCC	BIC	CAIC
Default model	381.586	393.126	646.192	717.192
Saturated model	506.000	547.124	1448.892	1701.892
Independence model	4950.993	4954.569	5032.983	5054.983

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1.247	1.129	1.391	1.285
Saturated model	1.654	1.654	1.654	1.788
Independence model	16.180	15.447	16.936	16.191

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	274	293
Independence model	17	18

Appendix F. The Initial Structural Equation Model

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 276
Number of distinct parameters to be estimated: 79
Degrees of freedom (276 - 79): 197

Result (Default model)

Minimum was achieved
Chi-square = 299.898
Degrees of freedom = 197
Probability level = .000

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
CME <--- POPS	-.658	.165	-3.992	***	
CME <--- RC	-.210	.105	-2.004	.045	
CME <--- TC	.125	.081	1.554	.120	
CME <--- HC	.080	.091	.872	.383	
CME <--- DC	.220	.136	1.612	.107	
CME <--- DCT	.015	.145	.102	.919	
CME <--- GA	-.092	.130	-.708	.479	
OP <--- POPS	-.248	.107	-2.307	.021	
OP <--- RC	-.073	.064	-1.131	.258	
OP <--- TC	-.071	.050	-1.413	.158	
OP <--- HC	-.023	.058	-.387	.699	
OP <--- DC	.274	.087	3.131	.002	
OP <--- DCT	-.146	.089	-1.630	.103	

			Estimate	S.E.	C.R.	P	Label
OP	<---	GA	-.511	.090	-5.651	***	
OP	<---	CME	.073	.039	1.838	.066	
pop6	<---	POPS	.953	.058	16.494	***	
pop5	<---	POPS	.997	.059	16.829	***	
pop1	<---	POPS	1.000				
rc4	<---	RC	1.086	.044	24.424	***	
rc3	<---	RC	1.119	.040	27.842	***	
rc2	<---	RC	1.000				
tc4	<---	TC	.920	.059	15.627	***	
tc3	<---	TC	1.127	.066	17.188	***	
tc2	<---	TC	1.000				
hc2	<---	HC	1.390	.084	16.580	***	
hc1	<---	HC	1.000				
dc3	<---	DC	1.400	.090	15.501	***	
dc2	<---	DC	1.000				
dct3	<---	DCT	1.280	.099	12.924	***	
dct2	<---	DCT	1.195	.095	12.628	***	
dct1	<---	DCT	1.000				
ga2	<---	GA	1.239	.083	14.914	***	
ga1	<---	GA	1.000				
op1	<---	OP	1.000				
op3	<---	OP	.900	.065	13.855	***	

	Estimate	S.E.	C.R.	P	Label
op4 <--- OP	.973	.063	15.554	***	
op5 <--- OP	.832	.072	11.594	***	

Total Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	-.092	.015	.220	.080	.125	-.210	-.658	.000	.000
OP	-.517	-.145	.290	-.017	-.062	-.088	-.295	.073	.000
op5	-.431	-.121	.241	-.014	-.052	-.073	-.246	.060	.832
op4	-.504	-.141	.282	-.016	-.060	-.086	-.288	.071	.973
op3	-.466	-.130	.261	-.015	-.056	-.079	-.266	.065	.900
op1	-.517	-.145	.290	-.017	-.062	-.088	-.295	.073	1.000
ga1	1.000	.000	.000	.000	.000	.000	.000	.000	.000
ga2	1.239	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	1.000	.000	.000	.000	.000	.000	.000	.000
dct2	.000	1.195	.000	.000	.000	.000	.000	.000	.000
dct3	.000	1.280	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	1.000	.000	.000	.000	.000	.000	.000
dc3	.000	.000	1.400	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	1.000	.000	.000	.000	.000	.000
hc2	.000	.000	.000	1.390	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	1.000	.000	.000	.000	.000
tc3	.000	.000	.000	.000	1.127	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.920	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	1.000	.000	.000	.000
rc3	.000	.000	.000	.000	.000	1.119	.000	.000	.000
rc4	.000	.000	.000	.000	.000	1.086	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	1.000	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.997	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.953	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	-.055	.009	.109	.046	.080	-.170	-.524	.000	.000
OP	-.457	-.126	.213	-.015	-.058	-.106	-.350	.108	.000
op5	-.293	-.081	.137	-.009	-.037	-.068	-.224	.069	.641
op4	-.372	-.103	.174	-.012	-.048	-.086	-.285	.088	.814
op3	-.339	-.094	.158	-.011	-.043	-.078	-.260	.080	.743
op1	-.365	-.101	.170	-.012	-.047	-.084	-.279	.086	.798
ga1	.764	.000	.000	.000	.000	.000	.000	.000	.000
ga2	.906	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	.701	.000	.000	.000	.000	.000	.000	.000
dct2	.000	.819	.000	.000	.000	.000	.000	.000	.000
dct3	.000	.852	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	.665	.000	.000	.000	.000	.000	.000
dc3	.000	.000	.878	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	.689	.000	.000	.000	.000	.000
hc2	.000	.000	.000	.999	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	.804	.000	.000	.000	.000
tc3	.000	.000	.000	.000	.917	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.811	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	.891	.000	.000	.000
rc3	.000	.000	.000	.000	.000	.960	.000	.000	.000
rc4	.000	.000	.000	.000	.000	.906	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	.813	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.839	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.827	.000	.000

Direct Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	-.092	.015	.220	.080	.125	-.210	-.658	.000	.000

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
OP	-.511	-.146	.274	-.023	-.071	-.073	-.248	.073	.000
op5	.000	.000	.000	.000	.000	.000	.000	.000	.832
op4	.000	.000	.000	.000	.000	.000	.000	.000	.973
op3	.000	.000	.000	.000	.000	.000	.000	.000	.900
op1	.000	.000	.000	.000	.000	.000	.000	.000	1.000
ga1	1.000	.000	.000	.000	.000	.000	.000	.000	.000
ga2	1.239	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	1.000	.000	.000	.000	.000	.000	.000	.000
dct2	.000	1.195	.000	.000	.000	.000	.000	.000	.000
dct3	.000	1.280	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	1.000	.000	.000	.000	.000	.000	.000
dc3	.000	.000	1.400	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	1.000	.000	.000	.000	.000	.000
hc2	.000	.000	.000	1.390	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	1.000	.000	.000	.000	.000
tc3	.000	.000	.000	.000	1.127	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.920	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	1.000	.000	.000	.000
rc3	.000	.000	.000	.000	.000	1.119	.000	.000	.000
rc4	.000	.000	.000	.000	.000	1.086	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	1.000	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.997	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.953	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	-.055	.009	.109	.046	.080	-.170	-.524	.000	.000
OP	-.451	-.127	.201	-.020	-.067	-.087	-.293	.108	.000
op5	.000	.000	.000	.000	.000	.000	.000	.000	.641
op4	.000	.000	.000	.000	.000	.000	.000	.000	.814

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
op3	.000	.000	.000	.000	.000	.000	.000	.000	.743
op1	.000	.000	.000	.000	.000	.000	.000	.000	.798
ga1	.764	.000	.000	.000	.000	.000	.000	.000	.000
ga2	.906	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	.701	.000	.000	.000	.000	.000	.000	.000
dct2	.000	.819	.000	.000	.000	.000	.000	.000	.000
dct3	.000	.852	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	.665	.000	.000	.000	.000	.000	.000
dc3	.000	.000	.878	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	.689	.000	.000	.000	.000	.000
hc2	.000	.000	.000	.999	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	.804	.000	.000	.000	.000
tc3	.000	.000	.000	.000	.917	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.811	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	.891	.000	.000	.000
rc3	.000	.000	.000	.000	.000	.960	.000	.000	.000
rc4	.000	.000	.000	.000	.000	.906	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	.813	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.839	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.827	.000	.000

Indirect Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	.000	.000	.000	.000	.000	.000	.000	.000	.000
OP	-.007	.001	.016	.006	.009	-.015	-.048	.000	.000
op5	-.431	-.121	.241	-.014	-.052	-.073	-.246	.060	.000
op4	-.504	-.141	.282	-.016	-.060	-.086	-.288	.071	.000
op3	-.466	-.130	.261	-.015	-.056	-.079	-.266	.065	.000
op1	-.517	-.145	.290	-.017	-.062	-.088	-.295	.073	.000
ga1	.000	.000	.000	.000	.000	.000	.000	.000	.000

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
ga2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct3	.000	.000	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	.000	.000	.000	.000	.000	.000
hc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc4	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.000	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	.000	.000	.000	.000	.000	.000	.000	.000	.000
OP	-.006	.001	.012	.005	.009	-.018	-.056	.000	.000
op5	-.293	-.081	.137	-.009	-.037	-.068	-.224	.069	.000
op4	-.372	-.103	.174	-.012	-.048	-.086	-.285	.088	.000
op3	-.339	-.094	.158	-.011	-.043	-.078	-.260	.080	.000
op1	-.365	-.101	.170	-.012	-.047	-.084	-.279	.086	.000
ga1	.000	.000	.000	.000	.000	.000	.000	.000	.000
ga2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct2	.000	.000	.000	.000	.000	.000	.000	.000	.000

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
dct3	.000	.000	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	.000	.000	.000	.000	.000	.000
hc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc4	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.000	.000	.000

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	79	299.898	197	.000	1.522
Saturated model	276	.000	0		
Independence model	23	5199.238	253	.000	20.550

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.269	.922	.891	.658
Saturated model	.000	1.000		
Independence model	1.384	.193	.119	.177

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.942	.926	.979	.973	.979
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.779	.734	.762
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	102.898	60.151	153.607
Saturated model	.000	.000	.000
Independence model	4946.238	4715.139	5183.721

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.980	.336	.197	.502
Saturated model	.000	.000	.000	.000
Independence model	16.991	16.164	15.409	16.940

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.041	.032	.050	.940
Independence model	.253	.247	.259	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	457.898	471.344	752.319	831.319
Saturated model	552.000	598.979	1580.610	1856.610
Independence model	5245.238	5249.153	5330.955	5353.955

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1.496	1.357	1.662	1.540
Saturated model	1.804	1.804	1.804	1.957
Independence model	17.141	16.386	17.917	17.154

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	236	252
Independence model	18	19

Minimization: .187
Miscellaneous: .828
Bootstrap: 2.688
Total: 3.703

Appendix G. The Final Structural Equation Model

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	276
Number of distinct parameters to be estimated:	73
Degrees of freedom (276 - 73):	203

Result (Default model)

Minimum was achieved
Chi-square = 306.750
Degrees of freedom = 203
Probability level = .000

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
CME <--- POPS	-.647	.109	-5.932	***	
CME <--- RC	-.197	.092	-2.141	.032	
CME <--- DC	.299	.123	2.425	.015	
OP <--- POPS	-.312	.088	-3.557	***	
OP <--- TC	-.089	.048	-1.850	.064	
OP <--- DC	.277	.089	3.113	.002	
OP <--- DCT	-.169	.082	-2.069	.039	
OP <--- GA	-.500	.075	-6.640	***	
OP <--- CME	.074	.039	1.926	.054	
pop6 <--- POPS	.950	.058	16.448	***	
pop5 <--- POPS	.996	.059	16.852	***	
pop1 <--- POPS	1.000				
rc4 <--- RC	1.086	.045	24.391	***	

		Estimate	S.E.	C.R.	P	Label
rc3	<--- RC	1.120	.040	27.807	***	
rc2	<--- RC	1.000				
tc4	<--- TC	.919	.059	15.592	***	
tc3	<--- TC	1.130	.066	17.174	***	
tc2	<--- TC	1.000				
hc2	<--- HC	1.390	.084	16.576	***	
hc1	<--- HC	1.000				
dc3	<--- DC	1.393	.090	15.512	***	
dc2	<--- DC	1.000				
dct3	<--- DCT	1.281	.099	12.912	***	
dct2	<--- DCT	1.196	.095	12.618	***	
dct1	<--- DCT	1.000				
ga2	<--- GA	1.236	.083	14.970	***	
ga1	<--- GA	1.000				
op1	<--- OP	1.000				
op3	<--- OP	.903	.065	13.816	***	
op4	<--- OP	.974	.063	15.462	***	
op5	<--- OP	.835	.072	11.569	***	

Total Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	.000	.000	.299	.000	.000	-.197	-.647	.000	.000
OP	-.500	-.169	.299	.000	-.089	-.015	-.360	.074	.000
op5	-.417	-.141	.249	.000	-.075	-.012	-.300	.062	.835
op4	-.487	-.164	.291	.000	-.087	-.014	-.350	.072	.974
op3	-.451	-.152	.270	.000	-.081	-.013	-.325	.067	.903
op1	-.500	-.169	.299	.000	-.089	-.015	-.360	.074	1.000
ga1	1.000	.000	.000	.000	.000	.000	.000	.000	.000
ga2	1.236	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	1.000	.000	.000	.000	.000	.000	.000	.000
dct2	.000	1.196	.000	.000	.000	.000	.000	.000	.000

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
dct3	.000	1.281	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	1.000	.000	.000	.000	.000	.000	.000
dc3	.000	.000	1.393	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	1.000	.000	.000	.000	.000	.000
hc2	.000	.000	.000	1.390	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	1.000	.000	.000	.000	.000
tc3	.000	.000	.000	.000	1.130	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.919	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	1.000	.000	.000	.000
rc3	.000	.000	.000	.000	.000	1.120	.000	.000	.000
rc4	.000	.000	.000	.000	.000	1.086	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	1.000	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.996	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.950	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	.000	.000	.148	.000	.000	-.159	-.516	.000	.000
OP	-.443	-.147	.221	.000	-.085	-.018	-.428	.111	.000
op5	-.284	-.094	.141	.000	-.054	-.011	-.274	.071	.641
op4	-.361	-.120	.179	.000	-.069	-.014	-.348	.090	.813
op3	-.329	-.109	.164	.000	-.063	-.013	-.318	.082	.743
op1	-.353	-.117	.176	.000	-.067	-.014	-.341	.088	.797
ga1	.765	.000	.000	.000	.000	.000	.000	.000	.000
ga2	.905	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	.700	.000	.000	.000	.000	.000	.000	.000
dct2	.000	.819	.000	.000	.000	.000	.000	.000	.000
dct3	.000	.852	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	.665	.000	.000	.000	.000	.000	.000
dc3	.000	.000	.873	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	.688	.000	.000	.000	.000	.000

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
hc2	.000	.000	.000	.999	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	.803	.000	.000	.000	.000
tc3	.000	.000	.000	.000	.919	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.810	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	.891	.000	.000	.000
rc3	.000	.000	.000	.000	.000	.960	.000	.000	.000
rc4	.000	.000	.000	.000	.000	.906	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	.814	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.839	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.824	.000	.000

Direct Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	.000	.000	.299	.000	.000	-.197	-.647	.000	.000
OP	-.500	-.169	.277	.000	-.089	.000	-.312	.074	.000
op5	.000	.000	.000	.000	.000	.000	.000	.000	.835
op4	.000	.000	.000	.000	.000	.000	.000	.000	.974
op3	.000	.000	.000	.000	.000	.000	.000	.000	.903
op1	.000	.000	.000	.000	.000	.000	.000	.000	1.000
ga1	1.000	.000	.000	.000	.000	.000	.000	.000	.000
ga2	1.236	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	1.000	.000	.000	.000	.000	.000	.000	.000
dct2	.000	1.196	.000	.000	.000	.000	.000	.000	.000
dct3	.000	1.281	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	1.000	.000	.000	.000	.000	.000	.000
dc3	.000	.000	1.393	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	1.000	.000	.000	.000	.000	.000
hc2	.000	.000	.000	1.390	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	1.000	.000	.000	.000	.000
tc3	.000	.000	.000	.000	1.130	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.919	.000	.000	.000	.000

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
rc2	.000	.000	.000	.000	.000	1.000	.000	.000	.000
rc3	.000	.000	.000	.000	.000	1.120	.000	.000	.000
rc4	.000	.000	.000	.000	.000	1.086	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	1.000	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.996	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.950	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	.000	.000	.148	.000	.000	-.159	-.516	.000	.000
OP	-.443	-.147	.204	.000	-.085	.000	-.370	.111	.000
op5	.000	.000	.000	.000	.000	.000	.000	.000	.641
op4	.000	.000	.000	.000	.000	.000	.000	.000	.813
op3	.000	.000	.000	.000	.000	.000	.000	.000	.743
op1	.000	.000	.000	.000	.000	.000	.000	.000	.797
ga1	.765	.000	.000	.000	.000	.000	.000	.000	.000
ga2	.905	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	.700	.000	.000	.000	.000	.000	.000	.000
dct2	.000	.819	.000	.000	.000	.000	.000	.000	.000
dct3	.000	.852	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	.665	.000	.000	.000	.000	.000	.000
dc3	.000	.000	.873	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	.688	.000	.000	.000	.000	.000
hc2	.000	.000	.000	.999	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	.803	.000	.000	.000	.000
tc3	.000	.000	.000	.000	.919	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.810	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	.891	.000	.000	.000
rc3	.000	.000	.000	.000	.000	.960	.000	.000	.000
rc4	.000	.000	.000	.000	.000	.906	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	.814	.000	.000

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
pop5	.000	.000	.000	.000	.000	.000	.839	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.824	.000	.000

Indirect Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	.000	.000	.000	.000	.000	.000	.000	.000	.000
OP	.000	.000	.022	.000	.000	-.015	-.048	.000	.000
op5	-.417	-.141	.249	.000	-.075	-.012	-.300	.062	.000
op4	-.487	-.164	.291	.000	-.087	-.014	-.350	.072	.000
op3	-.451	-.152	.270	.000	-.081	-.013	-.325	.067	.000
op1	-.500	-.169	.299	.000	-.089	-.015	-.360	.074	.000
ga1	.000	.000	.000	.000	.000	.000	.000	.000	.000
ga2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct3	.000	.000	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	.000	.000	.000	.000	.000	.000
hc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc4	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.000	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	GA	DCT	DC	HC	TC	RC	POPS	CME	OP
CME	.000	.000	.000	.000	.000	.000	.000	.000	.000
OP	.000	.000	.016	.000	.000	-.018	-.057	.000	.000
op5	-.284	-.094	.141	.000	-.054	-.011	-.274	.071	.000
op4	-.361	-.120	.179	.000	-.069	-.014	-.348	.090	.000
op3	-.329	-.109	.164	.000	-.063	-.013	-.318	.082	.000
op1	-.353	-.117	.176	.000	-.067	-.014	-.341	.088	.000
ga1	.000	.000	.000	.000	.000	.000	.000	.000	.000
ga2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct1	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dct3	.000	.000	.000	.000	.000	.000	.000	.000	.000
dc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
dc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
hc1	.000	.000	.000	.000	.000	.000	.000	.000	.000
hc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
tc4	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc2	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc3	.000	.000	.000	.000	.000	.000	.000	.000	.000
rc4	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop1	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop5	.000	.000	.000	.000	.000	.000	.000	.000	.000
pop6	.000	.000	.000	.000	.000	.000	.000	.000	.000

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	73	306.750	203	.000	1.511
Saturated model	276	.000	0		

Model	NPAR	CMIN	DF	P	CMIN/DF
Independence model	23	5199.238	253	.000	20.550

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.271	.921	.893	.677
Saturated model	.000	1.000		
Independence model	1.384	.193	.119	.177

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.941	.926	.979	.974	.979
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.802	.755	.786
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	103.750	60.562	154.906
Saturated model	.000	.000	.000
Independence model	4946.238	4715.139	5183.721

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	1.002	.339	.198	.506
Saturated model	.000	.000	.000	.000
Independence model	16.991	16.164	15.409	16.940

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.041	.031	.050	.951
Independence model	.253	.247	.259	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	452.750	465.176	724.810	797.810
Saturated model	552.000	598.979	1580.610	1856.610
Independence model	5245.238	5249.153	5330.955	5353.955

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1.480	1.338	1.647	1.520
Saturated model	1.804	1.804	1.804	1.957
Independence model	17.141	16.386	17.917	17.154

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	237	253
Independence model	18	19

Minimization:	.078	Miscellaneous:	.187
Bootstrap:	26.985	Total:	27.250

VITA

Jong One Cheong

1979	Born October 27 in Cheong-ju, Korea
2004	Graduated from The Catholic University of Korea, Korea: BA in International Relations and Bachelor of Public Administration
2006	Graduated from Seoul National University, Korea: Master of Public Administration
2007 – 09	Teaching Assistant, Rutgers University – Newark, USA
2009 – 10	Dissertation Fellowship, Rutgers University –Newark, USA
2010	Ph.D. in Public Administration