PERCEIVED ORGANIZATIONAL SUPPORT: LINKING HUMAN RESOURCE MANAGEMENT PRACTICES WITH IMPORTANT WORK OUTCOMES

By

Wei Liu

Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
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ABSTRACT

Title of Dissertation: PERCEIVED ORGANIZATIONAL SUPPORT: LINKING HUMAN RESOURCE MANAGEMENT PRACTICES WITH IMPORTANT WORK OUTCOMES

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It is widely believed that the implementation of progressive HR practices that affect employee skills, motivation, and behaviors can create strategic advantage for the organization (e.g., Arthur, 1994; Delaney and Huselid, 1996; Snell & Dean, 1992). However, the intervening mechanisms of this effect are yet to be examined. Given the strategic value of HR in successfully cultivating organizational culture and social relationships that cannot be readily replicated (Becker & Gerhart, 1996), researchers have pointed to the need to investigate the role of social relationships in the HR literature (Uhl-Bien, Graen, & Scandura, 2000).

Drawing on social exchange theory (Blau, 1964) and organizational support theory (Eisenberger, Huntington, Hutchinson, & Sowa, 1986), this dissertation aims to meet this need by examining the role of perceived organizational support (POS) in linking employee perceptions of HR practices and important work outcomes. It is

hypothesized that employee perceptions of the HR practices implemented that demonstrate organizational recognition of employee contribution and caring about employee well-being will increase employee POS, which in turn, will lead to positive employee attitudes and behaviors. Further, it is also proposed that employees' professional commitment will interact with POS to influence the outcomes.

Survey data were collected from 193 information technology workers and their direct supervisors within a large corporation. Structural equation modeling was used to examine the hypothesized model, and hierarchical regression analysis was conducted to test the interaction effects. As expected, it was found that employee perceptions of HR practices, including pay level, career development opportunities, work-family support, and relationships with the leader, are positively related to their POS. Higher levels of POS, in turn, resulted in lower turnover intention, and a sense of obligation within the individuals to reciprocate the organization with better job performance and increased OCBs, as well as stronger organizational commitment. In addition, the effects of POS on turnover intention, felt obligation, and organizational commitment were found to be moderated by professional commitment. The findings of this study shed some light on the process through which the implementation of appropriate HR practices may influence employee attitudes and behaviors.

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TABLE OF CONTENTS

List of Tables iv

List of Figures v

Chapter 1: Introduction 1
Antecedents of POS 2
Outcomes of POS and the Mediating and Moderating Process 6
Potential Contributions 9
Overview of Chapters 11

Chapter 2: Theoretical Background and Hypotheses Development 13
Definition of POS 13
Antecedents of POS 15
Pay Level Satisfaction 18
Career Development Opportunities 19
Work-Family Support 21
Leader-Member Exchange (LMX) 22
Outcomes of POS and Mediating Role of Felt Obligation 24
Turnover Intention 24
Organizational Commitment 25
In-Role Performance and OCBs 27
Moderating Role of Professional Commitment 29

Chapter 3: Methods 36
Research Setting and Data Collection Procedure 36
Participants and Response Rate 37
Measures 38
Analysis 43
Analytic Procedure 43
Test of Structural Model Using a Two-Step Approach 43
Evaluation of Model Fit 44
Assessment of Interaction Effects 46

Chapter 4: Results 48
Descriptive Statistics 48
Measurement Model 48
Structural Model 51
Hypotheses Testing for Structural Model 51
Alternative Model Testing for Structural Model 54
Moderating Effects of Professional Commitment 60

Chapter 5: Discussion 699
Summary of Major Findings 699

Limitations 777
Contributions 788
Managerial Implications 81
Future Research Directions 833
Conclusion.....855

Appendix 1: Survey Measures..……..……..……..……..…...87

References 90

LIST OF TABLES

1.	Means, Standard Deviations, Correlations, and Reliabilities	49
2.	Summary of Model Fit Indices	50
3.	Results of Hierarchical Regression Analysis for the Moderating Effects of Professional Commitment on the POS-Turnover Intention Relationship	63
4.	Results of Hierarchical Regression Analysis for the Moderating Effects of Professional Commitment on the POS-Organizational Commitment Relationship	64
5.	Results of Hierarchical Regression Analysis for the Moderating Effects of Professional Commitment on the POS-Felt Obligation Relationship	65

LIST OF FIGURES

1.	Hypothesized Model	14
2.	Structural Model Results for the Hypothesized Model	52
3.	Alternative Model 1	55
4.	Alternative Model 2, 3, 4, and 5	56
5.	Moderating Effects of Professional Commitment on the POS-Turnover Intention Relationship	66
6.	Moderating Effects of Professional Commitment on the POS-Organizational Commitment Relationship	67
7.	Moderating Effects of Professional Commitment on the POS-Felt Obligation Relationship	68

CHAPTER 1

Introduction

Social exchange theory (Blau, 1964) suggests that the exchange relationship between two parties often goes beyond pure economic exchange and entails social exchange. Accordingly, organizational researchers argue that employer and employee exchange not only impersonal resources such as money, services, and information, but also socioemotional resources such as approval, respect, and support (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). Social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) have recently been applied in organizational research to describe the motivational basis behind employee attitudes and behaviors in organizations (Settoon, Bennett, & Liden, 1996; Wayne, Shore, Bommer, & Tetrick, 2002). For example, Eisenberger and colleagues used the concept of perceived organizational support (POS), which refers to employees' perceptions about the degree to which the organization cares about their well-being and values their contribution, to describe the social exchange relationship between the organization and its employees (Eisenberger, Huntington, Hutchinson, & Sowa, 1986). It is argued that based on the norm of reciprocity in social exchange, employees with higher levels of POS are more likely to repay the organization with positive attitudes and favorable work behaviors (Eisenberger et al., 1986; Eisenberger, Fasolo, & Davis-LaMastro, 1990; Eisenberger, Cummings, Armeli, & Lynch, 1997). This contention is further developed into organizational support theory (Rhoades & Eisenberger, 2002).

Mainly drawing on social exchange theory and organizational support theory, as well as other relevant literature in human resource management and organizational

behavior research, this dissertation examines the antecedents and outcomes of POS. The purpose of this chapter is to identify the research questions to be addressed in this research, briefly discuss its potential contributions to the literature and management, and provide an overview of the structure of this dissertation.

Antecedents of POS

Since Eisenberger and colleagues' seminal work on POS (Eisenberger et al., 1986), researchers have examined the effects of POS on various work outcomes (e.g., Eisenberger et al., 1986; Eisenberger et al., 1990; Settoon et al., 1996; Wayne, Shore, & Liden, 1997). In contrast, although organizational support theory (Eisenberger et al., 1986; Eisenberger et al., 2001; Rhoades & Eisenberger, 2002) suggests that employees are likely to develop higher levels of POS when the organization cares about their well-being and values their contributions, until recently, in general, little research has been conducted to investigate the factors that contribute to POS. In particular, while human resource management plays a key role in developing and maintaining the exchange relationship between the employee and the organization (Tsui, Pearce, Porter, & Hite, 1995; Tsui, Pearce, Porter, & Tripoli, 1997), extant research offers little insight on how the implementation of appropriate human resource (HR) practices can help build high levels of POS, which in turn, contribute to positive work attitudes and organizational behaviors.

In the human resource management literature, researchers argue that the implementation of progressive HR practices that affect employee skills, employee motivation, and structure of work can create strategic advantage for the organization (e.g., Arthur, 1994; Becker & Gerhart, 1996; Delery & Doty, 1996; Delaney and

Huselid, 1996; Snell & Dean, 1992). However, although researchers have noted the strategic value of HR in successfully cultivating organizational culture and social relationships that cannot be readily replicated (e.g., Becker & Gerhart, 1996), the role of social relationships is yet to be explicitly investigated in the HR literature (Uhl-Bien, Graen, & Scandura, 2000). As Uhl-Bien et al. (2000) suggested, an important question to be addressed in the organizational behavior and HR literatures is the location of a specific set of HR practices that can promote relationship building. To address this question, one potentially helpful approach is to establish the linkage between the implementation of effective HR practices and the development of positive employee-employer relationships. In other words, examining the role of HR practices in fostering higher levels of POS can meet the need for a more relationship-based approach in the HR literature.

In summary, review of both the POS literature and the HR literature point to the importance of research on the linkage between HR practices and POS. Thus, one purpose of this dissertation is to address this issue by investigating the effects of employee perceptions of several important elements of HR practices on their evaluations of POS. A question that follows is: What HR practices should be included in this investigation?

In the POS literature, Shore and Shore (1995) identified two types of HR practices that are key to the development of higher POS: (1) discretionary practices that imply organizational caring but are not mandated by company policy or union contract, and (2) HR practices that symbolize organizational recognition of the employee's contribution. This proposition suggests that those HR practices that represent different

ways in which the organization shows concern for the employees and values their contributions may be particularly critical for the development of high POS.

Furthermore, if organizations were to employ HR practices to show support for employees, in order to motivate positive employee attitudes and behaviors, theories of motivation become critically relevant in guiding this effort. In the motivation literature, Alderfer's (1972) ERG theory offers "a useful way of thinking about employee motivation" (Steers, Porter, & Bigley, 1996, p. 17). Alderfer's theory conceptualizes three elements of human needs that are relevant to organizational settings and which may operate simultaneously. ERG theory (Alderfer, 1972) holds that individuals attempt to satisfy three levels of needs in organizations: (1) needs that are based on human existence, which are mainly physiological needs (*existence*); (2) needs that are associated with interpersonal relationships in the workplace (*relatedness*); and (3) needs that are related to the development of human potential and capabilities (*growth*). Accordingly, several HR practices are very important in showing support for employees to satisfy these needs. First, satisfactory pay is necessary for meeting individuals' physiological or existence needs. Second, growth needs can be met by sufficient career development opportunities that help employees extend their potential and expand their capabilities. Third, HR practices that provide social support, such as helping employees maintain good work and family relationships and develop positive leader-member exchange relationships, can be instrumental in fulfilling employees' need for relatedness. Therefore, the HR practices chosen to investigate as antecedents of POS include: pay level, career development opportunities, work-family support and leader-member exchange (LMX).

While the choice of other HR practices may appear more straightforward, including LMX as part of employee evaluation of HR practices may need some further clarification. The working relationship that emerges between an employee and his or her direct supervisor or manager is usually referred to as leader-member exchange (LMX; Graen, 1976; Graen & Scadura, 1987). A high quality LMX involves a supportive relationship between the supervisor and the subordinate in which the supervisor provides the subordinate with additional resources, responsibility, trust, influence, and support that go beyond what is indicated by the formal organization (Feldman, 1986; Wayne et al., 1997).

In promoting a relationship-based HR approach, Uhl-Bien and colleagues (Uhl-Bien et al., 2000) emphasized the importance of including LMX in research that investigates HR practices and relationship-building. They suggested that strategic HR system configurations should involve HR components that focus on the building of social capital through facilitation of high quality interpersonal interactions and relationships. Further, higher levels of LMX also satisfy an important need dimension in the ERG theory (Alderfer, 1972) of motivation—need for relatedness, because a high quality exchange relationship with the supervisor constitutes an essential component of the interpersonal relationship at the workplace, which by definition, addresses the employee's relatedness needs. Therefore, while examining the effects of HR practices on POS, the contribution of LMX to POS should not be neglected.

Similar arguments are also made in the POS literature. It is suggested that because the organization is often too abstract and distal to the employees (Reichers,

1985), POS is developed through a process of "personification" (Shore & Shore, 1995; Wayne et al., 1997). That is, the employees "personalize" the organization by accumulation of their experiences over time of the rewards and punishments that they receive from other more powerful organizational members (Shore & Shore, 1995; Wayne et al., 1997). Since employees' direct leaders are often in charge of administrating and allocating discretionary rewards, support, and resources, it is likely that the relationship between the leader and the employee plays an important role in influencing employee POS (Settoon et al., 1996; Wayne et al., 1997).

Therefore, it seems that a high quality LMX is often associated with favorable treatments provided to the employee by the supervisor on behalf of the organization in implementing organizational practices. Thus, it is appropriate to examine the role of LMX as an antecedent to POS, in addition to other variables that may seem to be more direct indicators of HR practices.

Outcomes of POS and the Mediating and Moderating Process

As mentioned earlier, a key concept associated with POS is the norm of reciprocity (Gouldner, 1960). According to organizational support theory, POS can have a positive impact on employee attitudes and behaviors mainly because it creates a sense of obligation within the individuals to repay the organization (Eisenberger et al., 1986; Eisenberger et al., 1990). Despite this contention, most POS studies have only examined the direct effect of POS on various outcomes, while little research has been conducted to investigate the mediating mechanisms through which POS influences employee behaviors and attitudes. One exception is Eisenberger et al.'s (2001) recent research, which specifically examined reciprocation's role in the relationships of POS

with employee commitment and job performance. Their research suggests that an important mediator of the POS-outcome relationship is felt obligation, which refers to an employee's belief regarding whether he or she should care about the organization's well-being and should help the organization obtain its goals (Eisenberger et al., 2001). This finding supports social exchange theory (Blau, 1964) and organizational support theory's (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002) contention that the norm of reciprocity applies to the employer-employee relationship. Specifically, employees respond to favorable treatment by the organization with feelings of obligation to care about the organization's welfare and to act in the organization's behalf, which, in turn, enhance positive work attitudes and behaviors. Following this research, to further validate the role of the reciprocity norm in explaining the mediating mechanism for the relationship between POS and important organizational outcomes, I examine the role of felt obligation as a mediator of the effects of POS on a variety of work attitudes and behaviors.

In the POS literature, organizational commitment, organizational citizenship behaviors (OCBs), job performance, and turnover intention have been the set of outcome variables that are usually found to be related to POS. In addition, these variables also represent the major organizational outcomes generally examined in the organizational behavior literature. Therefore, in this dissertation, I focus on these variables as the outcome variables that directly or indirectly result from POS.

While the way employees are treated by the organization is likely to have a significant impact on employee attitudes and behaviors, the employees' attitudes toward the occupation or profession they work in may also influence these outcomes.

Specifically, the psychological link between a person and his or her occupation that is based on an affective reaction to that occupation, namely, the commitment to one's occupation or profession (Lee, Carswell, & Allen, 2000), is likely to affect one's attitudes and behaviors in the employing organization (Meyer, Allen, & Smith, 1993).

As Lee et al. (2000) argued, because of the meaningful position of occupations or professions in the lives of many people and the potential link of occupational commitment to important work outcomes such as retention and performance, it is important to understand the role of professional commitment. In the literature, some researchers earlier believed that there is a conflict between the values related to one's memberships to his or her occupation and those related to one's employing organization (Gouldner, 1957, 1958). However, other researchers argue that one's commitment to the values and norms of the profession is not necessarily inconsistent or conflicting with those of the employing organization (e.g., Bartol, 1979; Lee et al., 2000). Empirical research has substantiated the latter point of view. It was found that professional commitment had a positive link with organizational commitment (e.g., Mathieu & Zajac, 1990; Wallace, 1993), job satisfaction (e.g., Lachman & Aranya, 1986; Meyer et al., 1993), and performance and OCBs (e.g., Darden, Hampton, & Howell, 1989; Jauch, Glueck, & Osborn, 1978; Lee et al., 2000; Meyer et al., 1993), and a negative relationship with turnover intention and actual turnover (e.g., Bartol, 1979; Lee et al., 2000). In evaluating the alternative models, Lachman and Aranya (1986) found support for the proposition that professional commitment precedes organizational commitment, rather than being in conflict with it.

Despite these research findings, no research has explored how one's commitment to the profession might interact with organizational factors to influence his or her attitudes and behaviors in the employing organization. In this dissertation, I aim to fill this void by examining the moderating role of professional commitment on the effect of POS on outcome variables. Specifically, while it is hypothesized that perceived support from the organization will induce positive work outcomes, it is possible that individuals with different levels of professional commitment might react differently to high levels of POS.

In summary, the major research agenda of the current research are three-fold: (1) investigating a variety of HR practices as antecedents to POS, (2) examining the mediating role of felt obligation in the POS-work outcome relationship, and (3) testing the interaction effect of professional commitment and POS on important work outcomes. To address these issues, a field study was launched among information technology professionals working in the headquarters of a large US-based, Fortune 500 corporation.

Potential Contributions

This dissertation has the potential to contribute to the literature in at least the following aspects. First and foremost, by incorporating HR practices as antecedents of POS, this research bridges the HR and OB literature. As Uhl-Bien et al. (2000) pointed out, although HR and OB are highly interrelated, research in these areas are often not integrated and more integration is necessary. For example, despite the fact that implementation of different HR practices often communicate the degree to which the organization cares about its employees and values their contribution, POS is often

treated as an OB topic and little research has examined its antecedents from the HR perspective. On the other hand, although the behavioral perspective of HR holds that the purpose of various HR practices is to elicit and influence employee attitudes and behaviors, and assumes that employee motivation and behavior is the mediator between HR practices and firm performance (Jackson, Schuler, & Rivero, 1989; Schuler & Jackson, 1987; Wright & McMahan, 1992), HR literature has focused only on the relationship between HR practices and firm performance (e.g., Arthur, 1992, 1994; Becker & Huselid, 1998; Delery & Doty, 1996; Huselid, 1995), and has rarely examined the effects of the implementation of HR practices on employee attitudes and behaviors. In this dissertation, I attempt to examine how employees' evaluation of several different HR practices can influence their perceptions of the level of support from the organization, which in turn, affects their work attitudes and behaviors. Such an approach has the potential to link POS research with HR practices research, and is also supported by the behavioral perspective of HR.

Second, this dissertation validates the proposition of social exchange theory (Blau, 1964) and organizational support theory (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002) on the norm of reciprocity in the employer-employee relationship, by investigating the mediating role of felt obligation in the POS-outcome relationship. Findings of this research would provide further evidence regarding the mediating process through which POS influences employee attitudes and behaviors, and demonstrate how and why organizations can improve employee commitment and induce higher performance by offering employees higher levels of support.

Last, but not the least, using a sample of information technology professionals allows this dissertation to offer some insights on the management of knowledge workers. In the knowledge economy, knowledge workers become a key source of competitive advantage for many firms (Drucker, 1999). However, knowledge workers are known to be more demanding in their working life, and in some cases, more likely to be committed to the profession rather than to a particular organization (Coombs & Gomez-Mejia, 1991; Morhman & Von Glinow, 1990). As a result, management of knowledge workers often requires more efforts in designing HR practices that can attract, maintain, and motivate these employees (e.g., Coombs & Gomez-Mejia, 1991; Drucker, 1999; Morhman & Von Glinow, 1990). This dissertation not only examines how HR practices can influence employee perceptions of POS and its direct and indirect outcomes among knowledge workers, but also investigates the role of professional commitment in this process. Thus, it has important implications for the management of knowledge workers.

Overview of Chapters

In Chapter 2, based on the review of POS literature and other relevant literature, I present the theoretical basis for the proposed model by developing each specific hypothesis. Several key elements of HR practices are proposed to be antecedents of POS (i.e., pay, career development opportunities, work-family support, and LMX). Hypotheses on the direct and indirect outcomes of POS are then presented, followed by the hypotheses on the moderating role of professional commitment.

In Chapter 3, I describe the methods used for this research. The data collection procedure and the sample, the measures used in this study, and the data analysis

techniques are discussed in this section. Chapter 4 offers a description of the results of this research, based on the tests of the proposed model, the specific hypotheses, and the alternative models.

Chapter 5 concludes this dissertation with a discussion of the major findings of this study, its potential contributions, managerial implications, limitations, and future research directions.

CHAPTER 2

Theoretical Background and Hypotheses Development

In this Chapter, based on a review of past research on POS and related constructs, I develop the hypotheses regarding the antecedents and outcomes of POS, and the mediating and moderating mechanisms through which POS influences employee attitudes and behaviors. The Hypothesized Model is depicted in Figure 1.

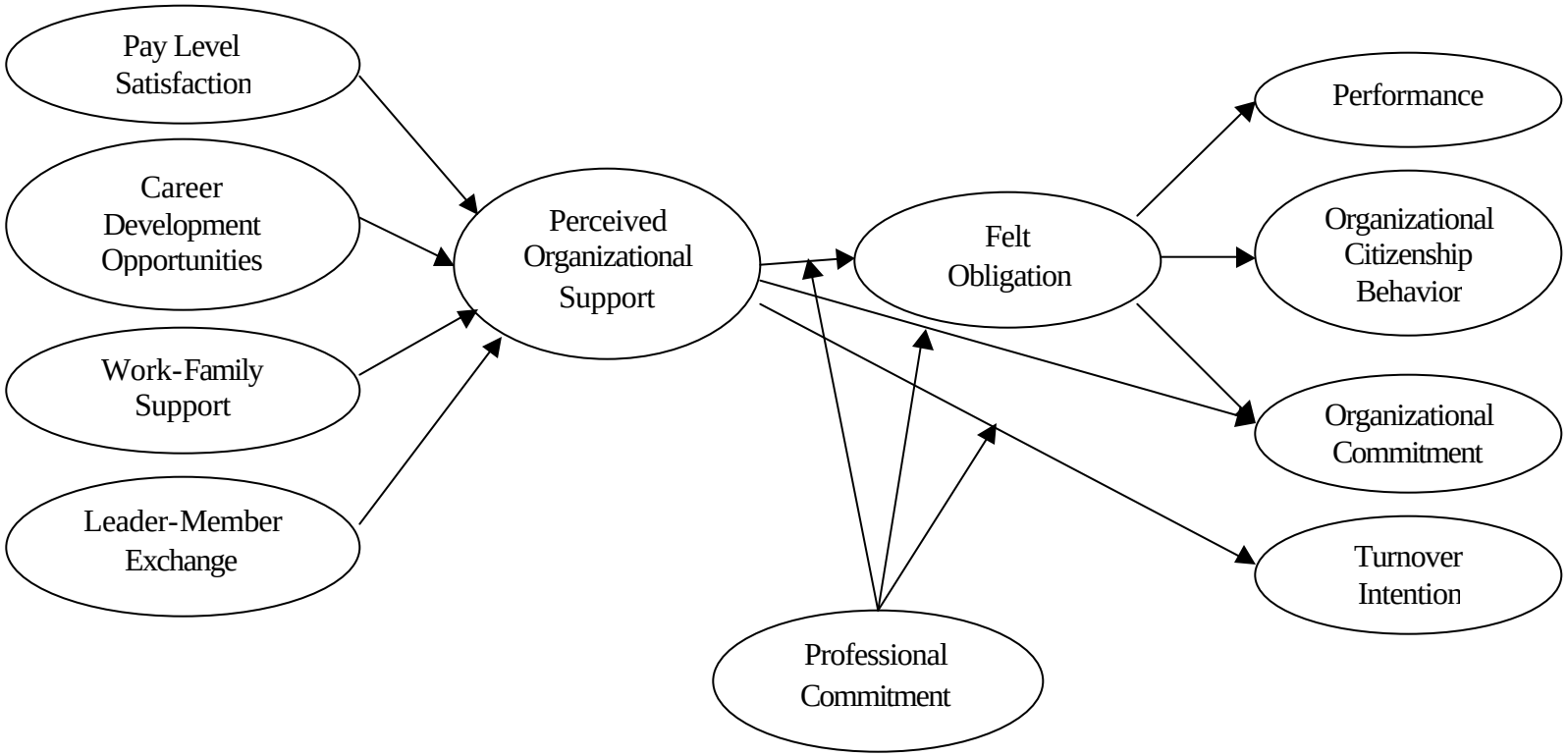
Definition of POS

Following Eisenberger and colleagues' seminal work on POS (Eisenberger et al., 1986), in this dissertation, POS, or perceived organizational support, is defined as employees' perceptions about the degree to which the organization cares about their well-being and values their contribution. POS represents an indispensable part of the social exchange relationship between employees and the employer, because it implies what the organization has done for them, at least in the employees' belief.

POS is a key concept of organizational support theory (Eisenberger et al., 1986; Eisenberger et al., 1997; Rhoades & Eisenberger, 2002), which posits that "employees evidently believe that the organization has a general positive or negative orientation toward them that encompasses both recognition of their contributions and concern for their welfare." (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002, p. 565). Also key to organizational support theory is the norm of reciprocity (Gouldner, 1960), which, applied to the employee-employer relationship, suggests that employees who receive favorable treatment from the employee organization, such as higher levels of POS, would feel an obligation that they should care about the organization's benefits and contribute to the achievement of organizational goals.

FIGURE 1

Hypothesized Model



Antecedents of POS

There are multiple mechanisms that the organization can employ to create employee beliefs that the organization cares about them and values their contribution. In other words, POS may have many different types of antecedents (see Rhoades & Eisenberger, 2002, for a review). As mentioned in Chapter 1, this dissertation focuses on perceptions of a set of important HR practices as the major antecedents of POS.

In the HR literature, the term "HR practices" is rarely explicitly defined. Researchers have taken different focuses when they refer to HR practices. Most research has focused on the role of HR practices in enhancing human capital. For example, Snell and Dean (1992) agreed with Cascio (1991), in noting that "HRM practices are the primary means by which firms invest in their employees" (p. 473). Delaney and Huselid (1996) suggested that progressive HR practices should include those practices that affect employee skills and ability, motivation, and structure of work. Huselid (1995) used the term "high-performance work practices" to refer to what are usually considered HR practices, and suggested that these practices "can improve the knowledge, skills, and abilities of a firm's current and potential employees, increase their motivation, reduce shirking, and enhance retention of quality employees while encouraging nonperformers to leave the firm" (p. 635). On the other hand, Uhl-Bien et al. (2000) stressed the relational aspects of HR practices, and pointed out that HR approaches that do not focus enough on relationships and the social context may have potential problems. It is argued that the way individuals interact within organizations through interpersonal relationships comprises social capital, and the contribution of employees' human capital to firm performance largely depends on social capital (Burt,

1997; Uhl-Bien et al., 2000). Based on these arguments, in this dissertation, I use a working definition of HR practices that incorporates an emphasis on both human capital and social capital. For the purpose of this dissertation, HR practices is defined as the set of practices implemented by the organization to utilize employees' human capital and social capital through developing their knowledge and skills, increasing work motivation, and fostering effective social interactions.

The choice of the specific relevant HR practices in this dissertation is mainly based on the ERG theory (Alderfer, 1972) of motivation and past research in the POS literature (e.g., Eisenberger et al., 1986; Shore & Shore, 1995; Eisenberger et al., 1997).

Extending Maslow's needs hierarchy theory (Maslow, 1954) into the organizational setting, Alderfer (1972) refined the needs hierarchy into three general categories: (1) existence needs (i.e., physiological and safety needs necessary for the existence of an human being), (2) relatedness needs (i.e., needs for interpersonal relationships that would meet one's desire for being accepted, valued, and loved by others), and (3) growth needs (i.e., needs for one's abilities and potential to be developed). Alderfer (1972) held that individuals might seek satisfaction of these needs either progressively or simultaneously. Thus, meeting each of these needs is important for high work motivation. Accordingly, to motivate employees through creating a higher level of POS belief, organizations should try to satisfy these individual needs at different levels.

Similarly, Eisenberger et al. (1997) suggested that higher levels of POS would meet individuals' needs for approval, esteem, social identity, recognition, and rewards. Shore and Shore (1995) also argue that organizational actions that are interpreted by the

employee as symbolic of appreciation, recognition, and discretionary rewards are more likely to contribute to POS. Therefore, I select a set of HR practices that would meet individuals' needs for existence, relatedness, and growth. These HR practices include: satisfactory monetary rewards, career development opportunities, support for work-family balance, and a positive leader-member exchange relationship. Among them, pay, or monetary rewards, meet physiological needs or needs for existence; career development opportunities meet employee needs for growth, or development of one's potential; work-family support balances the need for relatedness with family members and high levels of LMX satisfies need for relatedness in the workplace. As development of POS beliefs is based on individual employees' perceptions of the HR practices implemented by the organization, I ask participants to evaluate their level of satisfaction with pay level, perceived career development opportunities, and perceived work-family support.

In addition, LMX is also included as an antecedent of POS. This decision is made based on at least three reasons: (1) leaders play an important role in deciding the discretionary rewards and provision of other resources, involvement, and support by the organization (Sparrowe & Liden, 1997; Wayne et al., 1997); (2) LMX has been found to be an important contributor of POS (e.g., Eisenberger et al., 2002; Rhoades & Eisenberger, 2001; Wayne et al., 1997); and (3) a higher quality relationship with the leader is an important part of the interpersonal relationship at work, which meets individuals' need for relatedness (Alderfer, 1972).

Therefore, in this dissertation, pay level satisfaction, career development opportunities, work-family support, and LMX are proposed to be antecedents of POS. I discuss each of these variables below.

Pay Level Satisfaction

Organizational support theory holds that favorable rewards indicate the organization values the employees' contribution to the organization, which constitutes a major dimension of POS (Eisenberger et al., 1986; Eisenberger, Rhoades, & Cameron, 1999). Specifically, it is argued that such organizational rewards represent investment by the organization in the employee and are interpreted by the employee as indication of organizational appreciation and recognition, and thus, contribute to the development of POS (Eisenberger et al., 1997; Shore & Shore, 1995).

Different variables related to organizational rewards have been examined in the POS literature. Such variables include pay itself (e.g., Miceli & Mulvey, 2000; Shore & Tetrick, 1991), procedural justice (e.g., Moorman, Blakely, & Niehoff, 1998; Nye & Witt, 1993; Wayne et al., 2002), distributive justice (e.g., Wayne et al., 2002), and general organizational rewards (e.g., Allen, 1995; Rhoades, Eisenberger, & Armerli, 2001). This empirical research has found evidence that organizational rewards positively influences the level of POS.

For example, Shore and Tetrick (1991) found that POS had a positive relationship with employee satisfaction with their pay. Moorman et al.'s (1998) research suggested that employee beliefs in procedural justice contributed to higher levels of POS. In their recent study, Wayne et al. (2002) further found that both procedural justice and distributive justice perceptions were positively related to POS. Similarly,

Rhoades et al. (2001) also found that employee evaluations of favorable organizational rewards and procedural justice were both antecedents of POS.

Although different indicators of organizational rewards have been used in these studies, the research findings converge to suggest that rewards play an important role in employee perceptions of POS. However, in order to investigate the effect of compensation practice on POS, it would be redundant to evaluate all of these variables simultaneously in the current study here, because past research suggests that these variables, such as procedural justice (e.g., Hom & Griffeth, 1995; Welbourne, 1998), distributive justice (e.g., McFarlin & Sweeney, 1992; Summers & Hendrix, 1991; Sweeney & McFarlin, 1993), and actual pay (e.g., Motowidlo, 1983; Roberts & Chonko, 1996), all contribute to the same variable, pay satisfaction. Thus, in this dissertation, I use the degree to which employees are satisfied with the level of pay they receive as the measure of employee evaluation of organizational pay practices. Based on past research findings on the positive relationship between POS and variables that contribute to pay satisfaction, I hypothesize that the degree to which employees are satisfied with their pay is likely to have a positive impact on POS.

Hypothesis 1: Employees' pay level satisfaction will be positively related to the level of POS.

Career Development Opportunities

In addition to meeting physiological needs, employees also have a desire to extend their potential and develop their capabilities in organizations, or in other words, to satisfy their needs for growth and self-actualization (Alderfer, 1972; Maslow, 1954). Thus, another way that HR practices can create employee beliefs in higher POS is

through providing them developmental opportunities that would meet their needs for personal growth.

Similarly, Rhoades and Eisenberger (2002) suggested that providing potential career opportunities such as training and promotions may imply a high level of concern for employees and the recognition of their contributions by the organization. Since these organizational actions go beyond what is mandated by company policy or union contract, employees are likely to view them as discretionary treatment by the organization that are indicative of organizational caring and support (Eisenberger et al., 1997; Shore & Shore, 1995). Eisenberger et al. (1999) also held that opportunities for recognition and promotion have positive associations with POS.

Past research has provided some evidence that career development opportunities offered by the organization may enhance POS beliefs. For example, Tetrick, Shore, and Miles (1994; as cited in Shore & Shore, 1995) concluded that training provided by the organization is a predictor of POS. Wayne et al. (1997) found that developmental experiences and promotions both have significant positive impact on employees' perceptions of organizational support. In addition, Meyer and Smith (2000) also detected a positive relationship between career development and perceived support from the organization. Following this research, I predict that to the extent that an employee believes that the organization provides opportunities for career development, he or she will have a higher level of POS.

Hypothesis 2: Employees' perceived career development opportunities will be positively related to the level of POS.

Work-Family Support

Another HR practice that can meet employee needs, and thus, increase POS is work-family support. As Armeli, Eisenberger, Fasolo, and Lynch (1998) suggested, POS may be related to organizational actions that strengthen employee beliefs that the organization would provide sympathetic understanding and material aid to deal with stressful situations at work or home. These factors would help meet the need for emotional support and interpersonal relationships, thus enhancing employee POS. It is very likely that if the organization provides a high level of work-family support, the employees will consider the organization as more considerate of their well-being and being more supportive.

So far, little research has been conducted to explore the possibility that another contributor of POS may be work-family support. However, there has been some indication that the degree to which the organization shows concern for the employees' family issues and provides support for work-family balance is related to employee evaluations of POS. For example, Kossek and Nichol (1992) found that greater use of on-site child care led to more favorable employee work attitudes. POS was found to be positively related to perceived sufficiency of family-oriented actions among a group of expatriate managers (Guzzo, Noonan, & Elron, 1994; cf. Armeli et al., 1998). Further, Lambert (2000) suggested that work-life benefits directly contribute to POS and OCBs. Although she did not find support for the mediating role of POS, this proposition deserves further investigation. These findings all suggest that provision of work-family support may lead employees to have positive evaluations of the organization, such as

higher POS. Thus, in this dissertation, the contribution of work-family support to POS is examined.

Hypothesis 3: Employees' perceived work-family support from the organization will be positively related to the level of POS.

Leader-Member Exchange (LMX)

As Eisenberger et al. (1986) conceptualized, since the supervisor often acts as agent of the organization to direct discretionary rewards and to evaluate the employees' contribution, while these discretionary rewards and evaluations are key to POS, the treatment an employee receives from the supervisor tends to contribute to employee perceptions of the support he or she receives from the organization (Wayne et al., 1997). Thus, it is believed that the level of leader-member exchange (LMX) or supervisory support bears a positive relationship to POS (e.g., Rhoades & Eisenberger, 2002; Rhoades et al., 2001; Wayne et al., 1997).

This proposition has received some empirical substantiation. For example, although Wayne et al. (1997) found POS and LMX had a mutual influence on each other, they concluded that "the quality of leader-member exchange appears to have a stronger effect on perceived organizational support, indicating that LMX plays a key role in affecting employees' perceptions of organizational support" (p. 104). In examining the mediating role of POS between supervisor support and affective commitment, Rhoades et al. (2001) also provided evidence that supervisor support is predictive of POS.

Despite these findings that suggest LMX or supervisor support leads to POS, other researchers have raised the possibility that a positive relationship between LMX

or supervisor support and POS may suggest a reversed causality such that higher levels of POS makes the employees believe that the leader, as agent of the organization, treats them in a favorable way and holds a better relationship with them. To address this concern, Eisenberger et al. (2002) conducted a study to examine the relationship of temporal changes between supervisor support and POS, using a panel design. This research confirmed organizational support theory's conceptualization that a better relationship with the supervisor contributes to higher levels of employee POS, disconfirming the reversed causal direction.

In addition to the theorization and findings of organizational support theory, the positive association between LMX and POS is also consistent with ERG theory (Alderfer, 1972). According to ERG theory, one important aspect of the needs employees seek to satisfy in organizational settings is high quality interpersonal relationships. Thus, in evaluating the support provided by the organization, employees would take into account the work relationships they have with the supervisor. If the employee has a higher quality exchange relationship with the leader, he or she would feel that the organization has contributed to satisfying his or her need for relatedness, and thus, perceive that the organization cares about his or her well-being. Thus, following both POS literature and ERG theory, I hypothesize that the better the exchange relationship between the employees and their supervisor, the higher the level of POS.

Hypothesis 4: Employee perception of LMX will be positively related to the level of POS.

Outcomes of POS and Mediating Role of Felt Obligation

As mentioned above, reciprocity is a basic principle of social exchange. Based on the reciprocity norm, organizational support theory posits that POS, which indicates the evaluation of the organization's commitment to individuals, would produce a sense of obligation to care about the organization and to help the organization reach its objectives (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002; Eisenberger et al., 2001; Lynch, Eisenberger, & Armeli, 1999). In other words, higher levels of perceived organizational support create obligations within individuals to repay the organization with continued stay, higher commitment, and better performance of job responsibilities and citizenship behaviors (Settoon et al., 1996). I discuss each of these outcomes and propose specific hypotheses below.

Turnover Intention

Social exchange theory (Blau, 1964) and organizational support theory (Eisenberger et al., 1986) suggest that employees who receive high levels of support from the organization are inclined to repay the organization. One essential way to reciprocate the organization's favorable treatment is through continued participation (Allen, Shore, & Griffeth, 2003; Wayne et al., 1997). As Allen et al. (2003) argued, March and Simon's (1958) ground work on the inducements-contributions relationship between the organization and the employees also indicates that employees who receive more support as part of the inducements offered by the organization would have less desire to leave the organization.

POS research provides some evidence in support of this proposition. For example, Guzzo et al. (1994) found that expatriate managers who perceive higher levels

of support from the organization were less likely to seek employment elsewhere. The negative relationship between POS and turnover intention was also evident in some other studies (e.g., Wayne et al., 1997; Eisenberger et al., 2001). Rhoades and Eisenberger (2002) concluded that desire to remain with an organization had a large, positive relationship with POS. Based on this stream of research, a negative relationship between POS and turnover intention is hypothesized.

Hypothesis 5: Employee POS will be negatively related to turnover intention.

Organizational Commitment

Another important organizational outcome that might result from POS is commitment to the organization. As organizational support theory (Eisenberger et al., 1986; Eisenberger et al., 1990; Rhoades and Eisenberger, 2002) suggests, POS, which is an indicator of the organization's commitment to the employee, creates an obligation within the employee to care about the organization and reciprocate with commitment and loyalty. Tsui et al. (1997) also held that based on the reciprocity norm (Gouldner, 1960), organizational actions indicating caring of and concern for employees may enhance organizational commitment. Eisenberger and colleagues (Eisenberger et al., 2001; Rhoades et al., 2001) further argued that employees tend to reciprocate the organization's support with higher commitment, in an attempt to help maintain their self-image, avoid the stigma associated with violation of the reciprocity norm, and encourage future favorable treatment from the organization.

Empirical support has been found for a positive relationship between POS and organizational commitment (e.g., Bishop, Scott, & Burroughs, 2000; Eisenberger et al, 1990; Eisenberger et al, 2001; Settoon et al., 1996; Shore & Tetrick, 1991; Wayne et al.,

1997). Meta-analysis suggests that the overall effect size for the relationship between organizational commitment and POS is large (Rhoades & Eisenberger, 2002). Further, Rhoades et al. (2001) used repeated measures of POS and affective commitment to assess the direction of causality between these two variables, and their results suggested that POS contributed to changes in affective commitment over time.

Thus, consistent with organizational support theory and previous research, I hypothesize that employees will reciprocate the organization's support with higher organizational commitment.

Hypothesis 6: Employee POS will be positively related to organizational commitment.

Further, although POS is likely to induce employee commitment to the organization, this effect may function through a sense of felt obligation to reciprocate the organization's commitment to them (Eisenberger et al., 1986; Eisenberger et al., 2001). Based on this proposition, Eisenberger et al. (2001) hypothesized that felt obligation mediates the POS-commitment relationship, however, it was found that felt obligation only played a partial mediating role. This result suggested that POS still had a direct association with affective organizational commitment. In interpreting the findings, Eisenberger et al. (2001) contended that because organizational support fulfills employees' needs for relatedness and affiliation (Armeli et al., 1998), POS may increase employees' social identification with the organization, which constitutes an important part of affective organizational commitment (Mowday, Steers, & Porter, 1979). Thus, POS may have a direct effect on organizational commitment, as well as an indirect effect via felt obligation.

Hypothesis 7: The positive relationship between POS and organizational commitment will be partially mediated by felt obligation.

In-Role Performance and OCBs

According to organizational support theory, if employees perceive more support from the organization, they are likely to show greater attendance and efforts, which in turn, lead to better performance (Eisenberger et al., 1986). Eisenberger et al. (1986) found that employees reciprocated POS by reduced absenteeism. While this result indicated an increase in efforts to meet organizational goals as a result of higher POS, the authors called for research directly examining the effects of POS on work performance.

Subsequent research on this issue has generated mixed results. On the one hand, Eisenberger and colleagues' studies provided empirical evidence for a positive relationship between POS and job performance. For example, Eisenberger et al. (1990) found that higher levels of POS were associated with higher levels of conscientiousness in carrying out job responsibilities and with one indicator of performance, innovation on behalf of the organization. Further, in a study of police officers, Armeli et al. (1998) found direct evidence for the positive effects of POS on police performance. On the other hand, while both Settoon et al. (1996) and Wayne et al. (1997) hypothesized that both LMX and POS would predict employees' in-role behaviors, the relationship between POS and in-role performance turned out to be non-significant in these studies. Thus, the POS-job performance linkage deserves further examination.

Further, the perception that the organization values and cares about them may induce employees to incorporate organizational membership and role status into their

self-identity, and thus increase prosocial behaviors carried out on behalf of the organization (Eisenberger et al., 1990). These extra-role behaviors that are beneficial to the organization but are not required by job role descriptions or rewarded by formal organizational reward systems are referred to as organizational citizenship behaviors (Organ, 1988).

Organ (1988) further noted that employees' positive attitudes towards the organization, such as POS, may be even more closely related to their extra-role behaviors than to in-role behaviors. In fact, the positive relationship between POS and extra-role performance has received considerable empirical support. For example, Shore and Wayne (1993) found that POS was a better predictor of citizenship behaviors than more traditional commitment concepts of affective commitment and continuance commitment. Eisenberger et al. (1990), Settoon et al. (1996), and Wayne et al. (1997) all supported the notion that the higher the level of POS, the more likely are the individuals to perform extra-role behaviors that are beneficial to the organization. Eisenberger et al. (2001) also found that employees with higher levels of POS felt more obligated to help the organization reach its objectives, and thus, engaged in more organizationally spontaneous behaviors, a form of OCBs. In their meta-analysis, Rhoades and Eisenberger (2002) concluded that the relationship between POS and extra-role performance directed to the organization was higher than other categories of performance. Thus, it is likely that higher levels of POS will lead to increased OCBs.

While the previous discussion suggests a positive effect of POS on the performance of in-role job responsibilities and OCBs, the process of this effect deserves further investigation. Based on the norm of reciprocity, organizational support theory

suggests that the reason that employees who believe that they receive a higher level of support from the organization will perform better on job roles and extra-role behaviors is that they feel obligated to care about the organization and help meet its objectives through positive attitudes and behaviors towards the organization (Eisenberger et al., 1986). Such felt obligation to reciprocate the organization's favorable treatment, thus, may play a key role in the POS-performance relationship. However, except for a recent study by Eisenberger and colleagues (Eisenberger et al., 2001), past research examining the effects of POS has not explicitly examined this process (Eisenberger et al., 2001).

Hence, following Eisenberger et al. (2001), I hypothesize that POS will influence employees' felt obligation to take actions to help the organization, which leads to performance within and beyond job requirements that are beneficial to the organization. In other words, the effects of POS on job performance and OCBs are likely to be mediated by felt obligation.

Hypothesis 8: Employee POS will be positively related to their felt obligation, which in turn, will be positively related to in-role performance and OCBs.

Moderating Role of Professional Commitment

While it is likely that favorable treatments from the organization will create high levels of POS among employees, and in turn, induce positive work attitudes and behaviors, individuals may react differently to POS. An important factor that may influence these reactions is one's attitudes towards one's profession or vocation. Blau (1985) used the term "career commitment" to tap this concept. In the literature, to some degree, career commitment, occupational commitment, and professional commitment have been used interchangeably to refer to one's commitment to the profession or

occupation. However, there are slight, but meaningful, differences between these terms. As Lee et al. (2000) and Meyer et al. (1993) suggested, the term career is sometimes confusing, because career has been used by some researchers to refer to the series of jobs, vocational choices, and other work-related activities from entry into the workforce to retirement, and by some other researchers to refer to the particular job, occupation, or profession. Thus, the word career commitment is avoided here. Occupational commitment is preferred in some research, because it does not have the ambiguity as career commitment, while it can be applied to both professional and nonprofessional employees. In this dissertation, however, since the current study is conducted among professional workers, I choose to use professional commitment over the more general term occupational commitment.

As discussed in Chapter 1, organizational research suggests that the degree to which individuals are committed to their profession has an impact on a variety of important outcome variables, such as organizational commitment, turnover, and performance, above and beyond the effects of their attitudes toward the particular employing organization (e.g., Lee et al., 2000; Meyer et al., 1993). Some researchers assumed that there exists an organizational-professional conflict, because the employing organization and the profession often have incompatible values and demands (Brierley, 1998; Scott, 1966; Sorensen, 1967; Sorensen & Sorensen, 1974). Specifically, it was argued that, due to the inherent dilemma individuals face in choosing between complying to the goals and values of the organization and those of the profession, higher professional commitment tends to result in attitudes and behaviors that are not beneficial for the employing organization, such as lower loyalty. However, this

contention has been challenged both theoretically and empirically. For example, Aranya and colleagues (Aranya & Ferris, 1983; Aranya & Jacobson, 1975) proposed that professional and organizational commitment may be compatible and even help the development of each other over time. Lachman and Aranya (1986) tested the two competing models on the compatibility of organizational commitment and professional commitment, and the findings suggested that the contention that these two types of commitment are congruent with each other is a more viable formulation. Bartol's (1979) research also supported the challenges to the notion that there is an inherent conflict between professionals and their employing organizations.

Although it is likely that both organizational factors and professional commitment are functioning in influencing organizational outcomes, extant research has not explicitly examined whether and how employees' professional commitment might interact with their feelings about the employing organization to influence their attitudes and behaviors in the organization. In this dissertation, I intend to address this gap by testing the potential interaction effects of POS and professional commitment on the outcome variables. A discussion on each of the outcomes is provided below and the specific hypotheses are proposed.

As Lee et al. (2000) pointed out, while models of organizational turnover (e.g., Hom & Griffeth, 1995; Lee & Mitchell, 1994; Mobley, Griffeth, Hand, & Meglino, 1979; Price & Mueller, 1981) typically ignore occupation-related variables, it is important to integrate professional commitment into models of organizational turnover. In fact, empirical research has supported the notion that professional commitment contributes to the turnover intention and actual turnover. For example, Bartol (1979)

found that professional commitment was a negative predictor of turnover expectancy. Blau (1989) detected a significant negative relationship between career commitment and actual turnover among bank tellers. Meyer et al. (1993) also found that commitment to the nursing profession was associated with lower intention to leave the organization. These findings suggest that employees who are committed to the profession are less likely to leave the employing organization.

In this dissertation, it is hypothesized that employees with higher POS are less likely to leave the organization. In light of the research on the negative impact of professional commitment on employee turnover decisions, it is likely that the relationship between POS and turnover intention will be influenced by the individuals' professional commitment. Specifically, the effects of low POS on turnover intention may be dampened by high levels of professional commitment. Thus, it is hypothesized that POS and professional commitment will interactively affect turnover intention.

> Hypothesis 9: The negative relationship between POS and turnover intention will be stronger for employees with lower professional commitment, compared to those with higher professional commitment.

Members of the workforce can be committed to various domains at work (Morrow, 1983, 1993), and among them, commitment to the organization and the profession has received the most attention. While organizational commitment refers to the beliefs in and acceptance of the goals and values of the employing organization, and a willingness to exert effort on behalf of the organization and to maintain organizational membership, professional commitment refers to these feelings of a person toward the chosen profession or line of work (Vandenberg & Scarpello, 1994). Starting from a

speculation on a conflicting relationship between professional commitment and organizational commitment, considerable research has been conducted on the relationship between these two types of commitment. This research has provided strong support for a positive relationship between these two types of commitment, including several meta-analytic studies (Lee et al., 2000; Mathieu & Zajac, 1990; Wallace, 1993). Further, Vandenberg and Scarpello (1994) proposed that because a moderately stable level of professional commitment is often formed prior to organizational entry during the process of occupational socialization, professional commitment is likely to be a causal antecedent to organizational commitment. In longitudinal research among management information systems professionals, this view was supported through cross-lagged analysis.

Thus, it is likely that an individual's commitment to the employing organization will be influenced by his or her commitment to the profession. Moreover, this effect of professional commitment may interact with organization-relevant variables. Specifically, in examining the influence of employee POS on organizational commitment, the role of professional commitment should not be neglected. While employees perceiving lower levels of support from the organization may be less likely to be committed to the organization, this effect may be less strong among those with higher professional commitment. In other words, the POS-organizational commitment relationship will likely be moderated by the individuals' professional commitment.

> Hypothesis 10: The positive relationship between POS and organizational commitment will be stronger for employees with lower professional commitment, compared to those with higher professional commitment.

In addition, employees who are strongly committed to their profession might be more likely to set higher performance standard and more willing to work hard to achieve the goals (Wallace, 1995; Lee et al., 2000). Wallace's (1995) research showed that lawyers who have a higher commitment to the legal profession are more motivated to work hard. Similarly, in a study conducted among university professors, Jauch et al. (1978) found that researchers with stronger professional commitment had higher research productivity, among university professors. Lee et al. (2000) also believed that professional commitment has a potential link with work efforts and work performance, and their proposition received support by meta-analytic results. Furthermore, the positive effect of professional commitment on work efforts was also revealed in Carson's (1998) study, in which professional commitment was positively related to three different dimensions of OCBs, including sportsmanship, altruism, and civic virtue.

Thus, it seems that employees with higher professional commitment are likely to exert more effort at work, which leads to higher performance and more OCBs. At the same time, in this dissertation, it is hypothesized that POS will create a sense of felt obligation within the individuals to perform better. It is likely that these two sources of motivation may not be completely independent from each other. Specifically, while employees who perceive low POS may feel less obligation to work hard, for those who are highly committed to the professional commitment, the influence of POS may be less salient. That is, I hypothesize professional commitment to be a moderator on the effect of POS on felt obligation.

Hypothesis 11: The positive relationship between POS and felt obligation will be stronger for employees with lower professional commitment, compared to those with higher professional commitment.

CHAPTER 3

Methods

In this chapter, I describe the research setting in which the study was conducted, the procedure for data collection, the measures for the variables in the conceptual model, and the analytic techniques used to test the hypotheses.

Research Setting and Data Collection Procedure

The hypothesized model was tested in a field setting. As Brewer (2000) suggested, research conducted in natural field settings is often associated with greater external validity, generating more robust, representative, and relevant findings.

Data were collected from a random sample of information technology professionals working in the headquarters of a large, U.S.-based, Fortune 500 company. Limiting the participants to information technology professionals constrains sources of variance associated with employees in a wide variety of functions that may confound the effects of the independent variables, and thus allows better drawing of causal inferences.

An endorsement letter was obtained from the head of the IT function, and the contact information for the employees and their direct supervisors were provided from the company records by the human resource department. Confidentiality of the completed surveys was guaranteed to all respondents. It has been argued that obtaining support from the management is helpful for gaining trust from the respondents, confirming the purported use of the surveys, and increasing the probability of returning the questionnaires (Dillman, 1978, 2000; Roth & BeVier, 1998). However, it was emphasized to the employees that their participation was completely voluntary and the

company would not have access to their individual responses. Only overall results would be provided.

Data were collected from web-based surveys provided via a platform at the University of Maryland Smith School of Business. Thus, respondents provided data directly. After receiving all the responses, the data were then directly downloaded into a database, thereby avoiding data entry errors that may occur in paper-and-pencil surveys. Research comparing computerized surveys and paper-and-pencil surveys suggests that, compared to more traditional means, computerized surveys not only provide measurement equivalence and comparable item variability and covariance patterns (Donovan, Drasgow, & Probst, 2000; King & Miles, 1995; Stanton, 1998), but also may have less social desirability distortion and avoid large proportions of missing values (Richman, Kiesler, Weisband, & Drasgow, 1999; Stanton, 1998). Thus, it is concluded that web-based surveys can provide quality, useful data.

Participants and Response Rate

Based on the contact information obtained from the human resource department, emails were sent to 434 employees and link was provided for the web-based survey. Among these employees, 260 responded, yielding a response rate of 59.9%. Upon reception of employee responses, emails were sent to the direct supervisors of those who responded, to ask them to provide performance and OCB ratings for these employees. Supervisors of 193 employees completed the survey, providing performance and OCB data for 74.2% of the employees who responded. Thus, the final sample size for this study is 193. The number of employees evaluated by each supervisor varied from one to seven, with most supervisors rating only one or two employees.

Among the 193 respondents for whom both employee self-reports and supervisor ratings were available, 71.0% were Caucasion /White, 31.4% were women, and 74.6% were married. The average age was 36.2 years, the average organizational tenure was 5.2 years, and the average job tenure was 1.7 years. A majority (95.2%) of these employees had college or higher education. Specifically, 39.2% of the respondents possessed a bachelor's degree, 13.8% received some graduate education, and 41.8% had a graduate degree.

Measures

The unit of analysis for this study is the individual employees. Although organizational practices are examined as antecedents of POS, it is individual employees' perceptions about how these practices are implemented that influence their beliefs in POS. Therefore, these variables are operationalized as individuals' evaluations of their satisfaction with these practices (e.g., pay level satisfaction) or the level of these practices they receive (e.g., career development opportunities and work-family support). The outcome variables examined in this study are individual employees' attitudes and behaviors in the organization as a response to perceived support from the organization. Therefore, it is appropriate to measure all the variables in the conceptual model at the individual level of analysis.

Survey data were collected from two sources: ratings on performance and OCBs were obtained from surveys of employees' direct supervisors, and data on other variables were collected from employees. Unless otherwise noted, all the variables were measured by the subjects' responses based on 7-point Likert-type scales (1 = strongly disagree, 7 = strongly agree). The specific measures used are described below and listed

in Appendix 1. The reliabilities (Cronbach's alpha) for the scales are summarized in Table 1, as well as provided here.

Pay Level Satisfaction

The degree to which employees were satisfied with their current pay level was measured by selected items from the pay level satisfaction scale developed by Henaman and Schwab (1985). In response to complaints in a pilot study about redundancy in the content of the questions, I chose to use three top-loading items from the original scale. A sample item is "My current salary." Respondents were asked to indicate their feelings on a 7-point Likert –type scale (1=very dissatisfied, 7=very satisfied). The Cronbach's alpha for this scale was .95.

Perceptions of Career Development Opportunities

To measure employees' perceptions of opportunities they have for career development, a four-item scale was developed in this study. While this scale focuses on career related development provided by the organization, it is a more global measure of development. A sample item is "My organization provides me with the opportunity to achieve my career goals." The Cronbach's alpha for this scale was .95.

Work-Family Support

Three items from Judge, Boudreau, and Bretz (1994) were adopted to measure the degree to which the organization provided support for employees to balance work and family demands. A sample item is "My organization provides programs to assist balancing demands of dual career couples." The Cronbach's alpha for this scale was .88.

Leader-Member Exchange (LMX)

To examine the quality of exchange relationship between the employees and their leaders, Graen and Scandura's (1987) LMX-VII scale was used to measure leader-member exchange. A sample item is "My working relationship with my supervisor is extremely effective." The Cronbach's alpha for this scale was .75.

Perceived Organizational Support (POS)

Following recent research on POS (e.g., Eisenberger et al., 2001; Lynch et al., 1999; Rhoades et al., 2001), five high-loading items from the Survey of Perceived Organizational Support (SPOS; Eisenberger et al., 1986) were selected to measure employees' perceived organizational support. The validity and unidimensionality of this scale has been substantiated by previous research (e.g., Eisenberger et al., 1990; Shore & Wayne, 1993). Therefore, as Rhoades and Eisenberger (2002) suggested, although for practical reasons, many studies have used shortened versions of the original SPOS scale, this practice is not problematic. A sample item is "My organization really cares about my well-being." The Cronbach's alpha for this scale was .94.

Turnover Intention

Employees' turnover intention was measured by six items adopted from Bluedorn (1982), which were also used by Sturman and Short (2000). This scale consists of two-subscales. First, respondents were asked to answer the following question: "If I have my way I will be working for my current company in…"; second, they were asked to answer the question "I intend to leave my current company in the next…" For both questions, three choices were given: (a) three months, (b) six months, and (c) 12 months from now. For the first question, the respondents were asked to

indicate the degree they will act as suggested in the question on a 7-point Likert scale (1 = very unlikely, 7 = very likely), and for the second question, respondents were asked to indicate the likelihood in percentage that they will leave the company (choices include 0 %, 25 %, 50 %, 75 %, and 100 %). Responses to these six items were standardized and aggregated to create the score for the turnover intention scale. The Cronbach's alpha for this scale was .85.

Organizational Commitment

Organizational commitment refers to the relative strength of an individual's identification with and involvement in a particular organization (Porter, Steers, Mowday, & Boulian, 1974). Measurement of this variable consisted of nine items from the Mowday et al.'s (1979) Organizational Commitment Questionnaire (OCQ). Analysis by Bozeman and Perrewé (2001) indicated that six items from the original 15-item OCQ measure overlap with turnover cognitions and should be removed to avoid inflating the potential link between organizational commitment and turnover intentions. Therefore, only the remaining nine items were used. A sample item is "I find that my values and the organization's values are very similar." The Cronbach's alpha for this scale was .93.

In-Role Performance

The employees' performance on the job was evaluated by their immediate supervisors, using three items adapted from MacKenzie, Podsakoff, and Fetter (1991), Podsakoff and MacKenzie (1994), and Tsui (1984). A sample item is "[This employee] performs his or her job the way I like to see it performed." The Cronbach's alpha for this scale was .89.

Organizational Citizenship Behaviors (OCBs)

Organizational citizenship behaviors refer to employee behaviors that are beneficial for the organization but are not specified in the job description or rewarded by the formal organizational system (Organ, 1988). This variable was measured with a three-item scale adopted from Chen, Hui, and Sego (1998). This scale was based on the altruism measure developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990). A sample item is "[This employee] always is ready to help or to lend a helping hand to those around him or her." The Cronbach's alpha for this scale was .93.

Felt Obligation

Employees' felt obligation to care about the organization and to help the organization reach its goals was measured by three top-loading items from the scale developed by Eisenberger et al. (2001). A sample item is "I feel a personal obligation to do whatever I can to help my company achieve its goals." The Cronbach's alpha for this scale was .86.

Professional Commitment

Professional commitment refers to the psychological link between a person and his or her profession that represents the degree to which he or she is dedicated to, care about, and is proud to be a member of that profession (Lee et al., 2000; Wallace, 1995). This variable was measured with three items adapted from Blau (1988). A sample item is "If I could do it all over again, I would choose to work in the IT profession." The Cronbach's alpha for this scale was .92.

Analysis

Analytic Procedure

Following the approach taken by previous researchers (e.g., Eisenberger et al., 2001), to test the hypothesized model, data were analyzed through a combination of two analytic procedures. The path model containing the direct and mediated effects was examined via structural equation modeling using EQS program (EQS 5.7b, Bentler, 1998), and the interaction effects between POS and professional commitment were tested via moderated hierarchical regression using SPSS.

Test of Structural Model Using a Two-Step Approach

Structural equation modeling can be used to conduct a simultaneous test of the entire system of variables in the hypothesized model to determine the extent to which it is consistent with the data (Byrne, 1994). The maximum likelihood estimation technique was used to estimate the models, because this technique has generally been found to generate reliable results even in situations where the data may violate the assumptions of structural equation modeling such as normal distribution and large sample size (Chou & Bentler, 1995; Hoyle & Panter, 1995).

To run the structural models, a correlation matrix containing the appropriate variables and the standard deviations of those variables generated using SPSS were imported into EQS. The EQS program then generated the covariance matrix, which is used to estimate the model.

Following the recommendation of Anderson and Gerbing (1988), I used a comprehensive, two-stage analysis, in which the measurement model was first confirmed using confirmatory factor analysis, and then structural equation modeling

was performed based on the measurement model to estimate the fit of the hypothesized model to the data. The measurement model, which specifies and tests the relationships between the observed measures and their underlying constructs, provides a confirmatory assessment of construct validity (Bentler, 1978). The structural model then tests the causal relationships among the latent constructs, as posited by the theory (Anderson & Gerbing, 1982; 1988). Accomplishing the model-building task through a two-step procedure is believed to be an improved approach over a one-step analysis (Anderson & Gerbing, 1988).

It is suggested that in structural models, the sample size to estimated parameters ratio should be over 5:1 (Bollen, 1990). To ensure adequate sample size relative to the number of parameters estimated, I used a combination of two strategies to reduce the number of indicators for the latent constructs. First, I used all items as indicators for the mediating variables in the model (i.e., POS and felt obligation). Second, single-scale score indicators were used for other latent variables. Following the procedures suggested by previous research (e.g., Gowan, Riordan, & Gatewood, 1999; Podsakoff, Williams, & Todor, 1986), the factor path estimates were fixed to the square root of scale reliabilities, and the error term variances were set to 1 minus the scale reliability times the variance of the observed score. The four exogenous variables—pay level satisfaction, career development opportunities, LMX, and work-family support—were allowed to covary, in order to account for the correlations among these constructs.

Evaluation of Model Fit

As Bollen (1990) recommended, I examined and reported a set of multiple indices of model fit.

First, chi-square ($\chi 2$) values are reported as the index of absolute fit, which reveals the extent to which the covariances estimated in the model match the covariances in the measured variables. Low and nonsignificant values of $\chi 2$ values are desired (Kline, 1998). However, since the $\chi 2$ values are over-sensitive to sample size and rely on perfect fit as the standard for comparison, it is suggested that caution should be exercised in using $\chi 2$ values to evaluate model fit (Bollen, 1989).

Second, I report a set of incremental fit indices, which indicates the extent to which the research model provides an improved overall fit relative to a null model or an independence model, in which the observed variables are usually assumed to be uncorrelated. A commonly reported incremental fit index is Comparative Fit Index (CFI), which ranges from zero to one, with one indicating perfect fit. A similar index is the Joreskog-Sorbom Goodness of Fit Index (GFI) that was originally associated with LISREL program. In addition, as Hoyle and Panter (1995) suggested, I also report the Nonnormed Fit Index (NNFI), which includes a built-in correction for model complexity. It is generally believed that models with CFI, GFI, and NNFI values of .90 or higher provide a good fit to the data (e.g., Hoyle & Panter, 1995).

In addition, I also report two other widely used indices: the Standardized Root Mean Squared Residual (SRMR) and the Root-Mean Squared Error of Approximation (RMSEA). SRMR is a standardized summary of the average covariance residuals. A favorable value of the SRMR is less than .10 (Kline, 1998). RMSEA also indicates the extent to which the residuals in the model differ from zero (MacCallum, Browne, & Sugawara, 1996). In general, models with RMSEA of less than .05 are considered to reflect a good fit and models with RMSEA of between .05 and .08 are considered to

have a fair fit to the data (Browne & Cudeck, 1993). It is further suggested that RMSEA of .08 to .10 indicates mediocre fit and RMSEA of above .10 indicates poor fit of the model to the data (MacCallum et al., 1996).

According to Hu and Bentler (1995), using the combination rule that requires a CFI of .96 or higher and a SRMR of .10 or lower can help minimize the twin threats of rejecting the right model and retaining the wrong model. Thus, I used this rule as the major criteria to determine whether the measurement model and structural model provide good fit to the data.

As Bagozzi and Yi (1988) suggested, once the goodness of fit measures indicate an acceptable fit of the model as a whole to the data, the internal structure of the model must also be examined. In this study, I examine and report the statistical significance and parameter estimates of each path in the model based on the hypotheses developed in Chapter 2.

Assessment of Interaction Effects

To examine the role of professional commitment as a moderator of the relationship between POS and outcome variables, moderated multiple regression analysis was used. Hierarchical regression allows the researcher to arrange the order of entry of variables based on causal priority, and is one of the most useful tools for assessing interaction effects (Cohen & Cohen, 1983). This procedure enables the partitioning of the unique variance explained by the interaction term above and beyond those accounted for by the main effects.

The scale scores for the predictor variables (i.e., POS and professional commitment) were standardized before creating the product terms for interaction.

Separate regression analyses were conducted for each of the outcome variables. For each outcome, as suggested by Cohen and Cohen (1983), to assess the interaction effects, the main effects of POS and professional commitment were entered into the first step of the equation, and then the interaction term was entered into the second step of the equation.

CHAPTER 4

Results

Descriptive Statistics

In Table 1, a summary of the means, standard deviations, and inter-item reliabilities for all the variables in the model is provided. As can be seen, the scale reliabilities (shown in parentheses) for all these variables exceed the value of .70. Thus, as Nunnally and Bernstain (1994) suggested, the instruments used in this study provide reliable measures of the variables of interest.

Measurement Model

The confirmatory factor analysis suggested a good fit for the measurement model: $\chi^2 = 72.04$, df = 51, $p > .05$; Comparative Fit Index (CFI) = .99, Goodness-of-Fit Index (GFI) = .95, Non-Normed Fit Index (NNFI) = .98, Standardized Root Mean Squared Residual (SRMR) = .02, Root Mean Squared Error of Approximation (RMSEA) = .05. The fit indices are summarized in Table 2. Compared to the null latent model ($\Delta\chi^2 = 2062.47$, df = 54, $p < .001$), the measurement model was a significant improvement, indicating that there were significant relationships among the latent variables.

In the measurement model, none of the indicators cross-loaded on other factors and all the indicators loaded significantly ($p < .001$) onto their hypothesized latent factors. Thus, the initial ten-factor measurement model is confirmed and further examination of the structural model is justified (Anderson & Berbing, 1988).

TABLE 1

Means, Standard Deviations, Correlations, and Reliabilities[a]

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Pay Level Satisfaction	5.05	1.41	(.95)										
2. Career Development Opportunities	4.72	1.46	.34	(.95)									
3. Work-Family Support	4.99	1.35	.39	.56	(.88)								
4. LMX	4,96	.99	.35	.55	.37	(.75)							
5. POS	4.46	1.45	.45	.81	.72	.56	(.94)						
6. Felt Obligation	6.47	.77	.24	.26	.20	.34	.35	(.86)					
7. Professional Commitment	5.68	1.30	.20	.24	.13	.23	.20	.29	(.92)				
8. Turnover Intention	.00	1.00	-.42	-.49	-.37	-.35	-.46	-.21	-.22	(.85)			
9. Organizational Commitment	5.58	1.11	.31	.58	.48	.40	.71	.54	.30	-.40	(.93)		
10. In-Role Performance	5.18	1.25	.17	.07	.06	.25	.07	.24	.11	-.15	.10	(.89)	
11. OCBs	5.71	1.19	.06	.05	.10	.22	.04	.19	.09	-.07	.04	.77	(.93)

Note. [a] $N = 193$. Scale score correlations are given below the diagonal. Correlations with an absolute value of .14 or above were significant at the .05 level (two-tailed). Scale reliabilities (Cronbach's alphas) are shown in parentheses on the diagonal.

TABLE 2

Summary of Model Fit Indices

Model	χ^2	df	AIC	SRMR	RMSEA	CFI	GFI	NNFI
Independence Model	2143.51	105	1924.51	—	—	—	—	—
Measurement Model	72.04	51	-29.96	.02	.05	.99	.95	.98
Structural Model	143.64	80	-16.36	.05	.07	.97	.91	.96
Alternative Model 1	245.74	81	83.74	.13	.10	.92	.87	.90
Alternative Model 2	141.13	79	-16.87	.05	.06	.97	.91	.96
Alternative Model 3	143.04	79	-14.96	.05	.07	.97	.91	.96
Alternative Model 4	142.99	79	-15.01	.05	.07	.97	.91	.96
Alternative Model 5	143.24	79	-14.76	.05	.07	.97	.91	.96

Structural Model

Structural modeling results suggested that the Hypothesized Model fit the data well (see Table 2): χ^2 = 143.64, df = 80; Comparative Fit Index (CFI) = .97, Goodness-of-Fit Index (GFI) = .91, Non-Normed Fit Index (NNFI) = .96, Standardized Root Mean Squared Residual (SRMR) = .05, Root Mean Squared Error of Approximation (RMSEA) = .07. Although the chi-square statistic is significant ($p < .05$), this statistic is well-known to be oversensitive to sample size and may be significant even when the differences between observed and model-implied covariances are slight (Kline, 1998). To reduce the sensitivity of the chi-square statistic to sample size, researchers recommended to use an alternative rule to decide the acceptable χ^2 value: the value of χ^2 / df being lower than 3 (Kline, 1998). For the proposed model, χ^2 / df equaled 1.80, meeting this criteria. All of the other fit indices were within the acceptable ranges, suggesting that the proposed structural model offers a good fit to the data.

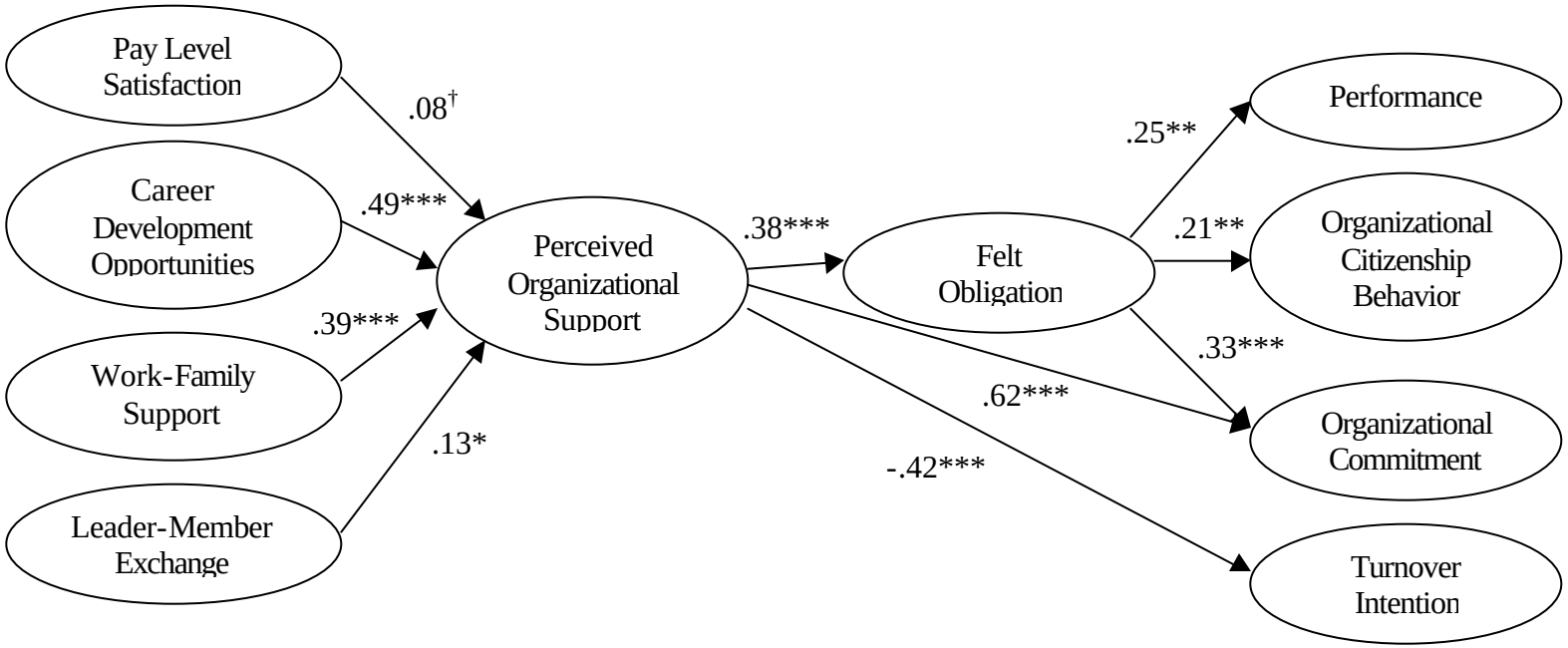
Hypotheses Testing for Structural Model

Most of the hypothesized relationships were supported based on the structural modeling results. The path estimates for the hypothesized model are shown in Figure 2.

First, all of the four hypothesized antecedents were found to be positively related to POS (Hypothesis 1 through Hypothesis 4). Hypothesis 1 proposed that employees' satisfaction with their pay level would be positively related to POS. This hypothesis received marginal support. While the relationship between pay level satisfaction and POS was in the hypothesized direction, this path was only marginally significant (β = .08, $p < .10$).

FIGURE 2

Structural Model Results for the Hypothesized Model



Note: †p < .10
*p < .05
**p < .01
***p < .001 (two-tailed)

Hypothesis 2, which predicted a positive relationship between employee perceptions of career development opportunities and POS, was strongly supported (β = .49, $p < .001$). This result confirmed the assertion that organizations that help the employees meet their needs for personal growth and ability development would be considered by the employees as more supportive.

Consistent with Hypothesis 3, work-family support was also found to have a significant positive relationship with POS (β = .39, $p < .001$), suggesting that employees who believe the organization offers support to help deal with work-family balance issues were more likely to have higher levels of POS.

Supporting Hypothesis 4, LMX was also found to be a significant predictor of POS (β = .13, $p < .05$). Employees with a higher quality relationship with the leader tend to perceive more support from the organization. This finding suggested that organizations can depend on leaders to help convey to employees that the organization cares about their well-being and values their contribution.

In accordance with Hypothesis 5, POS was found to be negatively associated with turnover intention (β = -.42, $p < .001$). Employees with higher POS were less likely to leave the organization.

Consistent with Hypothesis 6, POS had a direct positive relationship with organizational commitment (β = .62, $p < .001$). In addition, POS had positive effect on felt obligation (β = .38, $p < .001$), which in turn, was positively related to organizational commitment (β = .33, $p < .001$). These results, in combination, indicated that felt obligation partially mediated the relationship between POS and organizational

commitment, supporting Hypothesis 7. POS has not only a direct influence on organizational commitment, but also an indirect impact via felt obligation.

Finally, as expected, higher levels of POS were associated with a stronger sense of felt obligation ($\beta = .38$, $p < .001$), which in turn, led to better job performance ($\beta = .25$, $p < .01$) and increased OCBs ($\beta = .21$, $p < .01$). Thus, Hypothesis 8, which predicted that felt obligation would mediate the effect of POS on job performance and OCBs, was supported.

Alternative Model Testing for Structural Model

Following Anderson and Gerbing's (1988) suggestion, I tested a series of alternative models that are nested with the hypothesized model. As they suggested, only those alternative models that are plausible based on alternative theoretical arguments, rather than all possible nested models, are tested. They argued that such alternative models should be compared with the Hypothesized model, using chi-square difference tests. The alternative models are depicted in Figure 3 and Figure 4, and the fit indices for the alternative models are summarized in Table 2.

FIGURE 3
Alternative Model 1

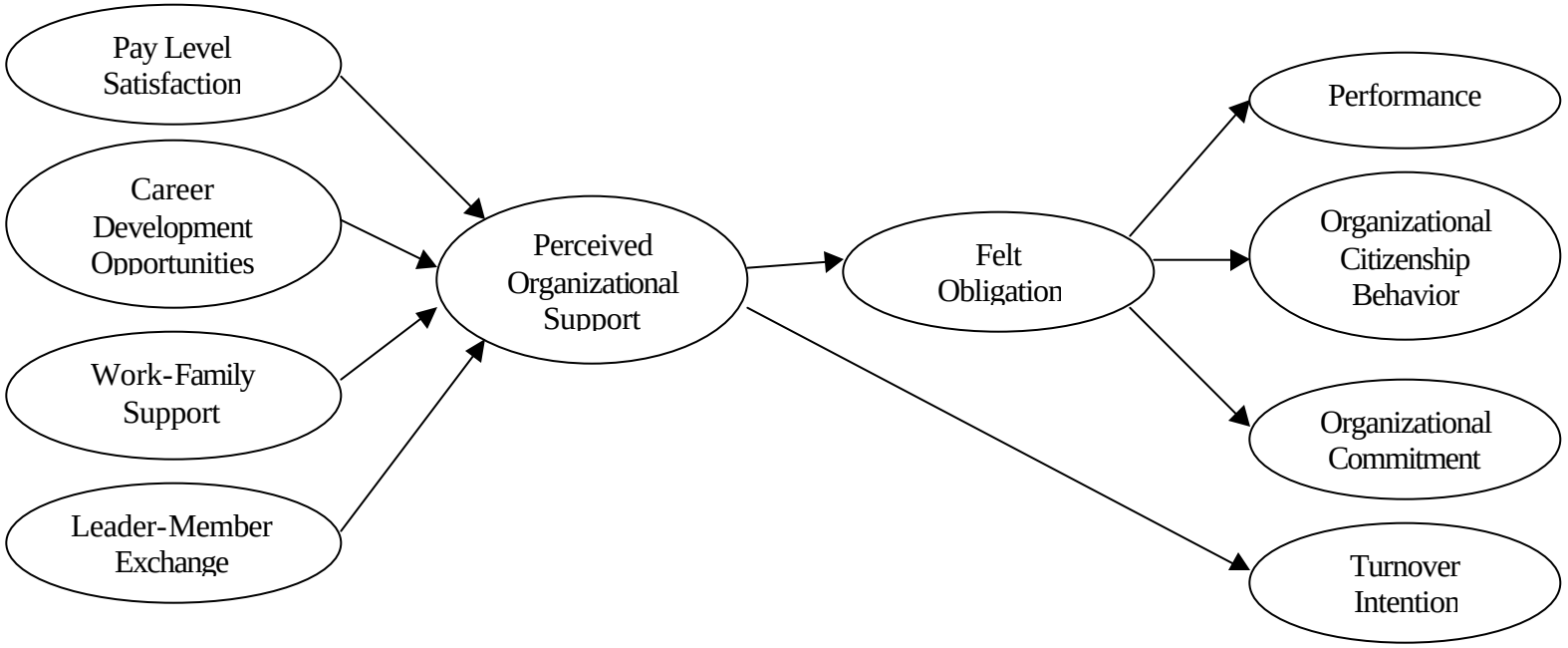
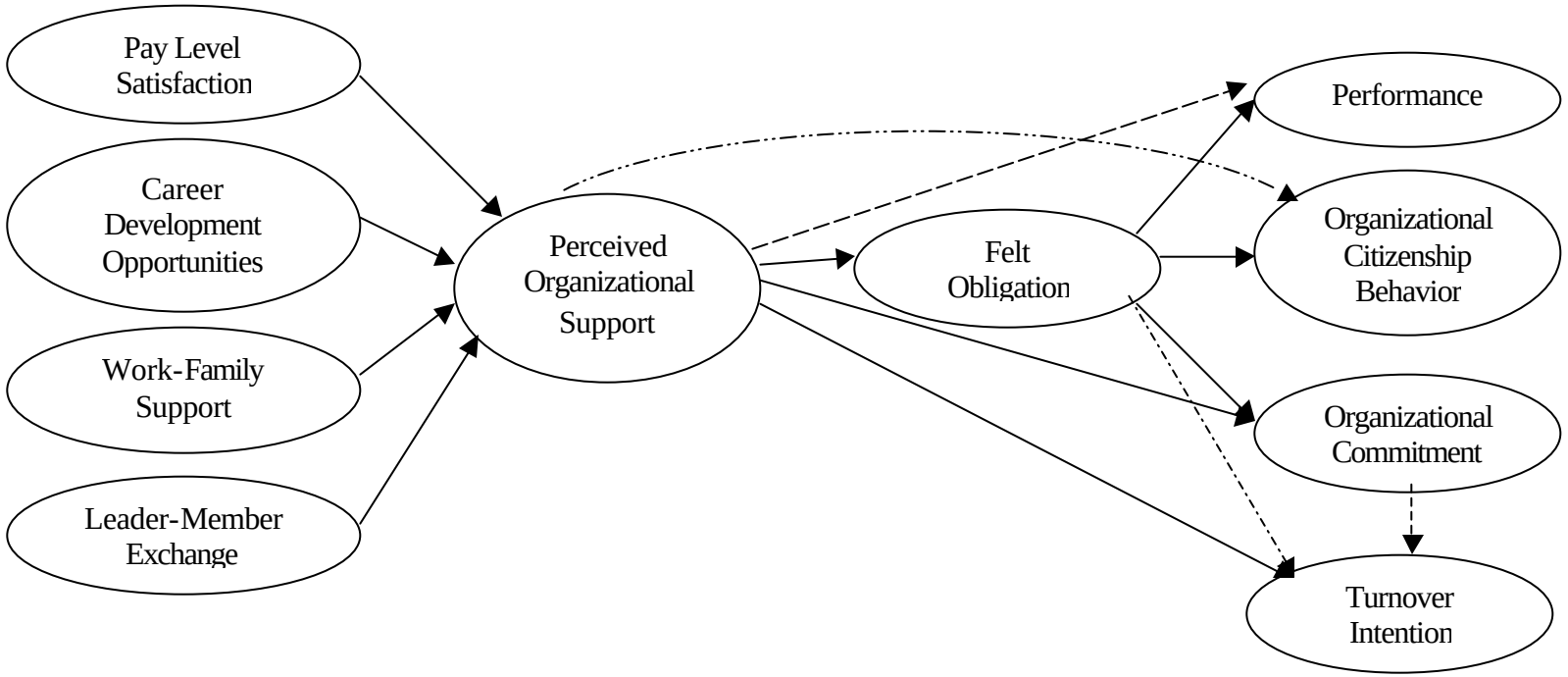


FIGURE 4
Alternative Models 2, 3, 4, and 5



Note: Each of the dotted lines represents an added path in one of the alternative models, compared to the Hypothesized Model.

Added path in Alternative Model 2
Added path in Alternative Model 3
Added path in Alternative Model 4
Added path in Alternative Model 5

Comparison to the More Constrained Model. As Anderson and Gerbing (1988) suggested, I first examined a model that is more constrained than the theoretical model, based on alternative theoretical rationale. Anderson and Gerbing held that if the chi-square comparison between the theoretical model and the more constrained model is not significant, the more constrained model should be accepted; on the contrary, if this comparison is significant, the theoretical model is maintained and then compared to the less constrained models.

In the Hypothesized Model, it was proposed that felt obligation would play a partial mediating role for the relationship between POS and organizational commitment. Some researchers may argue, however, POS may not influence organizational commitment directly by increasing employee attachment or liking of the organization. Rather, the sole reason that POS has an impact on employees' commitment to the organization may be that employees feel a sense of obligation to repay the organization's support and commitment through strong organizational commitment, based on the norm of reciprocity in social exchange. Thus, although in the structural model testing, I hypothesized a direct linkage between POS and organizational commitment, it is possible that this effect may be fully mediated by felt obligation. To examine this possibility, in Alternative Model 1 (see Figure 3), I eliminated the direct path from POS to organizational commitment, testing a full mediating effect of felt obligation. Structural analysis of this alternative model (see Table 2) revealed that it provided a significantly lower fit to the data than the Hypothesized Model ($\Delta\chi^2$ = 102.10, df = 1, $p < .001$). Therefore, according to this sequential chi-square difference test, I concluded that the Hypothesized Model is superior compared to the more

constrained model, and proceeded to the next step. Since there are no strong theoretical justifications for constraining other paths in the Hypothesized model, no other more constrained model was tested.

Comparison to the Less Constrained Models. As suggested by Anderson and Gerbing (1988), I next examined alternative models in which one parameter constrained in the theoretical model was estimated, based on alternative theoretical arguments. According to Anderson and Gerbing, if there is no significant difference between the Hypothesized Model and less constrained models, it indicates that relaxing the most likely constraint or constraints from a theoretical perspective in the Hypothesized Model does not significantly add to explanation of the construct covariances, and the Hypothesized Model is accepted, based on the preference for parsimony when given no difference in explanation. In contrast, a significant difference would suggest that the additional estimated parameter or parameters contribute to a better explanation than the Hypothesized Model, and the less constrained model should be accepted.

First, in the organizational behavior literature, some research suggests that lower commitment to the organization may lead to increased intention to quit (e.g., Mathieu & Zajac, 1990; Mowday, Porter, & Steers, 1982). That is, although POS is hypothesized to be an antecedent of both organizational commitment and turnover intention, organizational commitment may also be an antecedent of turnover intention such that organizational commitment partially mediates the effect of POS on turnover intention. To test this possibility, in Alternative Model 2 (see Figure 4), I added a path from organizational commitment to turnover intention. According to the chi-square difference test, this alternative model did not provide a significantly better fit to the data

than the proposed model ($\Delta\chi^2 = 2.51$, df = 1, $p > .05$), suggesting that adding the path from organizational commitment to turnover intention did not offer a better explanation of the data. Thus, it was concluded that the Hypothesized Model, which was more parsimonious, was superior to Alternative Model 2.

Second, while I hypothesized POS to directly contribute to a lower intention to leave the organization, it is possible that this effect may function through the sense of felt obligation resulted from POS. Thus, I tested Alternative Model 3 (see Figure 4), in which the path from felt obligation to turnover intention is estimated, in addition to the direct path from POS to turnover intention in the Hypothesized Model. Chi-square difference test indicated that Alternative Model 3 was not significantly better than the Hypothesized Model ($\Delta\chi^2 = .60$, df = 1, $p > .05$). This result suggested that POS had a direct effect on turnover intention, rather than mediated by felt obligation. Because parsimony is preferred with no difference in explanation, Alternative Model 3 was rejected, compared to the Hypothesized Model.

Third, based on organizational support theory's contention that POS creates a sense of obligation within the individuals to reciprocate the organization by helping it achieve organizational goals (Eisenberger et al., 2001), it was hypothesized that felt obligation would mediate the effect of POS on in-role performance and OCBs. Test of the structural model did support this proposition, with a significant positive path from POS to felt obligation and significant paths from felt obligation to in-role performance and OCBs. However, it is possible that felt obligation based on the reciprocity norm may not fully account for why employees with higher POS perform better on in-role and extra-role behaviors. In other words, alternative theories may argue that the effects

of POS on performance and OCBs are only partially mediated by felt obligation. To test whether this effect is fully or partially mediated, I also examined two other alternative models. In Alternative Model 4 (see Figure 4), the constraint on the relationship between POS and in-role performance was relaxed. It was found that this additional estimated parameter did not incrementally contribute to the explanation given by the Hypothesized Model ($\Delta\chi^2 = .65$, df = 1, $p > .05$). Similarly, the constraint on the relationship between POS and OCBs was relaxed in Alternative Model 5 (see Figure 4), and estimating this parameter did not provide improved explanation of the construct covariances either ($\Delta\chi^2 = .40$, df = 1, $p > .05$). Therefore, the Hypothesized Model was supported, rejecting the less parsimonious Alternative Model 4 and Alternative Model 5. These results confirm organizational support theory, suggesting that higher levels of POS increase the felt obligation to help the organization achieve its objectives, which in turn, leads to increased efforts and better performance on job roles and OCBs.

Moderating Effects of Professional Commitment

The moderated hierarchical regression results are summarized in Tables 3, 4, and 5. It can be seen that POS and professional commitment had significant interaction effects on turnover intention, organizational commitment, and felt obligation, respectively. As Aiken and West (1991) suggested, once a significant interaction has been obtained, we should sharpen our understanding of its meaning by plotting the interaction and conducting post hoc statistical testing (i.e., simple slope test and comparison of slopes). The plots and tests of the interaction effects associated with Hypotheses 9, 10, and 11 are discussed below.

Consistent with Hypothesis 9, there was a significant interaction effect of POS and professional commitment on turnover intention ($\beta = .24$, $p < .001$). Plot of the interaction effect (see Figure 5) showed that the negative relationship between POS and turnover intention was stronger for employees with lower levels of POS, compared to those with higher levels of POS. Simple slope test further suggested that there was a reliable negative relationship between POS and turnover intention at both 1 SD above ($b = -.136$, $t(189) = -2.47$, $p < .05$), and 1 SD below ($b = -.378$, $t(189) = -7.87$, $p < .001$) the mean professional commitment level, further substantiating Hypothesis 5.

A significant moderating effect of professional commitment on the POS-organizational commitment relationship was also found ($\beta = -.13$, $p < .01$). As shown in Figure 6, the positive relationship between POS and organizational commitment was dampened by high professional commitment, such that for employees who were less committed to the profession, POS had a stronger impact on organizational commitment than for those who were highly committed to the profession. Additional analysis demonstrated a consistent positive relationship between POS and organizational commitment at 1 SD above ($b = .60$, $t(189) = 8.05$, $p < .001$) and 1 SD below ($b = .83$, $t(189) = 12.68$, $p < .001$) the average professional commitment score, providing further support for Hypothesis 6.

Finally, the effect of POS on felt obligation was also moderated by professional commitment ($\beta = -.21$, $p < .01$). The plot of this interaction effect was shown in Figure 7. As stated in Hypothesis 11, the positive relationship between POS and felt obligation was stronger for low professional commitment employees than for high professional commitment employees. Further, the simple slope test suggested that the positive effect

of POS on felt obligation was not consistent across different levels of professional commitment. Specifically, this relationship was significant at 1 SD below the mean professional commitment score ($b = .08$, $t(189) = 1.21$, $p > .05$), but non-significant at 1 SD above the mean professional commitment score ($b = .33$, $t(189) = 5.54$, $p < .001$). These results indicated that although it was found that, in general, POS increased the sense of felt obligation, employees with higher levels of professional commitment may, in fact, have a strong sense of obligation to work hard even in absence of higher levels of POS.

TABLE 3

Results of Hierarchical Regression Analysis for the Moderating Effects of Professional Commitment on the POS-Turnover Intention Relationship[a]

	Turnover Intention		
Variable		ß	*t*
Step 1			
POS		-.40	-6.35***
Professional Commitment		-.09	-1.35
? R^2	.23		
? *F*	28.72***		
Step 2			
POS X Professional Commitment		.24	3.79***
? R^2	.05		
? *F*	14.35***		
Overall R^2	.29		
Adjusted R^2	.28		
Model *F*	25.27***		

Note. [a] N = 193.

[b] * p < .05

** p < .01

*** p < .001

All significance levels are based on two-tailed tests.

TABLE 4

Results of Hierarchical Regression Analysis for the Moderating Effects of Professional Commitment on the POS-Organizational Commitment Relationship[a]

	Organizational Commitment		
Variable		ß	*t*
Step 1			
POS		.66	12.97***
Professional Commitment		.14	2.74**
? R^2	.53		
? *F*	106.66***		
Step 2			
POS X Professional Commitment		-.13	-2.59**
? R^2	.02		
? *F*	6.71**		
Overall R^2	.55		
Adjusted R^2	.54		
Model *F*	.75.48***		

Note. [a] N = 193.

[b] * p < .05

** p < .01

*** p < .001

All significance levels are based on two-tailed tests.

TABLE 5

Results of Hierarchical Regression Analysis for the Moderating Effects of Professional Commitment on the POS-Felt Obligation Relationship[a]

Felt Obligation			
Variable		ß	*t*
Step 1			
POS		.27	4.11***
Professional Commitment		.18	2.71**
? R^2	.17		
? *F*	19.39***		
Step 2			
POS X Professional Commitment		-.21	-3.11**
? R^2	.04		
? *F*	9.66**		
Overall R^2	.21		
Adjusted R^2	.20		
Model *F*	16.74***		

Note. [a] N = 193.

[b] * p < .05

** p < .01

*** p < .001

All significance levels are based on two-tailed tests.

FIGURE 5
Moderating Effects of Professional Commitment on the POS-Turnover Intention Relationship

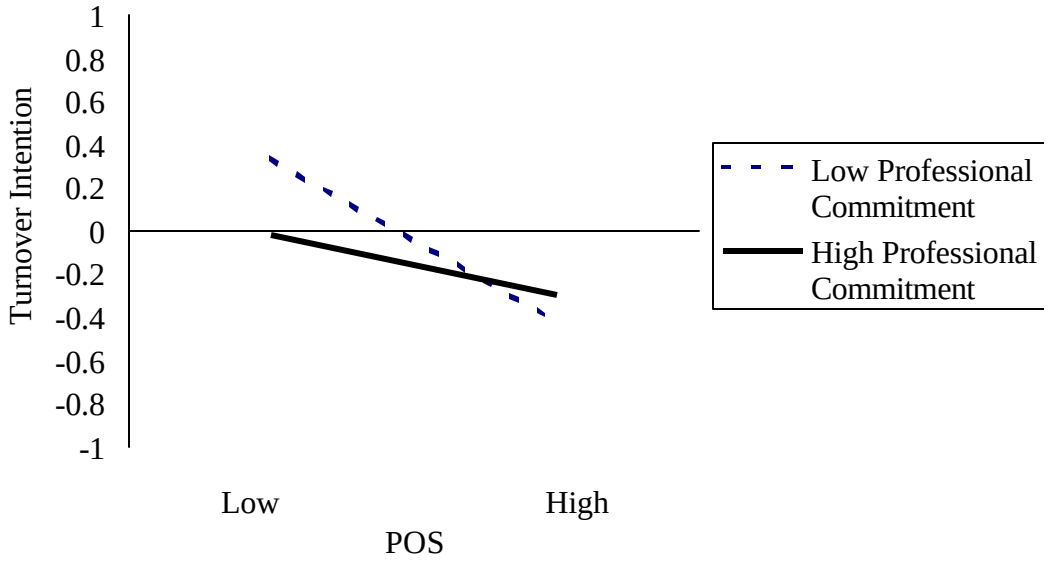


FIGURE 6
Moderating Effects of Professional Commitment on the POS-Organizational Commitment Relationship

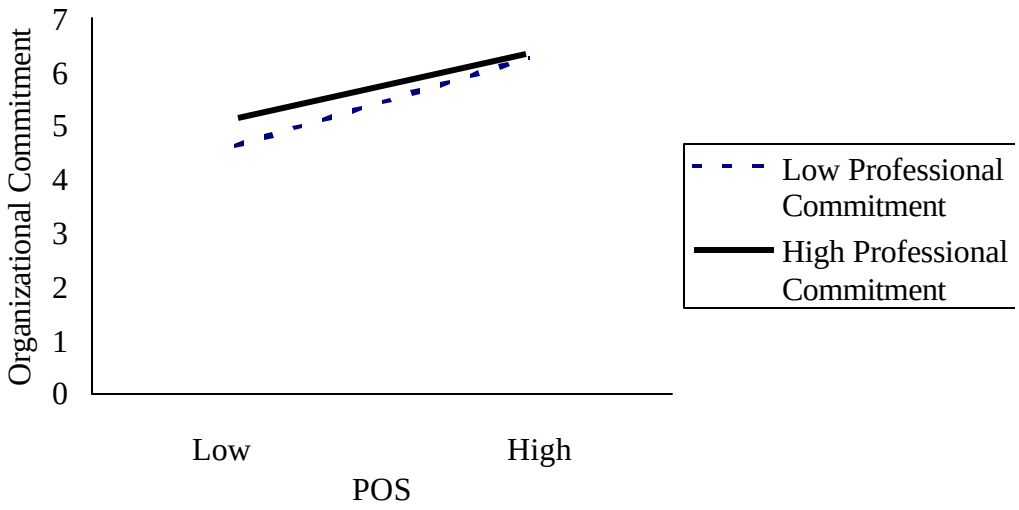
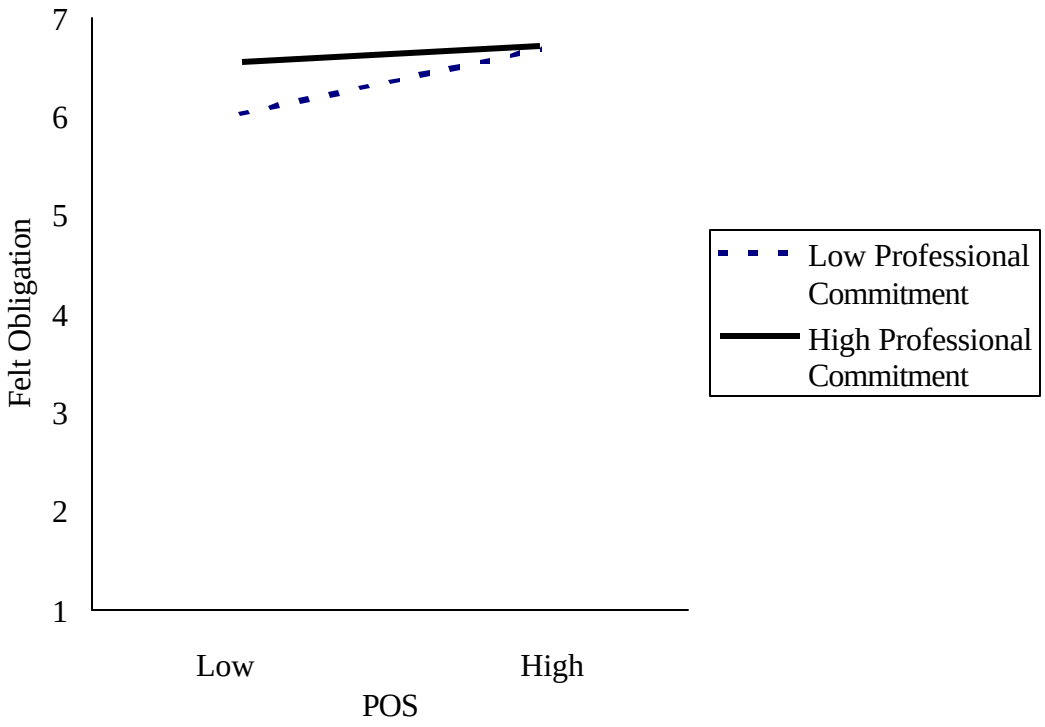


FIGURE 7
Moderating Effects of Professional Commitment on the POS-Felt Obligation Relationship



CHAPTER 5

Discussion

This dissertation examined the role of POS in linking HR practices with important work outcomes. In other words, in this dissertation, employee perceptions of the HR practices implemented were hypothesized as antecedents of POS. Further, the influence of POS on a variety of work outcomes, such as turnover intention, organizational commitment, performance and OCBs, as well as the mediating effects of felt obligation and the moderating effects of professional commitment, were investigated. Using survey data collected from 193 information technology professionals and their immediate supervisors, the hypotheses were tested through structural equation modeling and hierarchical regression analyses. The major findings of this dissertation are discussed below, followed by a discussion of the limitations, potential contributions, and managerial implications of the study. Some future research directions are then presented.

Summary of Major Findings

HR Practices as Antecedents of POS

Organizational support theory (Eisenberger et al., 1986) holds that organizational treatments that demonstrate organizational recognition of the employee contribution and caring about employee well-being are likely to induce higher levels of POS among employees. HR practices are an important channel that organizations rely on in treating their employees. Thus, in this dissertation, it was hypothesized that employee perception of a set of HR practices, including pay level satisfaction, career development opportunities, work-family support, and LMX, would contribute to the

evaluation of POS. In general, this proposition was supported by structural equation modeling results, except for a marginally significant relationship between pay level satisfaction and POS.

Specifically, although there was a positive association between the degree to which employees were satisfied with their pay and the level of their POS, this relationship was only marginally significant. This result suggests that in evaluating the degree to which the organization provides support for its employees, the employees are likely to consider the level of pay they receive, although it seems that pay level satisfaction is not playing the most critical role in influencing their decisions. One explanation for the marginal significance of this relationship can be offered from the needs hierarchy point of view. That is, while pay mainly satisfies the employees' physiological needs, which are lower level needs, compared to other needs the individuals wish to fulfill (Maslow, 1954; Alderfer, 1972), the employees may believe that the organization needs to go beyond meeting these basic needs to demonstrate their support. This may be especially true for the participants in this study, who are relatively well-paid IT professionals, for whom other factors, such as meeting growth needs and related needs, may be more important. It is possible that for employees who have much lower salary levels and have difficulties meeting their basic physiological needs, pay level satisfaction may be a more significant contributor of POS. An alternative explanation for the marginally significant relationship might be that pay satisfaction may not be the solely indicator of the importance of compensation for POS perceptions. Although pay satisfaction has been found to result from several related but different factors, such as actual pay level, distributive justice, and procedural justice (e.g.,

Roberts & Chonko, 1996; McFarlin & Sweeney, 1992; Sweeney & McFarlin, 1993), the influence of these factors on POS may not be completely accounted for by pay satisfaction. While I used pay level satisfaction to measure employee perceptions of the organization's pay practice, it is possible that the degree to which employees are satisfied with their pay might not fully indicate how employees perceive the level of pay they receive. In assessing POS, employees may take into account not only pay level satisfaction, but also how pay is allocated, such that employee perceptions of the fairness or criteria of pay allocation procedures may moderate the effect of pay level satisfaction on POS. Thus, future research should examine the potential influence of these additional factors, such as employee types, measurement instrument used, and fairness or criteria of pay allocation, on the magnitude of impact that perceptions about pay have on POS.

Consistent with the results of a few previous studies (Allen et al., 2003; Meyer & Smith, 2000; Wayne et al., 1997), in this study, perception of career development opportunities was found to have a significant positive impact on POS. This finding suggests that organizations that provide employees with opportunities to extend their potential and build up their capabilities, which help meet employees' needs for personal growth, are likely to be viewed as supportive and caring about employees' well-being.

Two other indicators of HR practices, work-family support and LMX, which address employees' needs for relatedness, were also found to be significantly positively related to POS. While no past research has explicitly examined the effect of work-family support on employee perceptions of POS, the finding of a positive relationship between these two variables points to the importance for organizations to help

employees to achieve work-family balance. Although the finding of a positive relationship between LMX and POS is not new, it should be noted that this study treats LMX as an indicator of HR practices, along with other traditional components of HR practices. While organizations often have HR policies that guide the implementation of HR practices, leaders who are often in charge of administrating and allocating rewards, resources, and opportunities may have considerable discretion on how these HR practices are implemented for specific employees (Settoon et al., 1996; Wayne et al., 1997). Thus, the quality of the exchange relationship between the employee and the leader (i.e., LMX) seems to be a critical component in implementing HR practices that may contribute to employee perceptions of organizational support. The findings on the positive influence of work-family support and LMX on POS highlight the need for organizations to help employees maintain good work and family relationships.

While some research (e.g., Wayne et al., 1997; Allen et al., 2003) has indicated that the effects of a few HR-related variables such as procedure justice, promotions, and developmental experiences, may contribute to POS, the selection of antecedents to POS in previous research were not based on a theoretically coherent framework. This study systematically selected a set of HR practices based on the ERG theory of motivation, and suggested that employee perceptions of those HR practices that satisfy employee different levels of needs are likely to increase their perceived organizational support.

Outcomes of POS and the Mediating Process

Social exchange theory (Blau, 1964) suggests that individuals who receive favorable treatments from others are likely to return the other party's favor based on the norm of reciprocity (Gouldner, 1960). Organizational support theory (Eisenberger et al.,

1986) further proposes that in the employee-employer exchange relationship, employees who believe they have received high levels of support from the organization tend to reciprocate with positive work attitudes and behaviors that benefit the organization. Based on these arguments, it was hypothesized that POS would have an impact on a variety of important work outcomes, directly or indirectly. The hypotheses on these outcomes of POS and the mediating role of felt obligation were supported and the specific findings are discussed here.

Consistent with the prediction, POS had a significant direct effect on employees' turnover intention. Employees were less likely to leave the organization if the organization was considered to be supportive. Test of alternative models suggested that the relationship between POS and turnover intention was not mediated by felt obligation. This result is consistent with Eisenberger et al.'s (2001) finding. It suggests that the intention to leave or stay in the organization is not necessarily based on a sense of felt obligation to help the organization achieve its goals, but rather a direct response to perceived organizational support. In addition, alternative model testing also failed to support a direct linkage between organizational commitment and turnover intention, disconfirming the possibility that organizational commitment would mediate the POS-turnover intention relationship. This result further indicates that POS directly influences employees' turnover intention. Further, although in many studies, organizational commitment has been found to be an antecedent of turnover intention, as Boseman and Perrewé's (2001) research suggested, this relationship may have been inflated by use of organizational commitment scales that contained items measuring the retention of employee membership in the organization. Following their suggestion, in this study, the

items representing an employee's desire or intent to remain in the current organization were removed from the measure of organizational commitment. This may also partly account for the insignificant result on the role of organizational commitment as a mediator of the POS-turnover intention relationship.

POS was found to have both a direct impact on organizational commitment, and an indirect impact mediated by felt obligation. As Eisenberger et al. (1986) pointed out, POS represents employees' beliefs in the organization's commitment to them, and thus employees with higher POS would repay the organization with stronger commitment to the organization. In addition, higher levels of POS create a sense of felt obligation to reciprocate the organization's support by caring about the organization's well-beling and helping achieve its objectives (Eisenberger et al., 2001). Thus, organizational commitment, which refers to an individual's identification with and involvement in the employing organization (Porter et al., 1974), may also stem from such a sense of felt obligation. While this mediating process plays a partial role, test of alternative models suggests that felt obligation does not fully mediate the effect of POS on organizational commitment. Rather, POS, which represents employees' belief in the organization's commitment to them, has a direct positive impact on the employees' organizational commitment.

Further, as expected, it was found that POS had an influence on in-role performance and OCBs via the mediating effect of felt obligation. Employees who receive higher levels of POS felt more obligated to help the organization achieve its objectives, and thus they were likely to put more effort into job roles and extra-role behaviors, leading to better job performance and more OCBs. Comparison of alternative

models suggested that the effects of POS on performance and OCBs were fully mediated by felt obligation. This result highlights the critical role of felt obligation in connecting POS to employees' actual behaviors in organizations.

This study, along with Eisenberger et al. (2001), provides empirical support for organizational support theory's (Eisenberger et al., 1986) contention that POS induces positive work attitudes and behaviors based on the norm of reciprocity. However, results of this study suggested that felt obligation mediates the effects of POS on variables such as performance and OCBs, but not other variables such as turnover intention. It is possible that the sense of obligation may be very important in influencing employees' organizational behaviors given their continued membership in the organization, while employees' decisions as to whether to stay in the organization may be more influenced by their affective attitudes towards the organization and alternative employment opportunities available. It is important that future research focus more on this concept of felt obligation in studying social exchange relationships, and further determine for which outcome variables felt obligation may play an important role.

Moderating Role of Professional Commitment

As Lee et al. (2000) pointed out, it is important to understand the role of professional commitment, due to its potential link with important outcomes such as turnover and performance. While past research suggests that professional commitment is related to a variety of work outcomes, it has not examined whether and how employees' commitment to the profession would influence their reactions to organizational treatments. In this study, I attempted to tackle this problem by testing the moderating effects of professional commitment on the POS-outcome linkage. As for

employees with higher professional commitment, their commitment to the profession provides an extra source of motivation, while employees with lower professional commitment are likely to rely more heavily on the organization's support for work motivation. Therefore, I predicted that the effect of POS will be stronger for employees with lower professional commitment. Results confirmed the hypotheses that the strength of relationships between POS and outcomes depends on the level of employee professional commitment. Specifically, the negative impact of POS on turnover intention was stronger for employees with lower professional commitment, compared to those with higher professional commitment. Similarly, the positive effect of POS on felt obligation and organizational commitment was also stronger for employees with lower professional commitment. Employees with both low POS and low professional commitment are most likely to leave the organization, have lowest organizational commitment, and feel the least sense of obligation to help the organization achieve its goals.

In addition, while all of these interaction effects were found to be statistically significant, the relative practical importance of these effects should not be neglected. Results of this study showed that the interaction effects of POS and professional commitment accounted for more unique variance in felt obligation (4 %) and turnover intention (5 %) than that in organizational commitment (2 %). It appears that professional commitment played a practically more important role in moderating the effects of POS on felt obligation and turnover intention, than the effect of POS on organizational commitment.

Limitations

There are several limitations of this study that need to be mentioned. First, the data were collected among information technology professionals within a single organization. While this design eliminates the confounding effects associated with multiple data sources, a tradeoff is that it limits the observed variability and decreases external validity. Thus, caution should be paid to the generalizability of the findings to other types of employees and organizations.

A second limitation is that this study was cross-sectional. Because the data were all collected at the same time, the causal inferences on the hypothesized relationship should still be made with caution. However, this problem is alleviated by the use of structural equation modeling, which allowed for the simultaneous evaluation of the path model as a whole.

Another limitation of the study is that the data on all the variables were measured by survey instruments. Although being able to collect data from two different sources—the employees and their supervisors—reduces the common-method bias associated with single data source, it would have been desirable to collect objective data on some variables, especially the performance and turnover information. However, supervisory evaluation is one of the major approaches by which employee performance is evaluated in most organizations. This may be particularly true among professional workers, for whom objective measures of performance are not likely to be readily available. For example, in Ferris and Buckley's (1990) study, all of over 100 high technology firms surveyed reported using the immediate supervisor as a source of evaluation, and sources outside of the supervisor-subordinate dyad had little input into

the performance appraisal process. Thus, it is justifiable to believe that the immediate supervisors in this study provided fairly reliable assessment of the employees' performance. Actual turnover, on the other hand, has been consistently found to be highly correlated with turnover intention reported by individuals (e.g., Griffeth, Hom, & Gaertner, 2000). Therefore, although actual turnover information was not available in this study, it is likely that the negative effect of POS on turnover intention would carry on to actual turnover.

Related, while employee perceptions of HR practices were found to be related to POS in this study, this may have been an inflated assessment of the relationship between the actual HR practices and employee POS, due to the perceptive nature of both the HR practices measure and POS. However, it should also be noted that organizations should not neglect the differential responses that can be resulted from the implementation of the same HR practices on different individuals. What the employees believe the organization does for them may be no less important than what the organization actually does, because it is the employees' beliefs that in fact determine how they would react to organizational actions and practices.

Contributions

This study has the potential to contribute to the literature in several different ways. First, by investigating the role of HR practices as antecedents of POS, it may contribute to both the HR literature and the POS literature. An important objective of HR research is to understand how HR practices can influence employee attitudes and behaviors in order to help achieve organizational goals (Jackson et al., 1989; Schuler & Jackson, 1987). While the strategic HR literature suggests that adoption of progressive

HR practices aimed at influencing employee motivation and skills create strategic advantage for the firm and improves firm performance (e.g., Arthur, 1992, 1994; Huselid, 1995; Snell & Dean, 1992), it is believed that HR practices do not directly lead to firm performance (Wright, McMahan, & McWilliams, 1994). The mechanisms underlying the HR practices-firm performance relationship remain to be fully understood (Delery, 1998). It was proposed and found in this study that employee perceptions of certain HR practices would influence their perceptions of organizational support, which in turn, contributes to employee attitudes and behaviors beneficial for the organization. This finding may help understand the "black box" between HR practices and firm performance.

On the other hand, while POS refers to employees' evaluations of favorable treatment from the organization and HR practices represent a critical channel the organization uses to communicate its support to employees, POS literature has not comprehensively examined the effect of HR practices on employee POS beliefs. The findings of this study documenting a positive association between a variety of HR practices and POS suggests that employees draw inferences from the HR-related treatment they receive in assessing the supportiveness of the organization. By implementing HR practices that demonstrate the organization cares about the employees' well-being and values their contribution, organizations are likely to be perceived as offering high levels of support for the employees. The results of this study add to our knowledge about the antecedents of POS. Moreover, while POS research has been largely rooted in the organizational behavior literature, this study bridges the HR literature and the OB literature, by combining HR practices and POS.

Examination of the relationship between POS and a variety of important work outcomes provide further insight into the effects of POS. Consistent with previous research, POS was found to contribute to lower turnover intention, stronger organizational commitment, and enhanced in-role and extra-role performance. This study, however, by examining the mediating role of felt obligation, helps understand the process through which POS influences employee attitudes and behaviors. While the results indicate that the effect of POS on outcomes largely stems from a sense of obligation to reciprocate by caring about the organization's well-being and helping achieve its objectives, felt obligation seems not to fully account for the impact of POS on certain outcomes (i.e., turnover intention and organizational commitment). This suggests that the POS-outcome relationship may be more complicated than it appears, and points to the need for further research to better understand this mechanism.

Another attribute of this study that may add value to the literature is the inclusion of professional commitment. Although past research has showed evidence for the importance of professional commitment in influencing work outcomes, this study adds to our understanding of the role of professional commitment by examining the interaction between professional commitment and POS. Results of this study revealed that the impact of POS on outcomes is not context-free. Individuals with different levels of professional commitment may react differently to perceived support from the organization. Finding this interaction effect is new to both the POS and professional commitment literature. It points to the need to consider the important role of individual differences in general, and professional commitment in particular, while examining the

effects of POS. The managerial implications of this finding are discussed in the next section.

Managerial Implications

This study sheds some light on the effective management of employees in general, and knowledge workers in particular. First of all, as higher levels of POS are related to a variety of positive work outcomes, organizations should find ways to promote higher POS beliefs among employees. Results of this study can help guide this endeavor. Since HR practices seem to be important antecedents of POS, organizations should deploy supportive HR practices that can induce higher levels of POS. Results of this study suggest that there may be a wide range of HR practices that organizations can rely on to foster high levels of POS, including offering satisfactory rewards, providing career development opportunities, supporting work-family balance, and building high quality work relationships. These HR practices help employees meet their needs at different levels, and thus can lead to positive employee attitudes and behaviors, including lower turnover intention, stronger organizational commitment, and better performance. These attitudes and behaviors are indispensable for successful performance of the organization.

More importantly, organizations should realize that in their endeavor to harness the intellectual capital of knowledge workers, they need to not only provide sufficient career developmental opportunities and reward the employees' contribution, but also care about the individuals as human beings by assisting them maintaining good work and family relationships. Specifically, the results of this study point to the value of two HR practices. On the one hand, provision of work-family support that helps employees

achieve work-family balance is likely to demonstrate to the employees that the organization cares about them as human beings who have family needs, and thus, create a higher sense of POS. On the other hand, high quality relationships with the supervisor also contribute to employee evaluations of POS. As Uhl-Bien et al. (2000) pointed out, such interpersonal relationships developed though interactions among organizational members are instrumental in creating social capital in organizations, which plays an essential role in realizing the value of human capital (Nahapiet & Ghoshal, 1998).

Second, the moderating role of professional commitment on the POS-outcome relationship suggests that organizations should pay attention to individual differences in professional commitment. On the one hand, because the effects of POS on positive work outcomes are stronger among employees with low professional commitment, providing support for these employees may be particularly important in encouraging them to help the organization achieve its goals. On the other hand, employees with both high POS and high professional commitment are the ones who have the lowest turnover intention, strongest organizational commitment, and highest performance and OCBs. This may suggest that contrary to the beliefs of some earlier researchers (e.g., Scott, 1966; Sorensen & Sorensen, 1974), employees' attitudes towards the organization and attitudes towards their profession are not necessarily in conflict with each other. With the rise of education levels and the increase in specialization for many lines of work, the chosen profession has become a more critical component in many people's life (Lee et al., 2000). As a result, it is more and more important for managers to understand the effect of professional commitment on professional employees. While concern has been raised that knowledge workers or professional workers who have a stronger

commitment to the profession may not be bound to a certain organization, the results of this study indicates that this worry may not be well-justified. Professionals may realize that to be successful in the profession, they need a strong sense of obligation, as well as prolonged involvement in professional activities. Thus, they demonstrate a considerable level of persistence and exert great efforts at work, which are beneficial to the employing organization. Given the positive influence of professional commitment on employee attitudes and behaviors in organizations, employers should consider ways to improve employees' professional commitment, probably via providing professional training and development, offering opportunities for professional networking, and encouraging involvement in professional activities. However, managers of professional workers should also realize that they need to provide the necessary level of organizational support, to keep them committed and engaged in the employing organization.

Future Research Directions

This research also points to some future research directions that can help further understand the phenomenon of interest and overcome the limitations of current research. First, findings of this study provide some insights into how HR practices may influence employee attitudes and behaviors, which potentially contribute to organizational performance. However, to more fully understand the black box between HR practices and firm performance, it will be helpful for future research to collect data from employees working in multiple organizations. Multi-level analysis can be conducted to explain how HR practices may influence employee perceptions and behaviors, which in turn, make a difference in the firm's overall performance. Through

such research at multiple levels of analysis, we can also better sort out the variances accounted for by the HR practices that are actually implemented and the variances attributable to the employees' perceptions of the same HR practices. Individual difference variables may also be included in such research, in order to explain why the implementation of the same HR practices may generate differential perceptions among employees. For example, it has been found that employees with positive affectivity tend to perceive more supervisor support (Yoon & Thye, 2000). Accordingly, individual differences in affectivity may lead employees to have different perceptions of the HR practices implemented, which in turn, may result in different levels of POS and differential attitudinal and behavioral outcomes.

Second, another direction for future research is to study the antecedents and outcomes of POS through longitudinal data. Longitudinal research would further our understanding of POS by investigating how POS is developed among employees over time and whether the effects of POS on work outcomes would diminish or strengthen over time. In addition, while in this study and most of the extant POS research, the focus is on how employees reciprocate the organization's favorable treatment, the other side of the reciprocal relationship is neglected. Thus, an interesting question is whether employee attitudes and behaviors in reaction to previous organizational support can influence management's decisions on how much support to provide for employees. Collection of longitudinal data is likely to be helpful in addressing these issues.

Third, although this study contributes to the literature by investigating the mediating and moderating mechanisms through which POS influences important work outcomes, future research is needed to further understand the influence of these and

other possible mediators and moderators in this process. In this study, felt obligation was found to fully mediate the effect of POS on in-role performance and OCBs. It appears the sense of obligation to reciprocate is the key reason that employees receiving higher levels of support make special efforts on in-role and extra-role behaviors to help the organization achieve its goals. Future research should incorporate felt obligation as a critical part of the theoretical framework in explaining and understanding social exchange relationships. On the other hand, while it was found that felt obligation did not mediate the effect of POS on turnover intention, there might be other variables that function as mediators of this relationship such as employees' overall satisfaction with the job or the degree to which employees are embedded in the organization. Other moderators of the POS-outcome relationship may also exist. In light of the Eisenberger et al.'s (2001) finding that individual differences in exchange ideology moderate the POS-felt obligation relationship and the findings of this study on the moderating role of professional commitment, future research should evaluate the potential moderating effects of other individual differences, such as the "big five" personality variables.

Conclusion

In conclusion, despite the limitations discussed previously, this study has the potential to make a significant contribution to management research and practice. By linking employee perceptions of a variety of HR practices with POS, this study bridges the human resource management and organizational behavior literatures, and provides guidance on how organizations can foster high levels of perceived support via implementation of appropriate HR practices. The findings on the significant effects of POS on important work outcomes demonstrate the importance of POS research and the

need for organizations to provide adequate support to their employees. Further, the fact that employee reactions to POS depend on their different levels of professional commitment illustrates the necessity for researchers to consider individual differences in POS research and for organizations to pay attention to employees' professional needs and attitudes. As discussed earlier, this study also points to some interesting directions for future research.

APPENDIX 1

Survey Measures

Unless otherwise stated, all the variables were measured by subjects' responses to the following question on a 7-point Likert-type scale: "To what extent do you agree with the following statements? (1 = *strongly disagree* to 7 = *strongly agree*)."

Pay Level Satisfaction (Selected from Heneman & Schwab, 1985)

Respondents answered the following question on a 7-point Likert-type scale: "For each statement below, indicate how satisfied or dissatisfied you feel about the compensation item by indicating the number that best indicates your feelings (1 = *very dissatisfied* to 7 = *very satisfied*)."

1. My take home pay.
2. My current salary.
3. My overall level of pay.

Perceptions of Career Development Opportunities (Developed for this study)

1. My organization is supportive of my long-term career development.
2. In the long run my organization will facilitate me accomplishing my career goals.
3. My organization takes steps to insure that I maximize my career potential
4. My organization provides me with the opportunity to achieve my career goals.

Work-Family Support (Selected from Judge, Boudreau, & Bretz, 1994)

1. My organization provides programs to assist balancing demands of dual career couples.
2. My organization provides programs to assist in balancing demands of families with children and/or elderly family members.
3. My organization stresses the importance of family, leisure, and health.

Leader-Member Exchange (Graen & Scandura, 1987)

1. I always know how satisfied my supervisor is with what I do.
2. My supervisor understands my problems and needs well enough.
3. My supervisor recognizes my potential some but not enough.
4. My supervisor would personally use his/her power to help me solve my work problems.
5. I can count on my supervisor to "bail me out" at his/her expense when I really need it.
6. I have enough confidence in my supervisor to defend and justify his/her decisions when he/she is not present to do so.
7. My working relationship with my supervisor is extremely effective.

Perceived Organizational Support (Adapted from Lynch, Eisenberger, & Armeli, 1999)

1. My organization strongly considers my goals and values.
2. My organization really cares about my well-being.
3. My organization shows a great deal of concern for me.

Turnover Intention (Bluedorn, 1982)

Respondents answered the following question on a 7-point Likert-type scale: "If I have my way I will be working for my current company in…"
1. three months
2. six months
3. 12 months from now.

In another section of the survey, respondents responded to the question by indicating the likelihood in percentage: " I intend to leave my current company in the next…"
1. three months
2. six months
3. 12 months from now.

All six items were standardized and aggregated to create the score for turnover intention scale. The anchors are *strongly disagree* to *strongly agree*.

Organizational Commitment (Selected from Mowday, Steers, & Porter, 1979)

1. I am willing to put in a great deal of effort beyond that normally expected in order to help this company be successful.
2. I talk up this company as a great company to work for.
3. I feel very little loyalty to this company. (R)
4. I find that my values and the company's values are very similar.
5. I am proud to tell others that I am part of this company.
6. This company really inspires the very best in me in the way of job performance.
7. I am extremely glad that I chose this company to work for over others I considered at the time I joined.
8. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees. (R)
9. I really care about the fate of this company.

Felt Obligation (Selected from Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001)

1. I feel a personal obligation to do whatever I can to help my company achieve its goals.
2. I owe it to my company to give 100% of my energy to my company's goals while I am at work.
3. I have an obligation to my company to ensure that I produce high quality work.

Professional Commitment (Adapted from Blau, 1988)

1. If I could do it all over again, I would choose to work in the IT profession.
2. I definitely want a career for myself in the IT profession.
3. I like the IT profession too much to give it up.

In-Role Performance (Adapted from MacKenzie, Podsakoff, &Fetter, 1991; Podsakoff & MacKenzie, 1994; Tsui, 1984)

1. This employee is outstanding, when all things are considered.
2. This employee performs his or her job that way I like to see it performed.
3. This employee is one of this company's most valuable employees.

Organizational Citizenship Behavior (Chen, Hui, & Sego, 1998)

1. This employee helps orient new employees even though it is not required.
2. This employee always is ready to help or to lend a helping hand to those around him or her.
3. This employee willingly gives of his or her time to help others who have work-related problems.

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