

An Empirical Study of the Conceptualization of Overall Organizational Justice  
and Its Relationship with Psychological Empowerment, Organizational  
Commitment and Turnover Intention in Higher Education

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Abstract

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Traditionally, organizational justice has been conceptualized by differentiating the construct into distributive, procedural and interactional justice. In recent years, some researchers have suggested that treating organizational justice as one concept may be a better approach, since the distributive, procedural and interactional justice have shown to have high correlations in numerous empirical studies. Nonetheless, the use of overall construct of organizational justice is based on the assumption that the organization as a whole is the common source and the single focus of the justice perceptions for the organizational members. In modern complex organizations such as research universities, faculty belong to different departments, colleges and schools, and at the same time work in the institutional environment. Therefore, faculty are likely to have multiple foci on which perceptions of organizational justice are based.

There were two main purposes of this study. The first purpose was to test the idea of taking into account of organizational structure of higher education in conceptualizing organizational justice construct. The second purpose was to model the relationship between organizational justice(s), psychological empowerment, organizational commitment and turnover intention of faculty.

Exploratory factor analysis, confirmatory factor analysis and structural equation modeling were used to analyze the data collected from a public research

university. The results indicated that organizational justice is best conceptualized as a multi-dimensional construct by differentiating into organizational justice in the department, the college and at the institution level. The result of a second-order confirmatory factor analysis showed that there is an underlying overall organizational justice that account for the covariance among the justice perceptions in the department, the college and at institutional level. The results of the structural models indicated that organizational justice in the department has direct impact on faculty empowerment, commitment and turnover intentions, organizational justice at institution level has indirect effect on turnover intentions mediated through empowerment and commitment, while organizational justice in the college only have direct influence on psychological empowerment. The second-order overall organizational justice is significantly related to psychological empowerment, organizational commitment and turnover intentions. In the structural models, the psychological empowerment has a direct impact on organizational commitment, but only has indirect influence on turnover intentions. The organizational commitment is a mediator for the effect of organizational justice and psychological empowerment on turnover intentions.

The findings suggested that the perception of justice in department has the strongest effect in faculty turnover intentions, while the influence of the overall justice perception on the differentiated justice constructs means that it is not only the individual transactions of allocation, procedures or interaction in faculty worklives matter, but also the overall justice climate or atmosphere that is crucial in shaping faculty perceived justice. The implications of the study for faculty worklives and organizational justice were also discussed.

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## CHAPTER I

### INTRODUCTION

#### **Background**

Historically, higher education institutions have played a vital role in American society. Universities and colleges bear the mission of educating citizens, preserving and advancing knowledge, engaging in services that benefit communities, incubating ideas that enrich culture, solve problems, and fulfill societal needs. As economic, demographic and technological developments and global competition redefine the traditional roles of different social institutions and their traditional ways of serving the society, higher education institutions and the academic profession have undergone many changes.

American colleges and universities have been facing challenges such as declining financial resources, changing student populations, and shifting societal expectations about the nature and purpose of higher education over the last three decades. The myriad of pressing issues in higher education require transformative change which cannot occur without a vital, institutionally engaged faculty. Faculty members play a central role in shaping the character of collegiate environments. They constitute the continuity, substance, and quality of the higher education enterprise. As Bowen and Schuster (1986) have stated, “the excellence of higher education is a function of the kind of people it is able to enlist and retain on its faculties” (p.3). The engagement of faculty with institutional issues and challenges is critical to institutional survival and prosperity.

From the perspective of an institution, it requires everyone’s effort in challenging time. The commitment of all institutional constituencies to the well-being of the institution can never be over-emphasized. Being definers and gatekeepers of academic

quality and core stakeholders of the institutional community, faculty members fulfill the responsibilities that affect every aspect of their institution to establish a high-quality, vigorous and supportive academic climate and environment. The primary responsibilities of university faculty are commonly articulated as teaching, research, and service. In addition to these areas, faculty members individually and collectively make important decisions for their departments, colleges or schools, and institution. They contribute to department decisions about peer review, curricula, student graduation criteria, research priorities, and more through their advice and recommendations. They also participate in decision-making through department, school, and campus-wide committees and task forces to create the climate and culture of collegiality, establish or revise criteria for student admission or requirements for academic programs and curricula, and form strategies and policies that ensure academic excellence.

Traditionally, shared responsibility has been one of the indispensable characteristics for higher education and the academic profession, and the appropriate practice of the tradition is always decisive for the healthiness of a college or university. In a joint “Statement on Government of Colleges and Universities” by the American Council on Education, the Association of Governing Boards and the American Association of University Professors (AAUP), the long-existing practice of shared responsibility for decision-making of faculty members had been explicitly stated:

*The variety and complexity of tasks performed by institutions of higher education produce an inescapable interdependence among governing boards, administration and faculty...The faculty has primary responsibility for such fundamental areas as curriculum, subject matter and methods of instruction, research, faculty status and those aspects of*

*student life which relate to the educational process.” (AAUP, 2001, p. 218-221)*

Corson (1960) identified the administration of colleges and universities as presenting “a unique dualism in organizational structure”. He saw the university as including two structures existing in parallel: the conventional administrative hierarchy and the structure through which faculty made decisions regarding those aspects of the institution over which they had jurisdiction. Gappa, Austin and Trice (2007) described the governing structure as both hierarchical and horizontal. On one hand, the hierarchical structure of governance includes the organizational levels from academic departments, to schools or colleges, and then to central administration of the institution with board of trustees at the top. On the other hand, the horizontal structure consists of faculty input into decisions at department, school, and institutional levels through interaction with department chairs, in the school or college councils that advise deans, and faculty senates or other governance bodies. The institutional decision-making can, therefore, be better balanced and enriched through the operation of the two interwoven strands of governance.

From a leadership point of view, faculty involvement and participation are desirable in setting institutional policies and procedures for work-related matters, such as teaching, research, or service, because faculty need to understand and believe in the legitimacy of the policies and procedures if they are to be implemented effectively and followed willingly. The best way to instill confidence in institutional administration is to engage the faculty in the decision-making process. By soliciting faculty opinions, making sure that they understand how and why certain decisions are made, and assuring that the decisions and decision-making processes are fair and straight-forward, an institution can build commitment through personal ownership and encourage responsible behavior. Besides, it is imperative that the faculty have a voice in the formative stage of policy-making to insure their loyalty in its implementation.

However, faculty involvement and participation in decision-making in a democratic fashion can be a notoriously detailed, deliberate, and time-consuming process. (Gappa, Austin and Trice, 2007) Although faculty are experts in their disciplines, they might not be efficient committee members. McCormick and Meiners (1989) suggested that faculty inclusion in the process of shared governance hampers institutional functioning. To the contrary, Cunningham (2009) argues that a strong presence of faculty in governance can serve as a proxy for monitoring administrative behavior in cost-efficient manner and will help improve institutional functioning. As colleges and universities are required to become more adaptive, responsive and flexible to internal and external challenges, and significant pressures for accountability are presented, institutional decision-making would tend to be more centralized for efficiency. That is, from the managerial point of view, faculty participation in decision making might not always be favorable.

Faculty members also have different views and expectations of their responsibilities and how teaching, research and service matters should be comprised in their work duties. Participation in departmental, college and institutional decision-making or committee assignments will certainly take up faculty time which could otherwise be used for the tasks on which that they are more interested or more productive. Furthermore, in higher education, research and teaching are perceived, by most of the faculty, as the primary factors on which faculty are mostly evaluated and rewarded. (Sax, Astin, Arredondo, & Korn, 1996) In these regards, faculty members might not always be active in participating in the formal process of governance or general decision-making process at different institutional levels unless they aspire to pursue and advance in an administrative career or become members of governance bodies.

Despite different levels of expected and actual involvement in decision making in their institution, faculty are, after all, the subject of decisions. The compensation and salaries faculty receive, the courses faculty teach and projects faculty undertake, and the social settings and organizational structure and arrangements within which faculty function are all closely related to the decisions and institutional decision-making processes. The economic and socio-emotional consequences of these decisions form the foundation for faculty motivation, empowerment, satisfaction, commitment, their perceived fit into their institution, and turnover intention. Even though the extent of faculty participation and involvement varies due to various subjective personal and objective institutional environment factors, it is reasonable to assume that the faculty will care about whether they feel they are treated fairly and whether they perceive they have access to appropriate information, and have their voices heard in the formation of decisions at different institutional levels.

The issues of justice or fairness are major concerns to virtually all individuals (Judge & Colquitt, 2004). In the existing research from the private sector, organizational justice has consistently demonstrated a strong correlation with trust in management, employee commitment, empowerment and performance, and many other work attitudes and behaviors. It is urgent for higher education researchers to start investigating what faculty think about fairness in terms of their involvement in decision-making, and the role of perceived organizational justice in shaping faculty attitudes and behaviors in higher education.

### **Statement of Problem**

Gappa, Austin and Trice (2007) note that as the environmental challenges continue to affect higher education institutions, the faculty members will also face the respective changes in careers, such as changing patterns in faculty appointments, declines in faculty autonomy and control, an escalating pace of work and expanding workloads, and an increasingly entrepreneurial and high-pressure environment. These dramatic changes in academe are quite similar to what has been taking place in business and industries; colleges and universities also confront a strategic imperative of ensuring that the academic workplace is organized in ways that continue to attract, retain and support faculty for the excellence of their work. To address the issue of faculty attraction and retention, leaders in higher education need to understand how faculty perceive their institutional worklife, and the factors that influence their attitudes toward their jobs and organizations, such as satisfaction, organizational commitment and turnover intention.

Over the past 15 years, there has been a plethora of research conducted on faculty worklives across the United States. (Rosser, 2005) Much of the previous research on faculty worklives has included such issues as faculty members' motivation,

productivity, and behavior (Blackburn & Lawrence, 1995), rewards and salary (Boyer, 1990; Hagedorn, 1996; Matier, 1990; McKeachie, 1979), gender and minority issues (Aquirre, 2000; Johnsrud & Sadao, 1998; Turner & Myers, 2000), instructional and learning technologies (Groves & Zemel, 2000; Privateer, 1999; Rice & Miller, 2001), and satisfaction (Boyer, Altbach & Whitlaw, 1994; Olsen, Maple, & Stage, 1995; Tack & Patitu, 1992). These important worklife issues have also been perceived as relevant to the retention and turnover of faculty members (Barnes, Agago, & Coombs, 1998; Johnsrud & Heck, 1994; Johnsrud & Rosser, 2002; Manger & Eikland, 1990; Smart, 1990; Weiler, 1985). No studies, however, have attempted to investigate perceived organizational justice and psychological empowerment of faculty in their institutional life and their impact on attitude and behavior, or tendency, such as organizational commitment and turnover intention.

Researchers in business and industrial psychology, public administration and organizational studies have shown that organizational justice has influence on satisfaction (Alutto, 1974; Cotton, 1995; Fassina, Jones, & Uggerslev, 1988; Kim, 2002; Loi, Yang, & Diefendorff, 2009; Miller & Monge; Moorman, Niehoff, & Organ, 1993; Taylor & Tashakkori, 1995; Tyler & Folger, 1980), commitment (Chungtai & Zafar, 2006; Moorman, Niehoff, & Organ, 1993; Siegel, Post, Brockner, Fishman, & Garden, 2005), trust (Ambrose & Schminke, 2003; Davis & Bryant, 2010; Dipaola & Guy, 2009; Driscoll, 1978; Frasier, Johnson, Gavin, Gooty, & Snow, 2010; Hoy & Tarter, 2005; Pillai, Schreischeim, Williams, 1999), job performance (Andrew, 1967; Cotton, 1995; Davis & Bryant, 2010; Garland, 1973; Pritchard & Jorgenson, 1972), and the organizational citizenship behavior (Aquino, 1995; Fassina, Jones, & Uggerslev, 1988; Karriker & Williams, 2009; Moorman, 1991) of employees. Psychological empowerment has also

been proven to be closely related to attitudes and behaviors of people in organization (Kirkman, 1999; Lashinger & Finegan; 2005; Liden, Wayne, & Sparrowe, 2000; Liu, Chiu, & Fellows, 2007). Nonetheless, in higher education, faculty work under unique conditions, requirements, norms and culture, and the job contents of faculty are fundamentally distinct from work in industrial and other professional settings, so the research results in business and other settings might not be completely applicable to the higher education context.

In addition, most of the previous studies of organizational justice have followed the traditional model of differentiating justice into distributive, procedural and interactional justice. In recent years, some scholars suggested that treating organizational justice as one concept instead of breaking it down into several components could be better because the empirically evident high correlations among distributive, procedural and interactional justice (Cropanzano & Ambrose, 2001; Ambrose & Schminke, 2009) makes it practically difficult to measure only a certain type of justice. Nonetheless, the underlying assumption of using single overall construct of organizational justice is that the organization as a whole is the common source and single focus of the justice perception for its organizational members. In complex organization, whether there is a common source from which or single focus on which organizational members perceive organizational justice is actually problematic.

In higher education, faculty in particularly large and comprehensive colleges and universities belong to different departments, colleges and schools, and at the same time work in an institutional environment. In the last half century, the diversity and diffusion in colleges and universities have increased significantly (Clark, 1993, 1995), and higher education institutions have become systems that are loosely-coupled (Weick, 1982), so

faculty could have very different disciplinary and professional, as well as demographic and ethnic, affiliation and identity within an institutional environment. Consequently, their sources or foci of perceived organizational justice might have different importance in forming their attitudes and influencing behaviors.

Taking all these issues into account, there are needs to address the lack of research on faculty perception of organizational justice, how the organizational justice construct should be conceptualized, and what and how perceived organizational justice can impact faculty attitudes and behavior.

### **Purpose of Study**

It is quite intuitively appealing that when people are treated fairly in an organization, they tend to have more trust for the decisions made about their work and are more willing to commit to their roles and responsibilities. As a result, positive outcomes such as higher motivation, satisfaction, better adjustment, commitment, performance, lower level of stress and turnover will result. But in order to put the logic to work in leadership or management practice, it is important to understand how and to what extent the influence of organization justice impacts which attitudes and behaviors.

In the past two decades, researchers have taken modeling approaches, such as confirmatory factor analysis (CFA) and structural equation modeling (SEM) to study work-related constructs that cannot be directly observed or measured and the relationship among work attitudes and behaviors. (Kline, 2005; Byrne, 2010)

Utilizing the widely available faculty climate survey data from a public research university, the present study attempts to measure the construct of perceived organizational justice of faculty in terms of their participation and understanding of the decision-making process, and perceived effectiveness of leadership at different levels in

the hierarchy of a university, and seeks to understand the relationship among perceived organizational justice, psychological empowerment, organizational commitment and turnover intention. More specifically, since no study has ever investigated the construct of organizational justice and psychological empowerment of faculty in the same model, this study puts together organizational justice, psychological empowerment, organizational commitment, and faculty turnover intention in structural equation models to examine the relationship among these constructs. In conceptualization, this study takes a monistic approach which uses an overall organizational justice perception to represent the organizational justice construct, and tests the appropriateness of differentiating perceived organizational justice according to the organizational hierarchy of higher education institutions, i.e. department, college and institution levels, using confirmatory factor analysis. None of the existing research of organizational justice has taken this multi-foci approach. The ultimate goal of this study is to develop a model to describe and explain the effect of faculty perceived organizational justice on their empowerment, commitment and intent to remain in their institution.

### **Theoretical Framework**

The theoretical framework for this study was drawn from a broad research tradition which links faculty organizational justice perceptions in relationship to participation and understanding of decision-making, perceived fairness of organizational outcomes distribution, perceived effectiveness of leadership, trust in administration, psychological empowerment, commitment and turnover intention. The building blocks of this framework includes aforementioned existing research contributing to knowledge of the definitions of and rationale behind perceived organizational justice in workplace

and the causal relationships among perceived organizational justice and work-related outcomes such as psychological empowerment, organizational commitment and turnover intention. According to the findings of those existing studies, organizational justice can benefit both organization and individuals working within by increasing the trust and commitment, improving job performance, diminishing conflict, and stimulating organizational citizen behaviors

Researchers on the conceptualization of organizational justice have traditionally suggested that there are three important components of organizational justice: distributive justice, procedural justice and interactional justice. (Greenberg, 1990; Colquitt, 2001) Distributive justice is the fairness of outcome allocation; procedural justice is the fairness of formal process of allocation; and, interactional justice is the fairness of interpersonal transactions an individual encounters with others in organization. On one hand, because the three type of justice are engendered in distinctive ways, this conceptualization is especially useful to study how different types of justice can arise from different managerial actions. On the other hand, empirical studies have shown that the three components tend to be correlated and often work together to influence the attitudes and behaviors of the employees within organizational context (Sweeney & McFarlin, 1997; Tyler & Bies, 1990). In recent years, some researchers proposed that the singular focus on the effects of specific types of justice may not capture the depth and richness of individuals' justice experiences (Ambrose & Schminke, 2009; Ambrose & Arnaud, 2005; Hauenstein, McGonigle, & Flinder, 2001; Lind, 2001; Lind & van den Bos, 2002). For example, According to Ambrose and Arnaud (2005), the underlying interest in the conceptual status of different types of justice should not be how they are conceptually distinct, but how they are related. The sole focus on

individual distinct constructs often makes researchers ignore the interdependence among the different types of justice. As a way to address this issue, the researchers recommended a shift in focus to a consideration of overall fairness judgments to have a more complete understanding of justice and its effect relative to other psychological constructs in organizational setting.

Some scholars suggested that structural differences between organizations may provide varying amounts of participation, due process, social exchange possibilities and other variables (Sheppard, Lewicki, & Minton, 1992). Schminke, Cropanzano and Rupp (2002) conducted a study to explore the relationship between organizational structure and fairness perceptions and concluded that organizational level was negatively related to justice perception; that is, the more levels within an organization, the lower levels of perceived organizational justice of the individuals in organization. Their research did not attempt to trace the sources of perceived organizational justice according to the organizational level. Nonetheless, when conceptualizing the organizational justice construct, organizational structure and complexity might need to be taken into account, since in complex organizations, the source of perceived organizational justice can derive from different parts of organization, for example different levels of organizational hierarchy.

The model designed for this study proposes that faculty perceived organizational justice at departmental, college and institutional level should be conceptually distinct. The perceived organization justice in this study refers to faculty perceptions of the fairness of treatment received from their department, college and institution in terms of participation and involvement in decision-making process, the understanding of how and why decisions such as committee assignments and tenure and promotion are made, and

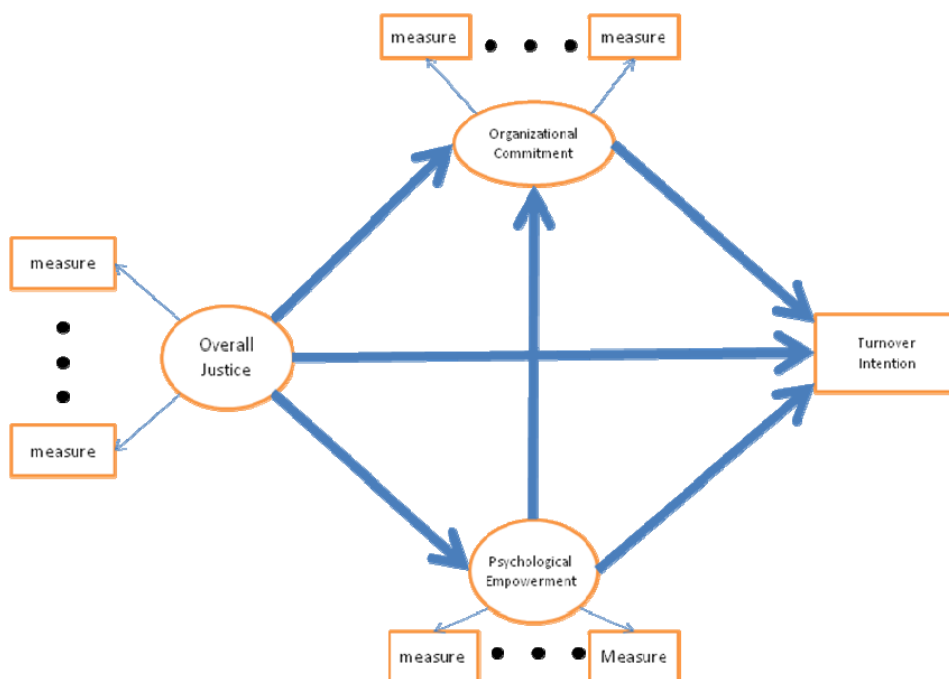
the perceived effectiveness of leadership at department, college, and institutional levels. The present study utilizes perceived organizational justice at different institutional hierarchies as antecedents to the constructs of faculty perceptions of empowerment, organizational commitment and turnover intentions. The perceptions of faculty about organizational justice is hypothesized to yield affective responses such as job satisfaction and organizational commitment. The perceived involvement and participation in decision making, the perceived understanding of how and why decisions being made, the acceptance of organizational decisions, and the trust in organizational leadership can all be attributed to the perceptions of organizational justice, because according to the control model of organizational justice (Thibaut & Walker, 1975), people feel that they have control over the decision-making processes or outcomes when they have opportunities to express their views regarding the decisions being made. And when people have a voice or role in determining and influencing what is going on with their organizational lives, they will be empowered psychologically. Therefore, perceived organizational justice should have a positive impact on psychological empowerment state of faculty.

According to Thomas and Velthous (1990), empowerment is intrinsic task motivation consisting of four cognitive dimensions: meaningfulness, competence, self-determination and impact. The four dimensions reflect individual's orientation to his or her role in the organization. When one's work or role is meaningful, there must be congruence between his or her work role and personal value system. When people feel competent in performing their job duties, they will be more likely to exert considerable effort, since they understand the linkage between personal specialties and organizational success. When people have self-determination at work, they feel having

control over their work and decision-making processes, this will stimulate the participation and involvement in organization activities. And when organizational members understand the contribution of their work to the accomplishment of organizational goals, the feeling of having an impact will serve as a source of motivation to make a difference.

Kirkman and Rosen (1999) studied the antecedents and consequences of empowerment in a team context and reported that team members' experience of empowerment will positively influence their level of organizational commitment. Their conclusion supported Steers' (1977) finding that work related experiences and perceptions, rather than personal, job or organizational factors, were the most powerful predictors of organizational commitment. Consequently, the model of the present study proposes that the psychological empowerment of faculty will influence the organizational commitment and faculty intentions to leave their institution. In addition, to test the direct effects of organizational justice and psychological empowerment, the indirect effects mediated through organizational commitment will be identified and explained.

Figure 1.1 illustrates the proposed theoretical relationships among these constructs. This study examines the relationships of these constructs and will use individuals as the unit of analysis, and will also concentrate on the development of a model that operates at the individual level and test the model with structural equation modeling methods.



**Figure 1-1 Theoretical Relationship among Constructs**

### Research Questions

This study proposes to investigate the following questions:

- (1) When taking into account of organizational hierarchy in a comprehensive university, such as departments, colleges and schools, and the institution as a whole, whether an overall construct of faculty perceived organizational justice best fits the survey data, or the construct needs to be differentiated according to organizational hierarchy?
- (2) How do organizational justice perceptions relate to the psychological empowerment of faculty?
- (3) How do organizational justice perceptions relate to the organizational commitment of faculty?
- (4) How do organizational justice perceptions relate to the turnover intentions of faculty?

- (5) Do psychological empowerment and organizational commitment mediate the relationships among faculty perceived organizational justice and turnover intentions?

### **Importance of Inquiry**

An examination of faculty perceptions of organizational justice and the impact of perceived justice on faculty attitudes and behavior is important and relevant for several reasons:

First, A growing body of research indicates that higher education in U.S. has been increasingly controlled by managerialism (Levin, 2006; Rhoades, 1998; Deem, Hillyard, & Reed, 2007; Hardy, 1996; Martin, 1997; Rhoades & Slaughter, 1997; Slaughter & Rhoades, 2004), under which professional management, formal planning, systematic performance evaluation, centralized resource allocation and directive leadership are the main emphases (Hardy, 1996). As a result, higher education is fast orienting toward the marketplace and entrepreneurial behavior. These changes have challenged the traditional work role and values of faculty. In addition, as the academic disciplines and university organization continue to expand, the organizational structure and procedures inevitably become more complicated and require business-like way of management. Because of these changes, faculty have encountered what Rhoades (1998) called “professional peripheralization”, being pushed to the margins in many cases of decision-making. In light of these development in higher education, it is necessary to understand how faculty feel and cope with the new expectations and mandates. Higher education researchers have conducted many studies to understand faculty worklives, but little light has been shed on organizational justice and psychological empowerment,

which are proven to have strong influence on employees' motivation, attitudes and behaviors (Gardell, 1976; Karasek, 1979; Liden, Wayne, and Sparrowe, 2000; Liu, Chiu, and Fellows, 2007; Vackarakiat, 2008) in business and other setting. Understanding organizational justice and psychological empowerment in faculty worklives will enable researchers and leaders in higher education to consider possible ways to support faculty adjustment to take on the new roles and expectations.

Second, given the traditional role of faculty in shared governance, and the differences in individual preference of the research, teaching and service roles, it is not clear what, in general, faculty think regarding their understanding and participation in decision-making at various levels in their institution. However, as suggested in organizational development literature, the key to success of organizational changes lies in the adaptive behavior of the employees (Burke & Litwin, 1992; Porras & Robertson, 1992), and the transformational changes facing higher education require the support and engagement of the faculty. Hence, the involvement of faculty becomes essential to ensure the understanding and support for the organizational goals and values. In reality, faculty have different levels of actual access to information about and interaction in decision-making processes. Along with individual preferences and priorities, faculty perception regarding participation, understanding decision making, and organizational leadership will form. In the psychological process, perception of organizational justice might have an impact on how faculty make sense and evaluate their own role and involvement in the institution. Therefore, understanding how perceptions of organizational justice determine attitude toward the institution can be useful for leaders in higher education when facilitating and implementing processes for changes by highlighting potential areas of resistance and identifying ways to influence faculty

acceptance and support for institutional policies.

In summary, the examination of organizational justice and its impact on faculty attitudes and behaviors should enhance the understanding of the dynamics inherent in the modern higher education context and provide further insight into the factors that might be useful in fostering faculty commitment, satisfaction, and other positive work outcomes.

### **Significance of the Study**

This study contributes to the literature in several research domains. First, empirical studies of organizational justice and psychological empowerment in higher education are sparse. Although considerable efforts have been devoted to the understanding of faculty worklives (Rosser, 2004, 2005; Blackburn & Lawrence, 1995; Hagedorn, 1996; Johnrud & Rosser, 2002; Smart, 1990), little research has been done to understand faculty justice perceptions and empowerment. As suggested by the literature in other contexts that organizational justice and psychological empowerment have significant influence on motivation, attitudes and behaviors of employees, the lack of understanding what the impacts of faculty justice perceptions and psychological empowerment a missing piece in understanding of faculty worklives. Because higher education institutions are subject to a different range of rules, regulations and norms from other settings, extending the knowledge in this context is both relevant and informative to higher education leaders faced with the challenges of ensuring a healthy and thriving environment in their institutions in light of the transformational changes.

A second contribution of this study is the use of an innovative way of conceptualizing the construct of organizational justice by taking into account the

organizational hierarchy of a university structure. As noted earlier, modern higher education institutions have become loosely-coupled systems (Weick, 1982), so faculty very likely develop perceptions that focus on different entities within the same institution. Applying this logic to the perceived organizational justice of faculty, the traditional single-focus conceptualization of perceived justice from the institution as a whole becomes inadequate. Therefore, the tests of the models with the considerations of organizational hierarchy built in will enable researchers to identify the specific impacts of organizational justice at different levels of organizational hierarchy on faculty attitudes and behaviors.

Third, this study will contribute to the extensive literature regarding employee work attitudes and behaviors by incorporating the construct of organizational justice, psychological empowerment, organizational commitment and turnover intention into the same research framework. Although empirical studies have been conducted on justice and commitment (Chungtai & Zafar, 2006; Moorman, Niehoff, & Organ, 1993; Siegel, Post, Brockner, Fishman, & Garden, 2005), and justice and empowerment, no study has developed models that contain the three constructs to examine their relationship. The models of this study will inform the research community how the impact of organizational justice influences the empowerment and commitment of faculty and how well the justice perceptions, empowerment and commitment can predict the turnover intention of the faculty.

### **Boundaries of the Study**

The study has a set of boundaries to ensure clarity and focus of the research. First, the study does not set out to model faculty organizational justice perception in all types

of higher education institutions, as institution types vary and the context within which the faculty work can be very different. Since the data collected for this research is from a public research university, the experiences and perceptions of faculty in this study might be generalized to the similar type of institutions. Second, the focus of justice perceptions in this study is on the experiences and perceptions regarding participation and involvement in and understanding of decision-making and interaction with leadership on campus. There are more aspects in faculty worklives that would influence their perceptions of justice, such as the pay and support the faculty receive, the interpersonal relationships, and interaction with colleagues. And these aspects are not included in the present study.

### **Organization of the Study**

This chapter has described the context and examined the importance of understanding the faculty perceptions of organizational justice in higher education institutions. The theoretical framework of the present study was discussed. The research questions that guide the inquiry were provided, and the significance of the study discussed. Chapter II provides a review of the literature relevant to organizational justice and each of the proposed attitudinal and behavioral consequences. There is also discussion on the relationships among the constructs and the relevant findings from previous research.

In Chapter III a concept model is presented, along with a detailed discussion of the research design, the research hypotheses tested, and the methodology used for testing the designed conceptual model and hypotheses. The results of the statistical analyses regarding tests of the research hypotheses are presented in Chapter IV. Chapter

V includes a discussion of the findings from statistical analyses and the implications derived from the findings. The limitations of the study, recommendations for future research and conclusions of the study are also given.

## CHAPTER II

### REVIEW OF LITERATURE

The purposes of this chapter were to review of a body of literature that helped guide the inquiry into what organizational justice is and how organizational justice impacts on employees' attitudes in general organizational settings and in higher education. Three areas of literature were reviewed to frame this present inquiry: (1) theoretical foundation regarding why people would care about organizational justice, including general motivation theories, social exchange theory and the theory of psychological empowerment; (2) the existing research on the constructs of organizational justice, satisfaction, commitment and turnover intention in general organizational and higher education context; (3) the existing research that provide insights on the relationship of the aforementioned constructs. This chapter will be concluded with a theoretical framework of the present study.

#### **Theoretical Foundation**

The study of justice extends back as far as Plato and Socrates (Ryan, 1993). Early researchers of justice focused on justice principles in general social interaction, not organizations specifically (Greenberg, 1990). It was not until 1970s that research began to address justice in organizational settings and attempt to describe and explain the role of fairness as a consideration in the workplace (Greenberg, 1987; 1990).

Organizational justice, according to the Encyclopedia of Industrial and Organizational Psychology (Rogelberg, 2007), refers to individual or collective judgments of fairness or ethical propriety within an organization. Rawls (1971) claimed justice to be the first

virtue of social institutions. Greenberg (1987, 1990) also asserted that organizational justice is of major importance to an organization's effectiveness and has an impact on the personal satisfaction of organizational employees. It is not difficult to understand and reason why people would care about fairness in an organization. Individuals are the subject of organizational decisions. Some decisions are related to how pecuniary or other types of benefits are allocated, some deal with how the tasks and responsibilities are assigned, and some have to do with the rules, structures and other issues of the organization in which people function. The consequences have impacts on the well-being of organizational members directly and indirectly. Therefore, it is not surprising that people pay close attention to fairness, or justice, in their organization. Given this intuitively straightforward account, some theories have also provided perspectives and solid foundations for the motives of people concerned about justice rather than just their immediate benefits and gain. These theories include motivation theories, equity theory, psychological empowerment theory, and social exchange theory.

### ***Motivation Theories***

Several theories about motivation can be use to explain why people would care about justice. Among them, drive theory, need models and expectancy theory are related to why justice would be a concern of people in their organizational lives. According to Hull (1943), the needs of people serve as internal stimuli for actions, and the actions will continue until the needs are satisfied. Based on the drive theory, there are two kinds of stimuli, primary drives, which are related to basic survival and procreation, and secondary drives, which are related to social and identity factors. Maslow (1943) used needs to represent the drives and claimed that five fundamental human needs are hierarchical in nature. Among the five categories of needs,

physiological needs and safety needs are similar to Hull's primary drives, and needs for belonging and esteem are closer to secondary drives. In an organization, decision-making can influence whether the needs of its members are met or underserved; and the members will often want to make sure that the outcomes, procedures, information and people who make those decisions are doing so in their interests. Their interests include economic and socio-emotional interest. For example, everyone needs resources to perform or fulfill the responsibilities assigned to one's role. The performance will then become an important factor for one's reward and development in the organization. The allocation of organizational resources and outcomes and the organizational structure and procedures that decide the allocation certainly will become the focus of people's concern.

In addition, Vroom (1964) suggested that people tend to make rational decisions about whether to exert effort based on their perceptions of whether their effort will lead to the outcomes they value. This is referred to as expectancy theory. The underlying assumption of the theory is that people are able to control, or perceive that they have a voice in the process of deciding what, how, and how much their reward would be. Based on these motivational theories, organizational justice will be an important consideration for people in their organizational lives.

### ***Equity Theory***

Adams' work on equity (Adams, 1963; 1965) was one of the first studies in psychology on perceptions of people regarding the allocation of outcomes (Cohen-Charash & Spector, 2001). The theory claims that individuals in organizations compare the ratios of their own outcomes, normally tangible rewards, to inputs, such as contributions, to the ratios of other organizational referents. The comparisons will lead

to adjustment of work behaviors. That is, when the comparisons yield big differences, people will be motivated to change the situation by either modifying their inputs and outcomes, changing their referent other, distorting their perception, or leaving the organization (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001). Some empirical studies have been conducted to test various aspects of the theory and have confirmed the predictability on worker behaviors (Andrews, 1967; Garland, 1973; Pritchard, Dunnette, & Jorgenson, 1972). Reviewers of organizational studies have also concluded that the evidence for equity theory is generally quite strong (Greenberg, 1986, 1987, 1990; Mowday, 1987). The comparisons and pursuit of equity in allocation of outcomes can be viewed as an important expression of evaluating organizational justice in an organization.

### ***Psychological Empowerment Theory***

Empowerment became a widely used term in organizational sciences in the 1980s. Zimmerman and his colleagues (Zimmerman, Israel, Schulz & Checkoway, 1992) incorporated definitions from various studies ( Berger & Neuhaus, 1977; Cornell Empowerment Group, 1989; Rappaport, Swift, & Hess, 1984; Schulz & Israel, 1990; Swift & Levin, 1987; Zimmerman, 1990a, 1990b) and describe empowerment as a process by which individuals gain mastery and control over their lives and a critical understanding of their environment. They stated that psychological empowerment can be conceptualized to have intrapersonal, interactional and behavioral components. The intrapersonal component refers to people's perceived influence on organizational social and political systems. In this aspect, it represents what Paulhus (1983) called domain-specific perceived control, self-efficacy, motivation to exert control and perceived competence. The interactional component refers to the transactions between persons and

environments that make the exertion of influence on an organization possible, including knowledge, understanding and skills about obtaining necessary resources, accessing causal agents, engaging in organizational problem-solving and decision-making process. The behavioral component refers to the actions an individual takes to exercise influence on the organizational environment through various kinds of participation and engagement in the organization or sub-groups.

In light of perceived influence or control, organizational justice matters because it guarantees the provision of some means and opportunities for people to influence decisions. The influence could be on the decision itself, or in the formation process of the decision. When the organizational members are provided with means and opportunities to influence organizational decisions and the process, they are psychologically empowered and will report measures of organizational justice.

### ***Social Exchange Theory***

In addition to concerns about self-interest, equity, and personal control in organizational processes and decisions, people also exchange economic and social-emotional outcomes and benefits with other organizational members, sub-groups and the organization as a whole through fulfilling their roles and responsibilities. According to Wat and Shaffer (2005), social exchange theory is originally an economic model of human behavior, in which all interactions among organizational members or between individuals and the organization are depicted as exchanges, and individuals seek to maximize benefits and minimize losses through exchanges. Contemporary social exchange researchers view social exchanges as a type of relationship between the involved parties (Organ, 1988, 1990; Shore, Tetrick, Lynch, & Barksdale, 2000). The social exchange relationship is based on reciprocity. That is, each party fulfills the clearly delineated responsibilities to repay the rewards or outcomes they receive from other social entities in the organization (Cook & Emerson, 1987). Blau (1964) placed exchanges on a continuum from economic to social. He characterized economic exchange relationships of short-term and social exchange relationship as long-term. The quality and the maintenance of the exchange relationships depend on fair treatment for each of the entities involved. When the exchanges are regarded as fair over time, the perception of organizational justice will prevail among organizational members and the coherence of the organization will be enhanced.

### **Perceived Organizational Justice**

It is human nature to compare and contrast. Through comparisons, we feel, perceive and learn about the environment around us. People also evaluate and make judgments based on comparisons. In the work setting, Individuals often form their perceptions and judgments on the basis of fairness, or justice, regarding the decisions and the consequences that impact their organizational lives. Over time, these judgments and perceptions serve to shape individual attitudes towards their work and organization. When we try to understand why employees think and react in certain ways, we will not be able to find an adequate answer without taking into account perceived fairness of the outcomes and the procedure used to reach those outcomes (Folger & Konovsky, 1989; Greenberg, 1986).

Greenberg (1990) in his article chronicling the research literature of organizational justice described that the early theories of justice were mostly derived from social interaction, and not until the 1980s did the conceptual models which describe and explain justice in organizational context start to develop and thrive. Initially, research efforts have been focused on the justice of decision outcomes, e.g. distributive justice (Adams, 1965; Deutsch, 1975; Homans 1961; Leventhal, 1976). Then researchers started to recognize the importance of justice of the process that lead to decision outcomes, e.g. procedural justice (Leventhal, 1980; Leventhal, Karuza, & Fry, 1980; Thibaut & Walker, 1975). Bies and Moag (1986) introduced the even newer construct of interactional justice, which focused on the quality of interpersonal treatment, such as respect, sensitivity and explanation for decisions, people receive when organizational procedures are implemented. However, some researchers argued that interactional justice is a subset of procedural justice (Moorman, 1991; Niehoff & Moorman 1993;

Tyler & Bies, 1990) or combine the separate measures of both constructs due to high inter-correlations (Mansour-Cole & Scott, 1998; Skarlicki & Latham, 1997). Greenberg (1993) argued respect and sensitivity should be viewed as interpersonal facets of distributive justice, since the effects are often seen on altering reactions of people to decision outcomes, and the explanation aspect of interactional justice should be viewed as an interpersonal facet of procedural justice because explanations often provide the information needed to evaluate structural aspects of the procedure (Colquitt, 2001). In the following sections, the literature on distributive, procedural and interactional justice will be reviewed.

### ***Distributive Justice***

In the early conceptualizations of organizational justice, theorists focused on distributive justice, which is defined by Greenberg (1990) as an individual's judgment or perceived fairness of resource allocation, based upon the produced outcomes of the individual compared to the expected inputs. The foundation of this theory is based on the equity theory of Adams (1963, 1965). Adams claimed that people care whether the outcomes they received are fair instead of the absolute level of outcomes. Adams postulated that individuals arrive at a sense of equity or fairness through the comparison of ratio inputs (contributions) and outputs (rewards) to referent others within an organization. When people perceive equity within workplace, they are satisfied. According to the theory, individuals will adjust their behavior or mental perceptions to change unpleasant inequitable states to pleasant equitable ones (Greenberg, 1990).

Many researchers have tried to test equity theory. Garland (1973) conducted an experimental study to identify the relationship between productivity and the equity perceptions among proofreaders. The subjects were paid at three different levels of 15,

30 or 60 cents per page, and were then arranged to meet another subject with lower, higher or equal pay. The author found that both the proofreaders' work quantity and quality were influenced by the perceptions of fairness. The people who were overpaid tended to read fewer pages with fewer errors, and the underpaid more pages with more errors. Another study by Cowherd and Levine (1992) examining the influences of pay on productivity in corporate setting also confirmed that increasing pay can serve as a motivational drive to improve product quality. Research by Aquino (1995) further supported equity theory from another direction. The author found that dissatisfaction with pay was negatively related to organizational behavior. Greenberg (1988) studied managers who were temporarily moved to offices with higher or lower status than their positions actually warranted. Similar to the effect of pay, the managers who moved to higher-status offices raised performance, whereas those moved to lower-status offices became less productive. When the managers returned to office matching to their status, the gains and losses in performance disappeared.

While Adams' theory advocated the use of an equity rule to determine fairness, researchers have also identified other rules of fair distribution, such as equality and need (Leventhal, 1976). Leventhal (1976) took a more proactive approach, contrasting to Adams' more reactive one, with his justice judgment model which describes how people proactively employed justice norms to rationalize administrative decision-making in resource allocation.

Lerner (1975) and Deutsch (1975) introduced equality as a second principle to distributive justice. The rule of equality was based on group or organizational membership, not contribution. Each individual receives the same amount of resource allocation regardless individual contribution to the organization. Lerner (1975) illustrated

that completely allocating resource by contribution puts some individuals in a more advantageous position for power over others in the organization, and thus could instead become a source of injustice. The rule of equality can eliminate the potential power struggle between individuals within a group by not differentiating the power status and hierarchy within the group. According to Deutsch (1975), the use or the primacy of certain rules of allocation is also related to organizational context, organizational goals and personal motives. For example, the principles for allocation in workplace should differ from those in family context. The rules could also vary when the distributions were out of altruistic rather than self-interest motives. Deutsch's argument found support in the study by Chen, Meindl, and Hui (1998), which examined the cultural effect on the application of allocation rules. They concluded that when the goal was productivity, the allocation would be more differential than equal. However, when the goal was solidarity, the allocation will be more egalitarian.

Besides equity and equality, Homans (1982) identified need as a third principle of distributive justice. That is, resources should be allocated based on the identification of need. Based on the need principle, people seek to achieve distributive justice by taking into account not only the present, but also historically disadvantaged groups and allocating resources to individuals with the greatest and urgent need. Although the achievement of distributive justice is always the objective, scholars have suggested that the allocation rules are not mutually exclusive and can be combined for better practices for distributive justice (Cropanzano, Bowen, & Gilliland, 2007).

### ***Procedural Justice***

Despite the popularity of the equity theory, organizational scientists began to notice the inadequacy of the prevailing theories of justice. One source of frustration was

that equity theory did not address how decisions were made as opposed to what those decisions were. The limitation of the distributive justice concept has made theorists refocus on procedural justice, the perceived fairness of the organizational policies and procedures for decision-making.

The theory of procedural justice was developed from Thibaut and Walker's (1975) study of responses to the dispute-resolution process in legal system. Thibaut and Walker investigated how disputants' perceived control over the processes and how the decisions would impact their perception of the final verdicts. They found that disputants consistently perceived verdicts from processes where they were allowed to offer input fairer and better accepted. This finding was later confirmed by investigations on the responses of citizens to police officers (Tyler & Folger, 1980), students to teachers (Tyler & Caine, 1984), and voters to elected officials (Tyler, Rasinski & McGraw, 1985).

Landy, Barnes, and Murphy (1978) expanded the scope of procedural justice by examining the perceptions of fairness of performance evaluations in a large manufacturing organization. The results of the regression analysis indicated that the perceived fairness of performance evaluation is highly correlated with the opportunities for the professional employees to express their opinions during the evaluation process. Similarly, Dipboye and de Pontbraind (1981) examined employee reactions to the organizational evaluation system in a research and development organization. The results of the multiple regression analysis indicated that employees' reactions to their evaluation systems were positively related to the likelihood to be able to express their viewpoints. Greenberg (1986) concluded that input into the performance evaluation system is a key determinant of perceived fair evaluation.

In addition to process control, researchers have focused on other aspects of

procedural justice. Leventhal and his colleagues (Leventhal, 1976, 1980; Leventhal, Karuza, & Fry, 1980) established some attributes of fair procedures. They claimed that procedural justice can be achieved if the procedures can suppress bias, create consistent allocation, rely on accurate information, are correctable, represent the concerns of all recipients, and are meeting prevailing moral and ethical standards. Based on a series of studies that attempted to test the criterion of consistency (Barett-Howard & Tyler, 1986; Fry & Cheney, 1981; Fry & Leventhal, 1979) and accurate information (Greenberg, 1987), Greenberg (1990) suggested that Leventhal's approach to procedural justice may be particularly valuable when it comes to explaining fairness in organizational contexts. Kim and Mauborgne (1991, 1993) observed the importance of procedural justice in developing, executing and implementing strategic plans. The authors reported that the managers showed more support to plans which emanated from a fair planning process. As a result, the managers were also more willing to trust their leaders, and were more committed to their employers. The explanation Kim and Mauborgne had for their observations was that fair processes lead to intellectual and emotional recognition. They claimed that voluntary cooperation in strategy execution cannot be achieved without trust and commitment, which resulted from the intellectual and emotional recognition for procedural justice (Kim & Mauborgne, 2005).

Cropanzano, Bowen and Gilliland (2007) further argued that procedural justice is essential to maintaining institutional legitimacy. They advocated that, even if previous research found that outcome favorability tends to affect satisfaction with particular decisions (Tyler & Blader, 2000), procedural justice affects what workers believe about the organization as a whole. When the organizational processes are perceived as just, the members of the organization will have greater loyalty and willingness to act in the

best interest of their organization, and are less likely to betray the institution and its leaders (Cropanzano, Bowen, & Gilliland, 2007).

### ***Interactional Justice***

Besides distributive and procedural justice, researchers have also found that the quality of interpersonal treatment that an individual receives will affect the perception of justice. The construct was termed by Bies and Moag (1986) as “interactional justice”. Bies and Moag (1986) explained that the assessment of interactional justice focused on the interaction, which was not covered by formal procedures and therefore should be conceptually different than the procedural justice, and could be separated as a unique dimension of organizational justice. According to Bies and Moag (1986), there are four fundamental elements for interactional justice: (a) truthfulness: the decision-making procedures should be communicated in a truthful manner to avoid deception; (b) justification: the decisions should be made with justifications; (c) respect: individuals should be treated with respect; and (d) propriety: managers should avoid making inappropriate comments or ask improper questions. Greenberg (1990; 1993) further differentiated the construct into interpersonal justice and informational justice. Interpersonal justice reflects the degree to which people are treated with politeness, dignity, and respect by authorities or third parties involved in implementing organizational procedures or allocating organizational outcomes. Informational justice focuses on the extent to which people are provided with explanations about why certain procedures are used in certain ways or why outcomes were distributed in a certain fashion. The dual-aspect view of interactional justice found support from other organizational justice researchers; Colquitt and his colleagues (Colquitt, Conlon, Wesson, Porter, & Ng, 2001) further emphasized that informational justice refers to whether one

is truthfully treated and provided adequate justifications when things go badly.

The emphasis of interactional justice on the manner people are treated and the adequate provision of information makes the employee-supervisor relationship the main target for assessment, because in organizational context the one-on-one transactions between employees and supervisors involve the two elements of interactional justice and directly influence employees' perceptions and their attitudes toward their work and organization. An empirical study by Skarlicki and Latham (1996) found that when union leaders were trained to behave more justly by providing explanations and apologies and treating people they were overseeing with courtesy and respect, the individuals who reported to the trained leaders exhibited more helpful citizenship behaviors than individuals working under untrained leaders.

### ***The Effect of Organizational Justice***

As organizational justice studies proliferated, the visibility of fairness concerns has also enhanced and diversified. A large number of studies focused on the effects of organizational justice, including the impact of specific types of justice, and how different types of justice work together to influence employee attitudes and behavior. While the studies concentrated on different specifics, they all highlighted the favorable effects of justice and unfavorable effects of injustice in workplace. In general, studies have found that justice can build trust and commitment, improve performance, foster organizational citizenship behaviors, and, in business organization, strengthen customer satisfaction and loyalty (Cropanzano, Bowen, & Gilliland, 2007).

In a meta-analytic review of organizational justice, Colquitt and his colleagues (2001) found that all three components of justice (distributive, procedural, and interactional justice) predict trust. The correlation between perception of just

procedures and trust can be as high as .60. In another study, Cohen-Charash and Spector (2001) found that when employees are justly treated, they are more likely to be committed to the organization they serve. The correlation between perceived justice and affective commitment ranged from .37 and .43 depending on how justice is measured.

Many scholars are concerned about the effects of justice on job performance, which was referred to as the formal job duties assigned by organizational authority and evaluated through periodical performance appraisals (Organ, 1988). Lerner (2003) found that justice affects employees' effectiveness because the perception of fairness leads to strong interpersonal relationships over time. In two studies examining whether supervisors treated subordinates with interactional justice, researchers observed that interactional justice improved the quality of leader-member relationship, and the positive relationship also motivated employees to have better job performance (Rupp & Cropanzano, 2002; Cropanzano, Prehar, & Chen, 2002).

Several studies have discovered that the perception of justice will influence employee behaviors that go beyond the call of duty, and the behaviors were defined as organizational citizenship behaviors (OCBs) (Organ, 1988). Cohen-Charash and Spector (2001) stated that justly treated employees are more likely to comply with organizational policies, show extra conscientiousness, and behave altruistically toward others. Since the organizational citizenship behaviors are beyond the formal duties of employees, it is straight-forward that employees tend to dole out their OCBs to their organization or individuals when they are treated justly, but withhold them when they are not. In a study on the relationship among the contingent workers, the temporary agency and the organization that contracts with it, researchers discovered that citizenship behaviors toward the organizations in which the workers performed their duties were influenced

by the procedural fairness with which the organization treated the workers (Liden, Wayne, Kraimer, & Sparrowe, 2003). In other words, contingent employees who perceived the processes of the contracting organization as just performed significantly more OCBs. Nonetheless, in the study the perceived procedural justice from the employment agency did not have an effect on the employees' OCBs toward the contracting organizations.

As justice can inspire employees to go beyond the call of their formal duties and behave altruistically toward others, it is logical to infer that OCBs will help the organization to meet the needs or mandates of its clients or, more broadly, its stakeholders. Bowen, Gilliland and Folger (1999) conducted research on the impact of perceived justice on customers of an organization, and suggested that the OCBs of justly treated employees have spill-over effect on customers of the organization. More specifically, they indicated that when employees perceived justice within organization, they would be more willing to help others and listen carefully to the needs of others. When these behaviors resulted in customers feeling appropriately treated, customers' satisfaction and loyalty will be fostered.

When taking into account distributive, procedural and interactional justice all together in predictive models for important organizational outcomes, researchers have paid special attention to the interaction among the three dimensions. Some researchers found evidence for the existence of interaction (Cropanzano, Slaughter, & Bachiochi, 2005; Skarlicki & Folger, 1997) and described that although the three components of justice interact in different ways, the key is that the ill effects of injustice can be at least partially mitigated if at least one component of justice is maintained. Generally speaking, people appear to be reasonably tolerant of a distributive injustice if the procedures for

allocation are perceived to be fair; likewise, if the outcomes are regarded as appropriate, a procedural injustice will be tolerated. Similarly, two-way interaction also exists between distributive justice and interactional justice. Specifically, when an unfavorable outcome is assigned via proper interaction with sufficient information and respectful manner, individuals will be more likely to accept it. Conversely, when the outcomes are fair or favorable, people will have greater tolerance for interactional injustice. A study by Goldman (2003) considered the interaction among all three types of justice together. Goldman found that claimants of workplace discrimination were most likely to pursue litigation when distributive, procedural, and interaction justice were all low. As long as one component of justice remained high, there would be a significant drop in legal claim. In other words, justice perceptions would be most negative when individuals experienced all three types of injustice at the same time. The findings suggest that the organizations should at least get one of the three types of justice right to maintain the positive perceptions of organizational justice in their employees' mind.

### ***Discriminating between the Three Constructs of Justice***

Despite the efforts of identifying the dimensions of the justice construct, some studies have discovered that there are considerable correlations among distributive, procedural and interactional justice. The correlations indicated that the three types of justice might not be distinct in the minds of many people (Folger, 1987). In a study of employee attitudes of federal agencies, researchers found that procedural and distributive justice were highly correlated, with a correlation coefficient of .72 (Sweeney & McFarlin, 1997). Similar results were found in the studies of different populations. In a comparative study of a high-tech firm and a more traditional company that makes consumer products, Welbourne, Balkin and Gomez-Mejia (1995) found a correlation

of .74 between perceived distributive and procedural justice.

The conceptual proximity between procedural and interactional justice also aroused debates regarding whether the two constructs should be treated as separate concepts. Bies and Moag (1986) were the first scholars to declare interactional justice as the third type of justice. Researchers supporting this view have handled procedural and interactional justice separately and studies have found evidence that the two types of justice have different correlates or independent effects, or both (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). A confirmatory factor analysis of U.S. workers by Blader and Tyler (2003) attempted to differentiate procedural factors derived from organization and from leader-member relationship. The study confirmed that the system-originated procedural factors and the leader-originated procedural factors were distinct, and hence should be represented differently. In another study on the intervening mechanisms through which procedural and interactional justice affected other organizational variables, Masterson, Lewis, Goldman, and Taylor (2000) proved the distinctiveness between the two constructs and concluded that the venues that the two types of justice affected employee perceptions were different.

However, in a later study (Tyler & Bies, 1990), Bies retracted the position and suggested that interactional justice should be treated as a social form of procedural justice. The suggestion was widely held by many other researchers (Cropanzano & Greenberg, 1997). As a result, some researchers have combined scales to measure procedural justice consisting of traditional measures of procedural justice and interactional justice (Colquitt, Conlon, Wesson, Porter, & Ng, 2001).

Cropanzano and Ambrose (2001) thought that procedural evaluations are based in large part on outcomes attained (Thibaut & Walker, 1975) and that the same event

can be treated as a process in one context and an outcome in another. Therefore, they made a theoretical argument that although the distinctions between the distributive and procedural justice are necessary and valuable, they may sometimes be overemphasized. Cropanzano and Ambrose (2001) suggested a monistic perspective, which uses overall organizational justice to represent the justice construct. Yet, they were not the first scholars to attempt this approach. As early as in 1995, Martocchio and Judge had taken a similar approach by examining the effect of “organizational justice” on disciplinary decisions (Martocchio & Judge, 1995).

### ***Organizational Justice in Higher Education***

In higher education research, little has been done using the construct of organizational justice. However, equity is not a new concept in the field of education. When it comes to the workplace equity on campus, issues such as appointments, promotions, tenure, collective bargaining, diversity and affirmative action, faculty compensation, faculty workload, and shared governance in higher education institutions are explicitly addressed by the American Association of University Professors (AAUP) and others to “safeguard academic freedom and quality of higher education” (AAUP, 2011), and all the aforementioned issues have to do with the fairness, or justice, within colleges and universities. For example, the issues on gender and racial equity in pay and opportunities for career advancement are concerned with distributive justice, while other issues related to process and policies for tenure and promotions are related to procedural justice. As important as in any other work setting, the perceived fairness or organization justice should have an impact on faculty work attitudes and behaviors. Although Staw (1984) suggested that because of the somewhat altruistic nature of education, the self-interest models of motivation might not be completely relevant to

educational roles. A more recent discussion of motivation in the higher education workplace, Bess and Dee (2008) still contended that the general theories of human motivation are applicable to higher education.

### **Organizational Commitment**

In addition to satisfaction or dissatisfaction toward one's job or organization in which one's job is situated, people also have feelings of attachment or commitment toward the organization for which they work. Generally speaking, organizational commitment can be viewed as the level of dedication people possess for their employing organization, the extent to which people are willing to work on the behalf of the organization, and the likelihood that they will continue their organizational membership (Jex & Britt, 2008). Over the last four decades, organizational commitment has been identified as a critical factor in understanding and explaining the work-related behavior of employees in organizations, and many researchers have made efforts to study the construct. O'Reilly and Chatman (1986) defined organizational commitment as the psychological attachment an employee feels for his or her organization. Mathieu and Zajac (1990) described organizational commitment as a link or bond between the individual to the organization. Steer (1977) defined organizational commitment as the relative strength of an individual's identification with and involvement in a particular organization.

Mowday, Porter and Steers (1982) suggested that commitment represents both the affective feelings and the behavioral tendencies that employees have toward the organization. Porter, Steers, Mowday, and Boulian (1974) also specifically indicated that the affective response of employees moves beyond passive loyalty and consists of three

related factors: (1) a strong belief in an organization's goal and values, (2) a willingness to exert considerable effort for the organization, and (3) a strong desire to maintain membership in the organization. Based on Mowday and his colleagues' conceptualization, Meyer and Allen (1997; 1991) indicated that affective commitment is defined as an employee's positive emotional attachment to the organization. As a result, the employee who is affectively committed will identify with the goals of the organization strongly and desire to remain a part of the organization.

Meyer and Allen (1997; 1991) also suggested two other forms of commitment based on different mind sets: continuance commitment and normative commitment. Continuance commitment represents a result of evaluating the economic costs and social costs of losing organizational membership, while normative commitment stands for an employee's stay with the organization because of feelings of obligation.

As to the factors that affect the development of commitment, according to Meyer and Allen (1991), employees will tend to develop affective commitment if they perceive that the organization is being supportive and/or treating them in a fair manner. Another factor they identified that has an impact on affective commitment is whether the organization is seen as a source of rewarding outcomes, including appropriate job scope, participative decision making, job autonomy and perceived competence (Meyer & Allen, 1997).

As to the development of continuance commitment, the longer an employee works for an organization, the more likely that he or she will be entitled to benefits or privileges based on his or her seniority, or will develop social relationships with other organizational members. The benefits and/or social connections function as "side bets" that commit one to a course of action (Becker, 1960), and will be at stake when the

employee is thinking of leaving the organization. Continuance commitment is also determined by employees' perception and expectation of the likelihood for them to successfully land on another job and do well. If the 'odds are high', the continuance commitment will be low, and vice versa.

The development of normative commitment is related to personal characteristics, especially the sense of morality, and the nature of transactions of the employees with their organization (Meyer & Allen, 1997). When an employee values loyalty or has a strong sense of moral obligation, he or she will tend to have strong normative commitment to the organization. While the sense of moral obligation is developed throughout the socialization processes, the treatment that employees receive from the organization also strongly influences their normative commitment. According to the theory of psychological contract (Schein, 1980), employees have expectations for reasonable treatment from the organization, even if that is not specified in the written contracts between the employees and the organization. Therefore, when employees perceive the treatment from the organization is consistent with their psychological contracts, normative commitment will be engendered.

Kelman (1958) took a different approach to categorize the various forms of commitment and suggested that organizational commitment can be derived from compliance (or exchange), identification (or affiliation), and internalization (or value congruence). When employees follow the organizational rules and adopt certain attitudes and behaviors in order to gain specific rewards or avoid certain punishments, the psychological bond between employees and the organization is compliance. If employees accept the influence of the organization so as to maintain a satisfying, self-defining relationship with the organization and other organizational members, the

psychological bond becomes identification, while if the attitudes and behaviors are further taken on as congruent with employees' own value system, then the psychological bond is internalization.

O'Reilly and Chatman (1986) conducted a study of the dimensions of organizational commitment in higher education predicted on Kelman's conceptualization. They concluded that Identification and internalization are positively related to prosocial behaviors and negatively related to turnover, and internalization is predictive of financial donations to a fund-raising campaign. The overall result supported the use of psychological attachment as a notion to specify the underlying dimensions of commitment and the confirmed the various forms of such attachment suggested by Kelman (1958). However, some further research showed that the measures of identification and internalization tend to correlated highly and the correlations with measures of other variables show similar patterns, so it is difficult to distinguish between the two constructs (Caldwell, Chatman, & O'Reilly, 1990; O'Reilly, Chatman, & Caldwell, 1991). As a result, the application of Kelman's model has been limited.

The interest of researchers and practitioners in organizational commitment is because of its relationship with other variables. Research indicates that commitment is negatively related to turnover (Cooper-Hakim & Viswesvaran, 2005), absenteeism (Farrell & Stamm, 1988), and counter-productive behavior (Dalal, 2005), while positively related to job satisfaction (Cooper-Hakim & Viswesvaran, 2005), motivation (Mathieu & Zajac, 1990), and organizational citizenship behavior (Riketta, 2002).

Most of research on organizational commitment has been conducted in industrial-organizational settings (Mueller, Wallace & Price, 1992). Little research has been done regarding organizational commitment of faculty in higher education. Chughtai

and Zafar (2006) studied the antecedents and consequences of organizational commitment among faculty in a Pakistani University. They concluded that personal characteristics, job satisfaction and organizational justice were related to organizational commitment of faculty, among which justice and trust in administration were the strongest correlates. Commitment was found to be negatively related to turnover intentions and positively related to self-report job performance.

### **Psychological Empowerment**

According to Spreitzer, Kizilos, and Nason (1997), the notions of empowerment were derived from theories of participative management and employee involvement. Research based on theories of participative management have advocated that managers share power for decision making with employees and claimed that it will help to enhance the performance and satisfaction at work (Locke & Schweiger, 1979; Miller & Monge, 1986; Cotton, 1995; Wagner, 1994). The interests of organizational researchers in psychological empowerment date back to the 1980s (Sagie & Koslowsky, 2000). Numerous scholars and practitioners have used the terms to analyze how the sharing of power and control would impact the effectiveness of organizations and the attitudes and behavior of organizational members, and to describe how the leaders in workplace can practice the skills of empowering subordinates to achieve organizational goals (McClelland, 1975; Kanter, 1979, 1983; Bennis & Nanus, 1985; Burke, 1986; House, 1988; Conger & Kannungo, 1988; Thomas and Velthouse, 1990; Spreitzer, 1995a, 1995b, 1996, 2007; Shelton, 2002 ).

Given the various research purposes and contexts of research, the concept of empowerment carries different meanings in varied cases (Zimmerman, 1990). According

to Thomas and Velthouse (1990), there had been no agreed-upon definition for empowerment until the 1990s, nor had researchers attempted to specifically focus psychological empowerment in working context (Spreitzer, 1995). However, researchers generally considered the allocation of decision making power to those previously lacking such power (Foy, 1994) and share vital elements of information, knowledge, and power (Bowen & Lawler, 1995) as issues of empowerment.

Conger and Kanungo (1988) were the first to clarify the concept by providing an analysis of the construct and integrating diverse approaches in their study. They defined psychological empowerment as the process of enhancing the feeling of self-efficacy among the members of an organization through identifying conditions causing powerlessness and ways to reduce the powerless state (Conger & Kanungo, 1988). Some other researchers defined empowerment as self-determination, or autonomy (Burke, 1986; Liden, Wayne, Sparrowe & Bradway, 1993; Macher, 1988). Thomas and Velthouse (1990) developed a multi-dimensional cognitive model of psychological empowerment, in which empowerment was defined as increased intrinsic task motivation. They identified assessments of four aspects of a task or work as the basis for worker empowerment: sense of impact, meaningfulness, competence, and choice (Thomas and Velthouse, 1990; Houghton & Yoho, 2005). In other words, individuals assess the dimensions of tasks or work to judge whether there are additive motivational effects for work.

The assessment of impact refers to whether and to what extent one's work is viewed as producing intended effects, or achieving the purpose. According to Lawler (1973), perceived impact represents a performance outcome expectancy, which reflects one's belief that individual behavior could influence the accomplishment of specific

organizational goals.

The assessment of competence refers to the degree to which an individual possesses the skills and abilities necessary to carry out task or work activities well. According to Bandura (1977; 1982; 1986), the perceived competence represents self-efficacy or personal mastery, and high self-efficacy tends to result in initiating behaviors, high effort and persistence when facing obstacles.

The assessment of meaningfulness refers to the evaluation of the task goal or work purpose with respect to an employee's personal values, ideals or standards. Spreitzer, Kizilos and Nason (1997) indicated that meaning serves as the engine of empowerment, since employee will not feel empowered if their hearts are not in their work (Thomas and Velthouse, 1990).

The assessment of choice refers to the judgment of whether a person's behavior is perceived as self-determined. deCharms (1968) used locus of causality to indicate that the extent to which a person's behavior is perceived as self-determined, and argued that perceiving oneself as locus of causality for one's behavior is essential for intrinsic motivation. Deci and Ryan (1985) noted that the very essence of self-determination is the experience of choice, and that perceived choice produces greater flexibility, creativity, initiative, resiliency, and self-regulation.

These four dimensions are not predictors or outcomes of empowerment, but comprise its very essence (Spreitzer, Kizilos, & Nason, 1997), since they reflect the individual orientation towards one's task role (Thomas & Velthouse, 1990).

### **Turnover Intentions**

Mobley (1977) explored extensively the psychological process underlying

withdrawal from work and carried out a comprehensive explanation for what people generally think and do when making a withdrawal decision. According to his model, when people feel dissatisfaction at work, they adjust their work attitudes and behaviors to alleviate the negative impacts. One of the adjustments is to quit. In Mobley's formulation of the withdrawal decision process, people go through a number of possible mediating steps from experiencing dissatisfaction to reaching the decision of actual quitting including: evaluating the expected utility of a job search and cost of quitting, forming behavior intention to search job alternatives, conducting actual job search, comparing present job and alternatives, forming intention to quit, and actual withdrawal. In this conceptualization, intent to leave the organization is considered as the final stage in the psychological process of withdrawal decision-making. Intent thus becomes a convenient proxy for actual turnover behavior and many studies have used turnover intent as the strongest predictor of actual turnover (Hom, Caranikas-Walker, Prussia, & Griffeth, 1992; Hom, Griffeth, & Sellaro, 1984; Mobley, 1982; Mowday, Porter, & Steers, 1982; Smart, 1990; Steel and Ovalle, 1984; Vandenberg & Scarpello, 1990).

In higher education, many studies have been conducted to explore faculty intentions to leave. Some research has taken a resource-based approach, and found that compensation and career advancement to be important factors. Weimer (1985) found that faculty are more likely to accept an outside offer when there is an expected gain in salary. Moore and Gardner (1992) indicated that salary as one of the five most important reasons for faculty departure. Rosenfeld and Jones (1988) contended that people trade prestige for salary, rank, and other resources when considering moving from one institution to another. Other research suggested that institutional environment, setting, leadership, and other factors matter for faculty turnover.

Brown (1967) in a large scale study found seven major factors influencing faculty departure decision, all of which are related to immediate work environment. The factors were competency of administrators, research facilities and opportunities, teaching loads, salary, competency of colleagues, and congeniality of colleagues. Some other researches shows financial well-being (Cameron, Whetten, & Kim, 1987; Cameron and Zammuto, 1983; Zammuto, 1986) and governance patterns (Bowen and Schuster, 1986; Clark, 1987) were also influential to faculty intention to leave. Smart (1990) suggested that three major sets of determinants explain faculty turnover intentions: individual characteristics, work factors, and the multiple dimensions of organizational and career satisfaction. Barnes, Agago and Coombs (1998) in their study of faculty turnover intention found that the two most important predictors of faculty members' intent to leave were a sense of frustration due to time constraints and a lack of a sense of community at their institution.

### **Relationships among Constructs, and Propositions**

The following section discusses the relationships among the constructs of this study, and introduces several propositions based on these relationships. As noted previously, some researchers suggested an overall construct of organizational justice might better catch the essence of the holistic judgment of individual perception of fairness in organization (Ambrose & Schminke, 2009; Ambrose & Arnaud, 2005; Lind & van den Bos, 2002). The approach will be adopted in this study. In the discussion regarding the relationships and among constructs and propositions of this study, organizational justice will be mainly treated as a single construct.

#### ***Organizational justice and organizational commitment***

Meyer and Allen (1991) suggested that when employees perceive that the organization is supportive and treating them in a fair matter, they will tend to develop affective commitment. According to Kelman (1958), employees' bonds with their organization are of and through three different levels: compliance, identification, and internalization. It is unlikely for employees to identify with the organization's goals and internalize values without going through the stage of compliance, which involve following the rules of the organization and adopting specific attitudes and behaviors for rewards or to avoid punishments. Consequently, it is important for the organization to make certain that the rules are just, and the system of rewards and punishments is fair, so that the employees' psychological attachment to the organization will develop.

From the equity theory point of view, when an employee perceives distributive injustice, the employee can restore justice by adjusting his or her work performance. However, when it comes to procedural and interactional injustice, it is less likely to have a concrete prediction about what response the employees would have. According to Lind and Tyler (1988), the effects of procedural justice are more on employees' attitudes and quality of work life. Therefore, the effects of procedural justice on performance are more likely mediated through attitudes such as organizational commitment. Other researchers argued that while distributive justice concerns are salient when productivity and efficiency are the focus of attention, procedural justice concerns are salient when the goal is group harmony (Barret-Howard & Tyler, 1986, Cohen-Charash & Spector, 2001). Group harmony cannot exist without positive social relations. Cropanzano, Prehar and Chen (2002) used social exchange theory to predict relations between perceived procedural fairness and work outcomes.

From the perspective of social exchange theory, organizations are arenas for

social transactions between the organizational members and organization (Cohen-Charash & Spector, 2001; Cropanzano, Prehar, & Chen, 2002; Greenberg & Scott, 1996; Wayne, Shore, & Liden, 1997). Steers (1977) also found that work experiences, along with personal characteristics and job characteristics, predict organizational commitment. It makes intuitive sense that the social exchanges or transactions serve as an important basis for organizational commitment. Since procedural justice and interactional justice should be influential to social transactions experiences of employees, they should also have effects on employees' affective commitment.

### ***Organizational justice and psychological empowerment***

Conger and Kanungo (1988) described empowerment as an individual having a 'voice' or role in shaping and influencing organizational activities. The idea is closely related to the concept of process control (Thibaut and Walker, 1975) or voice (Folger, 1977) in organizational justice theories. Thibaut and Walker (1975) used the concept of process control to depict that individuals in an organization are given the opportunities to express their views or to participate in decision making, and thus feel having control over the processes or outcomes. Researchers have identified empowerment to be a principal component of managerial and organizational effectiveness (Bennis & Nanus, 1985; Kanter, 1979, 1983; McClelland, 1975). Sharing of power and control improves organizational productivity (Kanter, 1979; Tannenbaum, 1968) and fosters cooperation, team building, group development and maintenance (Beckhard, 1969).

People need to feel that their work is achieving the intended purposes, which are of meaning to themselves, and they also need to feel that they have the competence and self-autonomy to their work behaviors to perceive empowerment. Perceiving organizational justice will aid the development of psychological empowerment because

distributive justice will foster the perception of competence through ensuring the responsibilities, resources and merits are fairly allocated in the organization; procedural justice will facilitate the employees' perception of self-determination, meaningfulness, and sense of impact by allowing voice or control of organizational members in the decision making process; interactional justice will aid to feeling of self-efficacy and identification with the organization through appropriate interaction with organizational members and sharing of necessary information regarding organizational goals, values, norms or even culture.

### ***Organizational justice and turnover intention***

Previous research has done little regarding the direct impact of organizational justice on employees' turnover intention. Based on the social exchange theory (Blau, 1964), which argues that continuing participation is one of the ways that people use to repay the favorable benefits and treatment from their organization, Zhang and Agarwal (2009) studied employees in two state-owned companies in China, and attempted to model the direct relationship between organizational justice and turnover intention. They asserted that both distributive and interactional justice have direct impacts on turnover intention, while the effect of procedural justice is mainly on organizational citizen behaviors.

Many researchers have investigated the relationship between turnover intention and job satisfaction (Moblely, Griffeth, Hand, & Meglino, 1979; Price & Mueller, 1981; Cotton & Tuttle; 1986; Porter & Steer, 1973; Lum, Kervin, Clark, Reid, & Sirola, 1998), or organizational commitment (Ferris & Aranya, 1983; O'Reilly & Caldwell, 1980; Stumpf & Hartman, 1984; Wiener & Vardi, 1980). Studies have reported negative correlations between turnover or turnover intentions and job satisfaction and organizational

commitment (Bluedorn, 1982; Arnold & Feldman, 1982; Hollenbeck & Williams, 1986), while job satisfaction and organizational commitment are positively correlated with one another (Bluedorn, 1982; Clegg, 1983; Dougherty, Bluedorn, & Keon, 1985). Since organizational justice can affect job satisfaction, organizational commitment and psychological empowerment positively, it is logical to infer that perceived organizational justice will affect employees' turnover intention. What is left to be examined is whether organizational justice has a direct impact on turnover intention or the effects are totally mediated through job satisfaction, organizational commitment and empowerment.

### ***Propositions***

Based on the evidence and rationale from previous research, the following propositions and a theoretical model were proposed and tested.

*Proposition 1: Organizational justice will have positive influence on organizational commitment of organizational members.*

*Proposition 2: Organizational justice will have positive influence on psychological empowerment of organizational members.*

*Proposition 3: Organizational justice will have a direct effect on turnover intention of organizational members.*

Meyer and Allen (1997) identified a series of outcomes rewarded by an organization that help the development of affective commitment. Those outcomes include proper job scope, participative decision making, job autonomy and perceived competence. The outcomes are related to psychological empowerment because the proper job scope allows employees to manage the requirements of their work roles and develop a sense of purpose, or meaningfulness, for the achievement of organizational

objectives and goals. Unchallenging, monotonous work without meaning can increase the stress level of employees (Gardell, 1976), while the over-demanding job will do just the same. Participative decision making is closely related to a sense of having an impact and self-determination. Job autonomy can give employees control over their work and is also important for them to make sense of the contribution of one's job to the organization. In addition, according to Karasek (1979), high job demands combined with low decision latitude can also be stressful. Perceived competence gives people the sense of self-efficacy and help people establish self-confidence, which is necessary when coping with adversary work situations.

Liden, Wayne and Sparrowe (2000) studied the the relationship of psychological empowerment with job, interpersonal relationships and work outcomes, and claimed that empowerment is accompanied with commitment. They also asserted that the more an individual is empowered, the more loyal he or she would be to the organization. The positive relationship between psychological empowerment and organizational commitment is also confirmed by other researchers who investigated the relationship in an international context (Liu, Chiu, & Fellows, 2007; Vacharakiat, 2008). Based on these studies, the following proposition is proposed for testing in this study:

*Proposition 4: Psychological empowerment will have a direct effect on organizational commitment of organizational members.*

The research on the relationship between organizational commitment and turnover intention is abundant. Mobley, Griffeth, Hand and Meglino (1979) indicated that organizational commitment have been one of the most frequently examined psychological variables to be found in models developed to predict turnover. Most research, if not all, on organizational commitment confirmed that organizational commitment will have a negative effect on turnover intentions of employees (DeCotiis & Summers, 1987; Kalleberg & Berg, 1987; Hom & Griffeth, 1994; Mathieu & Zajac, 1990; Mowday, Porter, & Steer, 1982; Price & Mueller, 1986; Lincoln & Kalleberg, 1996; Randall, 1990; Somers, 1995). The relationship makes intuitive sense that when the level of dedication (Jex & Britt, 2008), involvement, and identification (Steer, 1977) is high, and the emotional attachment (O'Reilly & Chatman, 1986), link and bond (Mathieu & Zajac, 1990) are strong, people will be more likely to stay and be loyal to their organization.

When taking the development of organizational commitment as the process of individuals being embedded or integrated into an organization through compliance, identification, and internalization (Kelman, 1958), as the level of commitment increases, the intention to leave organization will certainly diminish. Therefore, the following proposition can be derived for testing:

*Proposition 5: Organizational commitment will have a direct effect on turnover intention of organizational members.*

There has been very little evidence from previous studies that support the direct relationship between psychological empowerment and turnover intention. However, the indirect relationship mediated through the organizational commitment can be established through the literature confirming the relationship between empowerment and commitment, and commitment and turnover intention.

As previously noted, greater commitment leads to lower turnover, and higher level of perceived empowerment fosters greater commitment, the psychological empowerment state of employees should have a negative impact on their intention to leave the organization.

From another point of view, turnover intention is closely related to job dissatisfaction and stress (Mobley, 1977). Empowerment has been proven to be strongly associated with job satisfaction (Spreitzer, Kizilos, & Nason, 1997) and psychological adjustment (White, Lehman, Hemphill, Mandel, & Lehman, 2006). Consequently, the following propositions can be formulated:

*Proposition 6: Psychological empowerment will have a direct effect on turnover intention of organizational members.*

According to Baron and Kenny (1986), when a given variable accounts for the relationship between the predictor and the criterion, it functions as a mediator. This study predicts that psychological empowerment and organizational commitment will

mediate the relationships between organizational justice and turnover intentions. As noted earlier, organizational justice is correlated positively with both psychological empowerment and organizational commitment, and psychological empowerment is positively correlated with organizational commitment and negatively correlated to turnover intention, so the following propositions regarding the mediation effect of psychological empowerment and organizational commitment can be suggested:

*Proposition 7: Psychological empowerment will mediate the relationship among organizational justice, organizational commitment and turnover intention of organizational members.*

*Proposition 8: Organizational commitment will mediate the relationship among organizational justice, psychological empowerment and turnover intention of organizational members.*

To put the above propositions in the higher education context, faculty perception of organizational justice should have an impact on their psychological empowerment, organizational commitment and turnover intention. Although none of existing research in the higher education field has attempted to investigate the relationships among these constructs, based on the findings from the other sectors, this study will build and test a model depicting the relationships among the constructs in the higher education institutions.

## CHAPTER III

### METHODOLOGY

This chapter presents the research methodology utilized to investigate the relationships between organizational justice and its consequences. In this chapter, a conceptual model is developed, and also the research hypotheses of the study are presented, based on the literature review. In addition, the sample characteristics, data collection procedures, the measures and statistical analysis that are used in the present study are described.

#### **Conceptual Model and Research Hypotheses**

The purpose of this study is to present and test a model that attempts a different way of conceptualizing faculty's justice perceptions and the effects of these perceptions on faculty's work-related attitudes and behavior in a public research university. The major research questions addressed by this study are: (1) When taking into account the organizational hierarchy in a comprehensive university, such as departments, colleges and schools, and the institution as a whole, whether an overall construct of faculty perceived organizational justice best fits the survey data, or the construct needs to be differentiated according to organizational hierarchy?; (2) How do organizational justice perceptions relate to the psychological empowerment of faculty?; (3) How do organizational justice perceptions relate to the organizational commitment of faculty?; (4) How do organizational justice perceptions relate to the turnover intentions of faculty?; and (5) Do psychological empowerment and organizational commitment mediate the relationships between faculty perceived organizational justice and turnover

intentions?

The five research questions will guide the empirical investigations of the conceptual model, as shown in Figure 3-1. The conceptual model has been developed to empirically test the relationships among the variables that appear to be relevant to the present study. This model is based on the theoretical framework presented in Chapter I. Figure 3-1 follows the particular configurations of geometric symbols used to portray structural equation models. The ellipses (or circles) stand for unobserved latent factors, rectangles (or squares) represent observed variables, double-headed arrows signify covariances or correlations between variables, and single-headed arrows are symbols for the effect of one variable on another. The purpose of Figure 3-1 is to depict the relationships among the constructs of interest in the present study; therefore, all the error terms, including measurement errors associated with observed variables (the measures) and disturbance associated with endogenous latent factors, are not portrayed in the model. However, for formal path diagrams representing confirmatory factor analyses or structural equation modeling, the errors and disturbance are necessary, and are represented using ellipses with a single arrow pointed to the observed variables or the endogenous variables in the models.

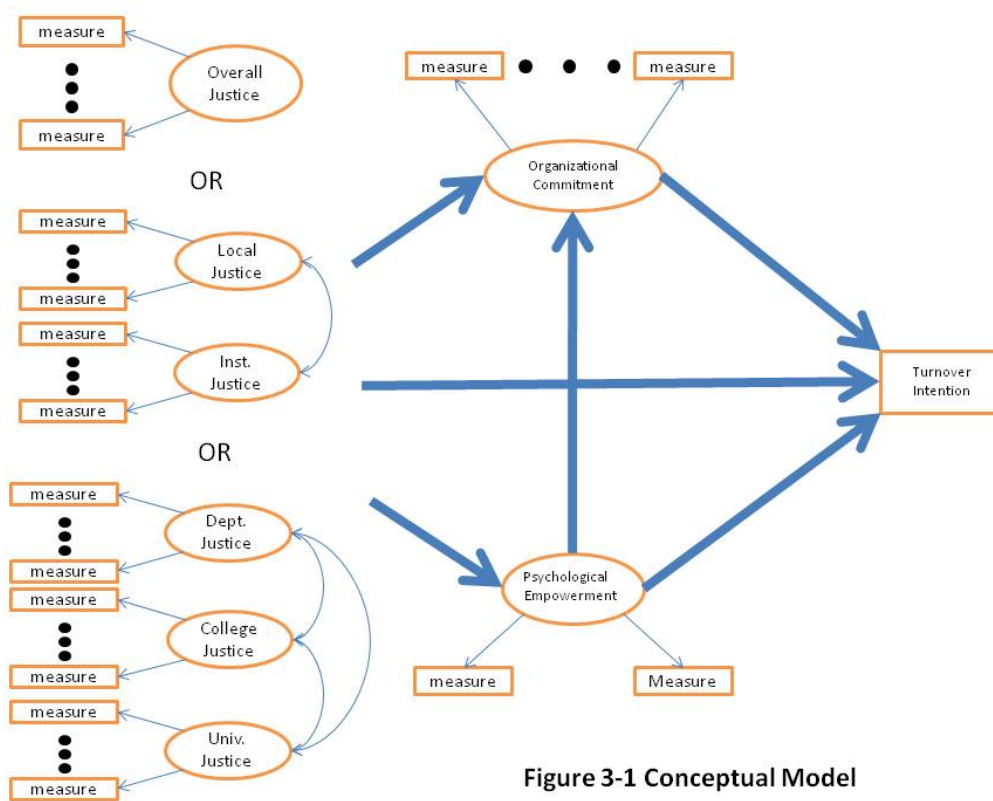


Figure 3-1 Conceptual Model

As noted previously, research on organizational justice suggests that different types of justice in organizations will have different effects on attitudinal and affective reactions of people in organizations. For example, Lind and Tyler (1988) found that procedural justice has positive effect on organizational commitment and can reduce conflict within organization. Compared to procedural justice, the influence of distributive justice on employees' attitudes is not as strong (Alexander & Ruderman, 1987). Austin & Walster (1974) also found that procedural justice can better predict the cognitive reactions toward the organization, while distributive justice works better in predicting reactions toward outcomes. As to interactional justice, Bies and Shapiro (1987) found that interactional justice is good for predicting reactions toward supervisors or managers and their decisions. Ambrose and Schminke (2009) conducted a study to test the

mediating role of overall justice judgments in the relationships between specific justice facets and outcomes. They concluded that overall justice mediated the effect of the specific justice judgments on employees' self-reports of job satisfaction, commitment, and turnover intentions. In the present study, organizational justice will not be differentiated into any specific type of justice; instead, organizational justice will be measured by multiple survey items including faculty perceptions of the distribution of outcomes, procedures of decision making, and interpersonal interaction.

In addition, Lind (2001) suggested that the relationship between specific justice facets and overall justice may vary as a function of the salience and relevance of any specific type of justice. Based on Lind's assertion, Ambrose and Schminke (2009) and other researchers (Ambrose & Schminke, 2003; Schminke, Ambrose, & Cropanzano, 2000; Schminke, Cropanzano, & Rupp, 2002) pointed out that contextual variables such as organizational structure may influence the salience and relevance of the specific justice facets. Therefore, it is possible that the organizational structure also has an impact on overall justice perception. The present study makes use of faculty survey data collected from a public research university. In the survey, the questions related to faculty perception of fairness at department, college and school, and institutional levels were asked. This study first uses exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to develop and evaluate models which treat faculty perception of organizational justice as one (overall organizational justice), two (local and institutional organizational justice), and three factors (department, college, and institutional organizational justice) to test the appropriateness of treating the construct of organizational justice at different levels of a traditional organizational hierarchy in a university as separate constructs. The following hypotheses are proposed:

*Hypothesis 1a:*

*There is an overall faculty perception of organizational justice that explains the variances and covariance of the selected survey items. The path diagram shown in the left upper corner of Figure 3-1 is the schematic representation of this hypothesis. The ellipse stands for the overall organizational justice factor, which is not directly measured, but reflected by the observed measures.*

*Hypothesis 1b:*

*There are separate but correlated faculty perceptions of organizational justice at local (department and college) and institutional levels that explain the variances and covariance of the selected survey items. The path diagram shown in the left middle of Figure 3-1 is the schematic representation of this hypothesis. The ellipses stand for the local organizational justice and institutional justice factor, which are reflected by their observed measures respectively. The local organizational justice and institutional justice factors are specified to be correlated with each other.*

*Hypothesis 1c:*

*There are separate but correlated faculty perceptions of organizational justice at department, college and institutional levels respectively that explain the variances and covariance of the selected survey items. The path diagram shown in the left lower of Figure 3-1 is the schematic representation of this hypothesis. The ellipses stand for the organizational justice in the primary department, in the college and in the university, which are reflected by their observed measures respectively. The three latent factors are specified to be correlated with the other two.*

These hypotheses represent the confirmatory factor analyses (CFA), or measurement models, to test the multidimensionality of the theoretical construct of organizational justice. Based on the result of the CFA, this study seeks to model the relationship among the constructs of interest, e.g. organizational justice, psychological empowerment and organizational commitment. According to the literature review and propositions in Chapter II, the following hypotheses are proposed:

*Hypothesis 2:*

*Organizational justice perceptions will affect psychological empowerment positively. That is, the more faculty feel being treated fairly in their work life, the more they feel psychologically empowered. This hypothesis is portrayed as the single arrow pointing from the CFA models to the latent factor of psychological empowerment in Figure 3-1.*

*Hypothesis 3:*

*Organizational justice perceptions will affect organizational commitment positively. The more faculty feel being treated fairly, the more organizational commitment the faculty will have toward their institution. This hypothesis is portrayed as the single arrow pointing from the CFA models to the latent factor of organizational commitment in Figure 3-1.*

*Hypothesis 4:*

*Psychological empowerment will affect organizational commitment positively. The more faculty feel psychologically empowered, the more committed faculty will be to*

*their institution. This hypothesis is portrayed as the single arrow pointing from the latent factor of psychological empowerment to organizational commitment in Figure 3-1.*

It is also the purpose of this study to understand the impact of organizational justice on the turnover intentions of faculty member. If it does have an impact, this study will examine whether if the impact is direct, or indirect, and in the case of indirect effect, whether the effect is fully or partially mediated through the constructs of psychological empowerment and organizational commitment. The direct effect of psychological empowerment on turnover intentions is also evaluated at the same time. Therefore, the following hypotheses are tested:

*Hypothesis 5:*

*Organizational justice will have a direct effect of faculty turnover intention. The more faculty perceive justice from their institution, the more likely they will remain in the institution. This hypothesis is portrayed as the single arrow pointing from the CFA models to the observed variable of turnover intention in Figure 3-1.*

*Hypothesis 6:*

*Psychological empowerment affects turnover intentions. That is, the more faculty feel empowered psychologically, the more likely they will stay in their institution. This hypothesis is portrayed as the single arrow pointing from the latent factor of psychological empowerment to the observed variable of turnover intention in Figure 3-1.*

*Hypothesis 7:*

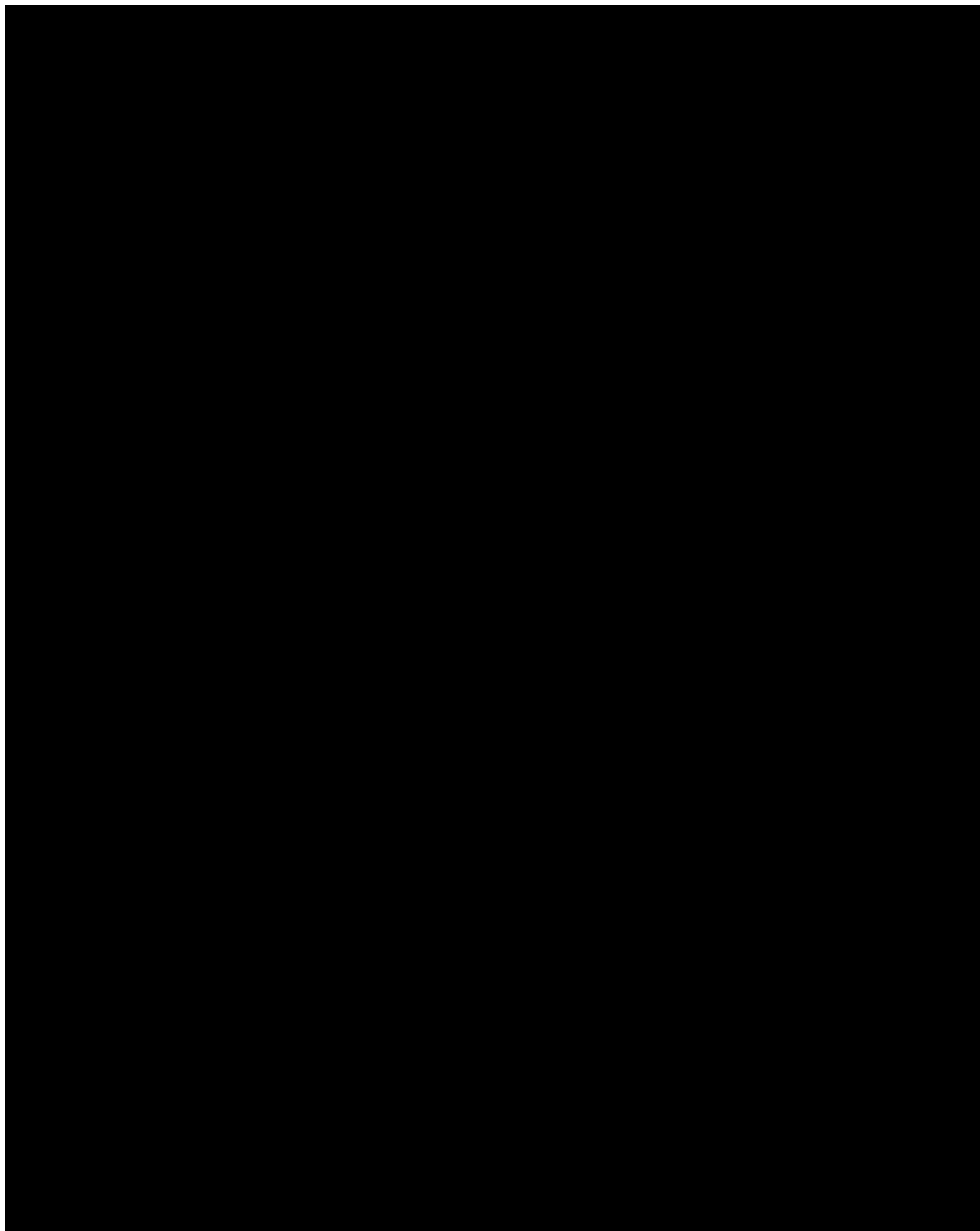
*Organizational commitment affects turnover intentions. When faculty feel committed to their institution, they are more likely to stay. This hypothesis is portrayed as the single arrow pointing from the latent factor of organizational commitment to the observed variable of turnover intention in Figure 3-1.*

### **Data Sources**

The present study utilizes the survey data collected using an academic faculty survey from a public research university in the Pacific Northwest of United States. The survey questions included items asking faculty about their experience of general work climate, and about key issues such as participation, interaction and leadership in their primary department, in the college or school, and in the university as a whole. There are also items enquiring about faculty satisfaction with different aspects of their work life, and their views of institutional diversity and inclusivity in terms of gender, culture and ethnicity, sexual orientation, age, and disability. The faculty survey was administered to full-time faculty at three campuses of the university. Most survey questions were asked as Likert type fixed-response items with scales ranging from 1 to 6.

The total number of effective responses were 1,105, representing about 48% of total number of full-time faculty. Basic demographic information about survey respondents is presented in Table 3-1. Based on available information, the respondents represent the faculty population well, except a slightly overrepresentation of female—50% female and 49% male faculty responded to the survey, while the actual female faculty make up only approximately 40% at this institution. Among the respondents who reported their academic ranks, 47% are professors, 30% are associate

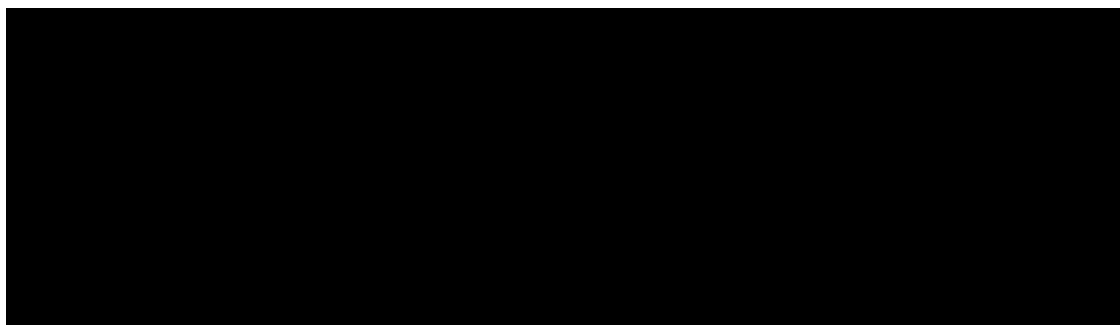
professors and 24% are assistant professors. There are 375 faculty members of total respondents did not report their ranks or reported that the options in this item were not applicable to them. In order to remove any possible personal identifiers, the department and college information is not available for the data.



### **Research Methodology and Procedures**

The methods of data analysis used in this study include exploratory factor analyses (EFA), confirmatory factor analyses (CFA) and structural equation modeling (SEM).

In order to decide the items to include in the analyses, survey items regarding the constructs of interest, including 57 items from the sections of general work climate (15 items), key issues in primary department (7 items), college and school (7 items), and university (7 items), and faculty satisfaction (21 items), were used initial analyses. Tests of internal consistency (Cronbach's alpha) were calculated to assess the reliability of the scales represented in each survey section. All the measures included for the test showed adequate levels of internal consistency. The Cronbach's alpha for the measures of the general institutional work climate, key issue in department, college, university, and job satisfaction are all above .90. Table 3-2 reports the descriptive statistics for the measures used, including mean, standard deviation, and internal consistency estimates for each measure.





### ***Exploratory factor analysis***

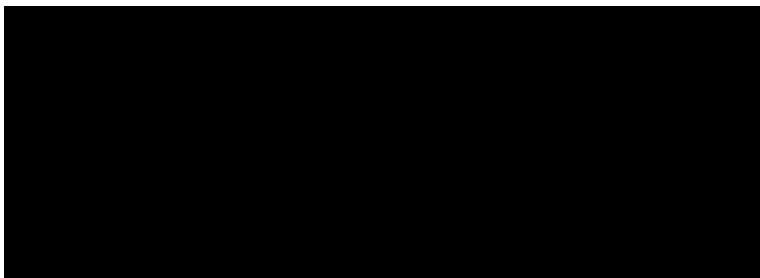
All 57 survey items were then used for an exploratory factor analysis. Exploratory factor analysis is a statistical approach to discovering which variables in the dataset form

coherent subsets, or factors, which represent the constructs of interest in the present study, based on the correlation among the variables. In other words, the goal is to group together variables that are highly correlated with one another into a factor, presumably because the variables all are influenced by the same underlying dimension (factor). Because the faculty survey data were used to collect information about more general experience of faculty in their institution, not all the items are designed specifically for this study. Therefore, the purpose of using an EFA is to provide preliminary evidence regarding whether the measures appear to represent the underlying constructs and to prepare the variables to be used for cleaner CFA and SEM. However, the selection of variables into later CFA and SEM models is not solely based on the results of the EFA; instead, the theoretical relationship of variables from literature review determines mainly which variables need to be included in the models for later analyses.

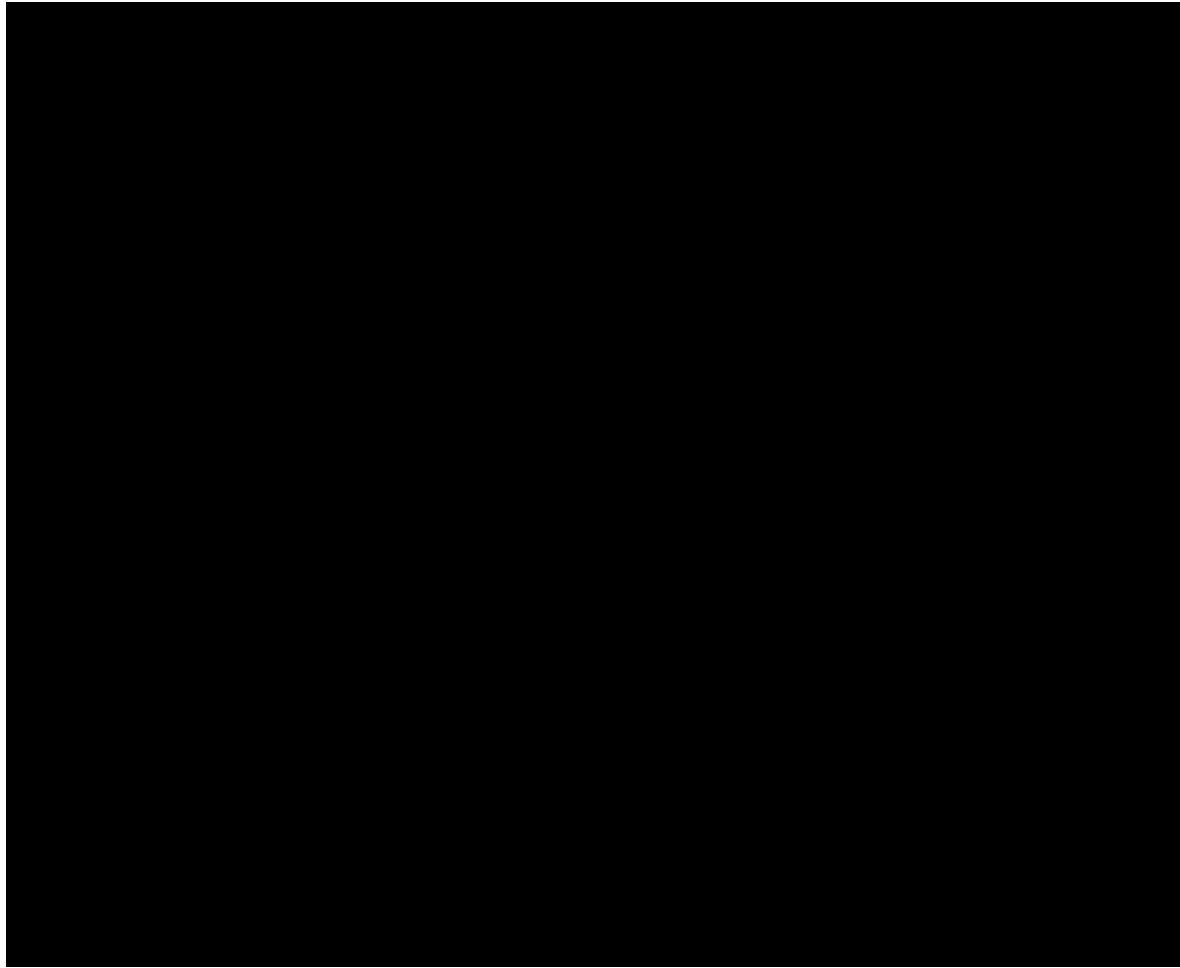
All 57 variables are analyzed using SPSS 20 for the EFA. The method of factor extraction is principle axis factoring, as the focus is the common variance and the purpose is to seek the least number of factors that can account for the common variance (or correlation) of the set of variables. The selected rotation type is Promax.

Stevens (2002) suggested that investigators should stop blindly using the rule of interpreting factors with loadings greater than the absolute value of .30, and take sample size into account. He also recommended “testing each loading for significance at  $\alpha = .01$  (two-tailed test)” (p.394). Cliff and Hamburger (1967) suggested that a rough check if factor loading is statistically significant, one needs to double the standard error, e.g. double the critical value required for significance for an ordinary correlation, because they found that the standard errors of factor loadings for orthogonally rotated solutions in all cases were considerably greater than the standard errors for an ordinary

correlation. The critical values for a simple correlation at  $\alpha = .01$  (two-tailed test) for sample size ranging from 50 to 1,000 are listed in Table 3-3 (Adopted from Stevens, 2002, p. ). Based on these suggestions, the critical values of the correlation coefficient for  $n=1,000$  is .081. The critical value for factor loading significance of present study is .162. In other words, only loadings greater than .162 in absolute value would be statistically significant. In addition to the statistical significance of factor loadings, Stevens (2002) also recommended that in general a variable should share at least 15% of its variance with the construct (factor) onto which it is mainly loading. Consequently, the loading should be .40 or greater to be able to practically serve the interpretation purpose.

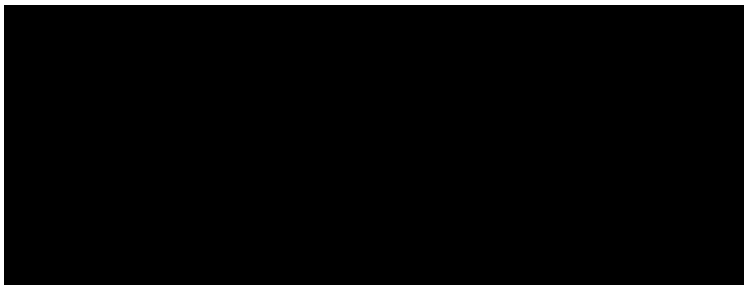


Based on the result of EFA, variables with factor loadings smaller than .20 or with differences of cross loadings less than .20 are removed, and then the rest of variables are included in another EFA. The hurdle of the factor loadings for later iterations of EFA are also raised to .50 in order to make certain that only variables highly associated with the factors are included in the model. The steps continue until the remaining variables all load only on one factor and with factor loadings higher than .60. The final result of EFA is a set of 22 variables with factor loadings above .60 loading on 5 factors that are meaningful representations of the constructs of interest for this study. The resulting items and their factor loadings and the factor names are reported in Table 3-4.



***Selected measures for the constructs***

Based on the EFA, 22 items are selected for their convergent validity, which means that the variables within a single factor are highly correlated. This is evident by the factor loadings. In addition, all items load only on one factor and the correlation coefficients among the factors are all less than .70 (see Table 3-5 for correlations among factors), based on which the factors can be said to have discriminant validity.



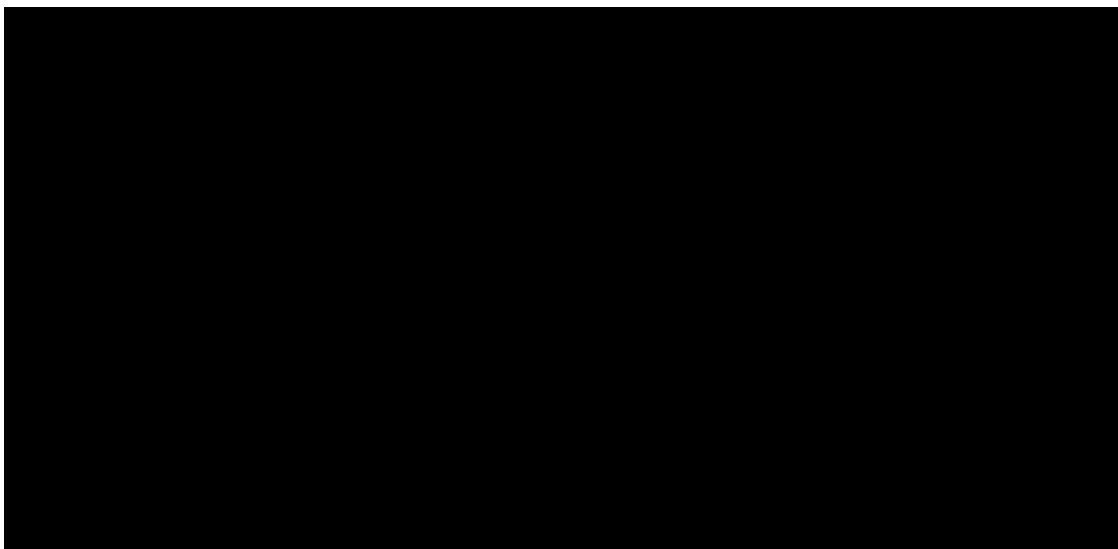
The five constructs of interest in the present study are organizational justice in the primary department (OJD), organizational justice in the college or school (OJC), organizational justice in the university (OJU), psychological empowerment (PE), and organizational commitment (OC).

As stated previously, all the measures also need to be examined based on their content validity, and construct validity based on the verbal wording of the survey questions and the theoretical support found from previous literature.

Among the survey items loading on the organizational justice factors (OJD, OJC, and OJU), several contain words such as fair and equal, which are directly related to the concept of fairness or justice, including the items regarding full and equal participation in decision-making, and fair committee assignment rotation at the department and college level. The perceived understanding of decisions made in the department, college and central administration in university are related to Thibaut and Walk's (1975) idea of process control. The perceived effectiveness of leadership in the department and college, and the trust in central administration can also be attributed to the same rationale. Cropanzano, Bowen and Gilliland (2007) asserted that procedural justice is essential to institutional legitimacy. Perceived organizational justice affects what organizational members believe about the organization as a whole. As a result, when organizational processes are perceived as fair, the members have greater trust, and are more willing devote themselves to their organization. Their argument also provides the content and

construct validity for the items regarding trust in tenure and promotion processes in the department, and problem-resolving procedures in the central administration of the university. In fact, all of the items regarding organizational justice including the question about being “respected by department chair” can find support from the principles of interactional justice. Bies and Moag (1986) listed truthfulness, justification, respect, and propriety as the four fundamental elements for interactional justice. When the faculty perceive organizational justice in their work life, they are more likely to consider the decision-making procedures have been communicated in a truthful manner, the decisions are made with justifications, and they are treated with respect and with propriety.

As the present study attempts to conceptualize organizational justice without breaking down justice into the distributive, procedural, and interactional justice, or even further into what Greenberg (1990; 1993) suggested as interpersonal and informational justice, to make certain the survey items have covered all the components, Table 3-6 lists items with the OJ components marked.



The measures of psychological empowerment include two items. The items represent the understanding of personal impact on the success and contribution to the goals and objective of the university. The content of these two items are fully consistent with the four elements of psychological empowerment, meaningfulness, self-determination, personal competence and mastery, and sense of impact (Thomas & Velthouse, 1990; Houghton & Yoho, 2005). When faculty understand how their roles and work affects the university, they are less likely to be powerless within themselves. Therefore, the validity of these two items sustain accordingly.

The items measuring organizational commitment are quite straightforward. All items are closely related to the involvement and affective attachment to the university. Therefore, the organizational commitment measured for this study should be more precisely termed as affective commitment, so as to differentiate it from continuance and normative commitment. An item asking about the general satisfaction of faculty member was included as the measure of affective commitment because research has shown that satisfaction and commitment are closely related. Therefore, using the item as one of the indicators of affective commitment is justified.

The turnover intention in this study is measured by the survey question Q58, which asks about the likelihood the faculty will stay at the university for at least the next five years. According Mobley's (1977) formulation of the withdrawal decision process, intent to leave or stay is the final stage in the psychological process of withdrawal decision-making. As a result, the intent can serve as a useful proxy for actual turnover behavior. Consequently, the present study uses this measure to represent the turnover intent.

***Confirmatory factor analysis (CFA)***

To answer the first research question and to test the hypotheses 1a through 1c, the 15 items loading on the factor of OJD, OJC and OJU are used for a confirmatory factor analysis. Compared to EFA, which is generally considered to be more of a theory-generating procedure, CFA is generally based on a strong theoretical and/or empirical foundation. Therefore, the CFA is more of a theory-testing procedure. The existing studies of organizational justice have generally treated the construct of organizational justice either as constituted by distributive justice, procedural justice and interactional justice, which sometimes is further differentiated into interpersonal and informational justice, or as uni-dimensional construct. However, in a complex organization such as a university, the faculty perception of organizational justice should have multiple foci because of the hierarchical organizational structure of a university.

Based on the hypotheses 1a through 1c, three CFA model are created and compared to test the fit of the specified models to the data. A number of fit indices were generated to determine which of the three models best fit the observed data. The resulting model with best fit is used for the structural equation models to test the rest of the hypotheses regarding the relationship among organizational justice, psychological empowerment, organizational commitment and turnover intention.

### ***Structural equation models (SEM)***

Structural equation modeling refers to a family of related procedures that allow a set of relationships between independent variables and dependent variables to be examined. Because the variables can be either observed variables or latent factors, SEM can be seen as the combination of regression and factor analyses. According to Byrne (1998), structural equation modeling has two important aspects: (a) the causal processes under study are represented by a series of structural equations; and (b) the structural relations can be modeled pictorially to enable a clear conceptualization of the theory under study. In this study, the measurement of constructs and the hypothesized relationships among the variables are assessed using SEM.

Kline (2005) pointed out that the technique of SEM is a priori, which means that the researcher must specify a model, either based on theories from existing studies or educated guesses reflecting researcher's domain knowledge and experience, for the analysis. Once the model is specified, the primary task is to test the fit of the model to the sample data. The goodness-of-fit between the hypothesized model and the sample data will decide whether the model needs to be modified or reconstructed. Joreskog (1993) indicated that there are three major categories of applications of SEM: (1) strictly confirmatory, (2) alternative models, and (3) model-generating. The present study shares the features of all three. As noted in Chapter II, the relationship between organizational justice, organizational commitment and turnover intention has been examined in many existing research studies, so the relationship specified in the model of the present study is confirmatory. However, the attempt to differentiate the construct of organizational justice based on the organizational hierarchy of a university and the inclusion of psychological empowerment into the SEM model along with organizational commitment

and turnover intention make this study an effort to generate a model or models that make theoretical and statistical sense. Based on the result of the goodness-of-fit and the plausibility of the model, and the postulated relations among the variables, it is likely that more than one model is available; in this case, this study will compare and make sense of the alternative models.

Hoyle (1995) pointed out that SEM is a comprehensive statistical approach to testing hypotheses about relations among observed and latent variables. In order to handle the latent constructs which are not directly measurable, the measurement models are used to define relations between the observed variables, or indicators, and the latent variables, or factors. By seizing the common factor explaining the observed variables loading together, the underlying constructs can be formed. Therefore, the measurement models need to be assessed before structural model can be specified. The structural model defines the relations among the latent constructs, then the hypothesized relationships are put to test, so that the explainability of the specified model can be examined.

After the CFA of organizational justice is performed, another CFA including the latent variable of psychological empowerment and organizational commitment is assessed. If the measurement model is proven to have good fit to the data, the causal relationship among the latent variables will be specified and the structure modeling tested.

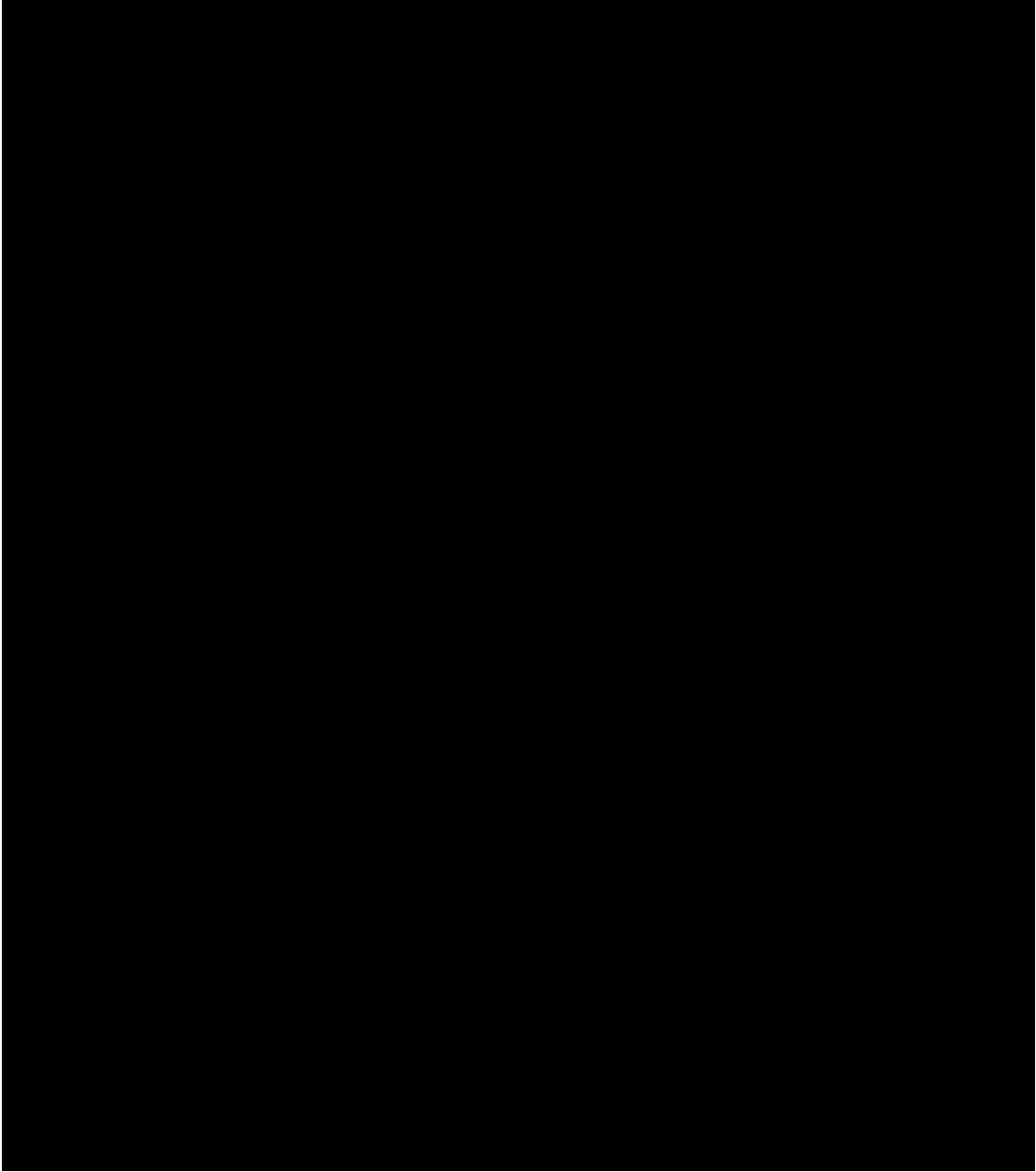
## CHAPTER IV

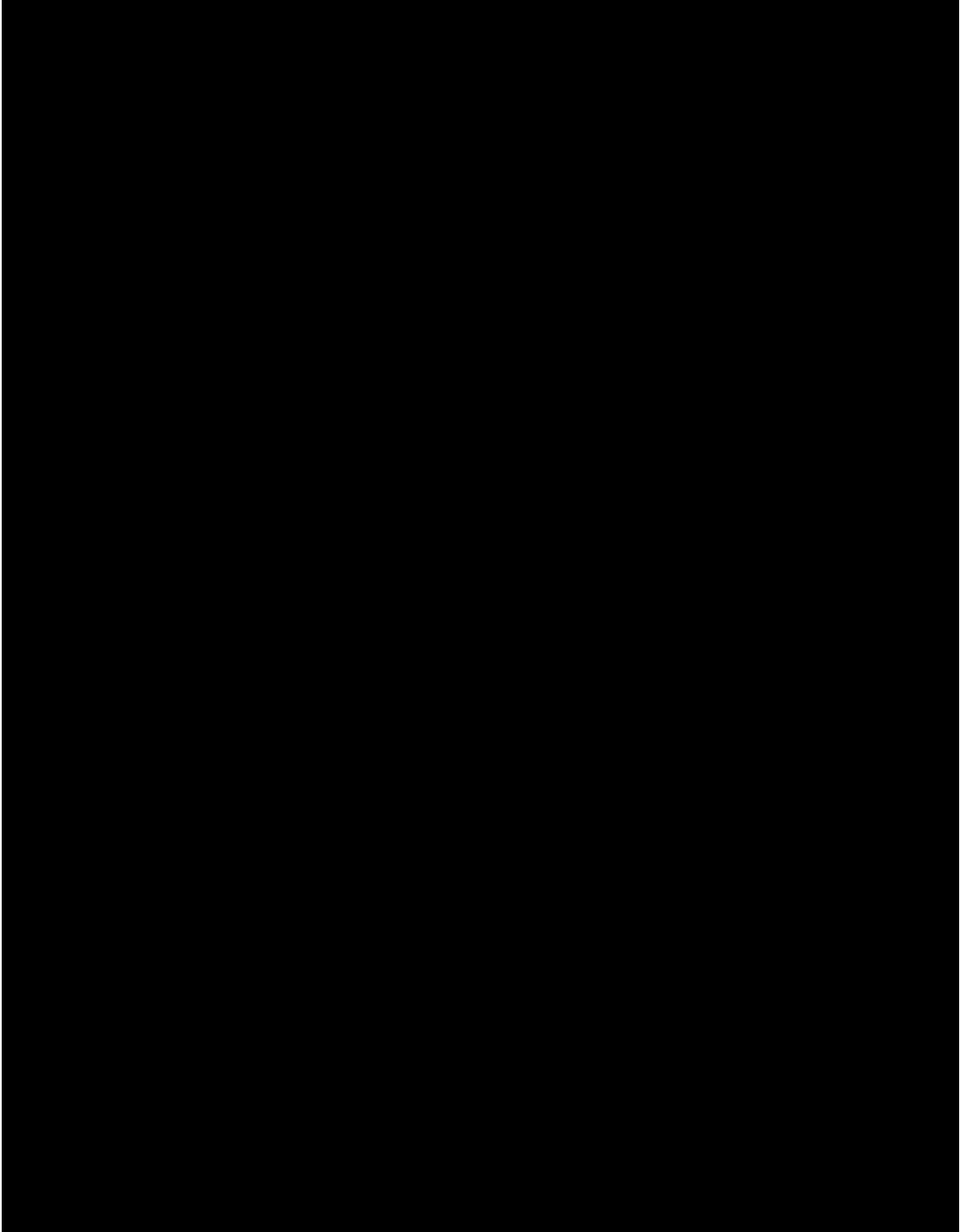
### RESULTS

This chapter presents the results of the statistical analysis of the data. First, the results of testing the confirmatory factor analysis (CFA) models regarding the organizational justice construct are described, followed by the results of structural equation models (SEM) in which the impact of organizational justice on psychological empowerment, organizational commitment and faculty intention to stay were examined. Finally, the hypotheses formed in chapter III were reviewed and tested.

The survey items used in the models were selected using the exploratory factor analyses (EFA) on 57 survey questions regarding faculty work experience in their primary department, college or school, and the university. For SEM models regarding faculty turnover intention, the item regarding faculty intention to stay (Q58) was included in the SEM models. The means and standard deviation for each of the 23 selected survey items used in these CFA and SEM models are reported in Table 4-1 and the correlations among these items are reported in Table 4-2.

The main goals of the analyses of the present study are to understand the relationship among the construct of organizational justice (OJ), psychological empowerment (PE), organizational commitment (OC) in the higher education context, and to assess the influence of these constructs on faculty turnover intention. The CFA models of OJ were assessed first, followed by the assessment SEM models for the OJ, PE and OC, and then the SEM models regarding turnover intention were evaluated.

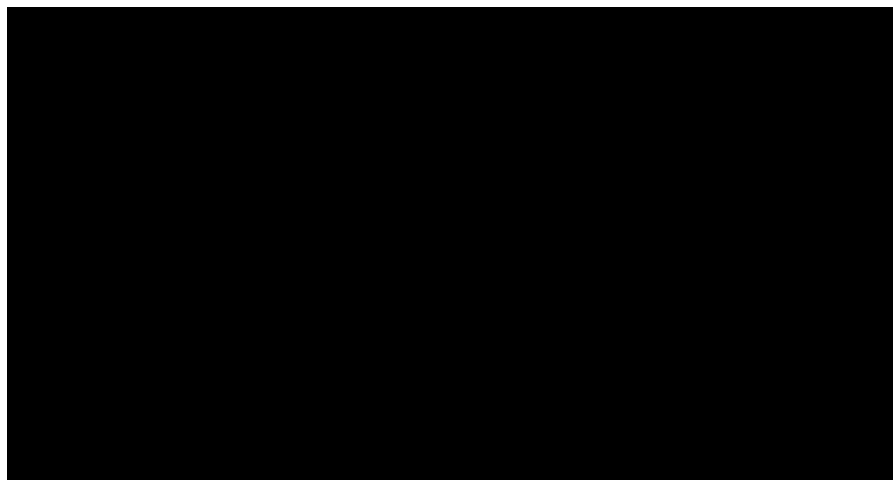




### **First-order CFA model of Organizational Justice**

The analysis starts with examining three first-order CFA models designed to test the multi-dimensionality of the theoretical construct of organizational justice. Specifically, the CFA tests the hypotheses 1a, 1b and 1c (see Chapter III), that faculty perceived organizational justice is a uni-dimensional, two-dimensional, or multi-dimensional construct. Numerous studies have supported the multi-dimensionality of organizational justice according to the causes of the justice perceptions, whether it is due to distribution of organizational outcomes, fairness of organizational procedures, or the interactions within the organizational environment, including the interpersonal relations and the access and availability of appropriate information. This study examines the multi-dimensionality of organizational justice due to the focus of different levels of organizational hierarchy in a comprehensive university.

Fifteen measures were selected for use in the CFA models, including Q14, Q18 through Q22, Q25, Q26, Q28, Q29, and Q32 through Q36. The Cronbach's alphas for scores of the single-factor, two-factor, and three-factor structure are reported in Table 4-3. As suggested by Nunnally (1978), alpha values should be at least .70; it is also generally considered acceptable to have a cutoff value of .80 (Henson, 2001). The Cronbach's alpha values for all three CFA models meet these expectations.



The first CFA model tests if faculty perceived organizational justice is a uni-dimensional construct. The model is presented schematically in Figure 4-1.

The component parts are listed below:

- (1) The single factor, overall organizational justice is indicated by the ellipse labeled Overall OJ.
- (2) There are 15 observed variables, as indicated by the 15 rectangles.
- (3) Each observed variable loads on the single factor.
- (4) Errors of measurement associated with each observed variable are uncorrelated.

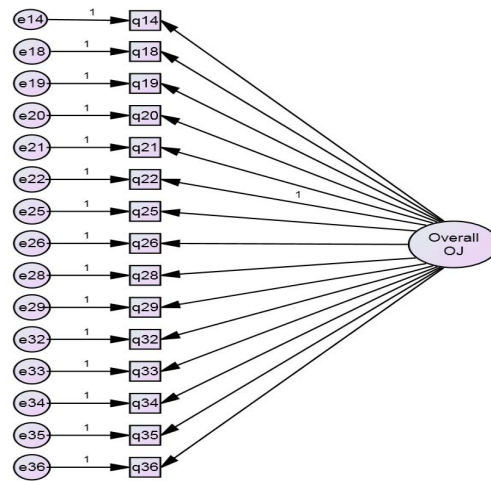


Figure 4-1: First-Order One-Factor CFA Model of OJ

The second CFA model was to test whether if faculty perceived organizational justice is a two-dimensional construct. The model is presented schematically in Figure 4-2.

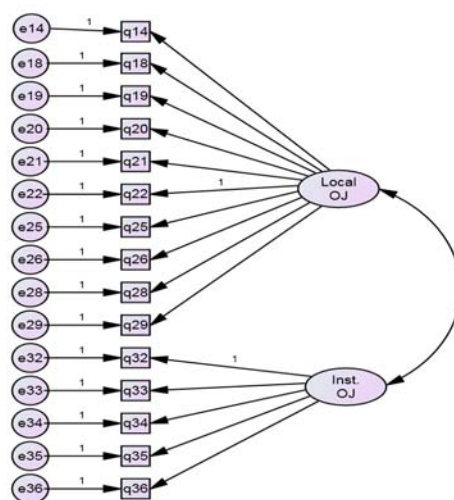


Figure 4-2: First-Order Two-Factor CFA model of OJ

The component parts are listed below:

- (1) There are two organizational justice factors, as indicated by the ellipses labeled Local OJ and Insti. OJ, which stand for institutional organizational justice.
- (2) The two factors are correlated, as indicated by the two-headed arrow.
- (3) The 15 observed variables indicated by the 15 rectangles each load on the one of the factors, and only on one factor.
- (4) Errors of measurement associated with each observed variable are uncorrelated.

The third CFA model tests whether faculty perceived organizational justice is a multi-dimensional construct. The model is presented schematically in Figure 4-3.

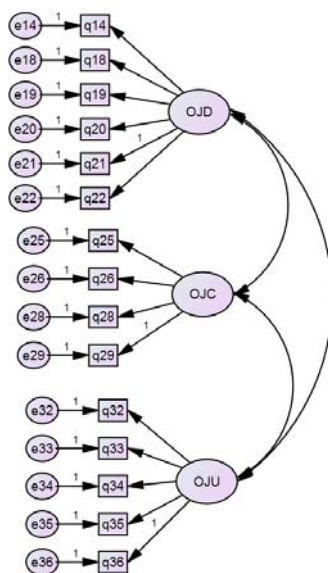


Figure 4-3: First-Order Three-Factor CFA Model of OJ

The component parts are listed below:

- (1) There are three organizational justice factors, as indicated by the ellipses labeled OJD, OJC and OJU, which stands for faculty perceived organizational justice in primary department, college or school, and the university.
- (2) The three factors are correlated, as indicated by the three two-headed arrows.
- (3) The 15 observed variables indicated by the 15 rectangles each load on the one of the factors, and only on one factor.
- (4) Errors of measurement associated with each observed variable are uncorrelated.

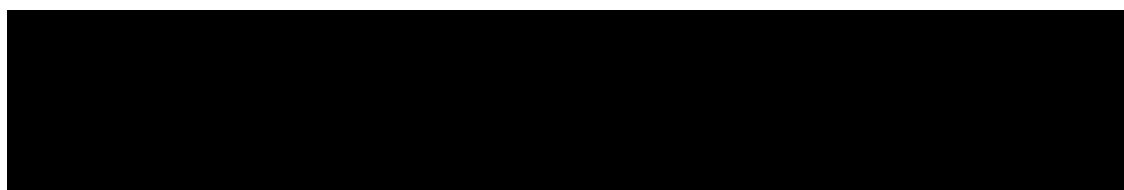
The CFA were conducted using AMOS 20 with maximum likelihood estimation,

and a number of fit indices were generated to determine which of the three models best fit the observed data. Researchers use a variety of fit indices to determine the model-data fit. By tradition, chi-square tests are used to judge the fit between the sample covariance matrix and the matrix implied by the models. A non-significant chi-square value indicates a good fit to the data, while a large and statistically significant chi-square value indicates the model to data fit is poor, and means that a substantial proportion of variance in the data is not explained by the model. However, it is widely known that the chi-square value is sensitive to sample size (Bollen, 1989). When the sample size is large, the chi-square value tends to be substantial, and therefore, the model fit will appear not to be good.

Fortunately, there are still many fit indices based on other criteria for model fit. Researchers use a variety of fit indices to determine if the model-data fit is acceptable. In the present study, Bentler and Bonett's (1980) Normed Fit Index (NFI), Bentler's (1990) Comparative Fit Index (CFI), and the root mean square error of approximation (RMSEA) are used to decide the fit of the models. Byrne (2010) pointed out that NFI has been the practical criterion of choice for a fit index, given a tendency to underestimate fit in small samples. CFI is a revision of NFI which has taken the sample size into account. Both NFI and CFI are relative fit indices that help evaluate the fit of a hypothesized model as compared to independent model, or a model with no structure. The values of NFI and CFI range from zero to 1.00 and a value greater than .90 was previously considered a good fit of the model, but in recent years researchers have called for more stringent guidelines of using .95 as the cutoff point for these fit indices (Hu & Bentler, 1999; DiStefano & Hess, 2005, Byrne, 2010). The root mean square error of approximation (RMSEA) index is based on residual estimates, and is sensitive to the complexity of the

model. MacCallum, Browne, and Sugawara (1996) recommended the cutpoints for the RMSEA index, and noted that RMSEA values ranging from .08 to .10 indicate mediocre fit, while Hu and Bentler (1999) has suggested a value of .06 or below to be good fit. In this study, the sample size of 1,105 is large, so in addition to chi-square statistics, CFI, NFI and RMSEA are chosen as alternative fit indices for the examinations of the models.

The fit indices produced by the CFA on the one-, two-, and three-factors are presented in Table 4-4. As can be seen, the one-factor model fit the data poorly as none of the fit indices approached an acceptable level. Compared to the one-factor model, the two-factor model provided a better fit, as indicated by all fit indices. However, the level of the fit indices of the two-factor model still falls out of the acceptable ranges. The difference in the chi-square values from one-factor to two-factor model is large. When considering the change in chi-square values in conjunction with the difference in the degree of freedom, the improvement of the model fit is statistically significant ( $\Delta \chi^2 [1]=2066, p < .001$ ). According to the CFI and NFI, the two-factor model failed to attain the widely accepted requirements of .90, and the RMSEA value is below the suggested acceptable levels of .08.



Compared to the two-factor model, the three-factor model made further improvement on the chi-square value, used up only 2 more degree of freedom due to the increased number of parameters to estimate. The change is again statistically

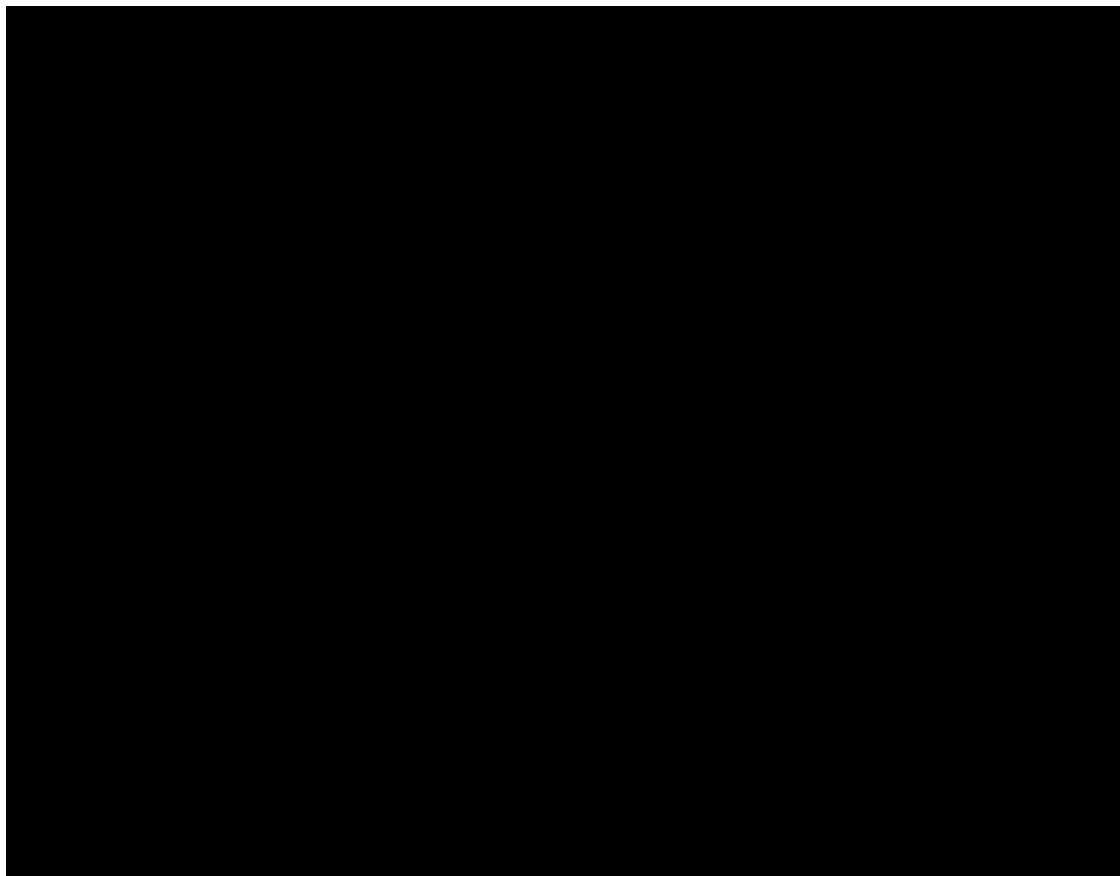
significant ( $\Delta \chi^2 [2]=1077, p < .001$ ). In addition, the improvement can be seen on all of the model fit indices, although the results are not completely within the levels for excellent model-data fit.

Another perspective of assessing model fit is to focus on the adequacy of parameter estimates. Byrne (2010) indicated three criteria of interest for reviewing parameter estimates:

- (1) The feasibility of the parameter estimates: The parameter estimates should exhibit the correct sign and size, and be consistent with the underlying theory.
- (2) The appropriateness of the standard errors: The presence of excessively large or small standard errors indicates poor model fit. However, since standard errors are influenced by the units of measurement and the magnitude of the parameter estimate itself, there are no definitive criteria for the appropriate ranges (Jorekog & Sorbom, 1993).
- (3) The statistical significance of the parameter estimates: The statistical significance test operates as a z-statistic in deciding if the estimate is statistically different from zero. The non-significant parameters indicate existence of the effects cannot be confirmed statistically, and therefore, are unimportant to the model. The path should be deleted from the model for scientific parsimony.

Table 4-5 reports the unstandardized and standardized parameter estimates for the three-factor model. As predicted, all the parameters have shown positive and substantial influence from perceived organizational justice from different levels of organizational hierarchy of the university. All the parameters estimates are significant at

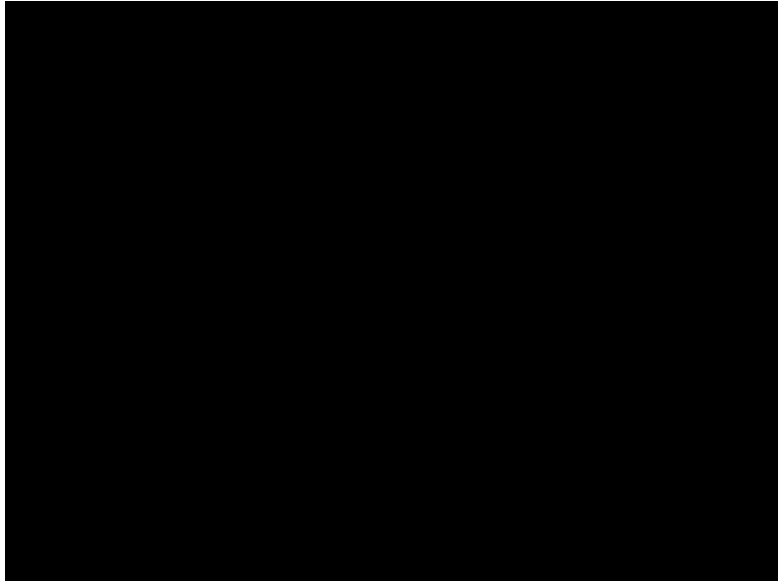
$p < .001$  level.



The paths pointing for the latent variables (OJD, OJC and OJU) to the observed survey items are the factor loadings of each item. As shown in Table 4-5, the influence of OJD on Q14, and Q18 through Q22 is significant and positive. The more organizational justice faculty perceived from their primary department, the more likely they would consider themselves to be respected by the department chair, a full and equal participant in decision making, and understanding how and why decisions were made. They would also tend to regard committee assignments being rotated fairly, the tenure and promotion processes being fair, and effective leadership being in the department. The item that loaded highest on OJD was Q21, it means that the perceived organizational

justice in department could be best reflected by faculty perception of understanding decision making in the department. For OJC, the item with highest loading was, again, the understanding “how and why decision are made in my college” (Q28). As for OJU, the item with highest loading was “the trust for central administration” (Q35) The standardized coefficients can be seen as the correlation of each item with their corresponding factors. For example, the OJC correlated with OJD and OJU at about the same magnitude, while the correlation between OJD and OJU was smaller in size.

For the purpose of further improving the absolute fit of the three factor model, adjustments were made to the model. The adjustment respecifies the model by adding the paths to account for the effects that have not been reflected. Due to the similar verbal expressions in some survey questions, for example the wording in Q18 and Q25, Q19 and Q26, Q21, 28 and 32, Q22, 29 and 36, the error terms of these items are possibly correlated due to these methodological effects. In addition, Q14 and Q22 are both measuring perceptions regarding leadership in primary department, and Q35 and Q36 measures leadership in the central administration at the university. These items might have covariances that were not completely explained by the OJ constructs. A way to specify these effects was to correlate the measurement errors associated with these items. Table 4-6 showed the aforementioned survey questions in clusters for easy comparison.



The respecified model was shown in Figure 4-4. The double-headed arrows added to the left-hand side of the diagram represent the correlations among the error terms of each survey items.

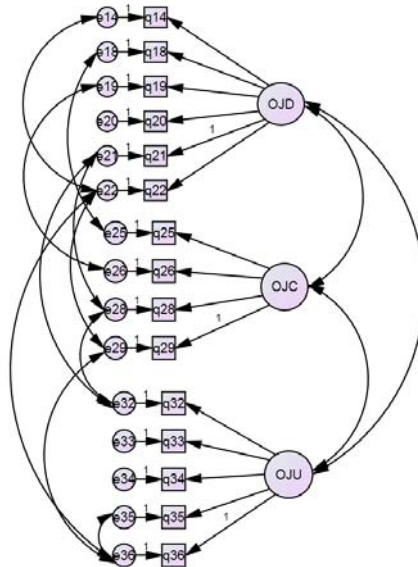


Figure 4-4: First-Order CFA with Covariate Errors Specified

The addition of the correlation among the error terms of the survey items significantly further reduced the chi-square value from 835.132 to 271.195, where  $\Delta \chi^2 [10]=564$ ,  $p < .001$ . Except for the covariance between e22 and e36, and e29 and e36, all the parameter estimates were statistically significant at  $p < .001$  level. The covariance between e29 and e36 was significant at  $p < .01$  level, but the effect size was small. For the parsimony of the model, the two paths were deleted and the model re-evaluated. The final CFA model was shown in Figure 4-5 with the values of the standardized parameter estimates. The chi-square value was  $\chi^2 [79]=281.766$ ,  $p < .001$ . The CFI was .979, the NFI .971 and the RMSEA .048. All the fit indices indicated excellent fit of the hypothesized model to the data.

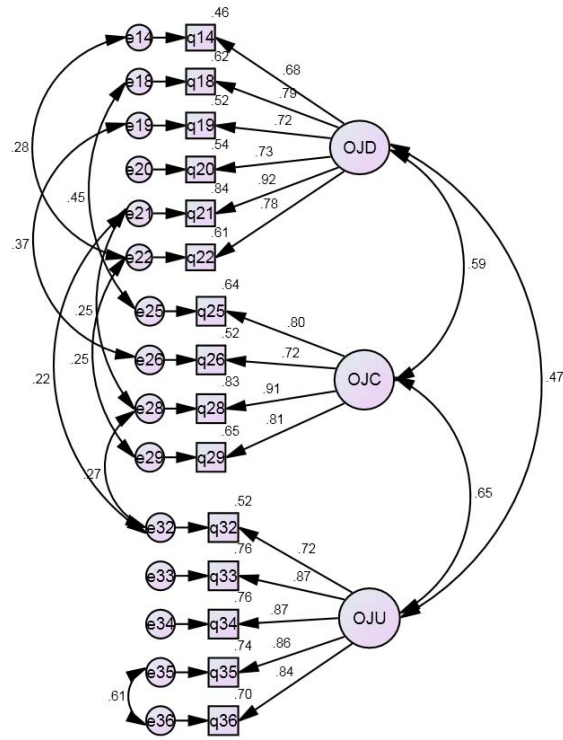
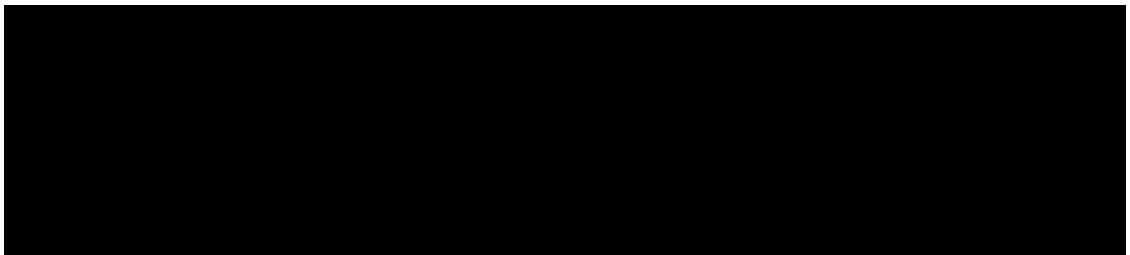
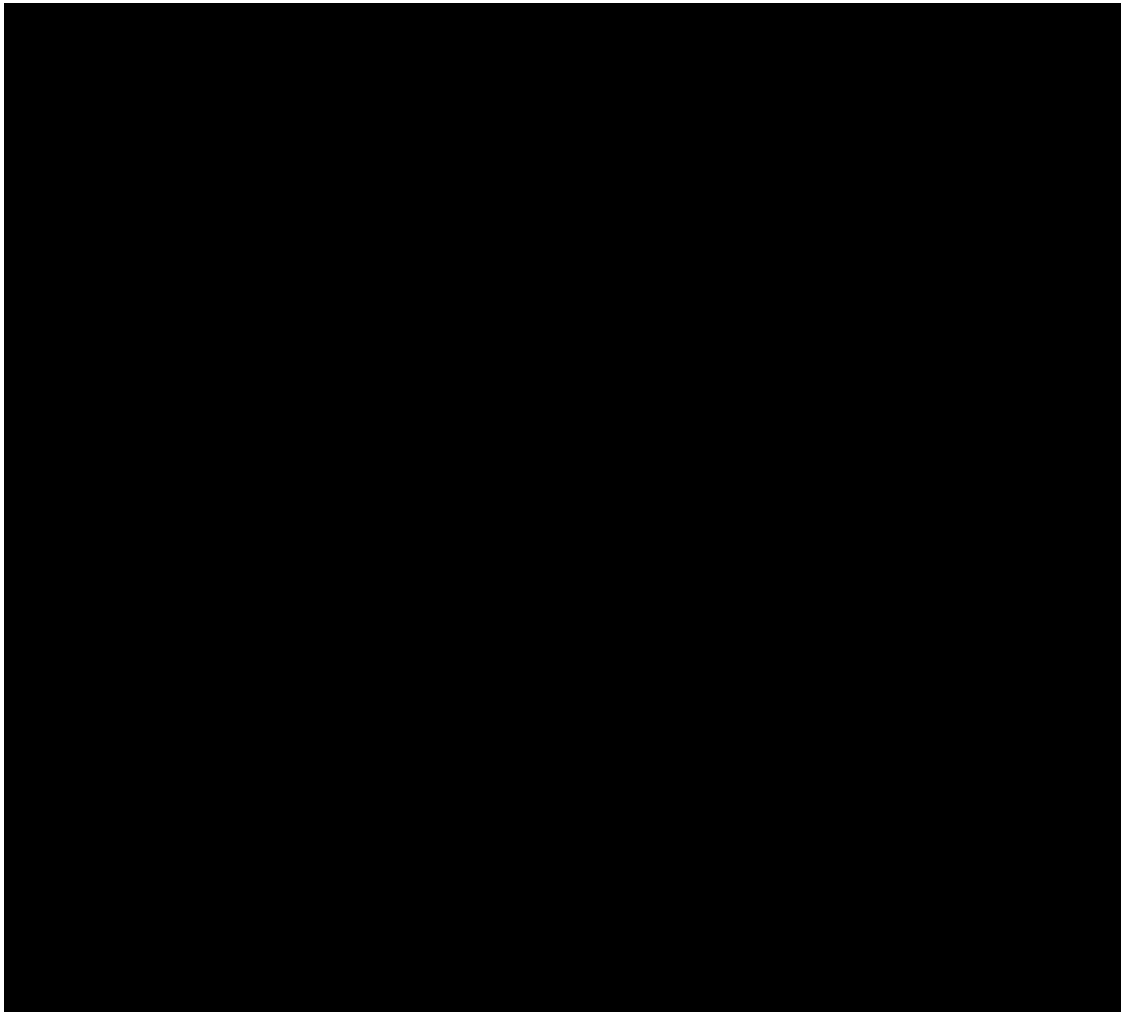


Figure 4-5: First-Order CFA Model of OJ with Path Coefficients Displayed

The fit indices produced by the CFA on the three-factor model without and with error covariance were presented in Table 4-7.



The parameter estimates were shown in Table 4-8. All the parameters were significant at  $p < .001$  level. The relative strength and the positivity of all paths remained consistent with the originally hypothesized three-factor model.



### **Second-order CFA of Organizational Justice**

As shown in the comparison of the CFA models, the three factor model better explains the variance of the sample data. That means the faculty perceived organizational justice should have three organizational referents based on the hierarchy

of the university. The organizational justice constructs are distinctive, yet substantially correlated. It is possible that the three factors could be explained by some higher order structure which is a single second-order factor of the overall perception of organizational justice by faculty. A second-order CFA model is set up to test this assumption. The model is shown in Figure 4-6.

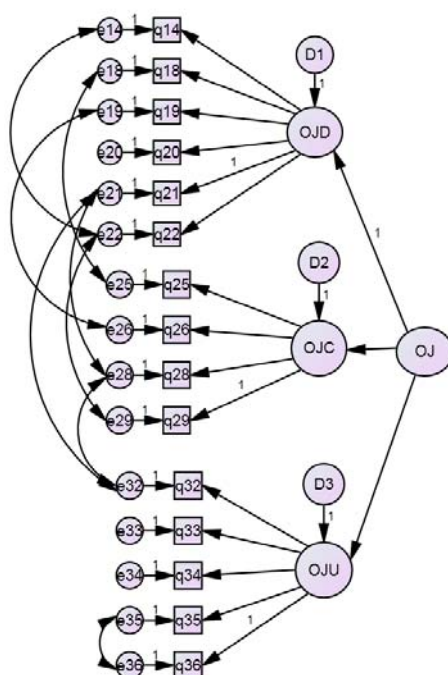
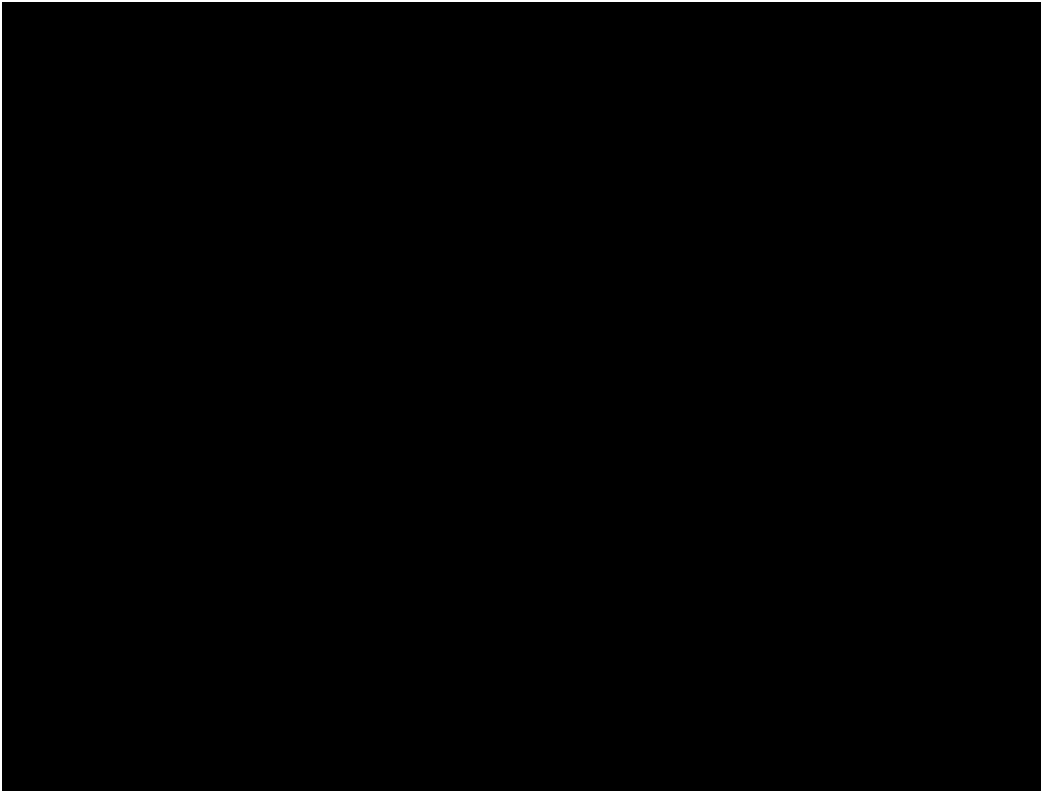


Figure 4-6: Second-Order CFA Model of OJ with Covariating Errors Specified

The model fit for this second-order CFA is as good as the modified three-factor first-order CFA, with  $\chi^2 [79]=281.766$ ,  $p < .001$ . The CFI, NFI and RMSEA are .979, .971 and .048. The resulting model diagram with standardized parameter estimates are

shown in Figure 4-7 and the estimates are also shown in Table 4-9.



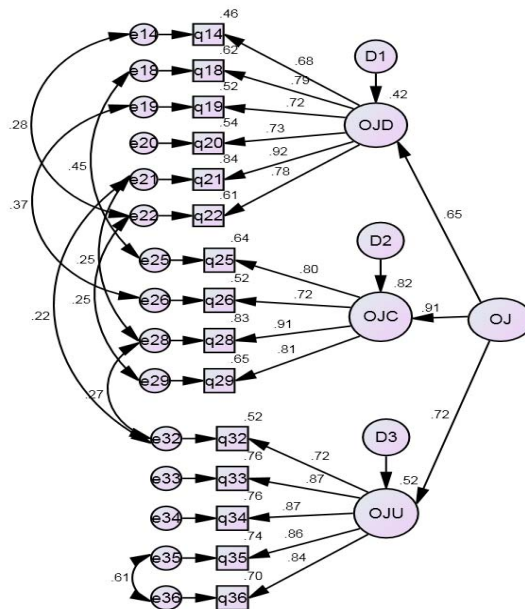


Figure 4-7: Second-Order CFA Model of OJ with Path Coefficients Displayed

As the results indicate, there is a higher-order overall organizational justice that has influence on faculty perception in the department, the college or school, and the university. Among the organizational justice at the three different levels, overall justice has the strongest impact on OJC, the second strongest impact on OJU, and the weakest impact on OJD. These results suggest that the impression or perception of organization justice at college and school level is influenced most strongly by the perception of the existence of overall justice within the institution.

The second-order CFA and first-order CFA are equivalent models, given the same number of estimable parameters and fit statistics. According to Rindskopf and Rose (1988), the second-order model is actually a special case of the first-order model, with the added restriction that structure be imposed on the correlations among the

first-order factors. The theoretical foundation of the second-order factor is quite straight-forward: there is an overall organizational justice that accounts for the shared variances among the three first-order justice constructs. Both the first-order and second-order CFA models are useful when they are imposed separately in structural models along with other variables. Having the three distinctive organizational justice constructs, it is possible to identify the different impacts of each justice perception on the outcome variables in the structural models. While using the single second-order overall justice construct, the theoretical relationship among the constructs of interest in this study can be clearly verified and revealed. As a result, in the following structural equation models for testing the relationship among faculty perceived organizational justice, psychological empowerment, organizational commitment, and intention to stay, both first order justice constructs and second order overall justice are used and the results reported and discussed separately.

### **SEM model with the separated justice constructs**

The first SEM model is to test the causal structure linking the separate organizational justice constructs to faculty psychological empowerment and organizational commitment.

Before proceeding to the test of the SEM model, it was important that the measurement of each latent factor be psychometrically sound (Byrne, 2010). Thus, it was necessary to take a preliminary step to test for the validity of the measurement model. For this purpose another CFA was used in testing the validity of the indicator variables. The latent factor of psychological empowerment and factor of organizational commitment are added into the first-order CFA of organizational justice. The diagram of

the CFA model is shown in Figure 4-8. The construct of psychological empowerment (PE) is measured by two survey items, Q6 and Q7, and organizational commitment (OC) is measured by five survey items, Q2 through Q5, and Q37. All the factors are specified to correlate with each other.

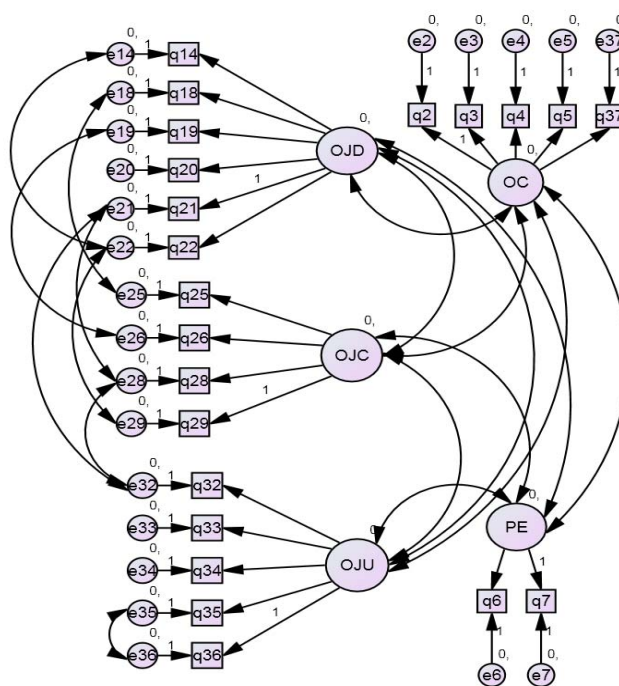
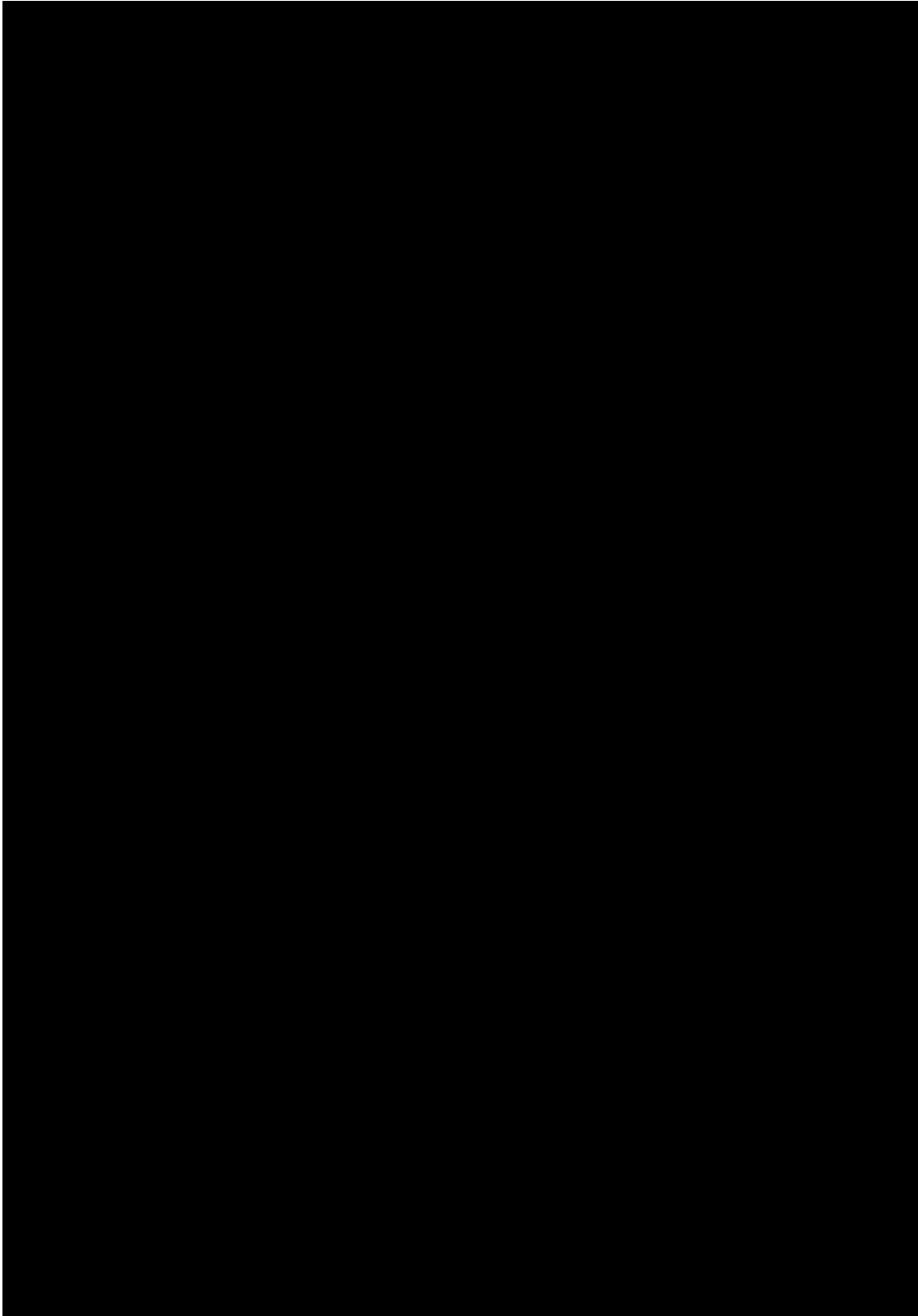


Figure 4-8: CFA model with Three First-Order OJ, PE, and OC Factors

The resulting fit indices for this CFA model indicate good fit with the  $\chi^2$  [191]=686.758,  $p < .001$ . The CFI, NFI and RMSEA were .967, .955 and .048. All the parameter estimates are significant at  $p < .001$  level. The parameter estimates are shown in Table 4-10.



All the measures load significantly on their respective factors, and all the factors are also significantly correlated with each other. The correlations among the OJ factors and the presumed consequential factors, e.g. PE and OC, are positive, which are consistent with the existing literature. OJU has the strongest correlations with PE and OC, while OJD has weakest. As the results of the CFA model confirmed the validity of the indicators for the factors, the SEM models were specified by changing the covariance among the factors into causal relations which were signified by single-headed arrow pointing from a cause to an outcome variable. Based on the propositions in Chapter II and hypotheses in Chapter III, the perception of organizational justice should impact faculty's empowerment and organizational commitment, and empowerment also influences commitment, therefore, the SEM model is shown in Figure 4-9a.

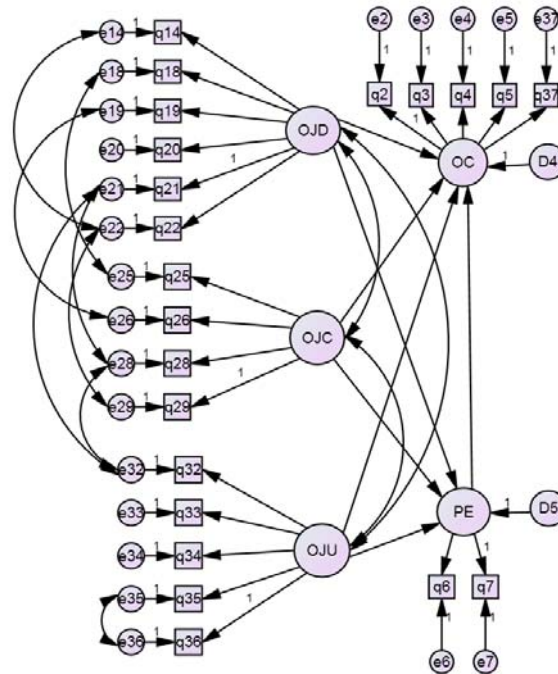
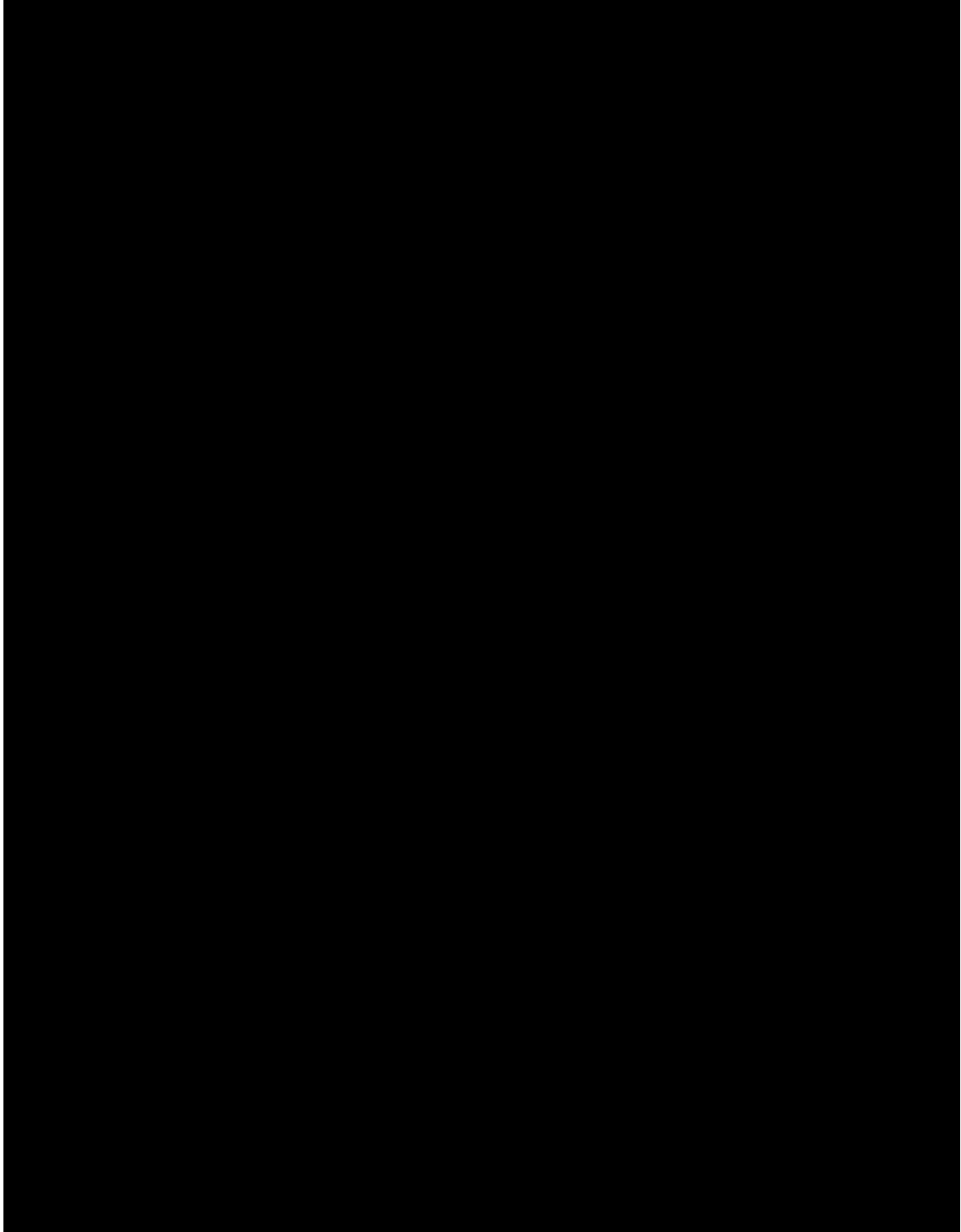


Figure 4-9a: SEM Model with First-Order OJ Factors

The resulting fit indices for this SEM model again indicated good fit with the  $\chi^2$  [191]=686.758,  $p < .001$ . The CFI, NFI and RMSEA were .967, .955 and .048 respectively. All the parameter estimates, except the path from OJC to OC were significant at  $p < .001$  level. The parameter estimates are shown in Table 4-11. As shown in Table 4-11, the effect of OJC on OC was quite small, and was not significant. Hence, the path could be deleted. The modified model was run again to test if the model fit was still good. The result was  $\chi^2$  [192]=689.620,  $p < .001$ , and the CFI, NFI and RMSEA were .967, .955 and .048 respectively. Therefore, the path from OJC and OC was removed.



The results of parameter estimates after the direct effect from OJC to OC was removed are shown in Figure 4-9b and Table 4-12.

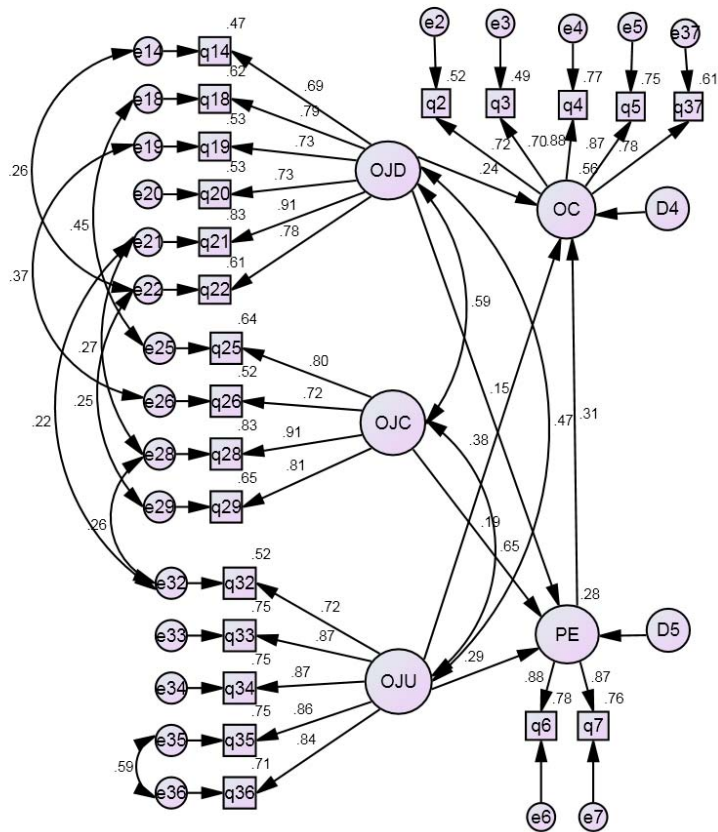
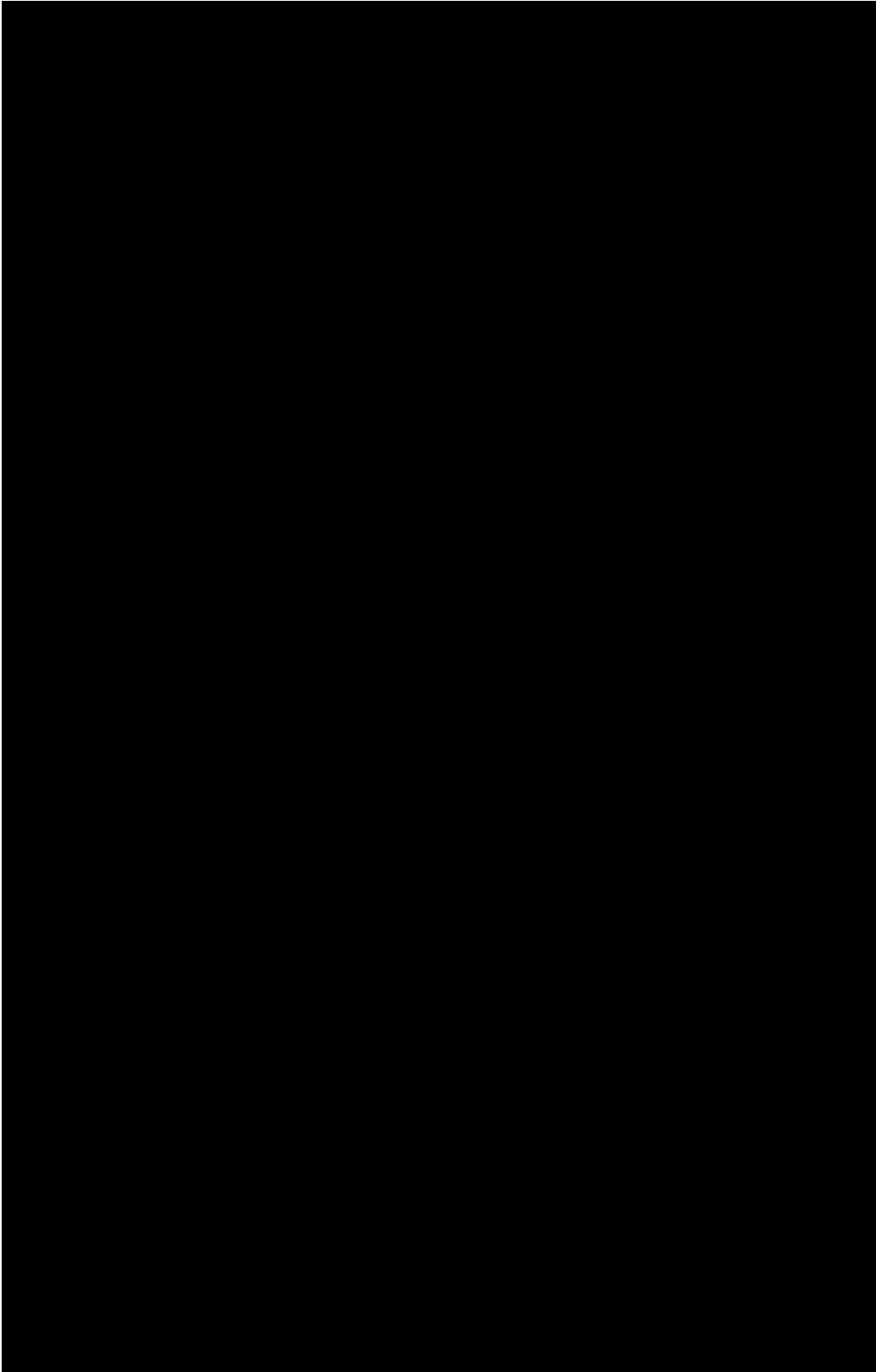


Figure 4-9b: SEM Model with First-Order OJ Factors with Path Coefficients Displayed



The results of the structural path coefficients show that, among the three OJ factors, OJU has stronger effect on both empowerment and commitment of faculty than OJD, while OJD's impact on faculty empowerment and commitment are both significant ( $p < .001$ ). The effect of OJC on OC is not significant, but both the path from OJC to PE and the path from PE to OC are significant ( $p < .001$ ). Therefore, the effect of OJC on OC is completely mediated through PE. The influences of OJU and OJD on OC are both direct and indirect (mediated through PE). OJU has stronger total effect of .467 on OC then OJD (.289) and OJC (.058).

As well as testing the proposed relationship among the constructs of interest, this study also sought to understand what effect organizational justice has on faculty's turnover intention. For this purpose, the observed variable of intention to stay in the next five years (Q58) is added to the previous SEM model and the derived SEM model is shown in Figure 4-10. In this model, organizational justice, psychological empowerment, and organizational justice are all specified to have a direct impact on faculty intention to stay.

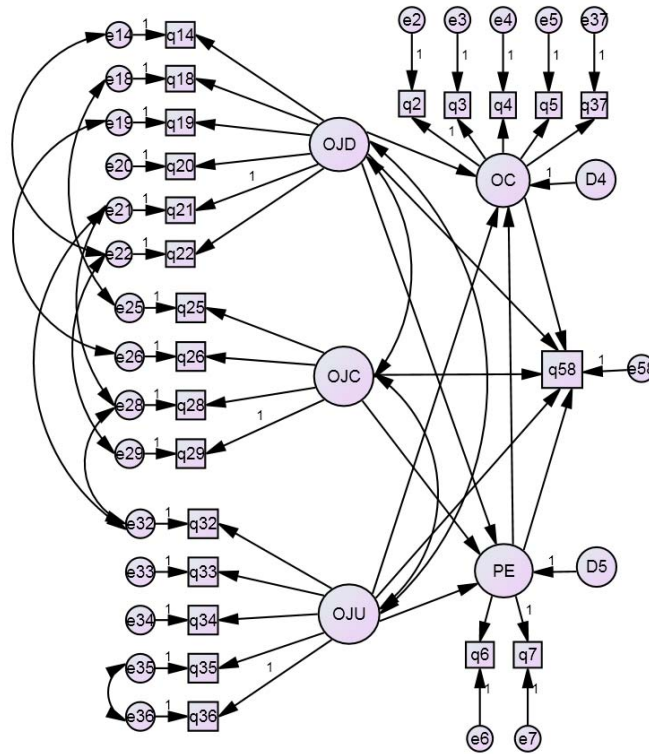
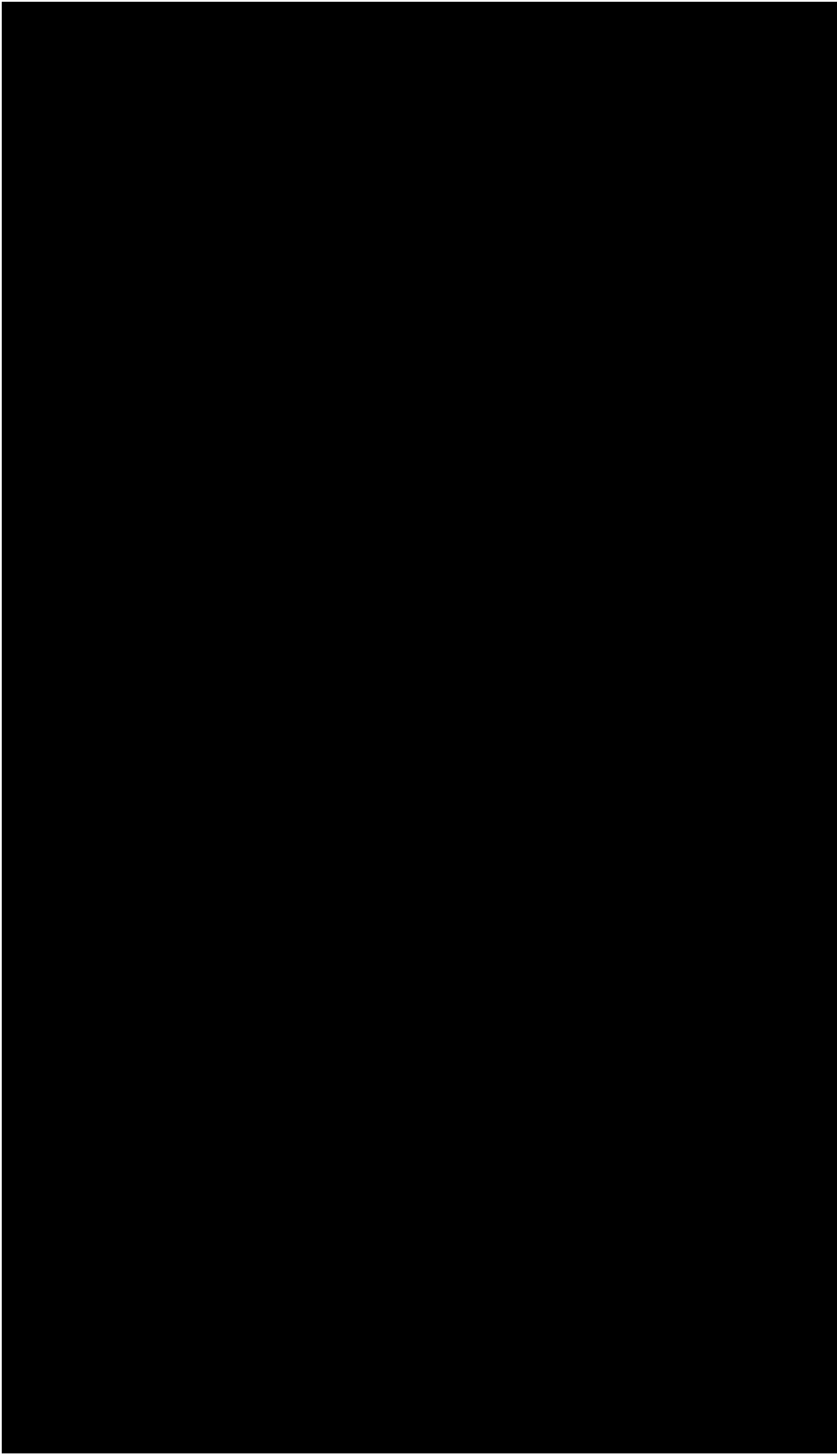


Figure 4-10: SEM Model with First-Order OJ Factors and Q58

The resulting fit indices for this SEM model indicate good fit with the  $\chi^2$  [209]=732.566,  $p < .001$ . The CFI, NFI and RMSEA are .966, .953 and .048. However, not all the parameter estimates are statistically significant.



As shown in Table 4-13, the paths from OJC, OJU and PE to “intent to stay” (Q58) are all not significant at  $p < .01$  level. After respecification by removing the path between OJC and Q58, OJU and Q58, and PE and Q58, the model shown in Figure 4-11 results:

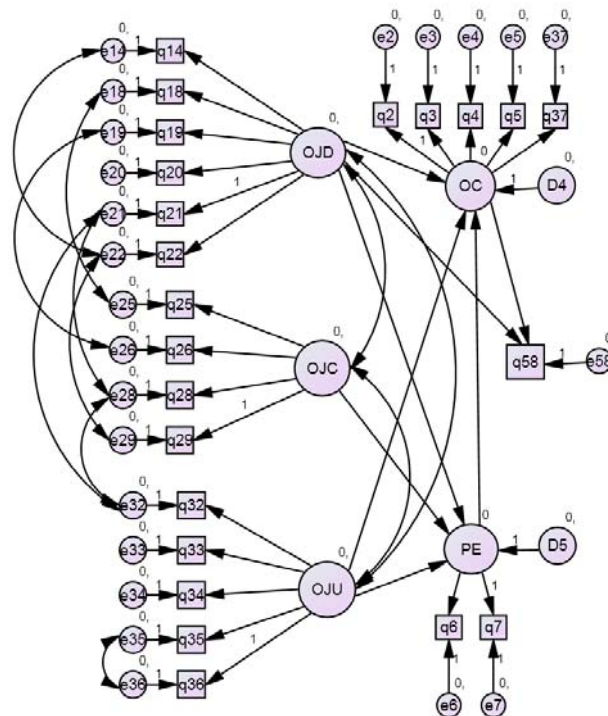
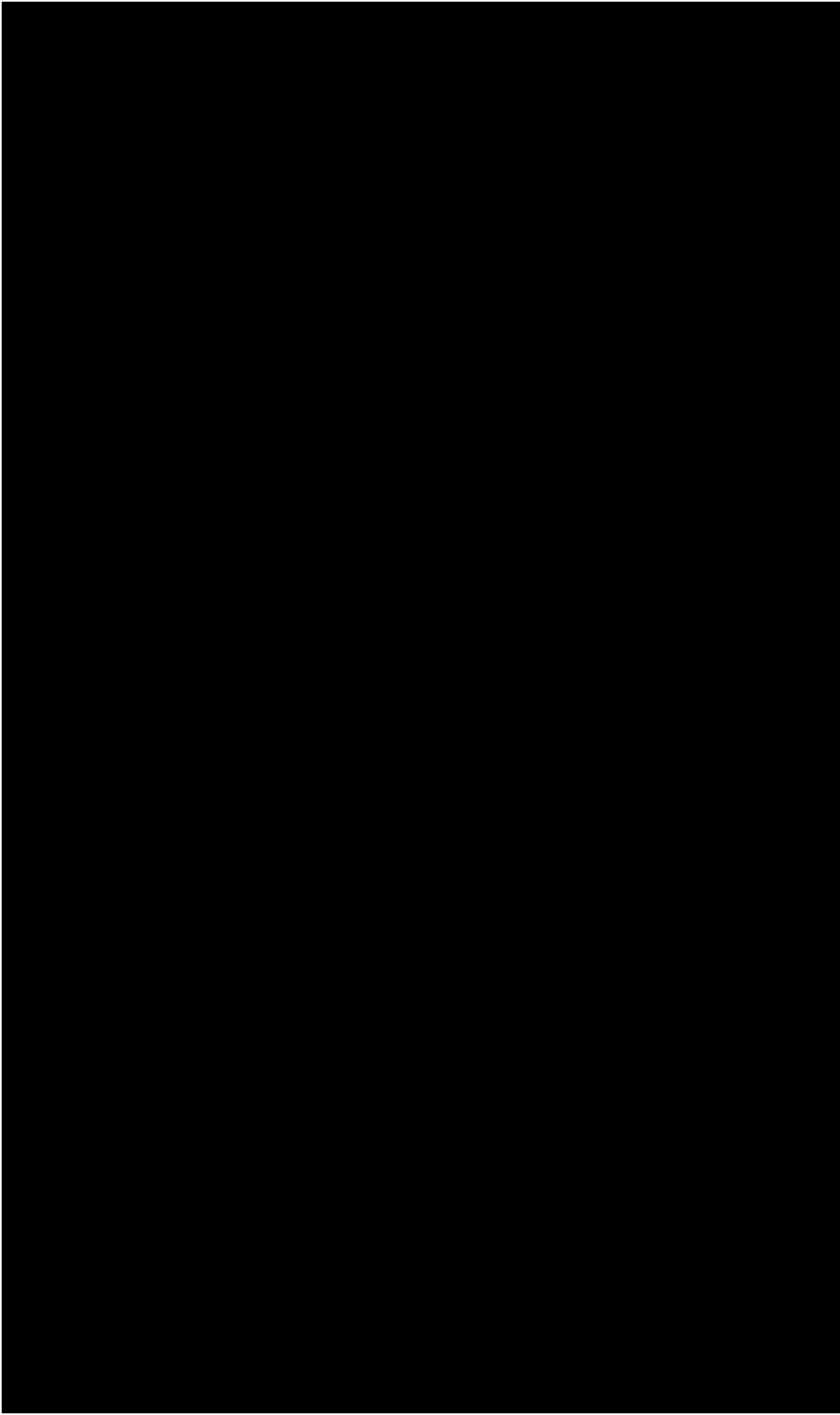


Figure 4-11: SEM Model with First-Order OJ Factors and Q58 with Non-significant Paths Removed

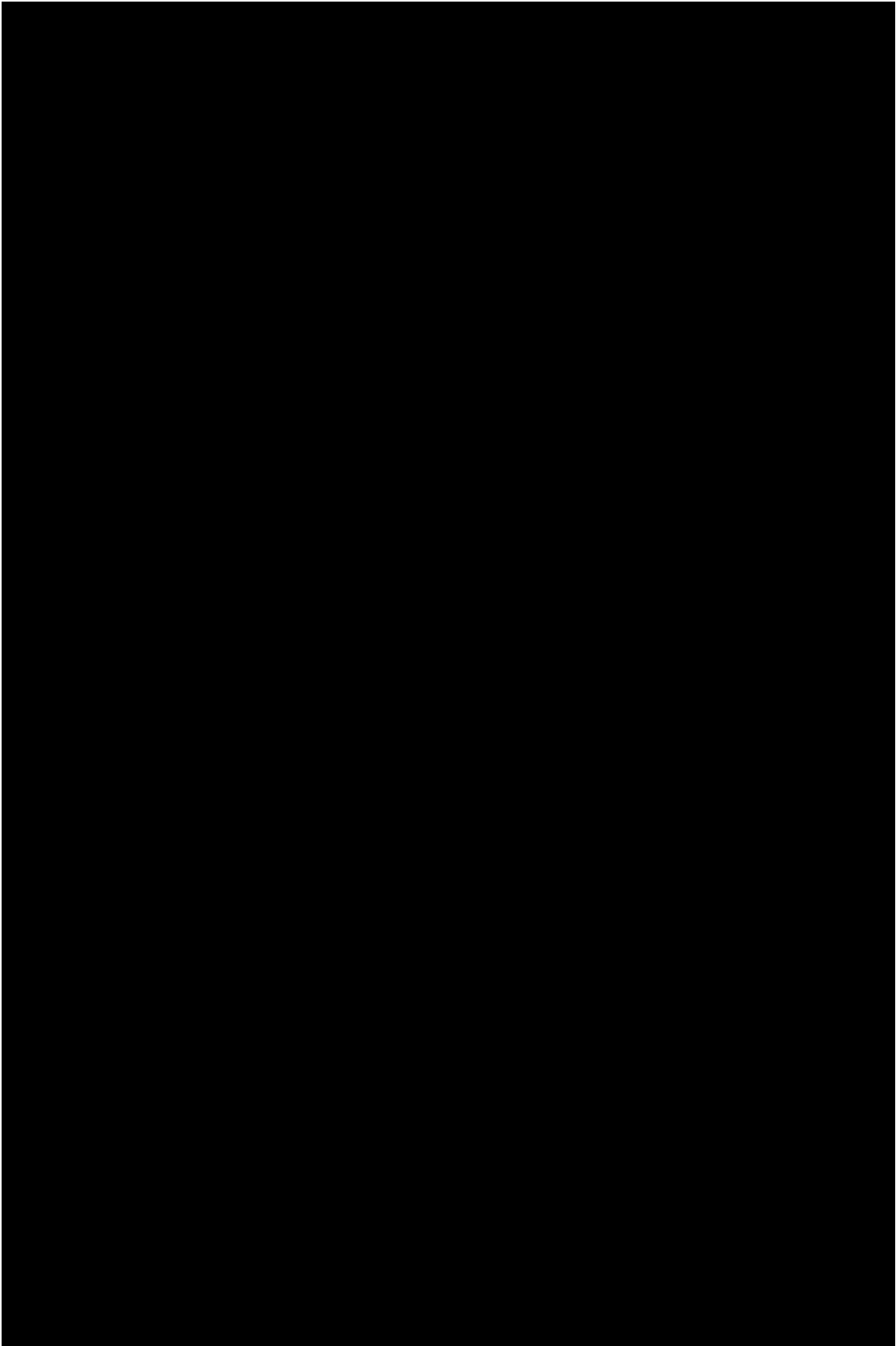
The resulting fit indices for this SEM model indicate good fit with the  $\chi^2$  [212]=737.536,  $p < .001$ . The CFI, NFI and RMSEA are .966, .953 and .047 respectively and all the parameter estimates are statistically significant (Table 4-14). Among the three

OJ factors, only OJD has significant direct positive effect on faculty intent to stay. The influences of both OJC and OJU on intent stay are indirectly mediated through PE and OC. OJD has the strongest total effect of .340 on faculty intent to stay, whereas the OJU's effect is .152 and OJC is .019.



### **SEM model with the single overall justice construct**

After testing the SEM model with separated organizational justice constructs, the individual effect of the justice constructs on PE, OC and intention to stay is identified. When the focus is generally the impact of organizational justice on empowerment, commitment, and intention to stay, the overall OJ construct can be used in SEM model. Again the analysis starts with evaluation of CFA model with the overall OJ, PE and OC, followed by the SEM model with the same factors. The resulting fit indices for both the CFA and SEM models indicate very good fit with the  $\chi^2 [195]=726.388$ ,  $p < .001$ . The CFI, NFI and RMSEA are .965, .952 and .050 respectively and all the parameter estimates are statistically significant (Table 4-15).



When it comes to the effect of overall organizational justice on the faculty intention to stay, the hypothesized model diagram is in Figure 4-12.

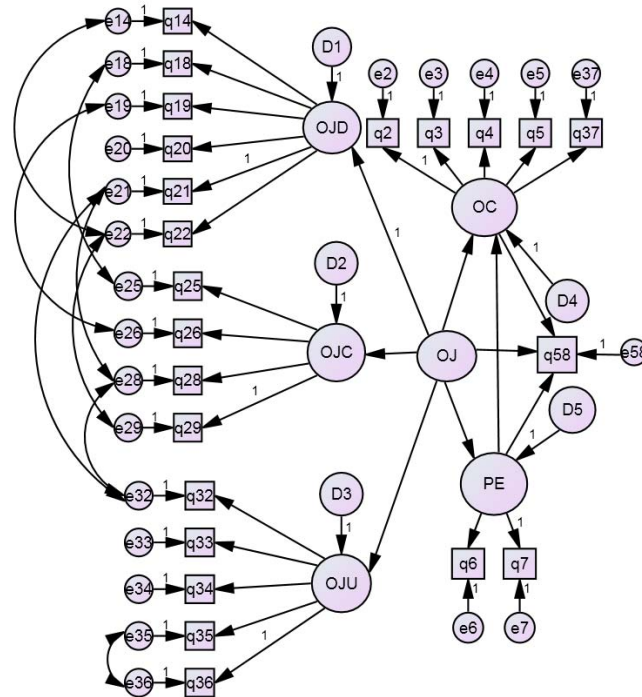
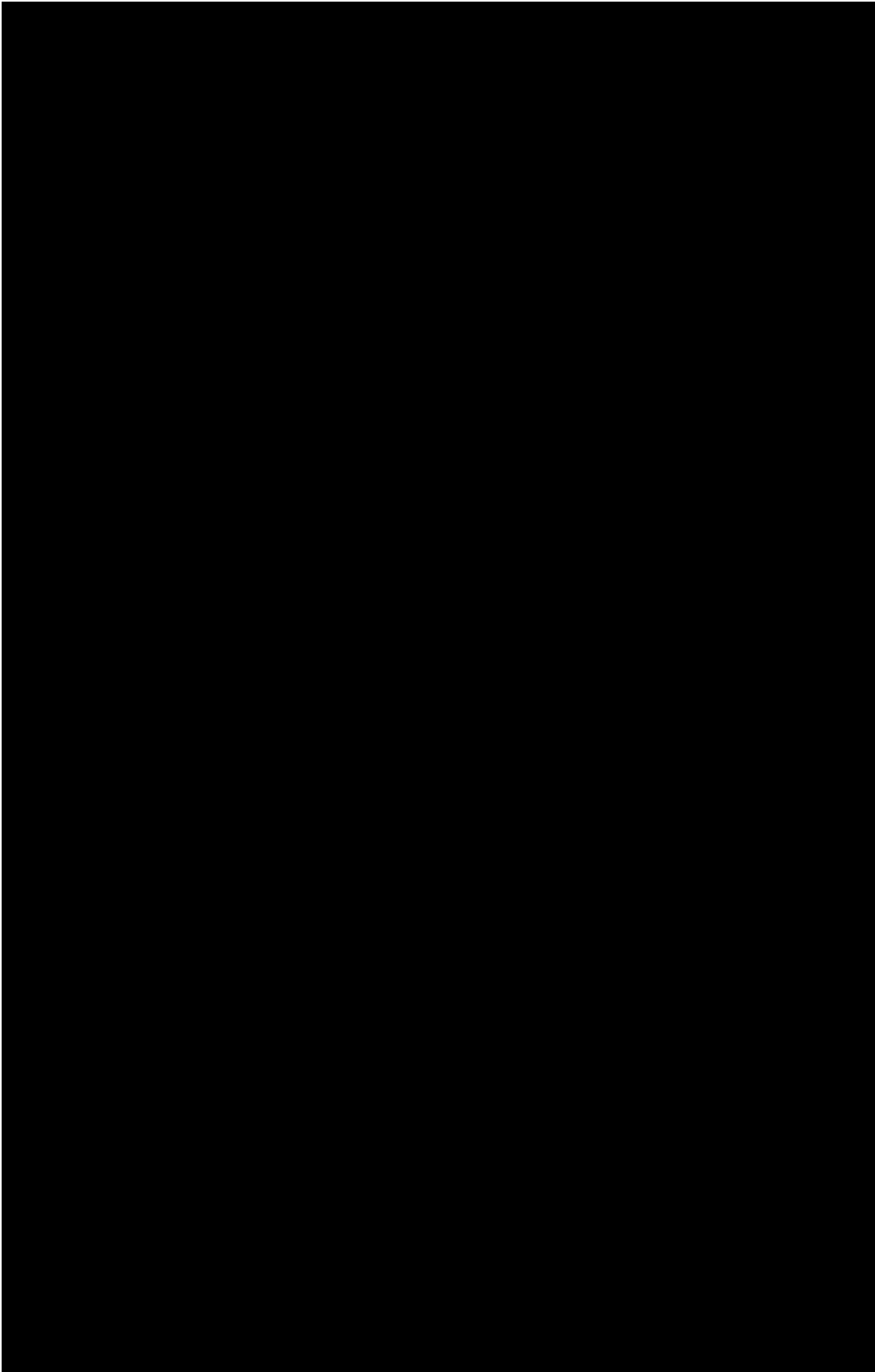
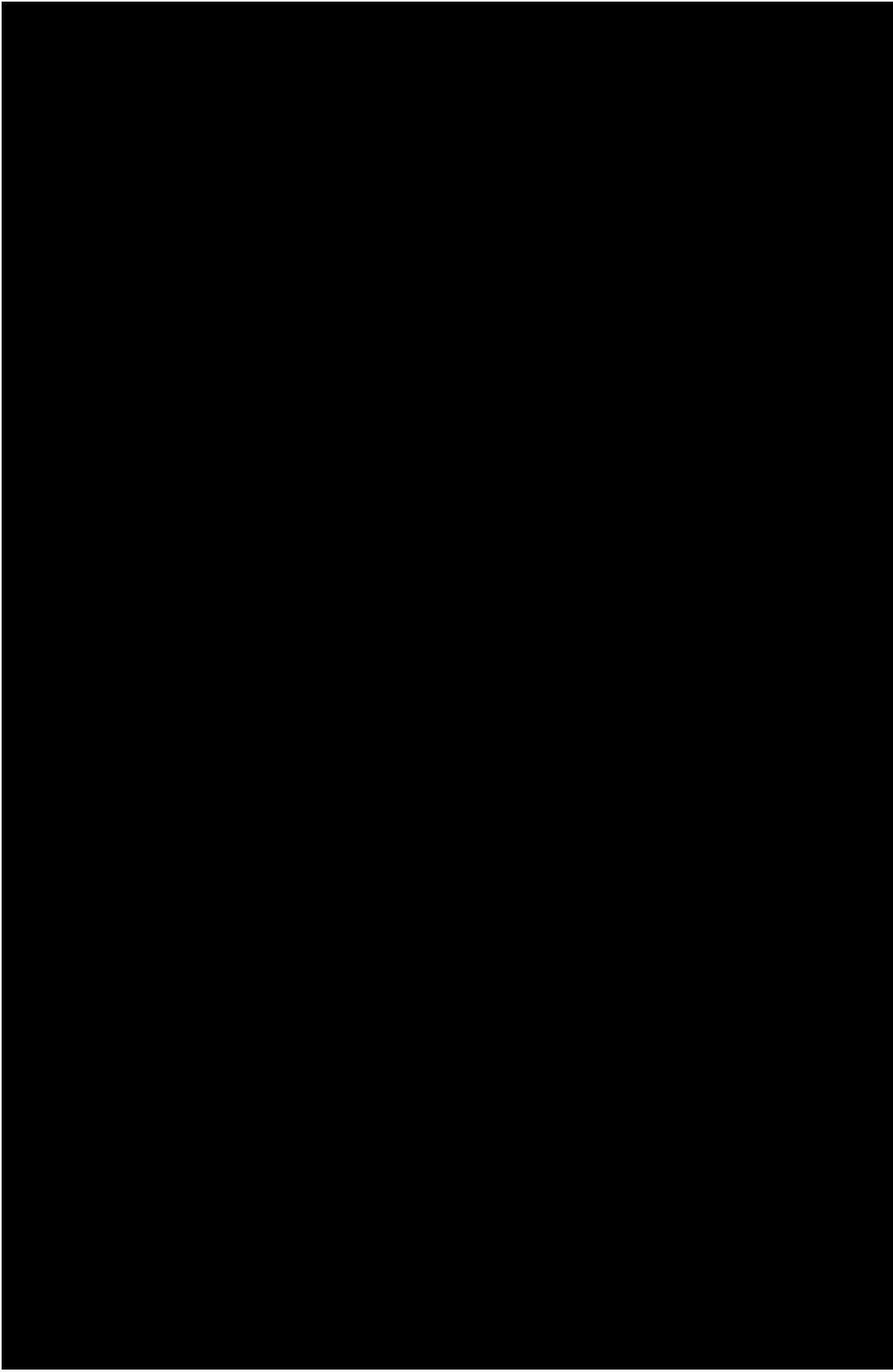


Figure 4-12: SEM Model with Second-Order OJ Factors and Q58

The resulting fit indices for this SEM model indicate good fit with the  $\chi^2$  [214]=806.312,  $p < .001$ . The CFI, NFI and RMSEA are .961, .948 and .050 respectively. For the parameter estimates, except the path from PE to Q58, and OJ to Q58, all other parameters are statistically significant at  $p < .001$  level (Table 4-16).



It is notable that the parameter for OJ to Q58 is significant at  $p < .01$  level. Consequently, in the respecified model, only the path between PE and Q58 is removed, and the resulting model still has good fit with the  $\chi^2 [215]=806.312, p < .001$ . The CFI, NFI and RMSEA are .961, .948 and .050 respectively, and all the parameters are statistically significant at  $p < .001$  level (Table 4-17). The influence of overall OJ on faculty intent to stay includes direct effect and indirect effects mediated through PE and OC. The total effect of OJ on intent to stay is .439.



The final model for the purpose of identifying the direct and indirect effect of faculty perceived organizational justice is shown in Figure 4-13 with all the standardized estimates shown on the paths.

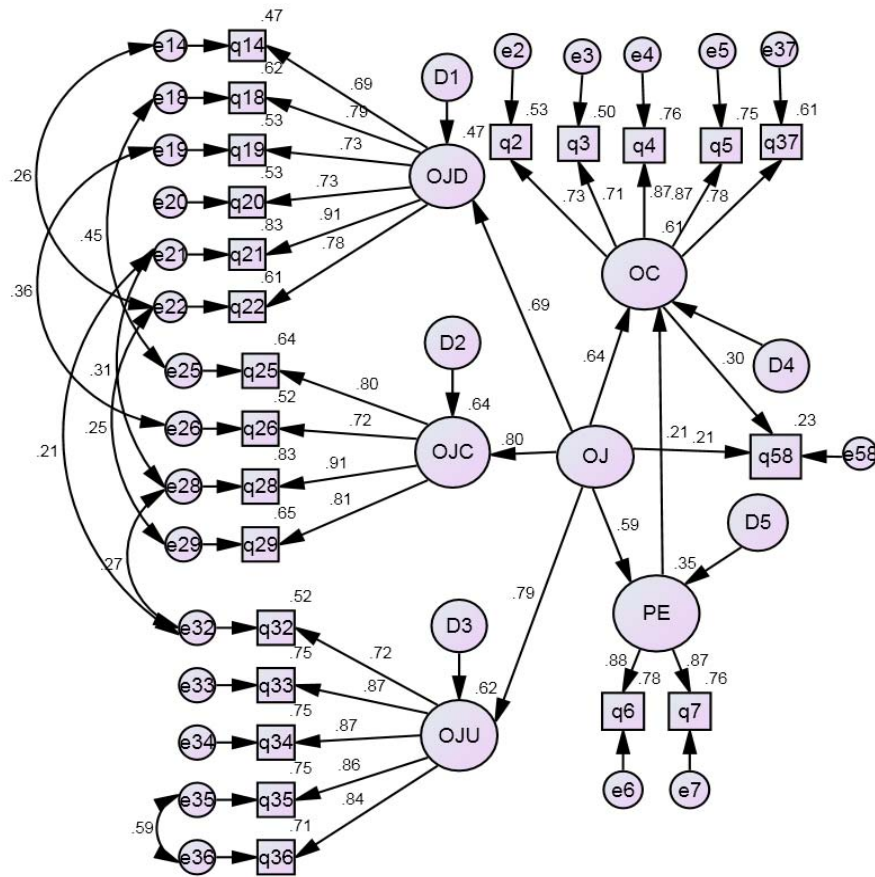
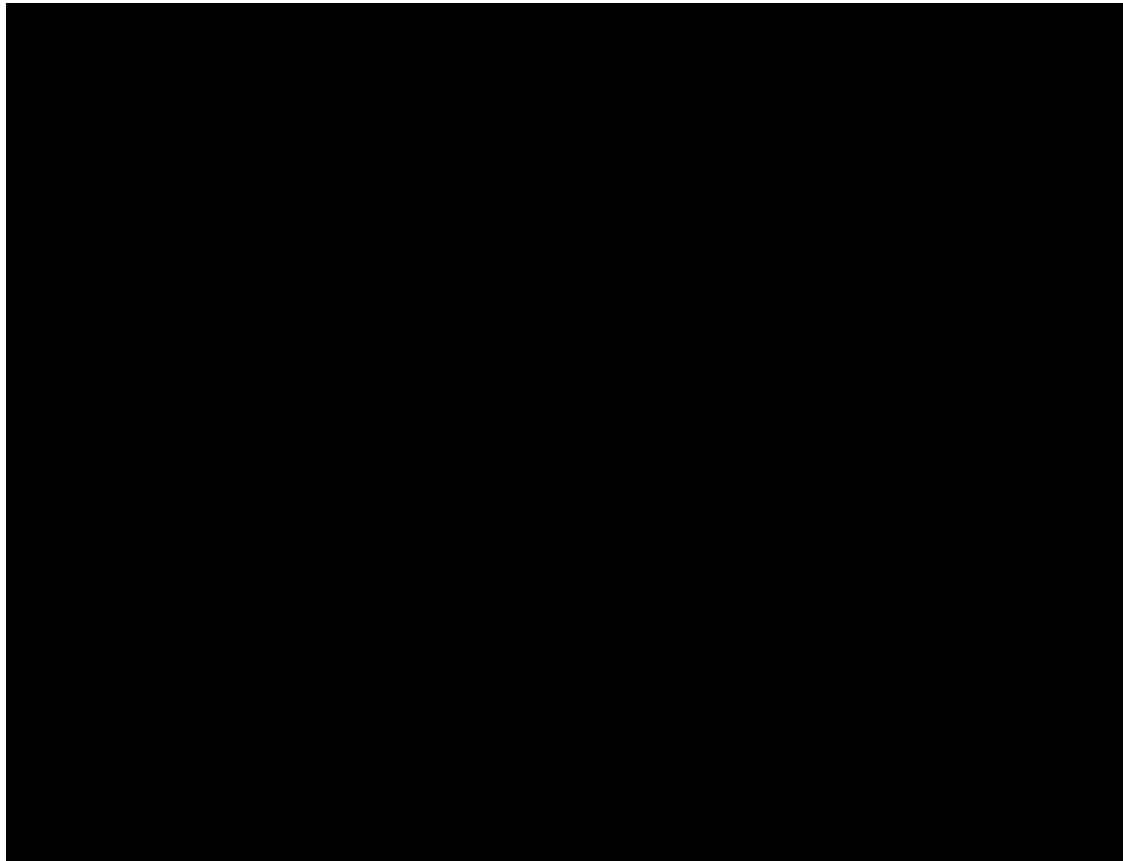


Figure 4-13: SEM Model with Second-Order OJ Factors and Q58 with Path Coefficients Displayed

### Hypotheses Testing

The hypotheses established in Chapter III were tested by using the CFA and SEM models. The summary of the hypotheses testing are presented in Table 4-18.



*Hypothesis 1a:*

*There is an overall faculty perception of organizational justice that explains the variances and covariance of the selected survey items.*

Hypothesis 1a is not supported based on the result of the one-factor CFA model. The poor fit of the model indicates that the model was mis-specified. The faculty perception of organizational justice should not be treated as a uni-dimensional construct.

*Hypothesis 1b:*

*There are separate but correlated faculty perceptions of organizational justice at local (department and college) and institutional levels that explain the variances and covariance of the selected survey items.*

Similar to Hypothesis 1a, hypothesis 1b is also not supported due to the poor fit of the two-factor CFA model, although compared to the one-factor model, the improvement was significant. Further modifications were needed to make the model-data fit up to expected level.

*Hypothesis 1c:*

*There are separate but correlated faculty perceptions of organizational justice at department, college and institutional levels respectively that explain the variances and covariance of the selected survey items.*

The hypothesis is support by the test of the three-factor model. The significantly better fit of the three factor model indicates that faculty perceived organizational justice should be differentiated according to the organizational hierarchy of the university. Organizational justice in the primary department, college or school, and the university are distinctive but correlated constructs. In addition, the results of the second-order CFA suggest that there should be a common factor that is the cause of the shared variation among OJD, OJC and OJU. It makes intuitive sense that the common factor is overall organizational justice.

*Hypothesis 2:*

*Organizational justice perceptions will affect psychological empowerment positively.*

The hypothesis is supported by both the SEM models with OJD, OJC and OJU, and the model with overall OJ as the antecedents of PE. All three separated OJ latent variables have direct influence on the empowerment of faculty, and the overall justice perception also has significant impact on PE. The positive path coefficients indicate the more fairness faculty perceive from their work life, the more they feel psychologically empowered.

*Hypothesis 3:*

*Organizational justice perceptions will affect organizational commitment positively.*

This hypothesis is also supported by both the SEM with OJD, OJC and OJU, and the model with overall OJ as the antecedents of PE. However, the non-significance of direct path between OJC and OC indicates that the impact of OJC on OC is completely mediated through PE, while both OJD and OJU have direct and indirect impact on OC. The indirect impact of OJD and OJU on OC is also mediated through PE. Overall OJ has both direct and indirect influence on OC. All the positive path coefficients suggest that the more faculty feel being treated fairly, the more organizational commitment the faculty will have toward the institution.

*Hypothesis 4:*

*Psychological empowerment will affect organizational commitment positively.*

The hypothesis is support by all the SEM models tested in this chapter. It is

consistent with the literature reviewed in Chapter II. In all models, the path coefficients are positive and indicate that the more faculty are psychologically empowered, the more committed faculty will be to the institution.

*Hypothesis 5:*

*Organizational justice will have a direct effect of faculty turnover intention.*

This hypothesis is supported by the SEM model with overall OJ. The influence of overall OJ on turnover intention, which is measured by intent to stay, is both direct and indirect mediated through OC, and PE and OC. However, it is notable that there is no direct path between PE and intention to stay. Therefore the indirect effect of overall OJ on PE is subsequently mediated through OC and then impacts faculty intention to stay. In general, the more faculty perceive justice from their institution, the more likely they will remain in the institution.

This hypothesis, however, is not supported by the SEM model with OJD, OJC and OJU. Among the three factors, only OJD has a significant direct effect on intention to stay. Both OJC and OJU have indirect influence on intention to stay, through the mediation of PE and OC.

*Hypothesis 6:*

*Psychological empowerment affects turnover intentions directly.*

This hypothesis is not supported on any SEM model in the present study. The lack of significant direct path from PE and intention to stay indicates the direct effect of PE on intention to stay is significantly different from zero. As a result, it can be concluded that the effect of PE on turnover intention is completely mediated through OC

*Hypothesis 7:*

*Organizational commitment affects turnover intentions.*

The hypothesis is supported by the significant direct path from OC to intention to stay in both SEM model with separated OJ constructs and with single overall OJ. It is confirmed by the present study that when faculty feel committed to their institution, they are more likely to stay.

## CHAPTER V

### DISCUSSION

Although existing research in business and public administration on organizational justice suggests that organizational justice has positive impact on attitudes and behaviors of individuals in organization, little has been done in the higher education setting to study how perceived organizational justice influence how the faculty feel and do. In addition, the construct of organizational justice has traditionally been conceptualized by differentiating the causes for justice perceptions, but little attention has been given to the effect of organizational hierarchy in the formation of organizational members' justice perceptions. As modern organizations become more versatile and complex in their structure, employees at work are likely to have multiple organizational identities. The employees' perceptions and attitudes can have different foci based on organizational structure and have varied levels of impact on employees' behaviors at work. The purpose of this study was to test the appropriateness of a multiple foci approach for conceptualizing the overall organizational justice construct, and to investigate the relationship among perceived organizational justice, psychological empowerment, organizational commitment and turnover intention of faculty in higher education. The following research questions were investigated:

- (1) When taking into account of organizational hierarchy in a comprehensive university, such as departments, colleges and schools, and the institution as a whole, whether an overall construct of faculty perceived organizational justice best fits the survey data, or the construct needs to be differentiated according to organizational hierarchy?

- (2) How do organizational justice perceptions relate to the psychological empowerment of faculty?
- (3) How do organizational justice perceptions relate to the organizational commitment of faculty?
- (4) How do organizational justice perceptions relate to the turnover intentions of faculty?
- (5) Do psychological empowerment and organizational commitments mediate the relationships among faculty perceived organizational justice and turnover intentions?

To answer these research questions, the quantitative data collected from a public research university using academic faculty survey were analyzed using confirmatory factor analysis (CFA) and structural equation modeling (SEM). The constructs of organizational justice, psychological empowerment and organizational commitment were measured indirectly with a series of observed variables, and the turnover intention was measured with a survey item asking about faculty intention to stay in the institution in the next five years. This chapter discusses the findings related to the research questions raised in Chapter I and the implications of the study are discussed, followed by the limitations and directions for future research.

### Major Findings

#### Findings from tests of CFA models

The results of the confirmatory factor analyses showed that neither the single- nor the two-factor model adequately fit the observed data. Instead, the three-factor model of the first order CFA and second order CFA models fit the observed data equally well. The three-factor first-order CFA model and the second-order model are presented in Figure 5-1 and Figure 5-2 respectively.

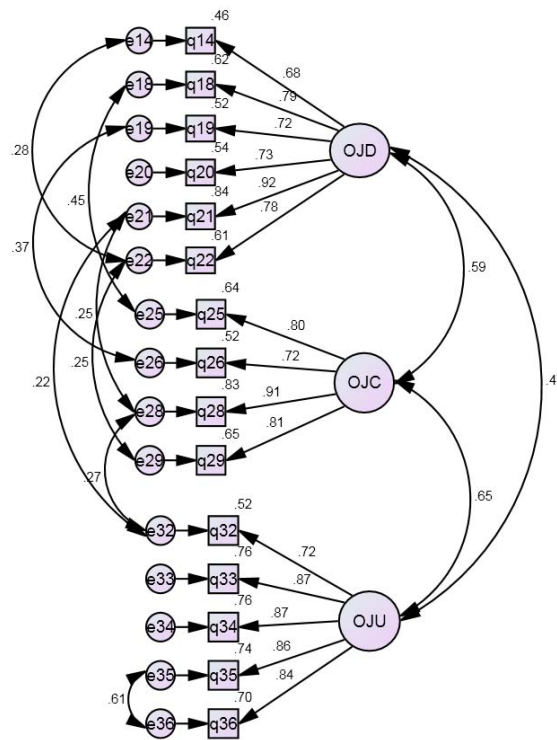


Figure 5-1 Final three-factor CFA model of OJ with coefficients

Based on the results of CFA, the construct of overall organizational justice is proven to consist of three components: organizational justice in the primary department (OJD), organizational justice in the college and schools (OJC), and organizational justice in the university (OJU). These three components serve as underlying causes that influence their respective indicators, e.g. the observed variables. In the first-order CFA model, the higher organizational justice that faculty perceive from their department and at college or school level, the more likely they will consider themselves being full and equal participant in decision-making, and understanding how and why decisions are made. They are also more likely to regard the assignment of committee work as fair and to view leadership as effective. At department level, when the faculty perceive justice they also feel respected by their department chair and perceive the tenure and promotion process to be fair. By the same token, when faculty perceive organizational justice at institutional level, they tend to believe that they understand how and why decisions are made and consider faculty and administrators to have positive relations. They also tend to view leadership as effective and trustworthy.

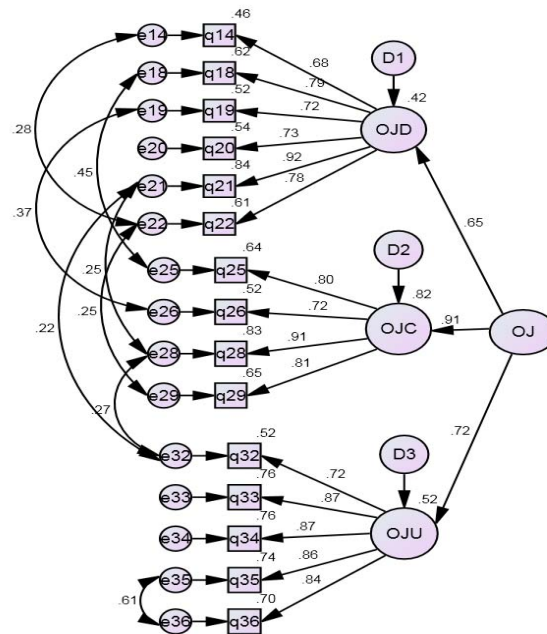


Figure 5-2 Final second-order CFA model of OJ with coefficients

The three OJ factors are correlated substantially, but there is not any theoretically foundation based on which to judge the causal relationship among OJD, OJC and OJU. However, the substantial correlation among the factors can be an indication of a underlying higher-order construct that causes the three first-order factors to covary, and it makes theoretical sense the an overall organization justice that is the cause for faculty perceptions of justice at department, college and institutional levels. The finding of the second-order CFA supports the assumption. The result indicates that when faculty perceive justice in the university as a whole, they tend to consider there is also justice at different levels of the organization. Among the three first-order OJ factors, overall organizational justice has strongest influence on OJC and least on OJD.

The revised final structural models, derived from removing the non-significant paths from the initially specified models, are presented in Figure 5-3 and Figure 5-4 respectively. Both of the models illustrate the key findings from the SEM analyses with respect to understanding the relationships among organizational justice, psychological empowerment, organizational commitment, and faculty intent to stay.

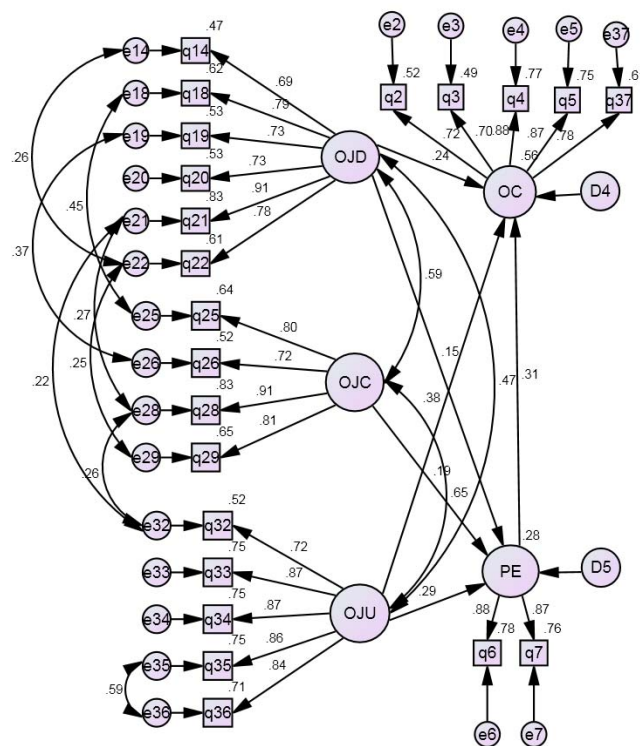


Figure 5-3 Final SEM model with three OJ factors and coefficients

The result of the SEM analysis with the first-order OJ constructs revealed that OJD, OJC and OJU are positively correlated with each other, and have positive impact on psychological empowerment (PE) of faculty. In other words, when faculty perceive a higher level of organizational justice in either the primary department, or college, or

institutional level, the faculty tend to be more psychologically empowered. Among the three first-order justice constructs, OJU has the strongest influence on psychological empowerment, while OJC has slightly stronger effect than OJD on PE. The model also showed that only OJU and OJD have direct positive impact on organizational commitment (OC) of faculty members, but all three first-order OJ constructs have indirect positive influence mediated through PE on OC. This means that the more justice faculty perceive at the department and institutional level, the more faculty will be committed to the university. Additionally, the more faculty are psychologically empowered, the more organizational commitment will faculty have for their institution. However, organizational justice in the college and school does not have a direct effect on the commitment of faculty. Rather, the effect of OJC on OC is completely mediated through faculty empowerment. OJU has the stronger total effect, direct plus indirect effect, on OC than OJD and OJC. Compared to OJU and OJD, OJC has relatively small influence on organizational commitment.

As to the impact of justice perceptions on faculty intent to stay, only OJD has direct influence on intent to stay. That is, the more organizational justice faculty perceive at department level, the more likely the faculty will continue to work for the university. Both OJD and OJU have indirect effect on faculty intent to stay mediating through OC and through PE and OC. The impact of OJC on intent to stay is completely first through PE and then OC. Among the three first-order OJ constructs, OJD has strongest positive influence on intent to stay, followed by OJU, and then OJC. In general, faculty organizational justice has positive influence on psychological empowerment, organizational commitment, and intent to stay. Faculty empowerment will enhance organizational commitment and eventually affect the tendency of faculty to stay in the

institution. Nonetheless, according to the data in this study, PE does not have a direct path to intent to stay, so the influence of PE or through PE will be completely mediated to or through OC.

The model with the second-order overall OJ variable showed a similar but clearer picture regarding the relationships among the constructs of interest in this study, namely OJ, PE, OC, and intent to stay. As shown in Figure 5-4, overall OJ has direct positive effect on PE, OC and intent to stay. PE has direct and positive influence only on OC, while OC also has direct and positive effect on intent to stay. Consequently, the influence of OJ on intent to stay can also be through the path of PE as the first mediator, and then OC as the second mediator or the path of OC as the single mediator. Stated another way, when faculty perceive organizational justice in the institution as a whole, they tend to be more empowered psychologically and feel committed to the university; and thus, they are more likely to continue their employment in the university. Besides, when the faculty feel empowered, they tend to be more aware of how their roles and work outcomes are related to the success and goals of the university, while when faculty are committed to the university, they tend to consider the university as a good place to work and feel inspired, satisfied and proud to work at the university, as well as having sense of accomplishment from their job.

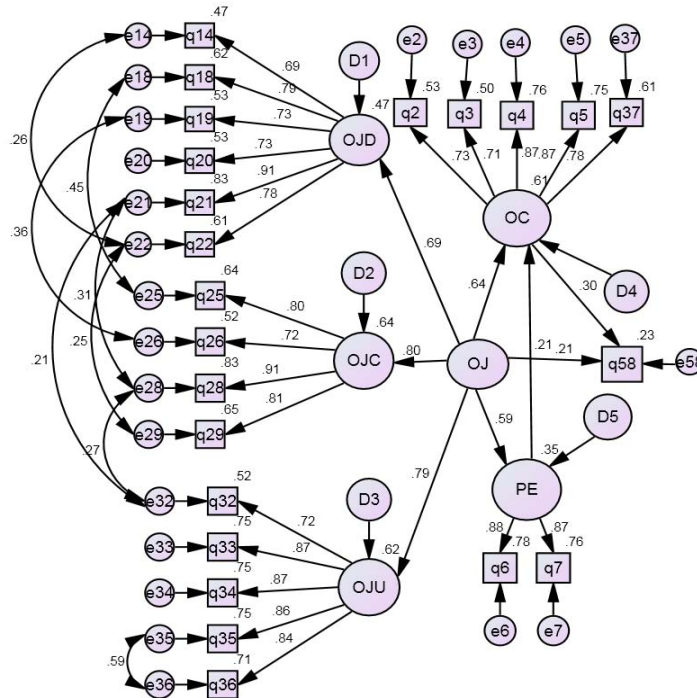


Figure 5-4 Final SEM model with 2<sup>nd</sup> order OJ, Q58 and coefficients

### Discussion

With the results from the CFA and SEM models, the research questions can be answered as following:

- (1) In a complex organization such as a comprehensive university, the faculty perception of organizational justice should have multiple foci, therefore a single dimensional construct of overall organizational justice is not sufficient; instead, organizational justice should be differentiated according to the organizational hierarchy of a university. According to the results of

second-order CFA, there is still an underlying overall construct of organizational justice that will influence the perceived justice from various foci.

- (2) Organizational justice has positive influence on psychological empowerment of faculty. More specifically, the first-order structural model showed that the perceived justice at institutional level has stronger positive effect than at college or department level.
- (3) Organizational justice has positive influence on organizational commitment of faculty. The first-order structural model showed that only the perceived justice at institutional and department level has positive effect on organizational commitment.
- (4) Organizational justice perceptions have positive effect on faculty intent to stay in the institution. However, in the first-order structural model only perceived organizational justice at department level has a direct and positive effect on faculty intent to stay. The perceived organizational justice at college and institutional level has minor and indirect effect on the intent to stay.
- (5) Both the psychological empowerment and organizational commitment are mediators in the relationships among faculty perceived organizational justice and turnover intentions. In the first-order structural model, psychological empowerment mediated the effect of all first-order OJ variables, and organizational commitment mediated the effect of perceived justice at department and institutional level and the effect of psychological empowerment on the intent to stay.

The results of this study confirmed that overall organizational justice is the antecedent for perceived organizational justice at different levels of university organization, psychological empowerment, organizational commitment, and faculty intent to stay. In complex organization, organizational justice should be viewed as a multiple foci concept by taking into account the organizational structure.

Although the resulting relationships among the organizational justice constructs and their outcomes are consistent with what the existing studies have suggested, this study successfully modeled the paths through which perceived justice of faculty influence the empowerment, commitment and intent to stay in higher education context. The differentiation of perceived justice within a traditional university hierarchy also disclosed how justice at the various levels of university can impact the faculty attitudes and behavior tendency differently.

Among the findings of this study, some interesting outcomes are worth further scrutiny, including (1) the stronger influence of overall OJ on OJC than on OJD and OJU in the second-order CFA model, (2) the stronger influence of OJU on the psychological empowerment and organizational commitment of faculty than OJD and OJC, and (3) the non-significant path between psychological empowerment and the faculty intent to stay.

In the second-order CFA model, the impact overall justice perception has a stronger influence on the perceived justice in the college or school than in the department and at institutional level can be interpreted as that the faculty perceived justice in the college or school is heavily dependent on the impressions or experiences of faculty regarding how the issues of fairness or justice are treated in the university as a whole. This means that faculty might have less information or interaction based on which they can form their judgment about how justice is implemented in the college or

school compared to in the department or at institutional level. The same logic also explains why overall justice perception has least impact on perceived justice at department level, because academic departments, as higher education scholars suggested, are where the notion of shared academic governance is most developed (Peterson, 1976; Trow, 1976), as well as faculty norms, values, and careers are shaped (Hearn, 2007). It is natural that faculty have more understanding and participation at the department level than at the college or institutional level, since departments are the foundational unit of U.S. colleges and universities. Therefore, faculty have more opportunities to access information or to interact with other department members, and shape their justice perception or judgment accordingly. Consequently, the overall justice perception is less influential for perceived organizational justice in the department.

The stronger influence of justice perception at institutional level on empowerment and commitment could be due to the content of the survey items. Because the survey questions of the measures of psychological empowerment and organizational commitment all specifically refers to “the University” in the contents, the latent constructs reflected by these measures could be mainly revealing the faculty attitudes toward the university. Therefore, the perceived justice at institutional level should be more influential on these constructs.

As aforementioned in Chapter II, there has been very little evidence from existing studies supporting the direct impact of psychological empowerment on intent to stay or leave. In this study, the hypothesized direct path was proposed based on the effect of empowerment in reducing negative work related outcomes, such as dissatisfaction and work stress, which are directly related to turnover intentions. However, according to Mobley (1977), the turnover intentions of employees have to do with not only negative

work outcomes, but also with the conditions of the available alternatives. A direct link between empowerment and intent to stay seems also dependent on the availability of satisfactory alternatives. Therefore, an indirect path mediated through commitment appears to be more adequate than a direct one.

### **Implications**

The findings from this study provide both theoretical and practical implications. This study contributes to the understanding of organizational justice as a multi-foci concept and the effects of justice perceptions on faculty empowerment, commitment and turnover intentions in higher education context. Specifically, the findings that perceived organizational justice in a complex organization should be treated as a multi-dimensional concept and should take the organizational structure into consideration are important because this study responds to the call in the research community of organization justice for studying overall organizational justice (Ambrose & Arnaud, 2005; Ambrose & Schminke, 2009), and also brings an innovative way of conceptualizing the construct to the knowledge base. The use of multiple foci approach allows researchers compare the effects of justice perceptions of different foci, so that managerial intervention or adjustment can be better targeted at specific areas that require the most attention. For instance, the finding that only perceived justice at department level has direct effect on intent to stay can help administrators dealing with turnover issues focus more on faculty experience in the department.

The findings regarding the underlying second-order overall justice perception is the cause for the perceived justice at various levels of a university also has important implications, because the overall justice perception represents impressions and

experiences of faculty regarding how justice issues are treated or implemented in the institution as a whole. These impressions and experiences can be results of individual faculty worklives, or the organizational collective memories that passed on from senior members to junior ones. They can also be the consequences of managerial communication regarding wide-ranging issues related to resource and outcome allocation, procedures of allocation, or interaction with others, or they can be the product of anecdotal stories that carry symbolic indications of justice as an organizational value. The substantial influence of the overall justice perception on perceived justice at department, college and institutional levels means that it is not only the individual transactions of allocation, procedures or interaction that happen in faculty worklives that matter, but also the overall justice climate or atmosphere that is crucial in shaping faculty perceived justice. Therefore, in practice, managerial intervention should not only focus on ensuring the actual allocation, procedures and interaction that affect direct justice experiences of faculty, but also the need to address and communicate fairness and justice as the core value and principle of the institution as a whole, so that the overall justice perception can be constructed in the mind of the faculty.

The findings of the effect of organizational justice on psychological empowerment, organizational commitment and turnover intent are largely consistent with the existing literature (Miller & Monge, 1986; Schuler, 1977; Davis & Bryant, 2010; Dipaola & Guy, 2005; Spreitz, Kizilos, & Nason, 1997). The models in this study, however, provided a foundation based on which the factors affecting faculty work experience in their institution can be studied and their relationships identified.

### **Limitations**

The findings and contributions of the present study need to be evaluated taking into account the limitations of the research design. First, this study uses data collected from one public research university in the U.S. The results might not be generalizable to other types of higher education institutions, or colleges and universities outside the U.S. context. However, the resulting models can serve as starting points for specifying the relationships among similar constructs in other types of higher education institution.

In addition, although the cases in the data represented the faculty population well, there are still concerns with common-method bias regarding the data. According to Spector (1994), even if the weakness in a cross-sectional self-report study is inherent, the design can still be of use and value in assessing how people feel and view their work environment. Because the academic faculty surveys used to collect data for this study were anonymous, and the scales in the survey demonstrated high levels of reliability and validity, the limitation of self-report measure can be largely offset (Spector, 1994).

A third limitation of this study is the underlying assumption that the faculty in the university belong to a homogeneous group. However, the faculty population is constituted by people of different age, gender, rank, disciplinary training and have varied length of history in their institution. These demographic variables have not been considered in this study. A multi-group SEM model will be able to better address this limitation.

The final limitation of this study is that the data used in this study is secondary data collected for evaluating work climate in a public university. Since the original purpose of the survey was not designed for this study, the measures for the constructs are limited to the survey items available in the survey. Although the items have undergone tests of reliability and validity and demonstrated good results, a survey

dedicated for the purpose of studying the constructs of interest in this study might more accurately measure the construct and assess the relationships.

## Conclusion

This study investigated organizational justice in higher education and its relationship with psychological empowerment, organizational commitment and turnover intentions of faculty. The theoretical model developed and tested for this study examined the appropriateness of treating organizational justice in a complex organization as a multi-dimensional construct based on organizational hierarchy. In addition, the models tested whether organizational justice has direct impact on faculty empowerment, commitment and their intent to stay in the university. The findings suggest that perceived justice at department, college and institutional level should be treated as separate but correlated constructs, and organizational justice has significant effect on psychological empowerment, organizational commitment, and turnover intentions of faculty. These findings are valuable because they provide tangible evidence for managerial actions and strategies that may potentially influence the successful outcome of virtually any kind of organizational initiative.

Higher education is facing challenges that require dedicated faculty to withstand its transformation. The findings of this study should advance the understanding of organizational justice and its influence on faculty work attitude and behavior, and provide guidelines to help leaders in higher education build a fair and thriving workplace in their institutions.

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