ANTECEDENTS AND CONSEQUENCES OF
ORGANIZATIONAL JUSTICE

ANTECEDENTS AND CONSEQUENCES OF ORGANIZATIONAL JUSTICE:
AN INVESTIGATION IN CHINA

By

HAIYAN ZHANG, B.ENG., M.A.

A Dissertation

Submitted to the School of Graduate Studies

In Partial Fulfillment of the Requirements

for the Degree

Doctor of Philosophy

McMaster University

DOCTOR OF PHILOSOPHY (2006)   MCMASTER UNIVERSITY
(Business Administration)   Hamilton, Ontario

TITLE: Antecedents and Consequences of Organizational Justice:
An Investigation in China

AUTHOR: Haiyan Zhang, B.Eng. (Tianjin University), M.A. (Renmin University)

SUPERVISOR: Dr. Naresh C. Agarwal

NUMBER OF PAGES: viii, 137

ABSTRACT

Organizational justice has received considerable research attention over the past three decades. Most of this attention, however, has focused on examining the relationship between organizational justice and outcome variables such as work attitudes and behaviours. The question of organizational antecedents of organizational justice has not been fully explored. Also, most previous studies have been conducted in western countries. The amount of available research from non-western countries is limited. The present study investigates both antecedents and outcomes of organizational justice using a sample of 242 supervisor-subordinate dyads from Chinese organizations. A path model is developed and tested depicting perceived HR practices (empowerment, psychological contract breach, and communication) as antecedents to organizational justice perceptions (distributive, procedural, and interactional), and organizational citizenship behaviour (OCB) and turnover intention as outcomes. The results provide empirical evidence of the impact of: (a) empowerment on distributive justice perceptions; (b) psychological contract breach on distributive and procedural justice; and (c) communication on procedural justice and interactional justice. The results also demonstrate that perceptions of distributive, procedural and interactional justice positively predict OCB and that perceptions of distributive and interactional justice contribute to turnover intention. The theoretical and practical implications of these results are discussed.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1 Introduction

1.1 Background

Judgement about what is fair or what should have been fair has been recognized as a fundamental cognition that affects people's attitudes and behaviours (Lind, 1997). The judgement of fairness in the workplace is known as organizational justice (Greenberg, 1990). Questions relating to organizational justice have received considerable research attention in industrial psychology, human resource management, and organizational behaviour over the past three decades. Early research has focused on distributive justice, emphasizing the perceived fairness of outcomes (Adams, 1965; Crosby, 1976; Deutsch, 1975). Later, research shifted to procedural justice, arguing that the procedures used in determining outcomes also affects individuals' judgment of fairness (Leventhal, 1980; Leventhal, Karuza, & Fry, 1980; Thibaut & Walker, 1975). Recently, researchers in the area of organizational justice have acknowledged the existence of interactional justice (Bies & Moag, 1986; Tyler & Bies, 1990), addressing the interpersonal aspects of the enactment of procedures.

Perceptions of organizational justice have been consistently linked to a variety of organizational outcomes. For example, the fairness of decisions about resource allocations as well as the fairness of procedures used in the allocation process have been found to affect employees' attitudes (e.g. outcome satisfaction, organizational commitment, and trust) and behaviours (e.g. organizational citizenship behaviour, withdrawal behaviours, and counterproductive behaviours) (e.g. Folger & Konovsky,

1989; Greenberg, 1990; Konovsky & Cropanzano, 1991; Lind & Tyler, 1988;

Moorman, 1991). Therefore, research on organizational justice has important

implications for organizations.

Despite a great deal of research, the literature on organizational justice suffers

from a number of limitations. First, voluminous studies have been conducted on

outcomes of organizational justice. Antecedents of organizational justice have been

relatively under-researched (Cohen-Charash & Spector, 2001). In particular, studies

on determinants of organizational justice have mainly focused on voice (Lind &

Tyler, 1988; Lind, Kanfer, & Earley, 1990) or specific events such as the

implementation of new pay and performance appraisal systems (e.g. Dulebohn &

Martocchio, 1998; Folger, Konovsky, & Cropanzano, 1992). Other organizational

antecedents of organizational justice, such as empowerment and communication, have

been largely overlooked. In light of this, organizational justice researchers have

called for more investigation into the relationships between organizational justice and

broader HR practices (Cohen-Charash & Spector, 2001; Greenberg, 1990).

Second, although researchers in organizational justice have differentiated

between three distinct dimensions of justice: distributive, procedural, and interactional

(Bobocel & Holmvall, 2001; Cohen-Charash & Spector, 2001; Greenberg, 1990),

much of the empirical work has examined only one or two types of organizational

justice (e.g. Folger & Konovsky, 1989; McFarlin & Sweeney 1992). In many cases,

interactional justice has been treated as a subset of procedural justice in

operationalization (e.g. Moorman, 1991; Niehoff & Moorman, 1993; Tyler & Bies,

1990). Given this, researchers suggest a research approach that includes the separate

measures of organizational justice within a single analysis (e.g. Blodgett, Hill, & Tax, 1997). This approach not only allows researchers to understand factors that affect different types of justice, but also shed light on the predictive power of different types of fairness (Kernan & Hanges, 2002). Nevertheless, such studies have been sparse in the literature.

Third, with increasing globalization, a growing number of large companies in western countries, such as Hewlett-Packard, Nortel, and IBM, have established their factories or branches in non-western developing countries like China. These international companies are faced with the challenge of understanding and motivating employees within different cultures. Research on the generalizability of western HR management theories such as organizational justice theories is essential for these companies to cope effectively with the challenge (Xie, 1996). However, most studies on organizational justice have been conducted in western countries. The amount of available evidence from non-western countries is limited (Greenberg, 1990; Lo & Aryee, 2003).

The above discussion suggests a need for research addressing the relationships between perceived organizational HR practices and organizational justice perceptions. Research also needs to assess the extent to which organizational justice findings generalize to non-western countries. These issues are addressed in the present study.

1.2 Purpose of the Study

The primary purpose of the current study is two fold. First, it aims to add to the organizational justice literature by investigating how organizational antecedent

variables influence employees' perceptions of justice. Three perceived HR practices--empowerment, communication, and psychological contract fulfillment--are selected as organizational antecedents of organizational justice (distributive, procedural, and interactional) due to their potential relationships with organizational justice and their importance to the functioning of organizations. By linking empowerment, communication, and psychological contract fulfillment with organizational justice, the current study should substantially enhance our understanding of organizational antecedents of organizational justice. Furthermore, organizations all over the world have been involved in intense global competition in recent years. Various HR practices such as empowerment and communication have been used to help organizations better cope with the complex competitive environment (Schuler, Dolan, & Jackson, 2001; Tzafrir, Harel, Baruch, & Dolan, 2004). As suggested by Greenberg (1990), one of the most important benefits of organizational justice research is its ability to explain a wide variety of organizational practices. Therefore, the results can provide managers insight into whether creating and enhancing organizational justice can be accomplished through organizational HR practices.

Second, the present study seeks to explore the cross-cultural generalizability of research findings on organizational justice. In existing organizational justice literature, most studies have been conducted in western settings. Although researchers have begun to examine organizational justice in oriental countries like China, most of this research investigated only consequences of organizational justice or included only one or two types of justice in a single study. The current study is the first to systematically examine organizational antecedents and consequences of

organizational justice in Chinese organizations. Particularly, multiple types of

organizational justice (i.e. distributive, procedural, interactional) are included in the

analysis. The present study should provide a more accurate picture reflecting the

perceptions of organizational justice within Chinese contexts.

Overall, the current study examines the impact of perceived HR practices (i.e.

empowerment, communication, psychological contract fulfillment) on employee

justice perceptions (i.e. distributive, procedural, and interactional) and the extent to

which these perceptions affect important organizational outcomes (i.e. organizational

citizenship behaviour, turnover intention) within Chinese contexts.

1.3 Theories Used in the Study

Major theories used to develop the hypotheses include resource-based models

of justice (Tyler, 1994), the relational model of justice (Lind & Tyler, 1988), and

social exchange theory (Blau, 1964).

Resource-based models of justice (Tyler, 1994) and the relational model of

justice (Lind & Tyler, 1988) have been developed to understand why organizational

justice perceptions occur. Resource-based models suggest that people are motivated

to maximize their own resource gains when interacting with others. Among these

models are equity theory (Adam, 1965), the self-interest model (Tyler, 1987), and the

process control model (Thibaut & Walker, 1975). The relational model suggests that

people care about fairness because of their relationships with the groups to which they

belong. In other words, people not only value economic gains, but also value their

long-term association or their group memberships.

Social exchange theory (Blau, 1964) suggests that reciprocal obligations can be established between two parties through mutual exchanges. When one party provides beneficial goods or services, the receiving party will become obligated to reciprocate with voluntary services in the future, although the exact nature and timing of the reciprocation is not stipulated in advance. Over time, recurrent mutual exchanges will develop into a social bond between the two parties, which fosters commitment, helping behaviour, and trust in their relationship. For example, if employees perceive that they are treated favourably by their supervisors, they feel obligated to pay them back with beneficial behaviours.

Social exchange theory has received strong support from empirical research on organizational justice (Cropanzano, Rupp, Mohler, & Schminke, 2001), leadership (Graen & Scandura, 1987), psychological contracts (Rousseau, 1989, 1990), and organizational citizenship behaviour (OCB) (Organ, 1988, 1990). Indeed, the reciprocity norm of social exchange theory has significant influence on people's attitudes and behaviours in the Chinese culture as well. Reciprocity is called "Pao" in Chinese, which refers to a form of human emotional debt (Chang & Holt, 1999). In China, one is expected to remember and to pay back others' good deeds. In light of this, social exchange theory provides a theoretical foundation to study aspects of employee-employer relationships and to delineate the motivational mechanism behind employees' attitudes and behaviours.

1.4 Organization of the Study

This chapter provided an overview of the study. It contains the research background, purpose of the study and theories used in building a path model. Chapter 2 provides a review of the literature on organizational justice, detailing theoretical development and empirical findings in organizational justice research. Chapter 3 presents a model of the organizational antecedents and consequences of organizational justice. Literature providing a theoretical foundation for the current study's hypotheses is reviewed, within the context of presenting each hypothesis. Chapter 4 describes the methodology used for testing the proposed model. An overview of the sample, data collection strategy, psychometric measures, and approach to data analysis is provided. Chapter 5 describes the results of the statistical analyses that are used to test the proposed model and hypotheses. Chapter 6 presents the research findings, the implications derived from the findings, limitations to the research design employed, and suggestions for future research.

Chapter 2 Review of the Literature

2.1 Introduction

Research on organizational justice has been derived from social justice, which examines principles of justice in general social interaction, and not organizations in particular (Greenberg, 1990). The Folger and Greenberg's (1985) seminal paper "Procedural justice: An interpretive analysis of personnel systems" carried social justice research into the workplace (Cropanzano, et al., 2001). Subsequently, organizational justice that is concerned with individuals' perceptions of the fairness in the workplace attracted researchers' attention. With a review of the literature in organizational justice, this chapter provides the theoretical and empirical background for the research. First, different components of organizational justice and theoretical advances in organizational justice research are reviewed. Then, antecedents and consequences of organizational justice are discussed. Finally, previous research on organizational justice within Chinese contexts is presented.

2.2 Components of Organizational Justice

Researchers in the organizational justice area have identified three dimensions of organizational justice: distributive, procedural, and interactional (e.g. Cohen-Charash & Spector, 2001). The following section reviews each dimension of organizational justice and their relationships.

Distributive Justice. Distributive justice refers to perceptions of fairness relating to the results or outcomes of allocation (Deutsh, 1975). Research on

distributive justice is rooted in Adam's (1965) equity theory, which argues that people

assess fairness by comparing the ratio of their inputs to their outcomes relative to that

of comparable others. In the workplace, inputs can be any contributions that

individuals bring into the organization, such as time, effort, ability, loyalty, and

commitment. Outcomes can be any rewards that individuals receive from the

organization, such as pay, promotion, recognition, security, and training opportunities.

According to equity theory, if an individual's ratio of inputs to outcomes is equal to

the ratio of inputs to outcomes of a comparison other, the person will feel equitable

and satisfied. Conversely, if an individual's ratio of inputs to outcomes is not equal to

that of a comparison other, the person will perceive inequity (underreward or

overreward). People in inequitable states will have negative psychological or

behavioural reactions (Walster, Walster, & Bersheid, 1978) and tend to change the

unpleasant inequitable states to more pleasant equitable ones by using the following

strategies (Deutsh, 1975). First, the individuals may attempt to alter their inputs or

outcomes. Second, the individuals may cognitively modify their own or others'

inputs or outcomes. Third, the individuals may choose to withdraw physically or

mentally from the situation. Fourth, the individuals may try to alter the inputs or

outcomes of the comparison other. Finally, individuals may change the object of

comparison. Early studies in the area of distributive justice provided general support

for equity theory. For example, studies found that workers lowered their performance

when they were paid unfairly (e.g. Greenberg, 1982; Mowday, 1987).

Equity theory is concerned with the justice perceptions of the individual who

receives outcomes. Leventhal's (1976) justice judgement model, on the other hand,

discussed distributive justice from the perspective of the individual who makes the

allocation. That is, the justice judgement takes a more proactive approach than equity

theory. According to the justice judgement model, people use a variety of principles

of distributive justice based on the situation. Three primary principles are: equity,

equality, and need. The equality principle of distributive justice suggests that

outcomes or resources should be divided equally among recipients, whereas the need

principle suggests that individuals should receive outcomes based on their needs.

Leventhal (1980) suggests that the principles used for evaluating distributive justice

may change in various situations. If decision-makers are pursuing productivity such

as maximizing individuals' work performance, they should choose equity as a

principle of distributive justice; if decision-makers want to foster a high level of

harmony and solidarity among group members, they should choose the equality

principle; and if decision-makers care more about personal welfare, they should use

the need principle in allocation.

Procedural Justice. Procedural fairness refers to the perceived fairness of the

procedures by which outcomes are determined (Lind &Tyler, 1988). Research on

procedural justice started from a series of studies on reactions to simulated dispute-

resolution procedures in legal settings by Thibaut and Walker (1975). These studies

and subsequent other studies using simulated legal decisions consistently showed that

verdicts resulting from procedures offering disputants control over the process used to

settle their grievance were perceived as fairer than identical decisions resulting from

procedures that did not provide disputants with process control (e.g. Walker, Lind, &

10

Thibaut, 1979). Thus, Thibaut and Walker suggested that people perceived fairness when they had an opportunity to influence the process that led to outcome decisions.

Leventhal and his colleagues (1980) broadened the definition of procedural justice beyond Thibaut and Walker's (1975) concept of process control. Leventhal and his colleagues argued that a process would be perceived as fair to the extent that it meets six procedural rules: consistency, bias-suppression, accuracy, correctability, representativeness, and ethicality. "Consistency" requires that procedures be applied consistently across people and across time. "Bias-suppression" requires that procedures be free from bias. "Accuracy" requires that procedures ensure accuracy in information collection and decision-making. "Correctability" requires that some mechanism be in place to allow for correction of flawed or inaccurate information. "Ethicality" requires that procedures conform to personal or prevailing standards of ethics or morality. Finally, "representation" requires organizational procedures ensure that the opinions of various groups affected by the decision have been taken into account. Leventhal and his colleges indicated that the greater the extent to which these rules were used in the process, the more positive individuals' perceptions of procedural justice.

Interactional Justice.   Expanding on the previous conceptualization of procedural justice, Bies and Moag (1986) proposed that perceptions of organizational justice are influenced by factors that go beyond the formal procedures used to arrive at outcomes. According to Bies and Moag (1986), interpersonal treatment that an individual receives during the implementation of procedures affects the individual's perception of organizational justice as well. Specifically, individuals' perceptions of

organizational justice can be enhanced when the reasons underlying decisions are explained clearly, truthfully, and adequately (Bies, Shapiro, & Cumming, 1988); positive organizational justice perceptions can also be fostered when the individuals are treated with courtesy, dignity and respect (Bies & Moag, 1986; Bies, 1987). In an attempt to differentiate between formal procedures (e.g. consistency, bias-suppression, accuracy) and the social aspects of fairness (e.g. treatment with courtesy and respect), Bies and Moag (1986) termed the latter "interactional justice". Researchers subsequently summarized the criteria of interactional justice into two categories: clear and adequate explanations, or justifications, for an allocation decision, and treatment of recipients with dignity and respect during the implementation of decision procedures (Bobocel & Holmvall, 2001).

Relationships between Distributive, Procedural, and Interactional Justice.
Organizational justice researchers have investigated the relationship between distributive and procedural justice. Although some studies suggested that distributive and procedural justice were not distinct constructs due to high correlations between them (e.g. Folger, 1986), more evidence supports the distinction between these two dimensions of organizational justice. It has been suggested that distributive justice is more strongly related to attitudes about specific outcomes such as pay satisfaction, whereas procedural justice has especially strong effects on global attitudes about institutions or authorities such as trust (Lind & Tyler, 1988). For example, Folger and Konovsky (1989) examined the impact of distributive and procedural justice on employee reactions to pay raise decisions. The results showed that distributive justice accounted for more unique variance in pay satisfaction than did procedural justice.

Similarly, Alexander and Ruderman (1987) investigated the relationships between procedural justice, distributive justice, and individuals' attitudes within an organization. They showed that relative to distributive justice, perceptions of procedural justice had a greater impact on job satisfaction, evaluation of the supervisor, and trust in management. Therefore, the distinction between procedural and distributive justice has been accepted by researchers in the organizational justice field (Konovsky, 2000).

Another contentious debate relating to the dimensionality of organizational justice concerns the status of interactional justice. Some researchers view interactional justice as either a social dimension of both distributive justice and procedural justice (e.g. Greenberg, 1993) or an interpersonal component of procedural justice (e.g. Sweeney & McFarlin, 1993). For example, Cropanzano and Greenberg (1997) argued that the formal procedures and the interpersonal interactions jointly comprise the decision-making process and should not be distinguished. By contrast, other researchers treat interactional justice as a third type of organizational justice, independent of procedural and distributive justice (e.g. Bies, 1987; Bies & Moag, 1986; Folger & Cropanzano, 1998). For instance, in a field study of steelworkers' union, Fuller and Hester (2001) examined the relationship between procedural and interactional justice, perceived union support and union commitment, and union participation. They found that interactional justice had a significantly stronger relationship with perceived union support relative to procedural justice. Their study clearly supports the distinction of interactional justice and procedural justice.

Based on social exchange theory, Masterson, Lewis, Goldman, and Taylor

(2000) investigated whether procedural and interactional justice affected work-related

outcomes through different social exchange relationships. They found that

interactional justice perceptions affected supervisor-related outcomes (e.g. OCB

toward supervisors) via leader-member exchange, and procedural justice affected

organization-related outcomes (e.g. OCB toward organizations) via perceived

organizational support. Consistently, Cropanzano, Prehar, and Chen (2002) proposed

that interactional justice was associated with reactions toward one's supervisor,

whereas procedural justice was associated with reactions towards upper management

and organizational policies. Specifically, in a field study of over 100 employees and

their supervisors they found general support for their prediction.

Cohen-Charash and Spector's (2001) meta-analysis of 190 studies published

on justice in the workplace showed that distributive, procedural, and interactional

justice represented three distinct constructs and differed in their associations with

relevant criteria. For example, leader-member exchange (LMX) quality was related

more to interactional justice (weight mean r = .67) than it was to procedural justice

(weight mean r = .37). Cohen-Charash and Spector (2001) suggested that there

analyses support a distinction among the three dimension of organizational justice.

They indicated, however, that interactional justice had not yet been thoroughly

investigated, and thus called for more theoretical and empirical work exploring the

construct validity of the dimensional specifications of organizational justice.

Presuming the distinctiveness of distributive, procedural, and interactional justice,

(Cropanzano, Prehar, & Chen, 2002), research that includes all three dimensions

within a single study should provide a better understanding of whether they are differentially related to various antecedents and outcomes.

2.3 Theoretical Advances in Organizational Justice

To understand why perceptions of organizational justice occur, a variety of theories have been developed. Tyler (1994) classified these organizational justice theories into two categories: resource-based models and the relational model.

2.3.1 Resource-Based Models of Justice

Resource-based models of justice are based on the assumption that people are motivated to maximize their own resource gains when interacting with others (Walster, Walster, & Berscheid, 1978). Equity theory (Adam, 1965), the self-interest model (Tyler, 1987), and the control model (Thibaut & Walker, 1975) are among these models. Equity theory suggests that people believe that equitable outcomes will promote their personal gain. According to equity theory, people compare their ratio of inputs to outcomes with that of others in order to determine the level of fairness. The self-interest model suggests that people are interested in fair procedures because they believe that fair procedures will lead to favourable outcomes. In other words, people value procedural justice out of self-interest because they believe that the implementation of fair procedures will result in long term economic gain. The control model suggests that people seek control over procedures because they are concerned with their own outcomes. According to the control model, the opportunities to exert control increase the likelihood of favourable outcomes and thus enhance perceptions

of procedural justice. For example, a performance appraisal procedure that provides

employees more process control is perceived as fairer than a procedure that does not

provide employees with control (Kanfer, Sawuer, Early, & Lind, 1987).

2.3.2 The Relational Model of Justice

The relational model (Lind & Tyler, 1988) proposes that people not only value

economic gains but also value their long-term association with authorities and

institutions. People care about their membership in social groups in that in addition to

material resources, groups provide emotional/social support and a sense of

"belonging" (Lind & Tyler, 1988). Additionally, group membership is a means of

obtaining social status and self worth (Hogg & Abram, 1988; Turner, 1987). The

relational model is also known as the group-value model (Tyler & Lind, 1992).

According to this model, people tend to seek signs and symbols that communicate

information about their identification with groups in decision-making procedures. In

particular, people pay attention to the way in which they are treated by authorities,

which are viewed as representatives of their organization (Tyler & Lind, 1992).

The relational model proposes three non-control issues of concern to people:

neutrality of the decision-making procedures, trust in the decision-makers, and

evidence about social standing (Tyler, 1989). According to Tyler (1989), people

cannot always have what they want in a long-term relationship. They must

compromise and defer to others' needs and desires. Hence, it is not realistic to get a

favourable outcome in all decisions. As a result, people focus on whether the

authority has created unbiased procedures to solve problems or conflicts within

groups. In addition to the focus on the neutrality of decision-making procedures, people focus on the intention of decision-makers. If authorities can be trusted, that is, if they are trying to be fair and to deal with them fairly, people will develop a long-term commitment to the group. Finally, people care about their standing in social groups. Interpersonal treatment during social interactions gives information about individuals' status within the group and, thus, is important for them. For example, when people are treated politely and respectfully by their managers, they feel that they are regarded as having high status within the group.

In organizational justice research, some researchers tend to identify with one model best suited to all situations. However, the resource-based models and the relational model emphasize different concerns with organizational justice and suggest different sets of criteria for evaluating justice. Each model has received considerable empirical support in the literature (Conlon, 1993; Lind, Kulik, Ambrose, & de Vera Park, 1993; Thibaut & Walker, 1975; Tyler, 1994). Given this, Konovsky (2000) proposed that it might be misleading to identify a single model. He suggested that there could be multiple causes of organizational justice judgements according to specific contexts. Lind and Tyler (1988) also claimed that both the resource-based models and the relational model have merits in explaining organizational justice. Therefore, these two types of models should be viewed as complementary rather than competing.

2.4 Antecedents and Outcomes of Organizational Justice

In view of the importance of organizational justice in explaining

organizational outcomes, voluminous studies have focused on the impact of

perceptions of justice on individuals' attitudes and behaviours in organizations.

Perceptions of organizational justice have been found to be an important predictor of

pay satisfaction (Folger & Konovsky, 1989; McFarlin & Sweeney 1992), job

satisfaction (Fryxell & Gordon, 1989; Masterson, et al., 2000), organizational

commitment (Lind & Tyler, 1988; Folger & Konovsky, 1989), trust in management

(Alexander & Ruderman, 1987; Konovsky & Pugh, 1994), OCB (Moorman 1991),

withdrawal behaviours (Bies & Shapiro, 1987; Dailey & Kirk, 1992; Hom, Griffeth,

& Sellaro, 1984; Masterson, et al. 2000), and counterproductive behaviours (Skarlicki

& Folger,1997).

Although studies on outcomes of organizational justice are fruitful,

antecedents of organizational justice have been relatively under-researched (Cohen-

Charash & Spector, 2001). Among the small number of studies in this area, however,

voice is probably the one that has received the most attention. Lind, Kanfer, and

Earley (1990) tested the effect of voice on perceptions of fairness and found that

merely giving people an opportunity to express themselves made them feel that the

process was fair even when voice had no input into the ultimate decision. They

suggested that having voice in decision-making processes enhanced employees'

perceptions of procedural justice even when the voice did not influence the outcomes.

Their study supported Lind and Tyler's (1988) argument that voice not only has an

instrumental function of influencing decision-making outcomes, but also symbolically

conveys dignity and respect.

Other studies on antecedents of organizational justice have focused mainly on

specific events such as new pay systems and a due-process performance appraisal

system. For example, Dulebohn and Martocchio (1998) investigated 368 employees'

perceptions of the fairness of work group incentive pay plans. They found that

understanding of the pay plan, belief in the effectiveness of the pay plan effectiveness,

and organizational commitment were positively related to perceptions of procedural

justice. These same variables, along with pay satisfaction, also related positively to

perceptions of distributive justice. Lee, Law, and Bobko (1999) also explored the

impact of pay systems on organizational justice. Based on a two-year study on a

skilled-based payment plan (SBP), Lee et al. (1999) found that SBP plans, which

provided training and were better understood and communicated, led to increased

perceptions of justice.

Based on the legal notion of due process, Folger et al. (1992) developed a due-

process appraisal system with three characteristics: adequate notice, fair hearing, and

judgement based on evidence. Adequate notice requires organizations to distribute

and explain performance standards to employees and provide timely feedback. Fair

hearing requires a formal review meeting to inform employees of results of a

performance assessment, and permit them to challenge the assessment. Judgement

based on evidence requires the organization to apply performance standards

consistently, honestly, and without biases. Testing the impact of the due-process

performance appraisal system on employees' reactions in a field experiment, Tylor,

Tracy, Renard, Harrison, and Carroll (1995) found that the due process appraisal system predicted employees' perceptions of fairness.

While these studies have shed light on the effects of certain HR practices on justice perceptions, overall, we have a rudimentary understanding in this area and how different approaches and practices relating to HR influence employees' perceptions of justice. In particular, these previous studies were focused mainly on voice or specific events such as the implementation of new pay and performance appraisal systems. Other organizational antecedents of organizational justice have been largely overlooked (Cohen-Charash & Spector, 2001). For example, Thomas and Velthouse (1990) have suggested that empowerment results in flexibility in controlling one's own task accomplishment. In this respect, empowerment is closely related to the concept of process control (Thibaut & Walker, 1975) of organizational justice, and may affect employees' perceptions of organizational justice. However, there is no empirical evidence regarding the relationship between empowerment and organizational justice perceptions.

2.5 Research on Organizational Justice in China

Since the late 1970s, China has been undergoing a radical transition from a planned economy toward a market-oriented economy, which results in impressive economic growth. In the past 25 years, China's gross domestic product (GDP) has increased more than tenfold (The Economist, 2005). Because of China's current and expected future strong economic growth, great potential business opportunities, and cheap labour, a large amount of foreign directed investment (FDI) has flowed into

China. Numerous foreign companies such as Hewlett-Packard, National Semiconductor and IBM have established their factories or branches in China. In 2001, China became the world's second largest recipient of FDI, ranking behind only the United States. Moreover, in response to its recent membership into the World Trade Organization (WTO), China has further lowered its entry barriers and thus is attracting more investment from international organizations. However, international companies from Western countries are facing challenges of managing and motivating Chinese employees with different cultural values.

According to Hofstede's (1980) study on culture differences, western countries like the United States are characterized as high in individualism and low in power distance; in contrast, oriental countries like China are characterized as high in collectivism and high in power distance. As suggested by previous research (e.g. Williams, 1993; Cropanzano, et al., 2001), people within different cultures have different norms and values, which may influence people's reactions to fairness. For example, there is less of a tendency to defer to power in low power distance cultures, which inclines people to react more negatively when they are not treated well by authorities compared to those high in power distance (Tyler, Lind, & Huo, 1995). In light of this, whether major Western management theories such as organizational justice theories are generalizable to Chinese settings has important implications for international organizations. Nevertheless, most existing studies on organizational justice have been based on Western samples.

Recently, a few studies on organizational justice have been conducted in Chinese settings. For example, Farh, Early & Lin (1997) tested the relationship

between organizational justice and OCB in Taiwan. They found that distributive and interactional justice were related to OCB and the relationships were stronger for individuals with high modernity values. Using a sample of Hong Kong employees, Lee, Pillutla, and Law (2000) examined how power distance moderated the relationships between distributive and procedural justice and the evaluation of authorities (trust in supervisors) and organizations (psychological contract fulfillment). Their study demonstrated that the relationship between procedural justice and trust in supervisor was higher for those low in power distance, and the relationship between distributive justice and psychological contract fulfillment was higher for those low in power distance.

Although organizational justice in non-Western countries has begun to attract researchers' attention, the amount of available evidence in non-Western countries is far from enough (Brockner, et al., 2001). In particular, existing studies in Chinese contexts have been focused on the effects of justice perceptions on organizational outcomes. No studies have investigated organizational antecedents of organizational justice perceptions in Chinese organizations. Additionally, interactional justice has been examined on a limited basis.

2.6 Summary

Organizational justice has been an interest of researchers over the last three decades. This chapter reviewed the conceptualization of organizational justice, a variety of theories used in justice research, and the impact of organizational justice on individuals' attitudes and behaviours. This chapter pointed to a number of limitations

in the literature. First, research on the antecedents of organizational justice in terms of organizational variables such as perceived HR practices is rather limited. Second, interactional justice has not been fully studied. Third, most studies on organizational justice have been conducted in Western countries. The extent to which the research on organizational justice can be generalized across cultures needs further investigation. These areas comprise the foci of the present study.

Chapter 3 Development of the Model

3.1 Introduction

Based on a review of the relevant literature, this chapter develops a causal model. First, the associations between perceived HR practices (i.e. empowerment, organizational communication, and psychological contract fulfillment) and organizational justice are discussed. Then, the associations among perceptions of organizational justice and OCB and turnover intention are presented. Finally, control variables are identified.

The proposed model that illustrates the relationships between the perceived HR practices (i.e. empowerment, communication, psychological contract fulfillment), organizational justice perceptions (i.e. distributive justice, procedural justice, and interactional justice), and OCB and turnover intention is shown in Figure 3.1.

3.2 Antecedents of Organizational Justice

With increasing globalization, many major corporations have extended the scope of their operations across borders. Facing this complex competitive environment, organizations must employ a variety of HR practices to facilitate organizational functioning. For example, management is encouraged to allow a high degree of empowerment (Spreitzer, 1995), to enhance communication (Clampitt & Downs, 1993), and to fulfill psychological contracts with employees (Coyle-Shapiro & Kessler, 2000). These HR practices, it has been contended, provide organizations

Figure 3.1: Proposed Model of Antecedents and Consequences of Organizational Justice
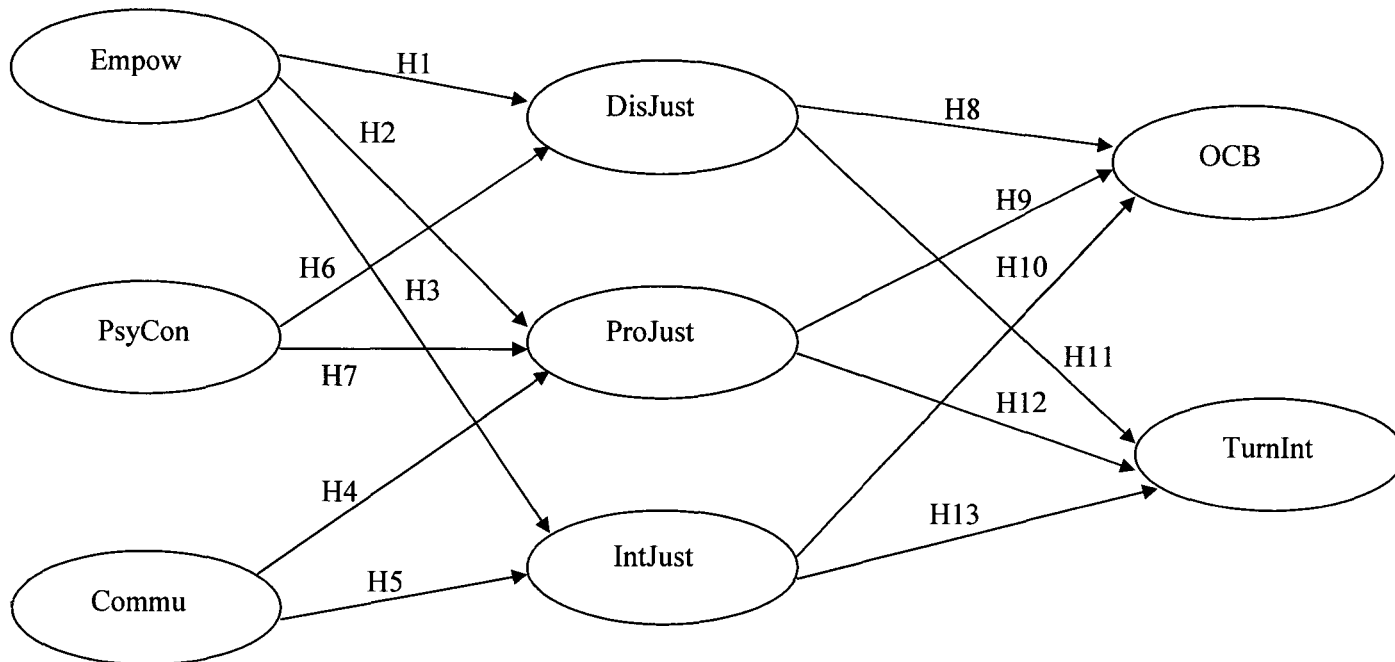
Note: Empow = Empowerment; PsyCon = Psychological Contract Fulfillment; Commu = Communication Satisfaction; Disjust = Distributive Justice; ProJust = Procedural Justice; IntJust = Interactional Justice; OCB = Organizational Citizenship Behaviour; TurnInt = Turnover Intention.

with a source of sustained competitive advantage (Barney, 1995; Huselid, 1995; Wright & McMahan, 1992).

China has also been involved in global competition. Since economic reforms started in the late 1970s, China has been undergoing dramatic changes in its economy, which has led to significant changes in management practices. Before then, human resources departments in China had little discretion in their functions. HR activities such as hiring, firing, and wage setting were determined at state and party levels. The government labour bureau amended and modified labour policies and laws and administered state supported benefits directly to employees, including medical, housing, and pensions (Chow & Shenkar, 1989). At that time, human resources (HR) management in organizations was not given much attention, serving only the most basic administrative functions (Tsui & Lau, 2002).

The past 25 years of economic reform in China have led to significant changes in managing practices in Chinese organizations. One of the most important changes was the adoption of an employment contract system in 1986 (Zhu, 2005). Employers and workers were required to sign a contract that specified the terms and conditions of employment and the rights and responsibilities of workers and employers (Zhu, 2005). The introduction of the employment contract system revoked the long-standing tradition of lifetime employment and made it possible for workers and employers to be free to select each other (Warner, 1995). As a result, Chinese companies have gained much freedom from the government and thus achieved considerable autonomy in the management of human resources in such areas as recruitment and selection, promotion and salary level. Particularly, after China

became a member of the World Trade Organization (WTO) in 2001, Chinese companies have been largely integrated into the global economy. As a consequence, there has been increasing use of western human resources techniques and motivational systems in Chinese organizations. HR functions in Chinese organizations have become much more sophisticated than before. HR practices such as empowerment and psychological contract fulfillment have been adopted by organizations in China (e.g. Chu, 2003; Hui, Lee, & Rousseau, 2004; Lo & Aryee, 2003). Meanwhile, these organizational changes in policies, procedures and resource allocation have brought fairness issues to the forefront. Given this, a study of Chinese organizations with a focus on how Chinese employees pursue and react to justice would be critical to practice and theory as well.

3.2.1 Empowerment

The concept of empowerment has attracted widespread interest among organizational researchers and practitioners as a means of increasing employees' initiative and innovation (Drucker, 1988). Two major perspectives on empowerment have been distinguished in the literature: structural and psychological. The structural perspective emphasizes the relationship between managers and subordinates in the distribution of power. From this perspective empowerment has been treated as transferring power from the authorities to lower level members of organizations. Thus, studies on structural empowerment have focused on organizational empowering practices such as delegation of decision making from managers to subordinates (Heller, Pusic, Strauss, & Wilpert, 1998) and increasing access to information and

resources for employees at lower levels (Rothstein, 1995). The concepts of power (Kanter, 1983), authority (Thorlakson & Murray, 1996), decentralization (London, 1993), joint decision-making (Ford & Fottler, 1995), and job enrichment (Hackman & Oldham, 1980) are usually used as synonyms for structural empowerment in the literature.

In contrast with the structural perspective of empowerment that assumes that empowerment practices result in employees being empowered (Kanter, 1983), the psychological perspective, a recent view of empowerment, argues that managerial empowerment actions do not guarantee that employees are in fact empowered (Menon, 2001; Spreitzer, 1995; Zimmerman, 1990). They suggest that empowerment can only be achieved when individuals perceive they are empowered. Conger and Kanungo (1988) first proposed a theory of psychological empowerment based on Bandura's (1986) motivational construct of self-efficacy, which concerns people's belief in their capabilities to mobilize their motivation, cognitive resources, and engage in courses of action that are needed to meet the demands of a given situation (Ozer & Bandura, 1990). Conger and Kanungo's theory suggests that psychological empowerment operates through a self-efficacy mechanism. In their theory, empowerment is viewed as an increase in employees' feeling of self-efficacy. Empirical studies have provided support for Conger and Kanungo's theory. For example, using a community sample, Zimmerman, Israel, Schulz, and Checkoway (1992) have found that participation in community organizations is strongly associated with self-efficacy. They suggest that belief in one's abilities to participate or exert control is a central component of empowerment for individuals.

Building on Conger and Kanungo's (1988) work, Thomas and Velthouse (1990) broadened the definition of empowerment. They define empowerment as increased intrinsic task motivation consisting of four cognitive dimensions that reflect an employee's orientation to his work role. The four dimensions of empowerment are meaningfulness, competence, self-determination, and impact. Meaningfulness refers to the value of a work goal or purpose, judged in relation to an individual's own ideals or standards (Thomas & Velthouse, 1990). Meaningfulness involves a fit between the requirements of a work role and beliefs, values, and behaviours (Brief & Nord, 1990; Hackman & Oldham, 1980). Competency or self-efficacy is an individual's belief in his capability to perform activities with skills (Gist, 1987). Self-determination is an individual's sense of having choice / autonomy in initiating and regulating one's own actions (Deci, Gonnell, & Ryan, 1989). Impact refers to the degree to which an individual can influence strategic, administrative, or operating outcomes at work (Ashforth, 1989).

Based on Thomas and Velthouse's (1990) theoretical work, Spreitzer (1995) developed a four-dimensional scale to measure meaningfulness, competence, self-determination, and impact. Using the four-dimension scale, Spreitzer (1996) examined relationships between organizational structural characteristics and psychological empowerment in a Fortune 500 organization. She found that the structural characteristics at the level of work unit (e.g. access information, socio-political support, a participative climate) were associated with feelings of empowerment. Thus, she suggests that structural empowerment represents an antecedent to psychological empowerment. In light of the aforementioned literature

review, empowerment in the present study refers to psychological empowerment, and is assumed to reflect structural empowerment.

Empowerment and Organizational Outcomes. Empowerment is widely accepted as an effective way to motivate employees (Conger & Kanungo, 1988; Spreitzer, 1995). First, studies have shown that empowerment is associated with employees' job attitudes. For example, Spreitzer, Kizilos and Nason (1997) found significant relationships between levels of psychological empowerment and job satisfaction and organizational commitment. Secondly, empowerment has been linked to job performance. Spreitzer (1995) argued that empowered employees are more likely to be effective because they are able to influence their work and thus proactively complete their job responsibilities. Further, Liden, Wayne, and Sparrowe (2000) suggest that individuals who feel that their jobs are meaningful and have an impact on others are motivated to perform well. Relationships between empowerment and work performance have gained support from empirical studies. For example, Koberg, Boss, Senjem, and Goodman (1999) reported that empowerment was associated with increased work productivity and decreased intention to leave the organization. Ashforth (1989) found that the impact dimension of empowerment was associated with an absence of withdrawal behaviours and higher job performance.

The practice of empowerment was not only essential for organizations in western countries. Using samples from 42 nations including China, Hui, Au, and Fock (2004) demonstrated that empowerment was consistently associated with job satisfaction across cultures. Based on a case study in Hong Kong, Chu (2003)

indicated that empowerment was an important "software" ingredient for a successful

change in Hong Kong's manufacturing factories.

Empowerment and Organizational Justice. Empowerment is based on the

assumption that individuals can have a "voice" or choice in shaping and influencing

organizational activities (Conger & Kanungo, 1988). Empowerment is thus closely

related to the concept of process control (Thibaut & Walker, 1975) or voice (Folger,

1977) in organizational justice theories. However, there is no study examining the

relationships between empowerment and organizational justice in the literature.

According to the control model of organizational justice (Thibaut & Walker,

1975), when given the opportunities to express their views or to make decisions,

people have a feeling of control over the decision-making outcomes or processes, and

consequently perceive fairness. For example, Kanfer, et al. (1987) found that the

opportunity to participate in the evaluation process enhanced employees' perceptions

of procedural justice. Further, Lind et al. (1990) demonstrated that people in voice

conditions reported higher ratings of procedural justice than those in a no voice

experimental condition. Thus, empowered employees who have more opportunities

to express their preferences are more likely to perceive procedural fairness than

others. Moreover, participation in fair exchange fosters assurances that people will

receive the rewards to which they are entitled (Reis, 1986). Accordingly, the desire to

control may also be a motive for distributive justice (Tyler, 1994). In other words,

empowered employees are likely to have a feeling of control over decision-making

outcomes, which can enhance their sense of distributive justice.

The relationship between empowerment and organizational justice can also be explained from the perspective of the relational model of justice (Lind & Tyler, 1988). According to the relational model, people search for information about the extent to which they are respected and valued by their groups. When they have a feeling of being treated favourably by their groups, they perceive fairness. Based on this model, empowerment is expected to be associated with interactional justice for the following two reasons. First, when employees get empowered, they usually have more opportunities to participate in decision making. Participation in decision-making has been found to reinforce individuals' sense of belonging to the group, which fosters justice perceptions of those empowered employees (Conlon, 1993). Second, empowered employees generally have more chances to express their views or preferences. Given voice not only has an instrumental function of influencing decision-making outcomes but also symbolically conveys dignity and respect (Lind & Tyler, 1988), those empowered employees may perceive that they are fairly treated by their organization. Therefore, it is plausible to expect a positive relationship between empowerment and perceptions of interactional justice.

Based on the aforementioned discussion, the following hypotheses are proposed.

Hypothesis 1: Empowerment is positively associated with distributive justice.

Hypothesis 2: Empowerment is positively associated with procedural justice.

Hypothesis 3: Empowerment is positively associated with interactional justice.

3.2.2 Communication

Communication is defined as a process of creating and exchanging information within a network of interdependent relationships in an organization (Goldhaber, 1990). Communication in organizations is critical for permitting organizations to function (Downs, 1977). Calabrese (2004) even pointed out that organizations characterized by good communications possess a competitive advantage relative to those that do not have the same characteristics. Communication has been studied from four different perspectives in the literature: mechanical, psychological, interpretative-symbolic, and systemic interaction (Krone, Jablin, & Putnam, 1987).

The mechanical perspective views communication as a transmission process in which a message travels across a channel from one point to another. This perspective of communication places emphasis on the channels that link receivers and senders of a message. According to the mechanical perspective, communication can be broken down into smaller units, and these units have a linear, causal and chainlike relationship in the communication process. Second, the psychological perspective focuses on individuals' characteristics that affect their communication. From this perspective, characteristics of individuals can affect not only what information is conveyed and interpreted, but also how this information is processed. The "conceptual filters" of individuals -- consisting of communicators' attitudes, cognitions, and perceptions (Fisher, 1978) -- reflect the locus of communication in the psychological perspective. Third, the interpretive-symbolic perspective suggests that individuals respond to others based on role-taking and shared meaning for words and actions. In this perspective, the meanings of actions are interpreted symbolically

through mutuality of experience and consensual interpretations of organizational

events and activities. Fourth, the systematic-interaction perspective emphasizes

interactions among people and use of symbols in communication (Fisher, 1978).

Patterned sequential communication behaviours, which reflect the grouping of

sequences of communicative behaviours, serve as the locus of communication.

According to Krone, et al. (1987), certain perspectives, or lenses of

communication are more suitable for studying particular questions in communication

research. Given that the current study examines effects of communication on

perceptions of organizational justice and subsequent organizational outcomes, a

psychological perspective is more appropriate for the current study, which is based on

the premise that an individual's cognitive and affective perceptions of their

organization will influence their behaviour in the organization (Goldhaber, Porter,

Yates, & Lesniak, 1978; Hunt, Tourish, & Hargie, 2000).

In empirical studies, the construct of communication satisfaction has been

used to assess communication, aligning most closely with the psychological

perspective (e.g. Clampitt & Downs, 1993; Varona, 1996). Communication

satisfaction is defined as an individual's satisfaction with various aspects of

communication in the organization (Downs & Hazen, 1977). Downs & Hazen (1977)

propose that communication satisfaction is a multidimensional construct consisting of

eight dimensions: organizational integration, media quality, co-worker

communication, corporate information, personal feedback, communication climate,

supervisory communication, and subordinate communication. Organizational

integration refers to the degree to which individuals receive information about their

immediate work environment. Media quality deals with the extent to which meetings

are well organized, written directives are short and clear, and the degree to which

communication is appropriate. Co-worker communication concerns the extent to

which horizontal and informal communication is accurate and free flowing.

Corporate Information deals with broad information about the organization as a whole

such as notification about changes and information about the overall policies and

goals of the organization. Personal feedback is concerned with employees' needs to

know how they are being judged and how their performance is appraised.

Communication climate reflects communication at both the organizational and

personal levels. For example, it concerns whether employees' attitudes toward

communication are healthy in organizations. Supervisory communication refers to

the assessment of communicating with supervisors, such as the extent to which a

supervisor is open to ideas and the extent to which the supervisor listens and pays

attention. Subordinate communication focuses on upward and downward

communication of subordinates, such as subordinate responsiveness to downward

communication from supervisors and the extent to which subordinates initiate upward

communication. Subordinate communication is only completed by those in

supervisory positions.

   Communication and Organizational Outcomes. Communication is not just

a function of the organization but also the very essence of all activities in the

organization (Katz & Kahn, 1978). First, communication satisfaction relates

positively to organizational productivity (Clampitt & Downs, 1993). Second,

communication satisfaction is linked to a variety of employees' attitudes and

behaviours. For example, Muchinshy (1977) and Pincus (1986) found that

communication satisfaction is associated with job satisfaction. Putti, Aryee, and Phua

(1990) and Varona (1996) found that communication satisfaction had a positive

relationship with organizational commitment. In a context of mergers, Schweiger and

DeNisi (1991) found that effective communication with employees reduced

absenteeism and turnover. Overall, effective communication in organizations can

facilitate the successful functioning of the organization. Failure to communicate,

conversely, can lead to dysfunctional outcomes such as stress, job dissatisfaction, low

trust and increased intention to leave the organization (e.g. Ashfold, Lee, & Bobko,

1989; Bastien, 1987).

Communication and Organizational Justice. Allowing employees to

opportunities to provide inputs into decision making and offering employees

justifications for decisions are effective methods of enhancing perceptions of

procedural justice (Bies, 1987; Bies & Shapiro, 1988; Salancik & Meindel, 1984).

High quality communication in organizations not only gives employees opportunities

to provide input into organizational decision-making processes, but also facilitates

employees' understanding of decisions. Therefore, it is plausible to expect a

relationship between communication and perceptions of procedural justice. A few

studies provide empirical evidence of the linkage between communication and

procedural justice. Gopinath and Becker (2000) investigated the relationship between

communication and procedural justice under a condition of divestiture. They found

that managerial communications helped employees understand the events surrounding

the divestiture and increased perceptions of procedural justice. Kernan and Hange

(2002) tested survivors' reactions to a reorganization in a multinational

pharmaceutical corporation. They found that communication quality predicted

survivors' perceptions of justice with respect to the reorganization.

The above studies provide evidence of the relationship between

communication and procedural justice. However, the measures of communication

used in these studies are either one global measure or self-developed scales. For

example, in Kernan and Hange's (2002) study, communication was measured by six

items such as accuracy and adequacy of the information they received during the

reorganization process. No studies regarding the relationship between communication

and organizational justice have used communication satisfaction, a more

comprehensive construct to assess communication. In particular, no studies have

examined the relationship between communication satisfaction and perceptions of

interactional justice.

On the other hand, an important aspect of interactional justice is whether

individuals feel that they are given adequate explanations of decision-making

(Greenberg, 1993). Ployhart, Ryan, and Bennet (1999) demonstrated that providing

job applicants with explanations for selection decisions promoted positive views of

the organization and enhanced perceptions of interactional justice. Thus, when

individuals receive open and complete information about their jobs and organizational

activities as well as how they are judged by authorities, they are likely to feel they are

treated fairly by the organization. Similarly, effective two-way communication

signals that the organization cares about employees' well-being and values their

membership (Conlon, 1993). That is, communication signals that the organization

cares about employees' well being and values their membership. According to the group-value model of justice (Lind & Tyler, 1988), employees perceive fairness if they have a feeling of being valued by their organization. Therefore, communication should relate positively with procedural and interactional justice. Accordingly, the following hypotheses are advanced.

Hypothesis 4: Communication is positively associated with perceptions of procedural justice.

Hypothesis 5: Communication is positively associated with perceptions of interactional justice.

3.2.3 Psychological Contract Fulfillment

"Psychological contract" was originally defined in terms of expectations about the reciprocal obligations between employees and employers (Argyris, 1960; Schein, 1965). More recently, Rousseau (1989) defined a psychological contract as an individual's beliefs in mutual obligations between employees and employers. That is, psychological contracts reflect employee beliefs of their organization's obligations to them, and their own felt obligations toward their organization (Robinson, Kraatz & Rousseau, 1994; Turnley, Bolino, Lester, & Bloodgood, 2003). Rousseau's (1989) definition represents a transition from the early understanding to more recent developments on psychological contracts, emphasizing two major factors: the individual's perception and the obligations between employees and employers. First, a psychological contract is an individual's belief. That is, whether the other party has

fulfilled the obligations of a psychological contract is a subjective experience of one party (Rousseau, 1989). Second, Rousseau's (1989) definition emphasizes obligations that are based on promises between employees and employers. Using policy-capturing methods, Rousseau and Anton (1988, 1991) examined beliefs in implicit contracts in samples of managers and human resources specialists. They found that employment itself was perceived as a promise and that employees' performance was perceived as a return for the promise.

According to Rousseau's (1989) definition, psychological contracts are different from formal employment contracts. That is, psychological contracts are based on promises, whereas formal employment contracts require a legal contract between employees and employers. In addition, psychological contracts are distinguished from expectations (Robinson & Rousseau, 1994). Expectations that refer to what employees expect to receive from their employer come from a wide variety of sources, such as past experience, observations by friends, and so forth (Wanous, 1977; Robinson, 1996). Only those that emanate from perceived promises by the employer are part of the psychological contract. Thus, the concept of an expectation is much broader than that of a psychological contract (Rousseau & Tijoriwala, 1998).

Individuals form their psychological contracts from two major sources: their interactions with organizational representatives and the work environment (Turnley & Feldman, 1999). First, a psychological contract begins to form in the earliest interaction between a job applicant and an employer. For example, during the recruitment process, recruiters or direct supervisors may make specific promises to

job applicants about what they can expect from the organization (Feldman, 1976; Van Maanen, 1976). Second, employees' psychological contracts are shaped by the work environment in which the employees witness other people's experiences in the organization (Turnley & Feldman, 1999). Psychological contracts can be conveyed through a written document, oral discussion, and organizational practices and policies (Rousseau, 1989; Rousseau & Greller, 1994; Rousseau & McLean Parks, 1993; Sims, 1994).

Although psychological contracts emphasize the mutual obligations between employees and employers, given psychological contracts are unwritten, employees and employers may have different understandings of promises made to each other (Rousseau, 1990). Consequently, employees and employers may possess different beliefs about what each party owes the other (Robinson & Rousseau, 1994). In this respect, psychological contracts can be examined from the perspective of employees (Rousseau, 1990), employers (Coyle-Shapiro, 2002), or both (Dabos & Rousseau, 2004). The current study focuses on employees' attitudes and behaviours and thus examines the psychological contract from an employees' perspective. Employees will be the direct source of information regarding the fulfillment of psychological contracts for the present study.

Psychological Contracts and Organizational Outcomes. Psychological contracts serve as an important foundation of employment relationships between employers and employees (Coyle-Shapiro, 2002). In empirical studies, psychological contracts have been examined by assessing psychological contract fulfillment or psychological contract breach (Rousseau, 1990). Indeed, psychological contract

fulfillment and breach are treated as two ends of a contract continuum. Psychological contract fulfillment refers to a cognition reflecting the extent to which an employer has met the obligations inherent in an employee's held psychological contract (Morrison & Robinson, 1997). On the other hand, psychological contract breach reflects a failure by either party to fulfill their obligation to the other (Morrison & Robinson, 1997).

Psychological contract breach occurs when an employee perceives that his employer has failed to fulfill the obligations comprising the psychological contract. For example, when an employee feels that he has fulfilled his obligation such as working extra hours, but his employer fails to fulfill an obligation to provide extra rewards, the psychological contract between the employee and the employer is breached. Obligations that are mostly used to assess the fulfillment or breach of a psychological contract include high salary, promotions and advancement, pay based on performance, long-term job security, sufficient power and responsibility, and training and career development.

Psychological contract fulfillment has been linked to positive outcomes. For example, Turnley, et al. (2003) used a sample of 134 supervisor-subordinate dyads to test the effects of psychological contract fulfillment on OCB and in-role performance. The results indicated that psychological contract fulfillment is positively related to both individuals' OCB and in-role performance. Conversely, psychological contract breach has been linked to various negative outcomes. Robinson and Rousseau (1994) examined the effects of psychological contract breach on job satisfaction, turnover, trust, and intention to remain. They found that psychological contract breach was

correlated positively with turnover and negatively with trust, satisfaction, and intention to remain. Coyle-Shapiro and Kessler (2000) examined the relationships between psychological contract breach, organizational commitment, and OCB. They found that employees reduced their commitment and their willingness to engage in OCB when they perceived the employer as not having fulfilled their end of the psychological contracts. Based on a sample of over 800 managers from a variety of research sites, Turnley and Feldman's (2000) study showed that psychological contract breach was positively related to employees' intention to quit, neglect of in-role job duties, and reduced loyalty and OCB.

A few studies have been conducted on psychological contracts within Chinese contexts. Using student samples, Lee, Tinsley and Chen (2000) examined psychological contract fulfillment in Hong Kong and the United States. They suggested that psychological contracts had similar meanings across the two cultures. Hui, et al. (2004) examined the relationship between psychological contract fulfillment and OCB in China. They found that psychological contract fulfillment was positively associated with OCB. Based on 152 Hong Kong Chinese employees, Lo and Aryee (2003) reported that psychological contract breach was positively related to turnover intention and psychological withdrawal behaviour, and was negatively related to civic virtue.

Psychological Contracts and Organizational Justice. Adam's (1965) equity theory proposes that an individual evaluates his situation by comparing it to that of a referent person. Building on equity theory, Goodman (1974) proposes that employees may use their organization as a referent when they make justice

42

judgments. That is, employees may compare how well the organization has fulfilled its promised obligations to how well they have done so (Robinson & Morrison, 1995). On the basis of this comparison, employees feel equitably or inequitably treated by the organization. Given that unfulfilled promises can deprive an employee of desired outcomes within the employee's psychological contract, psychological contract breach is likely related to distributive justice (Robinson & Rousseau, 1994).

In addition to outcome concerns, psychological contracts involve social-emotional concerns (Robinson & Rousseau, 1994). According to the group value model (Lind & Tyler, 1988), people want to understand, establish, and maintain social bonds with their social groups. As a result, people tend to seek evidence that they are accepted and valued members of their social groups (Tyler, 1994). The evidence that they are valued by their groups enhances their perceptions of procedural justice, whereas the evidence that they are not valued members reduces their perceptions of procedural justice (Tyler, 1994). When psychological contract breach occurs, employees perceive a discrepancy between what employees were promised by their organization and what they have received from the organization (Morrison & Robinson, 1997). Such a discrepancy may be viewed by the employees as evidence that they are not valued by the organization, which in turn negatively affects their perceptions of procedural justice. Therefore, it is plausible to expect that psychological contract fulfillment is related to perceptions of procedural justice. According to the above discussion, the following hypotheses are proposed.

Hypothesis 6: Psychological contract fulfillment is positively associated with

distributive justice.

Hypothesis 7: Psychological contract fulfillment is positively associated with

procedural justice.

3.3 Consequences of Organizational Justice

Before economic reform, HR practices in Chinese organizations were

characterized by four major features: full employment, lifetime tenure, low labour

mobility, and centralized labour allocation (e.g. Child, 1994; Warner, 1995). At that

time, all workers belonged to a working unit (Danwei) and seldom changed their jobs.

In other words, an employee could not leave a company without certain official

permission. Since the economic reform, China has been experiencing a dramatic

transition toward a market economy. Today, Chinese workers can move more easily

from one unit to another, and individuals have more freedom to seek better jobs.

Particularly, with a large number of foreign organizations entering China, job

opportunities have increased tremendously. As a result, a high rate of turnover has

become a substantial problem for organizations in China. According to Hewitt

Associates, a human-resources consultancy, a Chinese nationwide employee turnover

rate increased to 11.3% in 2004 from 8.3% in 2001, and some smaller companies had

a turnover rate as high as 30% (The Economist, 2005). With China's transition to a

market economy, employees' performance is increasingly emphasized within Chinese

organizations (Zhu, 2005). Similar to organizations in western countries,

organizational citizenship behaviours that are contextual aspects of performance have

been suggested to play an important role in organizational effectiveness (Farh, et al.

1997; Yen & Niehoff, 2004). The two important organizational outcomes (OCB and

turnover intention) were examined as consequences of perceptions of organizational

justice in the current research.

3.3.1   Organizational Citizenship Behaviour

Katz (1964) indicates that work behaviours such as innovative and

spontaneous behaviours that go beyond role prescriptions and are not explicitly

recognized by the formal reward system are essential for organizational effectiveness.

However, these work behaviours did not attract research interest until Organ and his

colleagues provided a more complete description and coined the term "organizational

citizenship behaviour" to describe them in 1980s. This section first reviews the

definition and dimensions of organizational citizenship behaviour (OCB). Then the

relationships between perceptions of organizational justice and OCB are discussed.

The Definition and Dimension of OCB. Organ (1988, p.4) defined

organizational citizenship behaviour (OCB) as "individual behaviour that is

discretionary, not directly or explicitly recognized by the formal reward system, and

that in the aggregate promote the effective functioning of the organization." Other

terms used to label such behaviours include extra-role behaviour (Van Dyne,

Cumming & McLean Parks, 1995), prosocial organizational behaviour (Brief &

Motowidlo, 1986; George, 1990, 1991; George & Bettenhausen, 1990; O'Reilly &

Chatman, 1986), organizational spontaneity (George & Brief, 1992; George & Jone,

1997), and contextual performance (Borman & Motowidlo, 1993, 1997).

Among the different labels, contextual performance is most relevant to OCB in the human resources and industrial psychology areas (LePine, Erez, & Johnson, 2002). According to Borman and Motowidlo (1997), work behaviours can be categorized as either task performance or contextual performance. Task performance refers to work behaviours that support or directly contribute to the organization's functioning. Contextual performance refers to activities that support the social and psychological context in organizations. A comparison between the definition of contextual performance and the initial definition of OCB shows that these two definitions are different. However, Organ (1997) redefined OCB as the behaviour that contributes to the maintenance and enhancement of the social and psychological context that supports task performance. This modified definition is very similar to contextual performance as defined by Borman and Motowidlo (1997).

Although the OCB literature has uncovered diverse behavioural dimensions of OCB, Organ's (1988) five-dimension framework has been most prevalent in the research literature on OCB (LePine, Erez, & Johnson, 2002). According to Organ (1988), OCB consists of five behavioural dimensions: altruism, civic virtue, sportsmanship, conscientiousness, and courtesy. Altruism, which is also referred to as helping behaviour, describes the willingness to assist coworkers and help new employees. Sportsmanship is defined as a willingness to tolerate the inevitable inconveniences and impositions of work without complaining (e.g. not complaining about trivial matters, not finding fault with other employees). Civic virtue refers to constructive engagement in organizational activities (e.g. attendance at voluntary meetings, responding promptly to correspondence). Conscientiousness refers to

behaviours such as being punctual, maintaining better than the average attendance record, and following an organization's rules, regulations, and procedures. Courtesy refers to helpful behaviours that prevent a problem from occurring or help to lessen the severity of a foreseen problem.

Studies on OCB have increased markedly in recent years in light of conceptual and empirical evidence suggesting that OCB is linked to both individual and organizational performance (Podsakoff, MacKenzie, & Bachrach, 2000). Organ (1997) suggests that OCB contributes to the efficient and effective functioning of organizations through the maintenance of the organization's social system. That is, OCB can reduce the need of monitoring employees' work performance, free managers' time for more valuable work (Podsakoff, MacKenzie, Ahearne, & Bommer, 1995), and can harmonize teamwork and promote work effectiveness (Netemeyer, Boles, McKee, and McMurrian, 1997; Organ & Konovsky, 1989).

Podsakoff, Ahearne, and Mackenzie (1997) examined the effects of OCB on the quantity and quality of work group performance within a paper mill. Results of their study indicated that helping and sportsmanship behaviours had significant effects on performance quantity, explaining 26% of the variance in the quantity of paper produced by a work team. Their study also indicated that helping behaviour had a significant impact on performance quality, accounting for 17% of the variance in the quality of paper produced by a work team. These findings support Organ's (1988) assertion that OCB can improve organizational performance.

Yen and Niehoff (2004) examined relationships between OCB and indicators of organizational effectiveness in Taiwanese Banks. Branch profit was related

positively to conscientiousness and labour cost per employee was related negatively

to helping behaviour. In addition, OCB has been linked with individual performance.

For example, Podsakoff and Mackenzie (1994) reported that three dimensions of OCB

(i.e. helping, civic virtue, and sportsmanship) related positively to performance ratings

provided by the employee's supervisor. They showed that the three dimensions of

OCB accounted for 48% of the variance in managerial assessments of employees'

performance.

OCB and Organizational Justice. Given that OCB is not captured by

traditional job descriptions and is more likely to reflect individual discretion, it has

been argued that organizational justice acts as a key determinant of OCB (Folger &

Konovsky, 1989; Moorman, 1991). Studies have consistently shown significant

relationships between OCB and perceptions of organizational justice. For example,

using a sample of 89 supervisor-subordinate dyads, Ball, Trevino, and Sims (1993)

examined the effects of perceived unjust punishment on OCB. They found that

subordinates tended to engage in OCB when they perceived a high level of

organizational procedural justice. Further, using a quasi-experiment in a large public

service union, Skarlicki and Latham (1996) found that training supervisors on

procedural justice principles could enhance levels of OCB among subordinates.

Two explanations have been given for the relationship between justice

perceptions and OCB (Organ, 1990). First, according to equity theory (Adam, 1965),

perceptions of unfair reward allocations relative to an individual's input will create

tension within the person. The person will attempt to resolve the tension by changing

his ratio of inputs to outcomes. Organ (1990) suggests that OCB that is discretionary

and lies outside of formal job requirements can be viewed as an input for one's equity ratio. In response to inequity, employees are likely to raise or lower their level of OCB.

Second, social exchange theory (Blau, 1964) provides insight into the relationship between organizational justice and OCB. According to Blau's social exchange theory, employees and organizations develop two types of relationships in the workplace: social and economic exchange. Economic exchange relationships are generally short-term. They usually involve concrete and pecuniary resources. Social exchange relationships emphasize the formation of interpersonal relationships. These relationships are long-term and often involve social-emotional resources such as self-esteem (Rupp & Cropanzano, 2002).

Organizational justice facilitates the formation of social exchange relationships and thus fosters OCB (e.g. Konovsky & Pugh, 1994; Lee, 1995; Moorman, 1991). That is, fair treatment could be considered a benefit and may invoke an obligation to reciprocate (Moorman & Byrne, 2005). For example, employees who perceive that they are treated fairly by the organization may develop a sense of obligation to reciprocate by performing OCB. Conversely, employees who feel that the organization treats them unfairly may reduce the frequency or magnitude of OCB in return. Therefore, Organ (1988) indicates that OCB is driven largely by perceptions of organizational justice. A few studies have tested the effects of perceptions of organizational justice on OCB in Chinese contexts (e.g. Farh, et al, 1997), but most of these studies include only one or two dimensions of organizational justice. The present study will investigate the relationship between each dimension of

organizational justice (i.e. distributive, procedural, and interactional justice) and OCB

within a Chinese context.

Based on above discussion, the following hypotheses are proposed.

Hypothesis 8: Perceptions of distributive justice are positively associated with OCB.

Hypothesis 9: Perceptions of procedural justice are positively associated with OCB.

Hypothesis 10: Perceptions of interactional justice are positively associated with

OCB.

3.3.2 Turnover Intention

Employee turnover has received much theoretical and empirical attention in

the human resource management area mainly for two reasons. First, turnover has

been linked to important consequences for organizations (Mobley, 1982). Although

the termination of employment has been shown to result in certain positive

consequences as well, such as the displacement of poor performers (Mobley, 1982),

turnover, in most cases, has been associated with visible negative consequences,

especially the high cost of replacement (Bluedorn, 1982). Second, the prediction of

turnover can provide valuable information for organizational HR planning,

recruitment and selection, and training and development.

Mobley, Griffeth, Hand, and Meglino (1979) advanced a seminal theoretical

model of voluntary turnover describing the processes underlying turnover intention

and withdrawal behaviour. In this model, individual characteristics and

organizational variables affect individuals' perceptions of the job or the organization.

In turn, these perceptions predict withdrawal cognition (e.g. turnover intention), which directly predicts the likelihood of quitting. Consistent with Mobley et al.'s model, the model proposed in the present study proposes that perceived organizational HR practices (i.e. empowerment, communication, psychological contract fulfillment) affect organizational justice perceptions, which in turn affect turnover intention.

Turnover intention refers to an employee's perceived probability of leaving an employing organization (Werbel & Bedeian, 1989). Turnover intention has been treated as the principal cognitive variable immediately preceding turnover behaviour in the literature (e.g. Cotton & Tuttle, 1986). Steel and Ovalle's (1984) meta-analysis reported that turnover intention and turnover has a correlation as high as .50. Based on these meta-analytic findings, they suggested that turnover intention is a better predictor of turnover than affective variables (e.g. job satisfaction, organizational commitment). As such, turnover intention has been recognized as the strongest indicator of an individual's actual turnover behaviour (e.g. Mobley, et al., 1979).

Organizational Justice and Turnover Intention. The relationship between organizational justice and turnover intention can be explained by social exchange theory (Blau, 1964). According to social exchange theory, people tend to feel obligated to repay favourable benefits and/or treatment offered by their organizations. One way for an individual to repay the organization is through continued participation. According to this, people perceiving a higher level of organizational justice would be less likely to seek alternate employment or leave the organization. Conversely, possible reciprocation for unfair procedures and unfavourable treatment by the organization is to quit. In other words, employees who perceive procedural

injustice and interactional injustice are more likely to think about leaving the

organization. The relationship between organizational justice and turnover intention

can also be explained by equity theory (Adam, 1965). According to equity theory,

when an employee receives an unfair allocation or unfair treatment, the employee is

likely to reduce his effort and/or choose to leave the organization. March and Simon

(1958) also argued that the employee's decision to continue to participate in the

organization is based on the balance between the inducements offered by the

organization and the contributions expected of the employee. An employee who

perceives greater inducements would be less likely to desire to leave the organization.

Thus, fairness is expected to be negatively related to turnover intention. Many studies

have demonstrated the relationship between organizational justice and turnover

intention in western countries (e.g. Bies & Shapiro, 1987; Dailey & Kirk, 1992; Hom,

et al., 1984; Masterson, et al. 2000), but more evidence regarding their relationships is

needed in non-western countries. In light of this need, the present study tests the

following hypotheses in a Chinese context:

Hypothesis 11: Perceptions of distributive justice are associated negatively with

turnover intention.

Hypothesis 12: Perceptions of procedural justice are associated negatively with

turnover intention.

Hypothesis 13: Perceptions of interactional justice are associated negatively with

turnover intention.

3.4 Control Variables

There is little evidence that demographic variables have a direct influence on OCB (Organ & Ryan, 1995). However, age, gender, and organizational tenure have been linked to turnover intention (e.g. Martin, 1979; Mobley, 1982; Griffeth, Hom, & Gaertner, 2000). That is, older employees usually have more difficulties in locating another job and thus are less likely to leave the organization; female employees typically have more family responsibilities than males and thus are more likely to leave the organization; longer term employees tend to be more satisfied with their jobs and hence less likely to turnover. In addition, individuals in higher-level jobs usually have more control over organizational resources, and therefore, they feel more empowerment (Koberg, et al., 1999) and are less likely to turnover (Maynatt, Omundson, Schroeder, & Stevens, 1997). To rule out possible influences of the demographic variables (age, gender, organizational tenure, and job level) on the proposed model, the present study collected participants' demographic information.

3.5 Summary

This chapter developed a model that includes empowerment, organizational communication, and psychological contract fulfillment as organizational antecedents of perceptions of organizational justice (i.e. distributive justice, procedural justice, and interactional justice). In turn, turnover intention and OCB were modelled as consequences of justice perceptions. In this model, employee perceptions of organizational HR practices (i.e. empowerment, communication, and psychological contract fulfillment) are expected to relate to perceptions of organizational justice (i.e.

distributive justice, procedural justice, and interactional justice). Then, perceptions of

organizational justice are expected to influence the organizational outcomes (i.e. OCB

and turnover intention). To eliminate potential spurious effects, control variables

including age, gender, organizational tenure, and job level were also discussed.

Chapter 4 Methodology

4.1 Introduction

This chapter provides an overview of the research methods used to investigate the proposed relationships between organizational justice and its organizational antecedents and consequences. A description of the sample, data collection strategy, measures, and approach to data analysis is provided.

4.2 Sample and Procedure

This study was conducted at two state-owned companies in China. After senior management of the two companies agreed to permit the study, data were collected by means of a two-part survey: one to employees and the other to their immediate supervisors. Employees were asked to complete a self-report questionnaire that measured empowerment, communication, psychological contract fulfillment, perceptions of organizational justice, and turnover intention. Supervisors were asked to evaluate their subordinates' OCB. 367 employees and their immediate supervisors from the two companies participated in the study. A total 286 employee questionnaires and 274 supervisor questionnaires were returned. The response rate for employees was 78%, and that for supervisors was 75%. After removing incomplete questionnaires and unmatched supervisor-subordinate pairs, 242 dyads remained, which comprised the final sample. Of the sample, 66% were male and 34% were female. The mean age was 35, minimum age was 19 and the maximum age was 59. The mean organizational tenure of respondents was 10.76 years. The job levels

included workers (21.9%), assistant engineers (49.6%), engineers (22.3%), and senior engineers (6.2%).

4.3 Measures

The variables in the proposed model were measured with previously published and commonly used scales, including psychological empowerment, psychological contract fulfillment, communication satisfaction, perceptions of distributive, procedural, and interactional justice, OCB, and turnover intention. Chinese versions of organizational justice and OCB measures were obtained from Dr. Cynthia Lee who has used these measures in Chinese contexts. For other measures, "back translation" was used to assure the equivalence of these measures in English and Chinese (Ady, 1994; Brislin, 1980). Back translation is the most commonly used technique in cross-cultural research. First, all the items in the questionnaire were translated from its original English version into Chinese by bilingual professionals. Then, these Chinese translations were translated back into English by other bilingual professionals. Finally, the back-translation and the original version of each measure were compared and discrepancies resolved by the translators. Six-point Likert-type scales were used for most constructs in light of the central tendency bias common among Chinese respondents (Hui, et al., 2004). The following sections present the scales used in the current study.

Empowerment. The four dimensions of empowerment were measured with a 12-item scale developed and validated by Spreitzer (1995) (Appendix A). The scale

contains 3 items for each dimension of empowerment: meaningfulness, competency, self-determination, and impact. Employees were asked to indicate the extent to which they agreed with each statement on a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Sample items of the four dimensions are, "I can decide on my own how to go about my work (self-determination)", "My impact on what happens in my department is large (impact)", "I am confident about my ability to do my job (competency)", and " The work I do is meaningful (meaningfulness)". Each set of 3 items was summed to form a dimension of empowerment. Spreitzer (1995) reported the Cronbach's alphas of .87, .88, .81, .81 for meaningfulness, impact, competence, and self-determination, respectively.

Psychological contract fulfillment.   A ten-item scale was taken from Lo and Aryee's (2003) study to measure psychological contract fulfillment (Appendix B). The items cover dimensions of the employment relationship such as training, promotion, feedback, job security, nature of job and compensation. Response options ranged from 1 (*receive much more than promised*) to 5 (*receive much less than promised*). The higher the score, the greater the magnitude of psychological contract fulfillment it represents. An example of an item in this scale is "feedback on job performance". Lo and Aryee (2003) reported the Cronbach's alpha for the scale was .86.

Communication satisfaction.   The Communication Satisfaction Questionnaire (CSQ) developed by Downs and Hazen (1977) is the most comprehensive instrument

to assess communication satisfaction (Pincus, 1986). Given that the current study

focused on employees' judgement of justice in organizational practices, six

dimensions of CSQ that are relevant to perceptions of organizational justice were

included. Each dimension was represented by three items (Appendix C). An example

of communication climate is: "Organizational communication makes you identify

with the organization". An example of supervisory communication is: "My

supervisor listens and pays attention to my opinion". An example of organizational

integration is: "I am satisfied with information about the requirements of my job". An

example of media quality is: "Organizational meetings are well organized". An

example of corporate information is: "I am satisfied with the information about

organizational changes". An example of personal feedback is: "I am satisfied with

how my effort is assessed". The six dimensions were measured with a 6- point

Likert-Type scale ranging from 1 (*very dissatisfied*) to 6 (*very satisfied*). The

Cronbach's alphas for the six dimensions ranged from .76 to .86 (Crino & White,

1981).

Distributive Justice.   Perceptions of distributive justice were measured with Price

and Mueller's (1986) Distributive Justice Index (Appendix D). This scale measures

the extent to which rewards received by employees are perceived to be related to

performance inputs. The six items ask for the degree to which the participants have

been fairly rewarded with respect to six general factors: responsibility, education,

experience, stress, effort, and good performance. For example, "I have been fairly

rewarded in view of the amount of experience I have." Responses were provided in

accordance with a six-point scale ranging from 1 (*Very unfair*) to 6 (*Very fair*). The Cronbach's alphas for the instrument have generally been above .90 (Moorman, 1991).

Procedural Justice and Interactional Justice.   Perceptions of procedural and interactional justice were measured with a 15-item measure that was used by Niehoff and Moorman (1993). Six items measured procedural justice (Appendix E) and nine items measured interactional justice (Appendix F). For procedural justice respondents were asked the degree to which decision-making procedures promoted consistency, bias suppression, accuracy, correctability, representativeness, and ethicality. For example: "All job decisions are applied consistently across all affected employees". For interactional justice, five items asked the degree to which participants were treated favourably by their supervisors, and four items asked the degree to which adequate explanations regarding work-related decisions were given by their supervisors. An example of the five items of treatment is: "My supervisor treats me with respect and dignity". An example of the four items of explanations is: "My supervisor offers adequate justification for decisions made about my job". A six-point Likert scale was used ranging from 1(*strongly disagree*) to 6 (*strongly agree*). Niehoff and Moorman (1993) reported the Cronbach's alphas of .85 and .92 for procedural and interactional justice, respectively.

OCB.   OCB is typically measured by either self-ratings or supervisor-ratings. Supervisor ratings can avoid the problem of common method variance, which exists

when all the information comes from a single source (e.g. Lam, Hui, & Law, 1999; Podsakoff & Organ, 1986). Thus, immediate supervisors were asked to evaluate their subordinates' OCB. According to previous studies (e.g. Farh, Zhong, & Organ, 2004), three dimensions of OCB (altruism, conscientiousness, and civic virtue) have shown requisite psychometric properties in Chinese contexts. Courtesy and sportsmanship have generally not been supported by prior OCB research in China and therefore were not measured here. Given this, 14 items from Podsakoff, MacKenzie, Moorman, & Fetter's (1990) OCB scale were used, measuring altruism, conscientiousness, and civic virtue (Appendix G). Each item was presented with a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). An example of the items of altruism is: "Willingly helps others who have work related problems." An example of the items of conscientiousness is: "Obeys company rules and regulations even when no one is watching." An example of the items of civic virtue is "Attends meetings that are not mandatory, but are considered important". Using a Chinese sample, Hui et al. (2004) reported Cronbach alpha coefficients of .86, .80 and .82 for altruism, conscientiousness and civic virtue respectively.

Turnover intention.   Turnover intention was measured by a three-item scale adapted from Cammann, Fichman, Jenkins, and Liesh (1970) (Appendix H). This scale measures the degree to which the participants are thinking of quitting, intend to search, and intend to quit. The three items are " I often thinking about quitting my job within the organization", "It is very likely that I will look for a new job within the next year", and "I will leave this organization if possible". Each item was presented

with a 6-point response scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*).

Cammann et al. (1970) reported the Cronbach's alpha for the scale of .83.

Control variables: Age, gender, organizational tenure, and job level were measured

directly.

4.4   Statistical Analysis

Structural equation modeling (SEM) was used to analyze the data collected in

the two companies in China. In this section, the strengths of SEM in data analysis and

a number of fit indices that were used to assess the adequacy of the proposed model

are discussed. Finally, the two-stage SEM approach that was followed is presented.

4.4.1   SEM Techniques

The present study used structural equation modeling (SEM) to assess the

hypothesized relationships among variables. SEM is a collection of statistical

techniques that allow a set of relationships between variables to be examined.

Compared to other traditional multivariate procedures such as multiple regression,

SEM has several strengths in testing proposed relationships among variables (Byrne,

2001). First, SEM can estimate a series of separate, but interdependent multiple

regression equations simultaneously by specifying the structural model. Thus, when

relationships are complex and multidimensional, SEM allows complete and

simultaneous tests of all the relationships. Second, SEM can estimate measurement

errors. Thus, when relationships among factors are examined, the relationships are

free of measurement errors and avoid possible mistakes made by other multivariate

procedures. Third, SEM not only considers observed variables but also incorporates

unobserved variables and thus can specify relations among the latent variables. Thus,

SEM provides a useful technique for examining the proposed model.

A SEM analysis generally includes three steps: model specification, parameter

estimation, and fit evaluation. In the model specification, the theory to be tested is

translated into a particular model that is testable. Then, in the parameter estimation,

the data collected are used to obtain estimates of the optimal model parameters.

Finally, in the fit evaluation, parameter estimates obtained in the second step are used

to examine whether the hypothesized model can represent the structure implied in the

data. In the current study, after the proposed relations were translated into a testable

model, the maximum likelihood method was used to perform the model estimation.

The adequacy of the model fit was then determined by multiple measures of goodness

of fit statistics, including Chi-square statistics, Root Mean Square Error of

Approximation (RMSEA), Comparative Fit Index (CFI), Incremental Fit Index (IFI),

and Standard Root Mean Square Residual (SRMSR). These indices correspond with

those recommended by past research (Hoyle & Panter, 1995).

Chi-square tests assess the size of the discrepancies between the covariance

matrix of a hypothesized model and that of the data. If the hypothesized model is

consistent with the data, the discrepancies are small and there is no significant

difference between the sample covariance matrix and the estimated covariance matrix.

Chi-square is not commonly used as a test of the fit of a model because of its

sensitivity to sample size and its strict requirement for multivariate normality of

variables (Bentler & Bonett, 1980). However, chi-square difference tests can be useful in comparing the fits of models for a given data set with a single sample size, particularly if the models are "nested" within each other (Joreskog & Sorbom, 1989).

Among other fit indices generated by SEM, RMSEA is one of the most informative (Thompson & Vacha-Hassa, 2000). RMSEA refers to the discrepancy between the covariance matrix derived from the model and the covariance matrix in the population with adjustment for the degrees of freedom. In other words, RMSEA represents how well the sample data fit the proposed population covariance matrix. According to Browne and Cudeck (1993), a RMSEA value less than .05 represents a good fit of the model, and a value between .05 and .08 represents a reasonable fit.

Other commonly used SEM statistics include the Comparative Fit Index (CFI), the Incremental Fit Index (IFI) and Standard Root Mean Square Residual (SRMSR). The CFI assesses fit relative to that of a model for the same data presuming independence of the measured variables (Bentler, 1990). The IFI evaluates the estimated model by comparing the chi-square values of the model to that of the null model, a baseline model that specifies that all measured variables are uncorrelated. CFI and IFI values range from 0 to 1, with 0 indicating a poor fit and 1 indicating a perfect fit. Generally, values over .90 are considered acceptable. The Standard Root Mean Square Residual (SRMSR) represents the average differences between the sample variances and covariances and the estimated population variances and covariances. SRMSR has a range of 0 to 1, and values of .08 or less are desirable (Hu & Bentler, 1999). Given that different fit indices evaluate different aspects of model

fit (1998), RMSEA, CFI, IFI, and SRMSR were used to test model fit and chi-square difference tests to compare competing models.

4.4.2 Two-Stage SEM Approach

The present study followed the two-stage SEM approach recommended by Anderson and Gerbing (1988): a measurement model and a structural model. According to Anderson and Gerbing (1988), the measurement model defines relations between the observed and unobserved variables. Specifically, it specifies how unobserved latent variables depend upon or are indicated by the observed variables. The structural model defines relations among the unobserved latent variables. In other words, it specifies the causal relationships among the latent variables, describes the causal effects, and assigns the explained and unexplained variance. Overall, this two-stage approach provides a comprehensive assessment of construct validity (Bentler, 1978). The measurement model provides a confirmatory assessment of convergent validity and discriminant validity (Campbell & Fishe, 1959), and then the test of the structural model constitutes a confirmatory assessment of nomological validity (Cronbach & Meehl, 1955).

At the first stage, a series of confirmatory factor analyses (CFAs) of all independent variables, mediators, and dependant variables were conducted to examine the reliability and the underlying factor structure of the measurement scales. At the second stage, the proposed model was estimated and all hypothesized relationships were tested. The primary task in this model-testing was to determine the goodness-of-fit between the hypothesized model and the sample data. If the goodness-of-fit is

adequate, the model supports the plausibility of the postulated relations among variables; if it is inadequate, the tenability of such relations is rejected. Further, to assess the suitability of the full mediation model proposed by the present study, four alternative models (three partial mediation models and a non-mediation model) were tested.

4.5 Summary

This chapter presented the research methods. First, the sample and data collection procedure were discussed. Then all measures of interest were presented. Given all the measures were taken from established scales in western countries, a back translation technique was used. Finally, the steps of SEM were described and key fit indices defined.

Chapter 5 Results

5.1 Introduction

This chapter presents the results of the statistical analyses. First, data

preparation for the SEM analysis is reported. Second, reliability and validity of the

measures used in the present study are discussed, followed by the results of

confirmatory factor analyses (CFAs). Third, structural model estimation and

hypothesis testing are presented.

5.2 Data Verification

After the accuracy of data entry was checked by inspecting the minimum and

maximum values, means, and standard deviation for plausibility, missing values were

inspected. According to Little and Rubin (1990), there are mainly three approaches

for handling missing data: the case deletion approach (i.e. complete case analysis and

available case analysis), the single imputation approach (e.g. mean substitution), and

the Likelihood-based approach (e.g. the Expectation Maximization method).

Complete case analysis, which is also known as listwise deletion, eliminates all cases

with any missing values from an analysis. Only responses with complete answers of

all questions are included in the statistical analysis. In an available case analysis,

which is also known as pairwise deletion, analysis is based upon available pairwise

data. Listwise deletion and pairwise deletion methods are convenient and thus used

by most statistical software. However, the case deletion approach often causes the

loss of information and may produce inconsistent data. Thus, researchers (e.g. Little

& Rubin, 1987; Granham & Donaldson, 1993) argue that these methods can do more

harm than good. In mean substitution, all the missing values of a data set are replaced

by the mean of available data. Although mean substitution preserves data and is easy

to use, it can distort variance or covariance estimates toward zero (Roth, 1994).

Dempster, Laird, and Rubin (1977) proposed the Expectation Maximization

(EM) algorithm method in the late 1970s. EM is an efficient method for obtaining

maximum-likelihood estimates of parameters from incomplete data by using specific

models. EM iterates between the following two steps. The expectation (E) step

computes the expected value of the complete data log likelihood based on the

observed data and parameter estimates. The maximization (M) step substitutes the

expected values for missing data and then maximizes the likelihood function to obtain

new parameter estimates, which are substituted back into the E-step. The procedure

iterates through the two steps until the change of the parameter estimates from

iteration to iteration becomes negligible.

Viewing missing values as potential sources of variability to be averaged, EM

has made substantial advances in treating missing data (Schafer & Olsen, 1998). In

particular, it does not concentrate solely on identifying a replacement for missing

data, but on using available information to preserve relationships in the data set

(Wayman, 2003). Thus, Tabachnick and Fidell (2001, p. 66) indicated that EM offers

the simplest and most reasonable approach to imputing missing data. In light of this,

missing values in the data set were handled with Expectation Maximization (EM)

method using SPSS 11.0. The maximum number of missing values for a single item

in the data set was 9 cases (3.7%) and most items had missing values between 0-3%.

The principal advantage of the SEM technique is that it allows for a concurrent assessment of relationships between independent and dependent variables. However, the concurrent assessment requires a large sample size. Specifically, the number of cases must be significantly larger than the number of parameters estimated. Bentler and Chou (1987) suggested that the ratio of sample size to estimated parameters should be between 5:1 and 10:1. Anderson and Gerbing (1988) proposed that a minimum sample size was 150 subjects, whereas Kelloway (1998) suggested a sample size of at least 200. Furthermore, Muller (1997) suggested that ratio of number of subjects to number of measured variables should be at least 10:1 for a stable estimation of SEM.

When a large number of items have been used to measure the variables of interest with a relatively modest sample size, subscales are usually used as indicators of the latent construct to reduce the number of parameters (e.g. Hui, et al., 2001; Liden, Wayne, & Sparrowe, 2000). In the current study, for example, "meaningfulness", "self-determination", "competence", and "impact" were indicators of empowerment. By doing so, the sample size of 242 in the current study was deemed sufficient.

Most of the estimation techniques used in SEM assume multivariate normality (Joreskog & Sorbom, 1989). Thus, all variables were examined for normality by testing the significance of skewness and kurtosis, as suggested by Tabachnick and Fidell (2001, p74). Skewness characterizes the degree of asymmetry of a distribution around its mean, and Kurtosis characterizes the relative peakness or flatness of a distribution compared to the normal distribution. The results demonstrated that no

skewness and kurtosis were statistically significant at .01 (alpha level). Therefore, both the skewness and kurtosis were within an acceptable level, and no extreme deviation from normality was detected.

5.3 Model Estimation

The present study followed the two-stage SEM approach: a measurement model and a structural model, as suggested by Anderson and Gerbing (1988). The measurement model and structural model were estimated by the maximum likelihood method using LISREL 8.51. Before reporting the results of the model estimation, descriptive statistics, and reliabilities for all variables are presented.

5.3.1 Descriptive Statistics

Table 5.1 reports means, standard deviation, and zero-order correlations for all independent, dependent, and control variables. The correlation matrix shows that empowerment, psychological contract fulfillment, and communication associated significantly with perceptions of organizational justice (distributive, procedural and interactional), and justice perceptions associated significantly with OCB and turnover intention. Age, gender, job level, and organizational tenure show small correlations with some variables in the model. After they were included in the model estimation, however, the correlations became statistically non-significant except those of organizational tenure. Thus, organizational tenure was statistically controlled.

Table 5.1   Descriptive Statistics

	Indicator	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	AGE	35.22	7.82	1														
2	SEX	.67	.47	.02	1													
3	TEN	10.76	7.87	.71**	-.05	1												
4	LEVEL	2.13	.82	.32**	-.17*	.26**	1											
5	EMP1	3.68	1.04	-.04	.07	-.13*	.04	1										
6	EMP2	3.41	1.12	.12	.10	.12	.10	.50**	1									
7	EMP3	4.69	.90	-.04	.12	-.11	-.10	.33**	.23**	1								
8	EMP4	5.02	.64	.09	.12	.01	.03	.04	.02	.28**	1							
9	COM1	3.93	.95	-.07	.12	-.12	-.10	.43**	.35**	.53**	.03	1						
10	COM2	3.89	.95	.01	.12	-.09	-.15*	.46**	.45**	.49**	.01	.80**	1					
11	COM3	3.92	.98	.00	.05	-.07	-.04	.54**	.43**	.46**	-.04	.83**	.85**	1				
12	COM4	4.50	.93	-.17**	.05	-.22**	.00	.41**	.25**	.36**	-.05	.49**	.48**	.55**	1			
13	COM5	4.11	.80	-.08	.12	-.16*	-.20**	.43**	.30**	.49**	.00	.67**	.67**	.69**	.53**	1		
14	COM6	4.15	.88	-.11	.14*	-.15*	-.22**	.46**	.35**	.58**	.09	.72**	.70**	.71**	.52**	.80**	1	
15	PCF1	2.68	.70	-.12	.08	-.14	-.21**	.44**	.33**	.34**	-.08	.46**	.47**	.50**	.17**	.46**	.48**	1
16	PCF2	2.85	.62	-.10	.12	-.11	-.12	.43**	.36**	.35**	-.06	.50**	.50**	.57**	.28**	.48**	.53**	.80**
17	PCF3	2.87	.61	-.03	.10	-.06	-.08	.38**	.36**	.29**	.00	.46**	.49**	.52**	.27**	.41**	.48**	.70**
18	DIS1	3.72	1.06	-.09	.10	-.22**	-.14*	.51**	.39**	.31**	-.08	.46**	.54**	.54**	.35**	.53**	.48**	.60**
19	DIS2	3.81	1.01	-.09	.03	-.19**	-.12	.53**	.41**	.30**	-.08	.49**	.55**	.58**	.38**	.53**	.48**	.55**
20	DIS3	3.77	1.07	-.11	.09	-.24**	-.12	.58**	.39**	.34**	-.05	.51**	.55**	.59**	.40**	.56**	.51**	.61**
21	PRO1	3.66	.99	-.11	.17*	-.21**	-.14*	.50**	.32**	.40**	-.09	.54**	.57**	.61**	.48**	.61**	.58**	.43**
22	PRO2	3.77	.92	-.09	.15*	-.18**	-.10	.41**	.26**	.30**	-.09	.49**	.50**	.51**	.40**	.51**	.48**	.38**
23	PRO3	3.81	1.01	-.12	.12	-.18**	-.12	.48**	.28**	.34**	-.08	.52**	.54**	.58**	.53**	.59**	.52**	.41**
24	INT1	4.54	.84	-.10	.09	-.17**	-.02	.44**	.30**	.38**	-.03	.41**	.45**	.50**	.75**	.47**	.43**	.27**
25	INT2	4.47	.85	-.12	.10	-.18**	-.05	.38**	.32**	.36**	-.04	.49**	.52**	.56**	.76**	.54**	.52**	.25**
26	OCB1	4.62	.80	-.02	-.08	-.10	.12	.41**	.31**	.20**	-.06	.36**	.38**	.44**	.36**	.37**	.35**	.28**
27	OCB2	4.53	.88	-.13*	-.07	-.13*	.05	.26**	.24**	.14**	-.03	.32**	.34**	.36**	.36**	.38**	.35**	.24**
28	OCB3	4.50	.80	-.08	-.11	-.08	.05	.35**	.29**	.15**	-.05	.35**	.39**	.41**	.40**	.39**	.36**	.19**
29	TUR1	2.11	1.06	-.04	.03	.04	.13*	-.11	.03	-.40**	-.15*	-.23**	-.20**	-.28**	-.20**	-.31**	-.24**	-.27**
30	TUR2	2.10	.96	-.12	.07	.00	.05	-.21**	-.08	-.30**	-.11	-.17**	-.18**	-.26**	-.23**	-.27**	-.21**	-.19**
31	TUR3	2.37	1.18	-.07	.11	.04	.09	-.10	.05	-.33**	-.13*	-.24**	-.26**	-.30**	-.15**	-.32**	-.23**	-.16**

Table 5.1 (Continued) Descriptive Statistics

		Mean	SD	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
16	PCF2	2.85	.62	1															
17	PCF3	2.87	.61	.75**	1														
18	DIS1	3.72	1.06	.57**	.45**	1													
19	DIS2	3.81	1.01	.56**	.43**	.84**	1												
20	DIS3	3.77	1.07	.57**	.45**	.89**	.90**	1											
21	PRO1	3.66	.99	.52**	.43**	.56**	.56**	.58**	1										
22	PRO2	3.77	.92	.44**	.44**	.47**	.51**	.52**	.83**	1									
23	PRO3	3.81	1.01	.49**	.44**	.47**	.53**	.53**	.81**	.81**	1								
24	INT1	4.54	.84	.36**	.32**	.36**	.35**	.38**	.56**	.46**	.57**	1							
25	INT2	4.47	.85	.34**	.32**	.34**	.35**	.38**	.55**	.49**	.59**	.87**	1						
26	OCB1	4.62	.80	.31**	.30**	.32**	.36**	.36**	.42**	.35**	.36**	.34**	.36**	1					
27	OCB2	4.53	.88	.30**	.26**	.28**	.34**	.31**	.36**	.31**	.31**	.29**	.30**	.77**	1				
28	OCB3	4.50	.80	.24**	.23**	.28**	.31**	.31**	.37**	.30**	.33**	.34**	.34**	.77**	.82**	1			
29	TUR1	2.11	1.06	-.28**	-.16**	-.29**	-.32**	-.33**	-.22**	-.18**	-.25**	-.24**	-.20**	-.02	.03	.06	1		
30	TUR2	2.10	.96	-.26**	-.17**	-.25**	-.30**	-.28**	-.28**	-.26**	-.32**	-.29**	-.25**	-.03	.00	.05	.78**	1	
31	TUR3	2.37	1.18	-.23**	-.11**	-.18**	-.19**	-.21**	-.26**	-.16**	-.28**	-.20**	-.20**	-.05	.03	-.01	.74**	.68**	1

Note:
1. n=242. SD= Standardized Deviation; TEN= Organizational tenure; EMP1 = Autonomy; EMP2= Impact; EMP3=Meaningfulness; EMP4=Competence; COM1= Supervisory communication; COM2= Organizational integration; COM3= Media quality; COM4= Corporate information; COM5= Personal feedback; COM6=Communication climate; PCF1- PCF3 = Psychological contract fulfillment; DIS1-DIS3= Distributive justice; PRO1-PRO3= Procedural justice; INT1= Interpersonal treatment; INT2= Explanations; OCB1= Conscientiousness;OCB2= Civic virtue; OCB3=Helping behaviour; TUR1-TUR3= Turnover intention.
2. ** Correlation is significant at the .01 level.
   * Correlation is significant at the .05 level.

5.3.2 Reliability Tests

Reliability refers to the degree to which scales are consistent and free from random measurement errors. The reliability of each of the scales was assessed by Cronbach's alpha. A Cronbach's alpha of .70 or above is considered acceptable (Nunnally, 1978). All of the scales included in the questionnaire showed adequate levels of reliability with a range .82 to .95. For example, the empowerment scale contained three items for each of the four dimensions: with alpha values of .90 (meaningfulness), .92 (impact), .83 (competence) and .85 (autonomy). Table 5.2 reports reliabilities for all measures.

Table 5.2   Reliability Estimates

Variables and Indicators	Cronbach's Alpha
Empowerment	
Autonomy	.85
Meaningfulness	.90
Impact	.92
Competence	.83
Communication Satisfaction	
Supervisory communication	.83
Organizational integration	.92
Media quality	.86
Corporate information	.89
Personal feedback	.82
Organizational climate	.92
Interactional justice	
Interpersonal Justice	.94
Informational Jusitce	.92
OCB	
Conscientiousness	.93
Civic virtue	.94
Helping behaviour	.95
Psychological contract fulfillment	.90
Distributive justice	.95
Procedural justice	.93
Turnover intention	.89

5.3.3 Confirmatory Factor Analyses

The adequacy of the measurement properties of the variables of interest was

tested using confirmatory factor analyses (CFAs). Results on how well observed

indicators represented latent variables are reported below.

5.3.3.1 CFA for Empowerment

To test whether Chinese respondents made distinctions among the four

dimensions of empowerment, a second-order CFA was done of the measurement

model comprising a higher order factor and four lower order factors. This

measurement model fit the data marginally (chi-square = 126.79, df = 50, RMSEA =

.08, CFI = .96, IFI = .96, SRMSR = .087). T-tests showed that all dimensions

significantly loaded on the same latent factor except "competency". After removing

"competency" a good fit of the model to the data was achieved (chi-square = 43.48, df

= 24, RMSEA = .058, CFI = .98, IFI = .98, SRMSR = .035). Table 5.3 presents the

final CFA results of the measurement model of empowerment.

Table 5.3
CFA for Empowerment

Variables and Indicators	Standardized Item Loadings	R^2
Autonomy	.89*	.79
AU1	.74*	.55
AU2	.88*	.78
AU3	.82*	.67
Impact	.52*	.38
IM1	.85*	.72
IM2	.91*	.82
IM3	.84*	.70
Meaningfulness	.41*	.16
ME1	.87*	.75
ME2	.91*	.83
ME3	.91*	.82

Note: * t-value is significant at $p < .05$.

Further, the fit of a second-order model of empowerment as a higher order factor with three lower level factors was compared to the fit of a one-factor model, in which all items loaded on one latent factor. The chi-square statistics for the second-order model (chi-square = 43.48, df = 24) was significantly lower than the one-factor model (chi-square = 812.99, df = 27). In addition, all goodness-of-fit indices indicated that the three-factor model represented the data better than did a one-factor model. Table 5.4 reports the CFA results of the second-order model relative to the one-factor model.

Table 5.4
Fit Indices for the CFA Models of Empowerment

Model	Chi-square	df	RMSEA	CFI	IFI	SRMSR
Second-order model	43.48	24	.058	.98	.98	.035
One-factor model	812.99	27	.35	.47	.48	.20

Note: df = Degree of freedom; RMSEA = Root Mean Squared Error of Approximation; CFI = Comparative Fit Index; IFI = Incremental Fit Index; SRMSR = Standard Root Mean Square Residual.

5.3.3.2 CFA for Communication

An adaptation of the scale by Downs and Hazen (1977) was used to measure communication satisfaction with all items loading on the same (single factor) latent construct. A CFA of the items measuring "satisfaction with communication" indicated that the measurement model did not fit the data well (chi-square =89 with 9 df, RMSEA = .19, CFI = .93, IFI = .93, and SRMSR = .049). The modification index suggested that "communication climate" and "media quality" were highly correlated. After deleting communication climate, the measurement model showed a much better fit to the data (chi-square =12.33 with 5 df, p = .031, RMSEA = .078, CFI = .99, IFI = .99, and SRMSR = .028). All item loadings were statistically significant at $p < .05$. Table 5.5 reports the CFA results of the final measurement model of communication satisfaction.

Table 5.5
CFA for Communication Satisfaction

Indicators	Standardized Item loadings	R^2
Corporate information	.89*	.79
Personal feedback	.90*	.81
Organizational integration	.94*	.88
Supervisory communication	.57*	.32
Media quality	.75*	.56

Note: * t-value is significant at $p < .05$.

Communication satisfaction has been proposed as a construct comprised "informational" and "relational" sub factors (Pincus, 1986; Gray & Laidlaw, 2004). The first pertains to satisfaction with communications with other organizational members and the latter reflects satisfaction with the content and flow of information. Accordingly, a two-factor measurement model of satisfaction with communications was tested with "personal feedback", "supervisory communication", and "media quality" as indicators of the "relational" dimension of satisfaction with communication and "organizational perspective" and "organizational integration" as indicators of the "informational" dimension (Gray & Laidlaw, 2000). The CFA results demonstrated that the two-factor model was a poor fit (chi-square = 12.14 with 4 df, RMSEA = .092) relative to the single factor model (chi-square =12.33 with 5 df, RMSEA = .078) (see Table 5.6).

Table 5.6
Fit Indices for the CFA Models of Communication Satisfaction

Model	Chi-square	df	RMSEA	CFI	IFI	SRMSR
One-factor model	12.33	5	.078	.99	.99	.028
Two-factor model	12.14	4	.092	.99	.99	.028

Note: df = Degree of freedom; RMSEA = Root Mean Squared Error of Approximation; CFI = Comparative Fit Index; IFI = Incremental Fit Index; SRMSR = Standard Root Mean Square Residual.

5.3.3.3 CFA for Organizational Justice

A CFA of perceived justice items supported the proposed three-factor model of distributive, procedural and interactional justice (Bies, 1987; Bies & Moag, 1986). However, a two-factor model of organizational justice has also been proposed, comprised of distributive and procedural justice (with interactional justice as a subscale of procedural justice) (e.g. Moorman, 1991; Tyler & Blader, 2000). Cropanzano and Ambrose (2001) proposed that distributive, procedural, and interactional justice reflect a core judgement of organizational justice and represent a single factor.

The fit indices of these three measurement models were compared and the three-factor model showed the best fit to the data (see Table 5.7). In this three-factor model, all of the items loaded significantly on their intended factors with standardized item loadings ranging from .89 to .94. The results of the CFA for this three-factor model are presented in Table 5.8.

Table 5.7
Fit Indices for the CFA Models of Organizational Justice

Model	Chi-square	df	RMSEA	CFI	IFI	SRMSR
One-factor model	870.38	20	.42	.60	.60	.20
Two-factor model	206.02	19	.20	.87	.87	.082
Three-factor model	38.04	17	.072	.99	.99	.024

Note: df = Degree of freedom; RMSEA = Root Mean Squared Error of Approximation; CFI = Comparative Fit Index; IFI = Incremental Fit Index; SRMSR = Standard Root Mean Square Residual.

Table 5.8
CFA for Organizational Justice

Indicators	Standardized Item Loadings	R^2
Distributive justice		
DIS1	.91*	.82
DIS2	.92*	.86
DIS3	.98*	.96
Procedural justice		
PRO1	.92*	.85
PRO2	.90*	.81
PRO3	.89*	.80
Interactional justice		
INT1	.93*	.86
INT2	.94*	.89

Correlations
DisJust ←→ ProJust = .62*
DisJust ←→ IntJust = .41*
ProJust ←→ IntJust = .64*

Note: * t-value is significant at $p < .05$.

The fairly high inter-correlations among distributive, procedural, and interactional justice present a possible multicollinearity problem. There is no definitive criteria for deciding when mulicollinearity poses a significant threat to the stability of statistical results, though the general "rule of thumb" is that correlations should not exceed .75 (Tsui, Ashford, Clair, & Xin, 1995). The highest zero-order correlation among distributive, procedural and interactional justice was .58 and so multicollinearity was not deemed to be a problem. Overall, a three-factor structure for perceived organizational justice was supported.

5.3.3.4 CFA for OCB

Three dimensions (altruism, conscientiousness, and civic virtue) of Organ's OCB have been found to apply cross-culturally (Farh et. al., 1997). Thus, immediate supervisors were asked to provide their evaluations of their subordinate's OCB on altruism, conscientiousness, and civic virtue. In order to test if the supervisors were able to distinguish the different dimensions of OCB, a second-order CFA was conducted of the measurement model of OCB with a higher order factor and three lower order factors. The results indicated that all items significantly loaded on their expected factors and goodness-of-fit indices supported this model (See Table 5.9).

Table 5.9
CFA for Organizational Citizenship Behaviour

Variables and Indicators	Standardized Item Loadings	R^2
Conscientiousness	.88*	.78
CO1	.85*	.73
CO2	.90*	.82
CO3	.91*	.82
CO4	.89*	.80
CO5	.74*	.54
Civic Virtue	.93*	.87
CV1	.88*	.77
CV2	.89*	.79
CV3	.89*	.80
CV4	.91*	.83
Helping behaviour	.93*	.86
HB1	.90*	.81
HB2	.89*	.79
HB3	.85*	.73
HB4	.94*	.88
HB5	.89*	.78

Note: * t-value is significant at $p < .05$.

The second-order model of OCB was compared to an alternative one-factor model. In the one-factor model, all items of OCB were directly loaded onto the same single factor. Chi-square statistics for the second-order model (chi-square= 178.68, df = 74) was significantly lower than for the one-factor model (chi-square= 907.85, df = 77). In addition, all goodness-of-fit indices indicated that the second-order model fit the data better than did a one-factor model (See Table 5.10).

Table 5.10
Fit Indices for the CFA Models of OCB

Model	Chi-square	df	RMSEA	CFI	IFI	SRMSR
One-factor model	907.85	77	.21	.85	.85	.06
Second-order model	178.68	74	.077	.97	.97	.028

Note: df = Degree of freedom; RMSEA = Root Mean Squared Error of Approximation; CFI = Comparative Fit Index; IFI = Incremental Fit Index; SRMSR = Standard Root Mean Square Residual.

5.3.3.5 CFAs for Psychological Contract Fulfillment and Turnover Intention

Both the measurement model of psychological contract fulfillment and the measurement model of turnover intention were just-identified. In other words, the number of data variances and covariances equals the number of parameters to be estimated, so the models cannot be rejected (Byrne, 1998). Thus, the CFA for the psychological contract fulfillment and turnover intention model was conducted simultaneously. Chi-square was 16.22 with 8 df ($p = .039$), RMSEA was .065, CFI was .99, IFI was .99 and SRMSR was .029. All items loaded significantly on their specific factors ($p < .05$). The CFA results can be found in Table 5.11.

Table 5.11
CFA for Psychological Contract Fulfillment and Turnover Intention

Indicators	Standardized Item Loadings	R^2
Psychological Contract Fulfillment		
PCF1	.85*	.73
PCF2	.93*	.87
PCF3	.81*	.65
Turnover Intention		
TUR1	.92*	.85
TUR2	.85*	.72
TUR3	.80*	.64

Goodness-of-Fit Indices

Chi-square = 16.22, df = 8   (P= .039)
RMSEA = .065
CFI = .99
IFI = .99
SRMSR = .029

Note:
1: df = Degree of freedom; RMSEA = Root Mean Squared Error of Approximation; CFI = Comparative Fit Index; IFI = Incremental Fit Index; SRMSR = Standard Root Mean Square Residual.
2: * t-value is significant at p < .05.

5.3.3.6 Full Measurement Model

Multiple-indicator measurement models were also tested as they allow a more accurate assessment of structural relationships (Anderson & Gerbing, 1982). Satisfaction with communication was identified with five indicators, interactional justice was identified with two indicators, and the other variables (empowerment, psychological contract fulfillment, distributive justice, procedural justice, OCB and

turnover intention) were all identified with three indicators. The full measurement

model was estimated using the maximum likelihood method. The chi-square statistic

for the model was 611.31 with 247 degrees of freedom, the RMSEA was .078, the

CFI was .92, the IFI was .92, and the SRMSR was .063. All items significantly

loaded onto their expected factors. Accordingly, the full measurement model

provided an acceptable fit to the data and justified the use of the two-stage approach

(Anderson & Gerbing, 1988). Table 5.12 shows the results of the CFA for the full

measurement model.

Table 5.12
CFA for the Full Measurement Model

Factors and Indicators	Standardized Item Loadings	R^2
Empowerment		
Autonomy	.74*	.55
Impact	.85*	.35
Meaningfulness	.80*	.25
Communication Satisfaction		
Corporate information	.88*	.77
Personal feedback	.89*	.80
Organizational integration	.94*	.89
Supervisory communication	.60*	.35
Media quality	.75*	.58
Psychological contract fulfillment		
PCF1	.85*	.75
PCF2	.92*	.85
PCF3	.81*	.66
Distributive justice		
DIS1	.91*	.82
DIS2	.93*	.86
DIS3	.98*	.95
Procedural justice		
PRO1	.92*	.85
PRO2	.90*	.80
PRO3	.88*	.80
Interactional justice		
INT1	.91*	.83
INT2	.95*	.91
OCB		
Conscientiousness	.86*	.74
Civic virtue	.89*	.80
Helping behaviour	.91*	.82
Turnover intention		
TUR1	.92*	.85
TUR2	.85*	.72
TUR3	.80*	.64

Goodness-of Fit Indices
Chi-square = 611.31, df = 247
RMSEA = .078
CFI = .92
IFI = .92
SRMSR = .063

Note: * t-value is significant at $p < .05$.

84

5.3.4 Structural Model Estimation

After confirming the measurement models for the latent variables, the structural model representing associations among the constructs in the proposed model was assessed. Considering an adequate fit does not necessarily mean a given model is the best explanation of the relationships among the constructs, so alternative competing models were tested against the benchmark revised hypothesized model.

5.3.4.1 Estimation of the Proposed Model

The structural model was estimated using the maximum likelihood method of LISREL 8.51. Given that different dimensions of organizational justice that tap on different aspects of fairness share similarity, associated residuals between distributive and procedural justice and those between procedural and interactional justice were anticipated (Rupp & Cropanzano, 1989). After allowing for these covariances, the hypothesized model was run. The results showed a reasonable fit to the data (Chi-square = 672.20, df =276; RMSEA = .077; CFI = .92; IFI = .92; SRMSR = .071), and most of the hypothesized paths in the proposed model were statistically significant (p < .05). After removing the non-significant paths, the revised model fit the data reasonably well (Chi-Square = 680.68, df = 279; RMSEA = .077; CFI = .92; IFI = .92, and SRMSR = .071) (See Table 5.13).

Figure 5.1: Standardized Path Coefficients for the Revised Structural Model
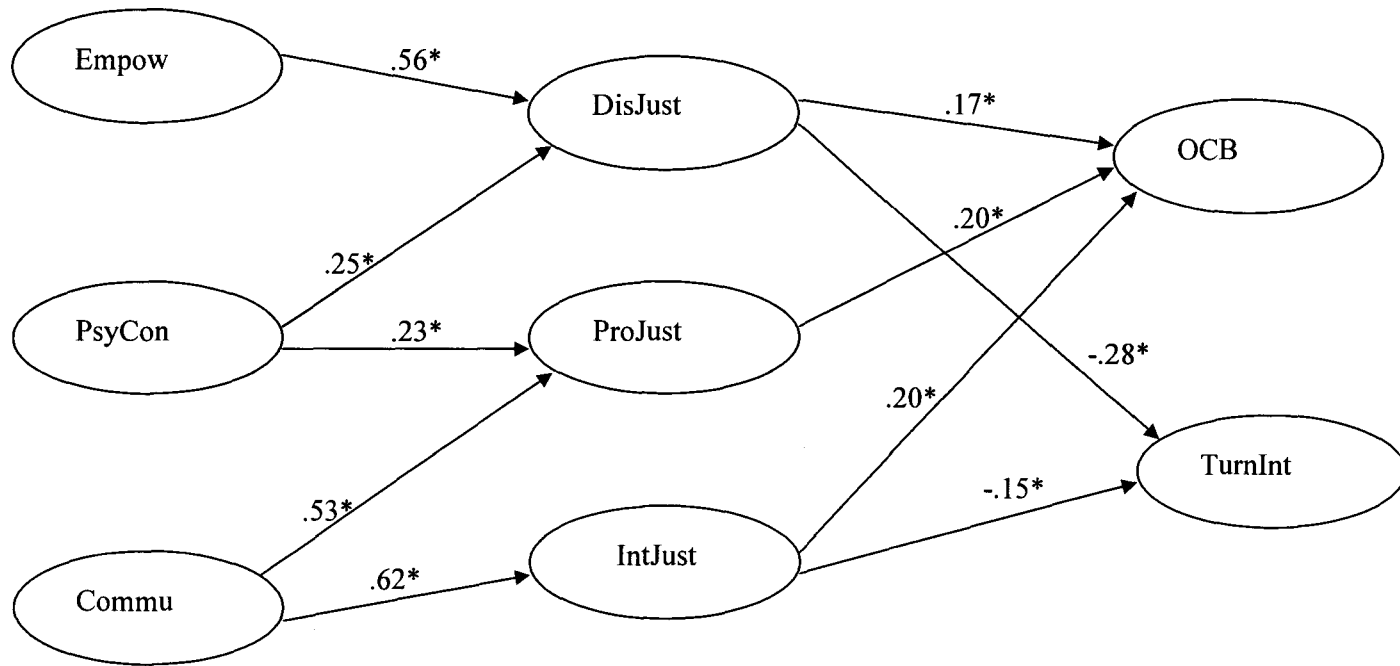
Note:
1. Empow =Empowerment; PsyCon=Psychological Contract Fulfillment; Commu=Communication;
Disjust= Distributive Justice; ProJust= Procedural Justice; IntJust= Interactional Justice; OCB=Organizational Citizenship
Behaviour; TurnInt=Turnover Intention.
2. *P < .05

Table 5.13
Results of Estimation of the Revised Structural Model

Paths	Structural Coefficients	S.E.	t-values
Empow → Disjust	.56*	.087	6.44
PsyCon → Disjust	.25*	.085	2.97
PsyCon → Projust	.23*	.065	3.43
Commu → Projust	.53*	.070	7.52
Commu → Intjust	.62*	.066	9.58
Disjust → OCB	.17*	.080	2.17
Disjust → TurnInt	-.28*	.072	-3.82
Projust → OCB	.20*	.10	2.02
Intjust → OCB	.20*	.083	2.33
Intjust → TurnInt	-.15*	.071	-2.12

Variables	Squared Multiple Correlations (R^2)
Disjust	.62
Projust	.52
Intjust	.41
OCB	.23
TurnInt	.14

Goodness-of-Fit Indices

Chi-square = 680.68   df = 279
RMSEA = .077
CFI = .92
IFI = .92
SRMSR= .071

Note: * t-value is significant at $p < .05$.

The results of the chi-square difference test between the originally hypothesized model and the modified model was statistically non-significant (Chi-square = 8.48, df = 3, $p < .01$). Additionally, there were no statistically significant differences between the two models in RMSEA, CFI, IFI or SRMSR. This suggests

that the additional paths presented in the hypothesized model do not provide

additional explanatory power and that the revised model is a more parsimonious and

better fitting model.

Overall, findings suggest that empowerment and psychological contract

fulfillment associate positively with distributive justice; psychological contract

fulfillment and communication associate positively with procedural justice; and

communication associates positively with interactional justice. Moreover,

distributive, procedural, and interactional justice associate positively with OCB;

distributive and interactional justice associate negatively with turnover intention.

5.3.4.2 Tests of Alternative Models

The revised model shows full mediation. Specifically, perceptions of

organizational justice fully mediate the effects of empowerment, psychological

contract fulfillment, and communication on OCB and turnover intention. This fully

mediated model was contrasted with four alternative models: three depicting partial

mediation and one depicting no mediation. Comparing the revised model against the

alternative models allows an assessment of which one best fits the data (Anderson, &

Gerbing, 1988).

In the first of the alternative models (A-1) two direct paths were added from

empowerment: one to OCB and the other to turnover intention (see Figure 5.2).

Specifically, empowerment may have motivational effects, directly resulting in

empowered behaviours that are not dependent on rewards (Robinson, Crino &

Gredendall, 2002; Thomas & Velthouse, 1990). For example, empowered employees

are likely to initiate new tasks as problems or opportunities arise, and show resilience to obstacles -- behaviours that parallel OCB (Robinson, et al., 2002). Similarly, empowerment can enhance the value of work for individuals (Fulford & Enz, 1995; Spreitzer, 1995) and reduce withdrawal from difficult situations (Ashforth, 1989). Together, this suggests that empowerment will associate negatively and directly with turnover intention (Koberg et al., 1999).

In alternative model two (A-2; Figure 5.3), two direct paths were added connecting psychological contract fulfillment with OCB and turnover intention. This modification is premised on the notion that employees who feel that their psychological contracts have been breached are more likely to withhold OCB and quit the organization than will employees who feel that their employer has fulfilled the terms of the psychological contract (Lo & Aryee, 2003; Turnley et al., 2003). Finally, in alternative model three (A-3; Figure 5.4), two direct paths were specified from communication to OCB and turnover intention premised on the notion that organizational communication can enhance employees' positive work attitudes and behaviours (Ashfold, et al., 1989; Varona, 1996)

Chi-Square tests did not demonstrate significant differences ($p < .05$) between the revised model and the alternative models. The chi-square difference between the revised model and A-1 was 4.37 (df = 2); the chi-square difference between the revised model and the A-2was 2.38 (df =2); and the chi-square difference between the revised model and A-3 was 3.36 (df = 2). Accordingly, adding these paths did not provide better fitting models to the data.

Alternative model 4 (A-4) shows no mediation (Figure 5.5). Here associations

between empowerment, communication, and psychological contract fulfillment and

OCB and turnover intention are not mediated by perceptions of organizational justice.

While previous studies (e.g. Schweiger & DeNisi, 1991; Thomas & Velthouse, 1990;

Turnley, et al., 2003) have suggested that empowerment, communication, and

psychological contract fulfillment are associated positively with OCB and turnover

intention, no study has tested the mediating role of perceptions of justice on these

associations. A Chi-Square difference test between A-4 and the revised hypothesized

model was statistically significant ($p < .01$), suggesting that the hypothesized

mediation model better fitted the data than did the non-mediation model (A-4).

Overall, the revised hypothesized model showed better fit to the data than did

any of the alternative models. The results of the comparisons between the revised

hypothesized model and the alternative models (A1- A4) are shown in Table 5.14.

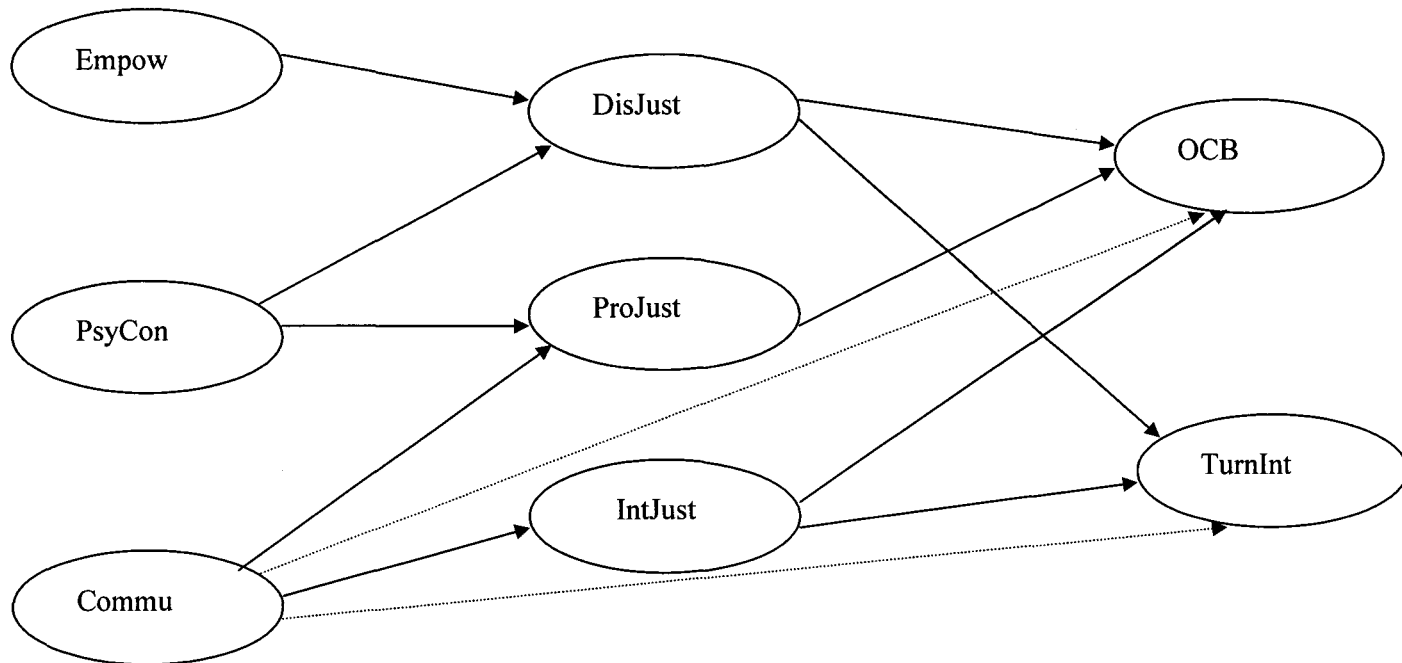**Figure 5.2: Alternative Model 1 (A-1)**
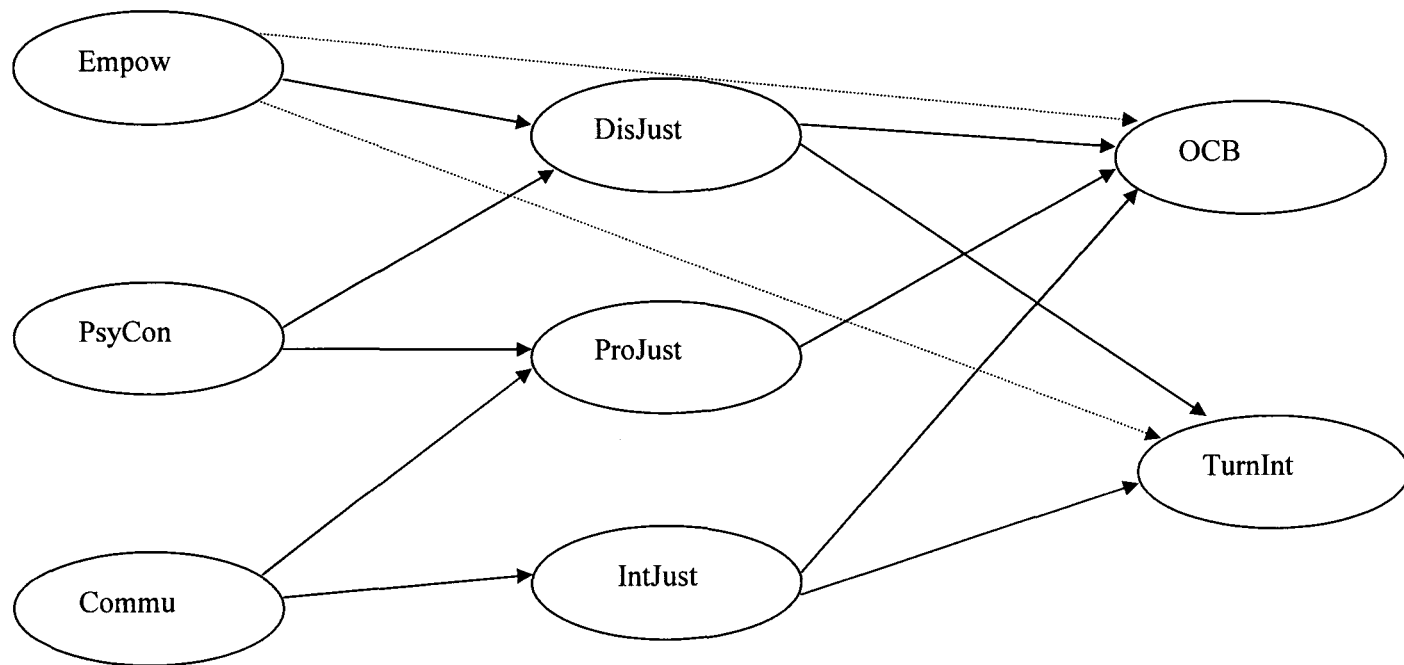
Note:
1. Empow =Empowerment; PsyCon=Psychological Contract Fulfillment; Commu=Communication;
Disjust= Distributive Justice; ProJust= Procedural Justice; IntJust= Interactional Justice; OCB=Organizational Citizenship
Behaviour; TurnInt=Turnover Intention.

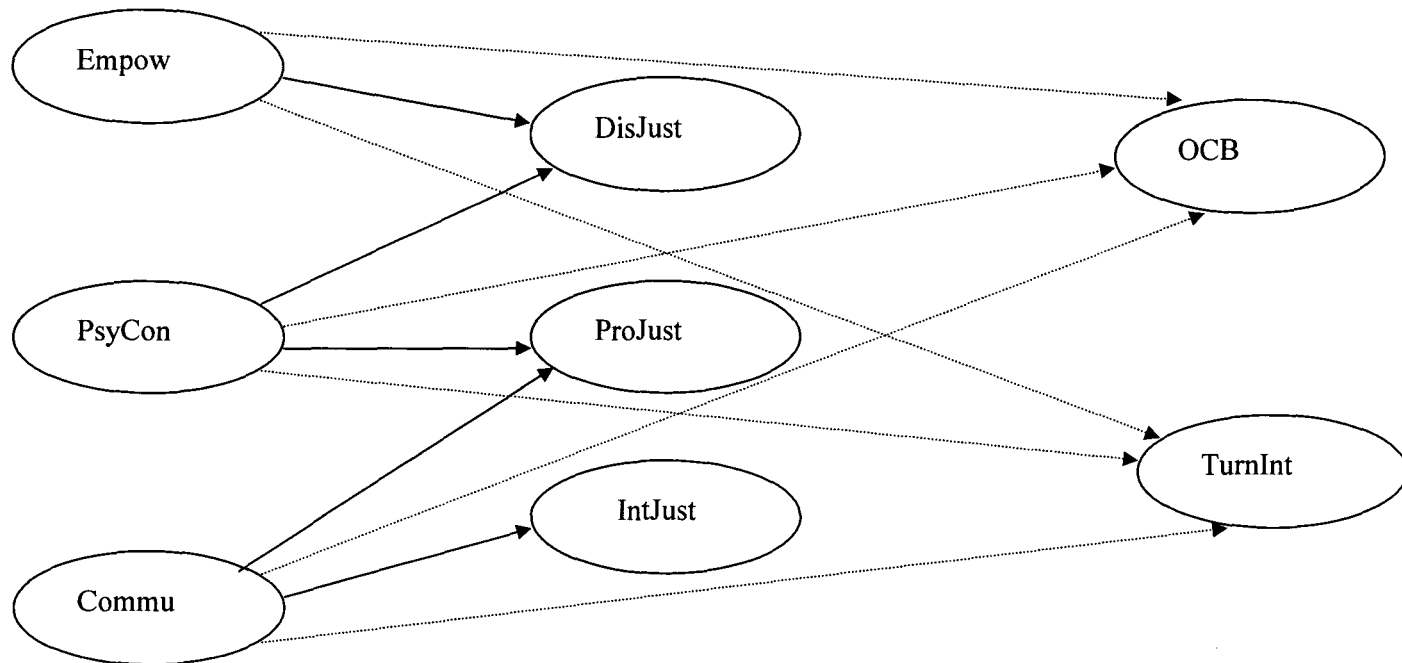**Figure 5.3: Alternative model 2 (A-2)**
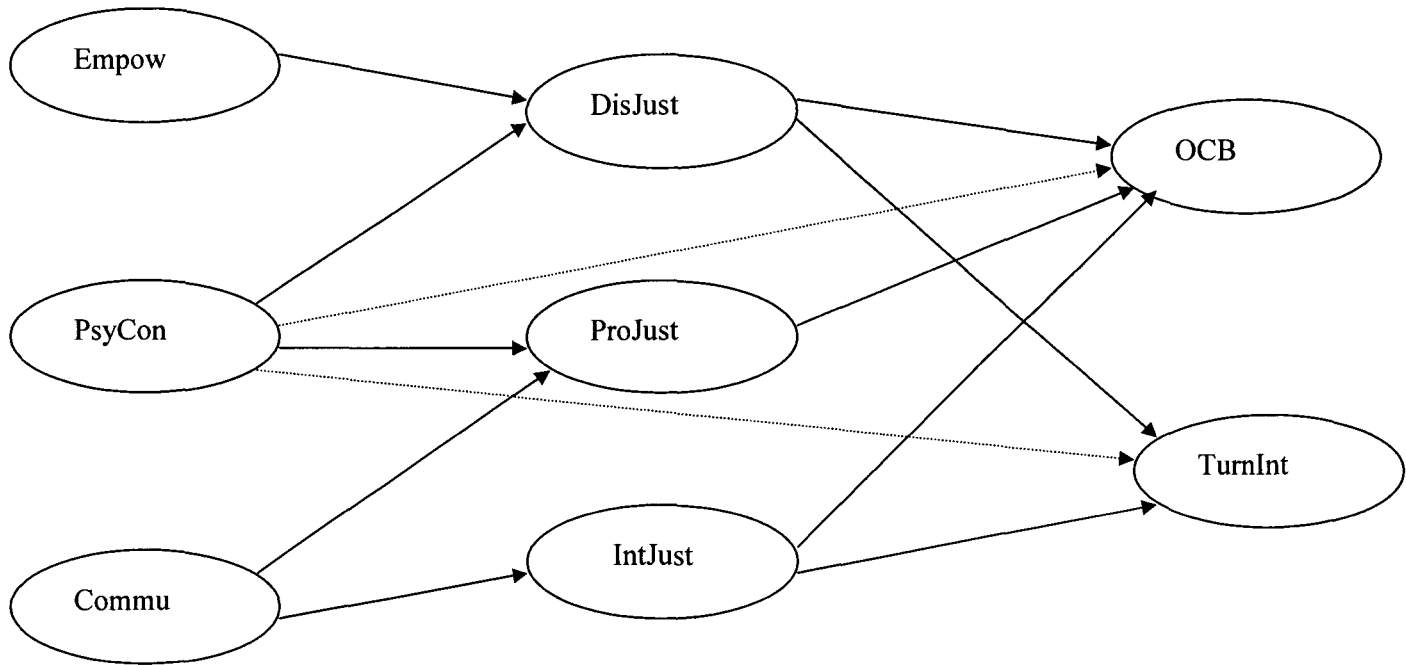
Note:

1. Empow =Empowerment; PsyCon=Psychological Contract Fulfillment; Commu=Communication;
Disjust= Distributive Justice; ProJust= Procedural Justice; IntJust= Interactional Justice; OCB=Organizational Citizenship
Behaviour; TurnInt=Turnover Intention.

Figure 5.4: Alternative Model 3 (A-3)

Note:
1. Empow =Empowerment; PsyCon=Psychological Contract Fulfillment; Commu=Communication;
Disjust= Distributive Justice; ProJust= Procedural Justice; IntJust= Interactional Justice; OCB=Organizational Citizenship
Behaviour; TurnInt=Turnover Intention.

Figure 5.5: Alternative Model 4 (A-4)

Note:
1. Empow =Empowerment; PsyCon=Psychological Contract Fulfillment; Commu=Communication; Disjust= Distributive Justice; ProJust= Procedural Justice; IntJust= Interactional Justice; OCB=Organizational Citizenship Behaviour; TurnInt=Turnover Intention.

Table 5.14
Comparison between the Revised Model and Alternative Models

Model	Chi-square	df	RMSEA	CFI	IFI	SRMSR	Chi-square difference test
Revised model	680.68	279	.077	.92	.92	.071	
Alternative model 1	677.32	277	.077	.92	.92	.067	4.37
Alternative model 2	676.31	277	.077	.92	.92	.067	2.38
Alternative model 3	678.30	277	.078	.92	.92	.070	3.36
Alternative model 4	689.48	278	.078	.92	.92	.069	8.80**

Note: ** t-value is significant at p < .01.

5.3.5 Tests of Hypotheses

The proposed model hypothesizes that perceived HR practices (empowerment, psychological contract breach, and communication) affect employees' perceptions of organizational justice, and that justice perceptions affect OCB and turnover intention. Each hypothesized association among the latent variables was tested individually and results are reported below.

5.3.5.1 Hypothesized Antecedents

H1 specified that empowerment associates positively with distributive justice perceptions. The standard path coefficient was positive (B = .56) and statistically significant (p < .05). H2 specified that empowerment associates positively with procedural justice perceptions and was not supported (B= .23, p. > .05). H3 specified that empowerment associates positively with perceived interactional justice and was not supported (p. > .05).

H4 and H5 specified that communication associates positively with perceptions of procedural and interactional justice respectively. Both were supported (procedural justice, B = .53, p < .05; interactional justice, B = .62, p < .05).

H6 and H7 specified that psychological contract fulfillment associates positively with perceptions of distributive justice and procedural justice respectively. Both received empirical support (distribute justice, B = .25, p < .05; procedural justice, B = .23, p < .05).

5.3.5.2 Hypothesized Consequences

H8, H9 and H10 specified positive associations between employees'

perceptions of distributive justice, procedural justice, and interactional justice and

OCB. Empirical support was found for all three hypotheses. The standard path

coefficients between perceptions of distributive, procedural, and interactional justice

and OCB were .17, .20, and .20 respectively (all p. < .05).

H11 and H13 specified negative associations between perceptions of

distributive and interactional justice and turnover intention. Both H11 and H13 were

supported. The standard path coefficient of -.28 and -.15 for distributive and

international justice and turnover intention respectively were statistically significant at

p < .05.

H12 specified that perceptions of procedural justice are negatively associated

with turnover intention and did not receive empirical support (p > .05).

5.4 Summary

The results demonstrated that most of the hypothesized relationships were

supported by the data. Overall, the hypothesized model, with slight modifications,

received greater support than did four alternative models.

Chapter 6 Discussion

6.1 Introduction

The present study investigated the relationships surrounding perceptions of organizational justice. This chapter presents a discussion of its findings and the practical implications that emerge from these findings. It also discusses the limitations of the study and offers recommendations for future research.

6.2 Discussion of Findings

A hypothesized model was tested depicting perceived HR practices (empowerment, psychological contract breach, and communication) as antecedents to organizational justice perceptions (distributive, procedural, and interactional), and OCB and turnover intention as consequences. The empirical results showed support for a slightly modified model, as illustrated in Figure 5.1.

Results revealed that distributive justice was predicted by empowerment and psychological contract fulfillment; procedural justice was predicted by psychological contract fulfillment and communication; and interactional justice was predicted by organizational communication. These findings add to our understanding of the factors contributing to perceptions of organizational justice in a number of ways.

First, there has been a growing interest in empowerment among researchers and practitioners in management (Donovan, 1994). It is presently recognized that empowerment can affect managerial and organizational effectiveness (Spreitzer,

1995). However, no research has linked empowerment with organizational justice. My study fills this void in the literature. Empowerment predicted distributive justice, suggesting that employees care about their power to make job-related decisions. Their evaluations of distributive fairness are influenced by their perceptions of such power. By showing the impact of empowerment on distributive justice perceptions, this research establishes an important link between the empowerment and organizational justice literatures.

While the hypothesized relationship between empowerment and distributive justice was supported, that between empowerment and each of the other two dimensions of organizational justice, procedural and interactional, was not. The psychology of justice may offer an explanation for these differential findings. According to Tyler (1994), there are two distinct psychological motives of justice: resource and relational. The resource motive suggests that that people have a desire to maximize their own resource gains in interaction with others (Walster, Walster, & Berscheid, 1978). Their judgements of distributive justice are responsive to their evaluations of the outcomes they receive, such as favorability of the outcomes. On the other hand, the relational motive suggests that procedural justice and interactional justice have a relational, not a resource, base. That is, people are concerned about their social status (Lind & Tyler, 1988). They search for information that communicates their positions within groups from decision-making procedures and the way authorities treat them. The information, such as treatment with dignity by

authorities, indicates that people have a respected position within the group and thus enhance their perceptions of procedural justice and interactional justice.

My research findings are consistent with Tyler's study (1994). Empowerment is the "process of enhancing feelings of *self-efficacy* among organizational members through the identification of conditions that foster powerlessness and through their removal by both formal organizational practices and information techniques of providing efficacy information" (Conger & Kanungo, 1988, p. 474). Thus, empowered employees appear to perceive their control / power over their own work as a *resource-based* gain rather than a *relational-based* gain. Therefore, empowerment was associated with perceptions of distributive justice but not with that of procedural justice and interactional justice.

Second, scholars in the area of psychological contracts have posited a relationship between psychological contract fulfillment and the concept of fairness. For instance, Robinson and Morrison (1995) suggest that unfulfilled promises that are implicit in a psychological contract deprive an employee of desired outcomes and thus are likely to be associated with perceptions of injustice. My findings provide empirical support for this suggested relationship. Furthermore, previous studies indicated the importance of psychological contracts in employee' attitudes and behaviours (e.g. Coyle-Shapiro & Kessler, 2000; Robinson & Rousseau, 1994). No research has yet investigated organizational justice as a possible mediator in their relationships. The results suggest that perceptions of organizational justice are responsible for the impact of psychological contract breach on organizational

100

outcomes. In other words, psychological contract breaches affect employees' OCB and turnover intention through organizational justice perceptions.

Third, as predicted, satisfaction with organizational communication associated positively with procedural justice and interactional justice. Employees who are most highly satisfied with organizational communication were likely to report higher levels of procedural justice and interactional justice. This finding extends our understanding of the role of communication in perceptions of organizational justice. It suggests that employees value information that extends beyond the justifications and explanations (the two aspects of interactional justice) provided by their supervisors on micro issues such as job-related decisions. Information on macro issues such as organizational changes is also important in employees' evaluations of fairness.

In terms of consequences of organizational justice, most of the findings are consistent with those of past research. Specifically, all three types of justice (distributive, procedural, and interactional) were positively associated to OCB, and two types of justice (distributive and interactional) were negatively associated to turnover intention. However, in contrast to previous studies, procedural justice did not relate significantly to turnover intention. Two possible reasons may explain this finding.

First, given their economic situation, Chinese workers are likely to care more about allocation outcomes (i.e. level of their pay or rewards) than procedures used in making allocation decisions. That is, pay or rewards are more salient for Chinese employees than procedures used to make the allocation. Second, "guanxi", which

translated into English means interpersonal relationships, is an important concept in

China (Yeung & Tung, 1996). Chinese have traditionally believed that obligations

based on "guanxi" mean much more than those based on rules and policies (Hui, Lee,

& Rousseau, 2004). Thus, Chinese tend to use "guanxi" as a basis for decision-

making (Farh, et al., 1997). Additionally, due to the lack of grievance systems in

Chinese organizations, employees cannot go over their immediate supervisors and

report their concerns to top management. As a result, "guanxi" between an employee

and the immediate supervisor takes on special importance in influencing employee

attitudes in Chinese organizations (Chen, 2003). When an employee perceives a bad

"guanxi" (interpersonal relationship) with the supervisor, he/she may think about

leaving the organization. Taken together, the findings suggest that distributive and

interactional justice, with their emphasis on allocation outcomes and "guanxi"

respectively, play a more important role in employees' turnover intention than do

perceptions of procedure justice.

Although empowerment has received increased attention as an effective way

to motivate employees in western organizations, no empirical studies have

investigated this concept within Chinese contexts. This research provides findings

that support using Spreitzer's (1995) empowerment measure in Chinese settings. The

results underscore the importance of empowerment in perceptions of distributive

justice among Chinese employees and reinforce the notion that the desire for personal

control is generalizable to non-western cultures (Xie, 1996). In addition, the findings

revealed that competency, the fourth dimension of empowerment, did not load on the

same factor as the other three dimensions (autonomy, impact, and self-determination).

Competency refers to an individual's belief in his or her capability to perform

activities (Gist, 1987). It may be viewed as a global efficacy, which is not specific to

work roles, whereas the other three dimensions refer more directly to an individual's

influence on his or her work (Ashforth, 1980), perhaps reflecting self-efficacy specific

to work.

In response to debate regarding dimensionality of organizational justice, the

findings clearly demonstrated that different dimensions of organizational justice had

different correlates and thus provide evidence of a three-factor model of

organizational justice (distributive, procedure, and interactional). In contrast to most

previous studies that examined only one or two types of justice, my research included

three dimensions of organizational justice in one study and measured them separately.

Thus, this approach provides a more comprehensive understanding of antecedents and

consequences of organizational justice, including understanding of similarities and

differences in this regard among its three dimensions.

Overall, my findings show that empowerment, psychological contract

fulfilment, and communication differentially predict perceptions of distributive,

procedural, and interactional justice, and that these perceptions differentially predict

employees' OCB and turnover intention. They add to our understanding of the factors

contributing to perceptions of organizational justice, an under-researched area in prior

research (Cohen-Charash & Spector, 2001). The findings also suggest a mechanism

for explaining the effects of perceived organizational practice (i.e. empowerment,

psychological contract breach, communication) on employees' OCB and turnover intention. That is, justice perceptions play a mediating role in relationships between perceived organizational practices and employees' attitudes and behaviours.

6.3 Practical Implications

My findings provide a number of practical implications for organizations. First, employees who perceived higher levels of empowerment reported higher levels of distributive justice, and, in turn, exhibited higher levels of OCB and lower turnover intention. This suggests that managers should encourage employees' involvement and job autonomy as a means to enhancing their sense of empowerment (Spreitzer, 1996). Empowered employees are then likely to hold higher perceptions of distributive justice, display more OCB and reduce their intentions to turnover.

Second, the study shows that employees who are more satisfied with organizational communication are likely to perceive higher levels of procedural justice and interactional justice, affecting in turn their OCB and turnover intention. This implies that managers should be proactive in promoting open and effective communication in the organization to enhance perceived organizational justice among employees. Management training programs designed to improve communication processes within the organization can prove to be beneficial.

Finally, the results suggest that if employees perceive that the promises implicit in the psychological contract are not being fulfilled, they are likely to perceive unfairness and withdraw their OCB or leave the organization. Therefore,

organizations should develop policies and procedures to ensure that they meet any

such expectations so as not to violate the psychological contract. They may also

benefit from implementing programs such as realistic job previews (RJPs) to provide

an accurate picture about the inducements that the organizations can offer so as to

minimize employees' misperceptions of psychological contract (Wanous, 1992).

In sum, given that perceived HR practices serve as signals to employees about

how they are treated by the organization (Wayne, Shore, & Liden, 1997),

organizations should monitor their employees' responses in the areas of

communication satisfaction, psychological contract fulfillment, and empowerment,

and amend their HR practices accordingly to enhance perceptions of organizational

justice, OCB and retention.

6.4 Limitations and Future Research Directions

My research examined organizational antecedents and consequences of

organizational justice in field settings. As with many empirical studies, this one has

certain methodological limitations.

A cross-sectional design was used which does not allow for an assessment of

causality. Thus, causal relationships among the independent and dependant variables

cannot be concluded. Longitudinal or experimental designs are required to confirm

the causality of the hypothesized relationships.

Although subordinates' OCB was evaluated by their immediate supervisors,

the other constructs examined here came from a single source – they were based on

employees' perceptions. Thus, there is a possibility that the relationships between the variables such as perceptions of organizational justice and turnover intention may be partly affected by common method variance. However, given the major objective of this research was to explore perceptual processes relating to organizational justice, reliance on single source perceptual data is appropriate for this type of research (Parker, 1998). Moreover, confirmatory factor analyses showed that no general factor accounted for most of the covariance in the independent and criterion variables. Therefore, the effect of common method variance on the findings should be minimal (Podsakoff & Organ, 1986).

The final limitation relates to its generalizability. Although this research was conducted in field settings, the sample was obtained from two Chinese organizations. It may not be representative of the more global working population. Accordingly, the findings should be treated as tentative and in need of replication in other organizations within and outside China.

Research directions at the conceptual level are also suggested. First, my research findings revealed several organizational antecedents of organizational justice (empowerment, psychological contract fulfillment, and communication). In order to develop a more complete nomological network of organizational justice perceptions, other potential antecedents should be explored, including leadership styles of supervisors. Second, a few studies have investigated the moderating effect of power distance on relationships between perceptions of organizational justice and organizational outcomes such as OCB (e.g. Farh, Early & Lin, 1997; Lee, Pillutla, &

Law, 2000). Chinese employees within a high power distance culture have been found to react less strongly to organizational justice compared to those within a low power distance culture. Along this research line, other moderators such as individualism that may affect relationships between organizational antecedents, organizational justice perceptions, and organizational outcomes need further research (Erdogan & Liden, 2006). Comparative research based on samples from different cultures should be promising in revealing the moderating role of cultural differences.

Finally, the present study examined organizational justice as a three-factor concept, composed of distributive, procedural, and interactional justice. However, some researchers have argued that interactional justice is comprised of two constructs: informational and interpersonal justice (e.g. Greenberg, 1993; Colquitt, et al., 2001). The *interpersonal* component is concerned with the manner (e.g. honesty, courtesy) in which people are treated during the decision-making process. The *informational* component is concerned with the amount and quality of information provided to an individual. Thus, a four-factor model of organizational justice (distributive, procedural, interpersonal, and informational) has been proposed (Greenberg, 1993). However, there are few empirical studies using this four-factor model. The status of interpersonal and informational justice needs to be further examined.

6.5 Conclusion

The purpose of the current research was to develop and test a model that represents organizational antecedents and consequences of perceptions of

organizational justice. Notwithstanding the limitations of its cross-sectional design, the study has achieved its purpose. The results provide empirical evidence of the impact of: (a) empowerment on distributive justice perceptions; (b) psychological contract breach on distributive and procedural justice; and (c) communication on procedural justice and interactional justice. The study also demonstrates that employees' perceptions of distributive, procedural justice and interactional justice positively predict employees' OCB and that perceptions of distributive and interactional justice contribute to turnover intention in Chinese contexts.

Overall, the results provide considerable insight into perceptions of organizational justice and suggest guidelines for managers on how to promote employees' perceptions of organizational justice and OCB, and reduce turnover intention in their organizations.

References

Adams, J. S. (1965). Inequity in social exchange. In L. Berkowithz (Ed.), Advances in experimental social psychology (Vol.2, pp.267-299). New York: Academic Press.

Ady, J. C. (1994). Minimizing threats to the validity of cross-cultural organization research. In R. L. Wiseman & R. Shuter (Eds.). Communicating in multinational organizations (pp.30-42). Thousand Oaks, CA: Sage Publications.

Alexander, S., & Ruderman, M. (1987). The role of procedural and distributive justice in organizational behaviour. Social Justice Research, 1,177-198.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103, 411-423.

Argyris, C. (1960). Understanding Organizational Behaviour, Dorsey, Homewood, IL.

Ashfold, S. J., Lee, C., & Bobko, P. (1989). Content, causes, and consequences of job insecurity: A theory-based measures and substantive test. Academy of Management Journal, 32, 803-829.

Ashforth, B. E. (1989). The experience of powerlessness in organizations. Organizational Behaviour and Human Decision Processes, 43, 207-242.

Ball, G. A., Trevino, L. K., & Sims, H. P., Jr. (1993). Justice and organizational punishment: Attitudinal outcomes of disciplinary events. Social Justice Research, 6, 39-67.

Bandura, A. (1986) Social Learning Theory. Englewood Cliffs, NJ: Prentice Hall.

Barney, J. (1995). Looking inside for competitive advantage. The Academy of Management Executive, 9, 49-61.

Bastien, D. T. (1987). Common patterns of behaviour and communication in corporate mergers and acquisitions. Human Resource Management, 26, 17-34.

Bentler, P. M. (1978). The interdependence of theory, methodology, and empirical data: Casual modeling as an approach to construct validation. In D. B. Kandel (Ed.), Longitudinal drug research (pp. 267-302). New York: Wiley.

Bentler, P. M. (1990). Comparative fit indices in structural models. Psychological Bulletin, 107, 238-246.

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structure. Psychological Bulletin, 88, 588-606.

Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural equation modeling. Sociological Methods and Research, 16, 78-117.

Bies, R. J. (1987). Beyond "Voice": The influence of decision-maker justification and sincerity on procedural fairness judgments. Representative Research in Social Psychology, 17, 3-14.

Bies, R. J., & Moag, J. F. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewiciki, B. H. Sheppard, & M. H. Bazerman (Eds.), Research on negotiations in organizations (Vol.1, pp.43-55). Greenwich, CT: JAI Press.

Bies, R. J., & Shapiro, D. C. (1987). Interactional fairness judgments: the influence of causal accounts. Social Justice Research, 1, 199-218.

Bies, R. J., & Shapiro, D. C. (1988). Voice and justification: Their influence on procedural fairness judgments. Academy of Management Journal, 31, 676-685.

Bies, R. J., & Shapiro, D. C., & Cummings, L. L. (1988). Causal accounts and managing organizational conflict: Is it enough to say it's not my fault? Communication Research, 15, 381-399.

Blau, P. (1964). Exchange and power in social life. New York: Wiley.

Blodgett, J. G, Hill, D. J., & Tax, S. S. (1997). The effects of distributive, procedural, and interactional justice on post-complaint behaviour. Journal of Retailing, Vol. 73, 185-210.

Bluedorn, A. (1982). A unified model of turnover from organizations. Human Relations, 35, 135-153.

Bobocel, D. R., & Holmvall, C. M. (2001). Are interactional justice and procedural justice different? Framing the debate. In S. Gilliland, D. Steiner, & D. Skarlicki (Eds.), Research in social issues in management: Theoretical and cultural perspectives on organizational justice, (Vol. 1, pp.85-108). Greenwich, CT: Information Age Publishing.

Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, W. C. Borman, &

Associates (Eds.). Personnel selection in organizations (pp. 71-98). San Francisco, CA: Jossey-Bass.

Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. Human Performance, 10, 99-109.

Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviour. Academy of Management Review, 11, 710-725.

Brief, A. P., & Nord, W. R. (1990). Meaning of Occupational Work. Lexington, MA: Lexington Books.

Brislin, R. W. (1980). Translation and content analysis of oral and written material. Handbook of Cross-Cultural Psychology, 80, 168-177.

Brockner, J., Ackerman, G., Greenberg, J., Gelfand, M. J., Francesco, A. M., Chen, Z. X., Leung, K, Bierbrauer, G., Gomez, C, Kirkman, B. L., & Sharpiro, D. (2001). Culture and procedural justice: The influence of power distance on reaction to voice. Journal of Experimental Social Psychology, 37, 300-315.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), Testing structural equation models (pp.136-162). Thousand Oaks, CA: Sage.

Byrne, B. M. (1998). Structural equation modeling with LISREL, PRELIS, and SIMPLES: Basic concepts, applications, and programming. Mahwah, NJ: Erlbaum.

Byrne, B. M. (2001). Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming. Mahwah, NJ: Lawrence Erlbaum Associates.

Calabrese, A. (2004). The evaluation of quality of organizational communications: A quantitative model. Knowledge and Process Management, 11, 47-67.

Cammann, C., Fichman, M., Jenkins, D., & Liesh, J. (1970). The Michigan Organizational Assessment Questionnaire. Unpublished manuscript, University of Michigan, Ann Arbor, Michigan.

Campbell, D. T., & Fishe, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod validity. American Bulletin, 56, 81-105.

Chang, H. C., & Holt, R. G. (1999). Debt-repaying mechanism in Chinese relationships: Exploration of the folk concepts of pao and human emotional debt. Research on Language and Social Interaction, 27, 351-387.

Chen, X. P. (2003). Leader behaviours and employee turnover. In A. S. Tsui and C. Lau (Eds.). The Management of Enterprises in the People's Republic of China. Kluwer Academic Publishers.

Child, J. (1994). Management in China during the age of reform. Cambridge: Cambridge University Press.

Chow, Z., & Shenkar, O. (1989). HR practices in the People's Republic of China. Personnel. December, pp.41-47.

Chu, K. F. (2003). An organizational culture and the empowerment for change in SMEs in the Hong Kong manufacturing industry. Journal of Material Technology, 139, 505-509.

Clampitt, P. G., & Downs, C. W.(1993). Employee perceptions of the relationship between communication and productivity. Journal of Business Communication, 30, 5-28.

Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. Organizational Behaviour and Human Decision Processes, 86, 2,278-321.

Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, C.O.L., & Ng, K. Y. (2001). Justice at the Millennium: A meta-analysis review of 25 years of organizational justice research, Journal of Applied Psychology, 86,3,425-445.

Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. Academy of Management Review, 13, 471-482.

Conlon, D. E. (1993). Some tests of the self-interest and group-value models of procedural justice: Evidence from an organizational appeal procedure. Academy of Management Journal, 36, 5, 1109-1124.

Cotton, J. L., & Tuttle, J. M. (1986). Employee turnover: A meta-analysis. Academy of Management Journal, 36, 1140-1157.

Coyle-Shapiro, J. & Kessler, I. (2000). Consequences of the psychological contract for the employment relationship: A large scale survey. Journal of Management Studies, 37, 903-930.

Coyle-Shapiro, J. (2002). A psychological contract perspective on organizational citizenship behaviour, 23, 927-946.

Crino M. D., & White, M. C. (1981). Satisfaction in communication: An examination of the Downs-Hazen measure. Psychological Reports, 49, 831-838.

Cronbach, L. J. & Meehl, P. E. (1955). Construct validity in psychological tests. Psychological Bulletin, 52, 281-302.

Cropanzano, R., & Ambrose, M. L. (2001). Procedural and distributive justice are more similar than you think: A monistic perspective and a research agenda. In J. Greenberg & R. Cropanzano (Eds.), Advances in organizational justice (pp. 119-151). Stanford, CA: Stanford University Press.

Cropanzano, R., & Greenberg, J. (1997). Progress in organizational justice: Tunneling through the maze. In C. L. Cooper & I. T. Robertson (Eds.), International review of industrial and organizational psychology (Vol. 12, pp.317-372). New York: Wiley.

Cropanzano, R., Prehar, C. A., & Chen, P. Y. (2002). Using social exchange theory to distinguish procedural from interactional justice. Group and Organizational Management, 27, 324-351.

Cropanzano, R., Rupp, D. E., Mohler, C. J., & Schminke, M. (2001). Three roads to organizational justice. In G. R. Ferris (Eds.), Research in Personnel and Human Resources Management (Vol. 20, pp.1-113). Greenwich, CT: JAI Press.

Crosby, F. (1976). A model of egoistical relative deprivation. Psychological Review, 83, 85-113.

Dabos, G. E., & Rousseau, D. M. (2004). Mutuality and reciprocity in the psychological contracts of employees and employers. Journal of Applied Psychology, 89, 52-72.

Dailey, R. C., & Kirk, D. J. (1992). Distributive and procedural justice as antecedents of job dissatisfaction and intent to turnover. Human relations, 45, 305-317.

Deci, E. L., Gonnell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. Journal of Applied Psychology, 74, 580-590.

Dempster, A. P., Laird, N. M., & Rubin, D. B. (1977). Maximum likelihood from incomplete data via the EM algorithm. Journal of the Royal Statistical Society, Series, B, 39, 1-38.

Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive behaviour? Journal of Social Issues, 31, 137-149.

Donovan, M. (1994). The power of flexibility. Business Horizons, 37, 43-46.

Downs, C. W., & Hazen, M. D. (1977). A factor analytics study of communication satisfaction. Journal of Business Communication, 14, 63-74.

Drucker, P. F. (1988). The coming of the new organization. Harvard Business Review, 66, 45-53.

Dulebohn, J. H., & Martocchio, J. J. (1998). Employee perceptions of the fairness of work incentive pay plans. Journal of Management, 24, 469-488.

Economist (Apr., 2005). China's people problem. http://www.economist.com/business. html.

Erdogan, B., & Liden, R. C. (2006). Collevtivism as a moderator of responses to organizational justice: Implications for leader-member exchange and ingratiation, Journal of Organizational Behaviour, 27, 1-18

Farh, J-L, Early, P. C., Lin, S. (1997). Impetus for action: A cultural analysis of justice and organizational behaviour in Chinese society. Administrative Science Quarterly, 42, 421-444.

Farh, J-L, Zhong, C-B, Organ, D. W. (2004). Organizational citizenship behaviour in the People's Republic of China. Organizational Science, 15, 241-253.

Feldman, D. C. (1976). A contingency theory of socialization. Administrative Science Quarterly, 21, 433-452.

Fisher, B.A. (1978). Perspectives on human communication. New York: Macmillan.

Folger, R. (1977). Distributive and procedural justice: Combined impact of "Voice" and improvement on experienced inequity. Journal of Personality and Social Psychology, 35, 108-119.

Folger, R. (1986). Rethinking equity theory: A referent cognitions model. In H. W. Bierhoff, R.L. Cohen, & J. Greenberg (Eds.). Justice in social relations: 145-162. New York: Plenum.

Folger, R., & Cropanzano, R. (1998). Organizational justice and human resource management. Thousand Oaks, CA: Sage.

Folger, R., & Greenberg, J. (1985). Procedural justice: An interpretive analysis of personnel systems. In K. Rowland, & G. Gerris (Eds.), Research in personnel and human resources management: Vol.3, 141-183. Greenwich, CT: JAI Press.

Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. Academy of Management Journal, 32,115-130.

Folger, R., Konovsky, M. A., & Cropanzano, R. (1992). A due process metaphor for performance appraisal. Research in Organizational Behaviour, 14, 129-177.

Ford, R. C., & Fottler, M. D. (1995). Empowerment: A matter of degree. Executive, 9, 21-28.

Fryxell, G. E., & Gordon, M. E. (1989). Workplace justice and job satisfaction as predictors of satisfaction with union and management. Academy of Management Journal, 32, 851-866.

Fulford, M. D., & Enz, C. A. (1995). The impact of empowerment on service employees. Journal of Managerial Issues, &, 161-175.

Fuller, J. B., & Hester, K. (2001). A closer look at the relationship between justice perceptions and union participation. Journal of Applied Psychology, 86, 1096-1105.

George, J. M. (1990). Personality, affect, and behaviour in groups. Journal of Applied Psychology, 75, 107-116.

George, J. M. (1991). State or trait: Effects of positive mood on prosocial behaviours at work. Journal of Applied Psychology, 76, 299-307.

George, J. M., & Bettenhausen, K. (1990). Understanding prosocial behaviour, sales performance, and turnover: A group-level analysis in a service context. Journal of Applied Psychology, 76, 299-307.

George, J. M., & Brief, A. P. (1992). Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship. Psychological Bulletin, 112, 310-329.

George, J. M., & Jone, G. R. (1997). Organizational spontaneity in context. Human Performance, 10,153-170.

Gist, M. E. (1987) Self-efficacy: Implications for organizational behaviour and human resources management. Academy of Management Review, 12, 472-85.

Goldhaber, G. M. (1990). Organizational Communication. IA: Wm. C. Brown.

Goldhaber, G. M. Porter, D. T., Yates, M. P., & Lesniak, R. (1978). Organizational communication: 1978 (state of the art). Human Communication Research, 5, 76-96.

Goodman, P. S. (1974). An examination of referents used in the evaluation of pay. Organizational Behaviour and Human Performance, 12, 170-195.

Gopinath, C., & Becker, T. E. (2000). Communication, procedural justice, and employee attitudes: Relationships under conditions of divestiture. Journal of Management, 26, 63-83.

Graen G. B., & Schiemann, W. (1978). Leader-member agreement: A vertical dyad linkage approach. Journal of Applied Psychology, 63, 206-212.

Granham, J. W., & Donaldson, S. I. (1993). Evaluating interventions with differential attrition: The importance of nonresponse mechanisms and use of follow-up data. Journal of Applied Psychology, 78, 119-128.

Gray, J., & Laidlaw, H. (2004). Improving the measurement of communication satisfaction. Management. Communication Quarterly, 17, 425-448.

Greenberg, J. (1982). Approaching equity and avoiding inequity in groups and organizations. In J. Greenberg & R. L. Cohen (Eds.), Equity and justice in social behaviour: 389-435. New York: Academic Press.

Greenberg, J. (1990). Organizational justice: Yesterday, today, and tomorrow. Journal of Management, 16, 399-432.

Greenberg, J. (1993). The social side of fairness: Interpersonal and informational classes of organizational justice. In R. Cropanzano (Ed.), Justice in the workplace: Approaching fairness in human resource management (pp.79-103). Hillsdale, NJ: Erlbaum.

Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. Journal of Management, 26, 463-488.

Hackman, J. R., & Oldham, G. R. (1980). Work Redesign. Reading, MA: Addision-Wesley.

Heller, F., Pusic, E., Strauss, G., & Wilpert, B. (1998). Organizational participation: Myth and Reality. Oxford: Oxford University Press.

Hofstede, G. (1980). Culture's consequences. Beverly Hills, CA: Sage.

Hogg, M. A., & Abram, D. (1988). Social identifications: A social psychological of intergroup relations. New York: Routledge.

Hom, P. W., Griffeth, R. W., & Sellaro, L. (1984). The validity of Mobley's (1977) model of employee turnover. Organizational Behaviour and Human Performance, 1984, 34, 141-174.

Hoyle, R. H. & Panter, A. T. (1995). Writing about structural equation models. In R. H. Hoyle (Ed.), Structural Equation Modelling: Concepts, issues, and application. Thousand Oaks, CA: Sage Publication.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1-55.

Hui, C., Lee, C., & Rousseau, D. M. (2004). Psychological contract and organizational citizenship behaviour in China: Investigating generalizability and Instrumentality. Journal of Applied Psychology, 89, 311-321.

Hui, M. K., Au, K., & Fock, H. (2004). Empowerment effects across cultures. Journal of International Business Studies, 35, 46-60.

Hunt, O., Tourish, D., & Hargie, W. (2000). The communication experiences of education managers: Identifying strength, weaknesses and critical incidents. The International Journal of Educational Management, 14, 120-129.

Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. Academy of Management Journal, 38, 635-672.

Joreskog, K. G., & Sorbom, D. (1989). LISREL 7: A guide to the program and applicants (2nd ed.). Chicago: SPSS.

Kanfer, R., Sawuer, J. E., Early, P. C., & Lind, E. A. (1987). Fairness and participation in evaluation procedures: Effects on task attitudes and performance. Social Justice Research, 1, 235-249.

Kanter, R. M. (1983). The change masters. New York: Simon & Schuster.

Katz, D. (1964). The motivational basis of organizational behaviour. Behavioural Science, 9, 131-146.

Katz, D., & Kahn, R. L. (1978). The Social Psychology of Organizations. New York: John Wiley, & Sons, Inc.

Kelloway, E. K. (1998). Using LISREL for structural equation modeling: A researcher's guide. Thousand Oaks, CA: Sage.

Kernan, M. C., & Hanges, P. J. (2002). Survivor reactions to reorganization: Antecedents and consequences of procedural, interpersonal, and informational justice. Journal of Applied Psychology, 87, 916-928.

Koberg, C. S., Boss, R. W., Senjem, J. C., & Goodman, E. A. (1999). Antecedents and outcomes of empowerment. Group and Organization Management, 24, 71-91.

Konovsky, M. A. (2000). Understanding procedural justice and its impact on business organizations. Journal of Management, 26, 3, 489-511.

Konovsky, M. A., & Cropanzano, R. (1991). Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance. Journal of Applied Psychology, 76, 698-707.

Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behaviour and social exchange. Academy of Management Journal, 37, 656-669.

Krone, K. J., Jablin, F. M., & Putnam, L. L. (1987). Communication theory and organizational communication: Multiple perspectives. In Jablin F., Putnam, L., Roberts, K., Porter, L. (Eds.), Handbook of Organizational Communication: An Interdisciplinary Perspective (pp. 18-40). Newbury Park, CA.: Sage.

Lam, S. S. K, Hui, C., & law, K. S. (1999). Organizational citizenship behaviour: Comparing perspectives of supervisors and subordinates across four international samples. Journal of Applied Psychology. 84, 594-601.

Lee, C. (1995). Prosoical organizational behaviours: The roles of workplace justice, achievement striving, and pay satisfaction. Journal of Business and Psychology, 10, 197-206.

Lee, C., Law, K. S., & Bobko, P. (1999). The importance of justice perceptions on pay effectiveness: A two-year study of a skill-based pay plan. Journal of Management, 25, 851-873.

Lee, C., Pillutla, M., & Law, K. S. (2000). Power-distance, gender, and organizational justice. Journal of Management, 26, 685-704.

Lee, C., Tinsley, C. H. and Chen, Z. X. (2000). Psychological normative contracts of work group members in the U. S. and Hong Kong. In D. M. Rousseau & R. Schalk (Eds.) Psychological contracts in employment: Cross-cultural perspective (pp. 87-103). Thousand Oaks, CA: Sage.

LePine, J. A, Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behaviour: A critical review and meta-analysis. Journal of Applied Psychology, 87, 52-65.

Leventhal, G. S. (1976). Fairness in social relationships. In J. W. Thibaut, J. T. Spence, & R. C. Carson (Eds.). Contemporary topics in social psychology: 211-239. Morristown, NJ: General Learning Press.

Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness insocial relationships. In K. Gergen, M. Greenberg, & R. Willis (Eds.), Social exchange: Advances in theory and research (pp.27-55). New York: Plenum.

Leventhal, G. S., Karuza, J., & Fry, W. R. (1980). Beyond fairness: A theory of allocation preferences. In G. Mikula (Ed.), Justice and social interaction (pp.167-218). New York: Springer-Verlag.

Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships and work outcomes. Journal of Applied Psychology, 85, 407-416.

Lind, E. A. (1997). Litigation and claiming in organizations: Antisocial behaviour or quest for justice? In R.A. Giacalone & J. Greenberg (Eds). Antisocial behaviour in organizations: 150-171. Thousand Oaks, CA: Sage.

Lind, E. A., Kanfer, R., & Earley, P. C. (1990). Voice, control, and procedural justice: Instrumental and noninstrumental concerns in fairness judgments. Journal of Personality & Social Psychology, 59, 952-959.

Lind, E. A., Kulik, C. T., Ambrose, M.A., & de Vera Park, M. V. (1993). Individual and corporate dispute resolution: Using procedural fairness as a decision heuristic. Administrative Science Quarterly, 38, 224-251.

Lind, E. A., & Tyler, T.R. (1988). The social psychology of procedural justice. New York: Plenum.

Little, R. J. A., & Rubin, D. B. (1987). Statistical analysis with missing data. New York: John Wiley & Sons.

Little, R. J. A., & Rubin, D. B. (1990). The analysis of social science data with missing values. In J. Fox & J. S. Long (Eds), Modern methods of data analysis, Sage Publications, Newbury Park California.

Lo, S., & Aryee, S. (2003). Psychological contract breach in a Chinese context: An integrative approach. Journal of Management Studies, 40, 1005-1020.

London, M. (1993). Relationships between career motivation, empowerment and support for career development. Journal of Occupational and Organizational Psychology, 66, 55-69.

March, J. G., & Simon, H. A. (1958). Organizations. New York: Wiley.

Martin, T. N. (1979). A contextual model of employee turnover intentions. Academy of Management Journal, 22, 313-324.

Masterson, S. S., Lewis, K. Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedural and treatment on work relationships. Academy of Management Journal, 43, 738-748.

Maynatt, P. G., Omundson, J. S., Schroeder, R. G., & Stevens, M. B. (1997). The impact of Anglo and Hispanic, gender, position, personality and job satisfaction on turnover intentions: A path analytic investigation. Critical Perspective on Accounting, 8, 657-683.

McFarlin, D. B., & Sweeney, P. D. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational commitment. Psychological Bulletin, 108, 172-195.

Menon, S. T. (2001). Employee empowerment: An integrative psychological approach. Applied Psychology-An International Review, 50, 153-180.

Mobley, W. H. (1982). Some unanswered questions in turnover and withdrawal research. Academy of Management Review, 7, 111-116.

Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. Psychological Bulletin, 86, 493-522.

Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship? Journal of Applied Psychology, 76, 845-855.

Moorman, R. H., & Byrne, Z. S. (2005). What is the role of justice in promoting organizational citizenship behaviour? In Greenberg, J. & Colquitt, J. A (Eds.), Handbook of Organizational Justice: Fundamental Questions about Fairness in the Workplace. Lawrence Erlbaum Associates, P. 355-380.

Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. Academy of Management Review, 22, 226-256.

Mowday, R. T. (1987). Equity theory predictions of behaviour in organizations. In R. M. Steers & L. W. Porter (Eds.), Motivation and workplace behaviour (4th ed.): 89-110. New York: McGraw-Hill.

Muchinshy, P. M. (1977). Organizational communication: Relationships to organizational climate and job satisfaction. Academy of Management Journal, 20, 592-607.

Muller, R. O. (1997). Structural equation modeling: Back to basics. Structural Equation Modeling, 4, 353-369.

Netemeyer, R. G., Boles, J. S., McKee, D. O., & McMurrian, R. (1997). An investigation into the antecedents of organizational citizenship behaviours: Achievement orientation and personality. Journal of Business and Psychology, 13, 263-279.

Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behaviour. Academy of Management Journal, 36, 527-556.

Nunnally, J. (1978). Psychometric Theory (2nd ed.). New York: McGraw-Hill.

O'Reilly, C., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behaviour. Journal of Applied Psychology, 71, 492-499.

Organ, D. W. (1988). Organizational citizenship behaviour: The good soldier syndrome. Lexington, MA.: Lexington Books.

Organ, D. W. (1990). The motivational basis of organizational citizenship behaviour. In B. Staw & L. L. Cummings (Eds.). Research in organizational behaviour (Vol. 12, pp. 43-72). Greenwich, CT: JAI Press.

Organ, D. W. (1997). Organizational citizenship behaviour: It's construct clean-up time. Human Performance, 10, 85-97.

Organ, D. W., & Konovsky, M. (1989). Cognitive versus affective determinants of organizational citizenship behaviour. Journal of Applied Psychology, 74, 157-164.

Organ, D. W., & Ryan, (1995). A meta-analysis review of attitudinal and dispositional predictor of OCB. Personnel Psychology, 48, 775-802.

Ozer, E. M., & Bandura, A. (1990). Mechanisms governing empowerment effects: a self-efficacy analysis. Journal of Personality and Social Psychology, 58, 472-486.

Pincus, J. D. (1986). Communication satisfaction, job satisfaction, and job performance. Human Communication Research, 12 (3), 395-419.

Ployhart, R. E., Ryan, A. M., & Bennett, M. (1999). Explanations for selection decisions: Applicants' reactions to informational and sensitivity features of explanations. Journal of Applied Psychology, 84, 87-106.

Podsakoff, P. M., Ahearne, M., & Mackenzie, S. B. (1997). Organizational citizenship behaviour and the quantity and quality of work group performance. Journal of Applied Psychology, 82, 262-270.

Podsakoff, P. M., & Mackenzie, S. B. (1994). Organizational citizenship behaviours and sales unit effectiveness. Journal of Marketing Research, 31, 351-363.

Podsakoff, P. M., MacKenzie, S. B., Ahearne, M., & Bommer, W. H. (1995). Searching for a needle in haystack: Trying to identify the illusive moderators of leadership behaviours. Journal of Management, 21, 422-470.

Podsakoff, P. M., MacKenzie, S. B., Bachrach, D. G. (2000). Organizational citizenship behaviour: A critical review of the theoretical and empirical literature and suggestions for future research. Journal of Management, 26, 513-563.

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviours and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviours. Leadership Quarterly, 1, 107-142.

Podsakoff, P. M., & Organ, D. W. (1986). Self reports in organizational research: Problems and prospects. Journal of Management, 12, 531-544.

Price, J. L., & Mueller, C. W. (1986). Handbook of organizational measurement. Marshfield, MA: Pitman.

Putti, J. M., Aryee, S., & Phua, J. (1990). Communication relationship satisfaction and organizational commitment. Group and Organizational Studies, 15, 44-52.

Reis, H. T. (1986). The nature of the justice motive. In J. C. Masters & W. P. Smith (Eds.), Social comparison, social justice, and relative deprivation (pp. 131-150). Hillsdale, NJ: Erlbaum.

Robinson, S. L. (1996). Trust and breach of the psychological contract. Administrative Science Quarterly, 41, 574-599.

Robinson, T. L., Crino, M. D., & Fredendall, L. D. (2002). An integrative model of the empowerment process. Human Resource Management Review, 12, 419-443.

Robinson, S. L., & Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longitudinal study. Academy of Management Journal, 37, 137-152.

Robinson, S. L., & Morrison, E. W. (1995). Organizational citizenship behaviour: A psychological contract perspective. Journal of Organizational Behaviour, 16, 289-298.

Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. Journal of Organizational Behaviour, 15, 245-259.

Roth, P. L. (1994). Missing data: A conceptual review for applied psychologists. Personnel Psychology, 47, 537-560.

Rothstein, L. R. (1995). The empowerment effort that came done. Harvard Business Review, 73, 20-31.

Rousseau, D. M. (1989). Psychological and implied contracts in organizations. Employee Responsibilities and Rights Journal, 2, 121-139.

Rousseau, D. M. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. Journal of Organizational Behaviour, 11, 389-400.

Rousseau, D. M., & Anton, R. J. (1988). Fairness and implied contract obligations in job termination: A policy capturing study. Human Performance, 1, 273-289.

Rousseau, D. M., & Anton, R. J. (1991). Fairness and implied contract obligations in job termination: The role of remedies, social accounts, and procedural justice. Journal of Organizational Behaviour, 11, 389-400.

Rousseau, D. M., & Greller, M. M. (1994). Human Resource practices: Administrative contract makers, Human Resource Management, 33, 385-401.

Rousseau, D. M., & McLean Parks, J. M. (1993). The contract of individuals and organizations. In L. L. Cummings, & B. M. Stow (Eds.). Research in organizational behaviour, 15, 1-47. Greewich, CT: JAI Press.

Rousseau, D. M., & Tijoriwala, S. A. (1998). Assessing psychological contracts: Issues, alternatives and measures. Journal of Organizational Behaviour, 19, 679-695.

Rupp, D. E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. Organizational Behaviour and Human Decision Processes, 89, 925-946.

Salancik, G., & Meindel,J. (1984). Corporate attributions as strategic illusions of management control. Administrative Science Quarterly, 29, 238-254.

Schafer, J. L. & Olsen, M. K. (1998). Multiple imputation for multivariate missing-data problems: A data analyst's perspective. Multivariate Behavioural Research, 33, 545-571.

Schein, E. H. (1965). Organizational Psychology. Englewood Cliffs. NJ: Prentice Hall.

Schuler, R. S., Dolan, S. L., & Jackson, S. (2001). Trends and emerging issues in human resource management: Global and transcultural perspectives-introduction. International Journal of Manpower, 22, 195-197.

Schweiger, D. M., & DeNisi, A. S. (1991). Communication with employees following a merger: A Longitudinal field experiment. Academy of Management Journal, 34, 110-135.

Sims, R. R. (1994). Human resource management's role in clarifying the new psychological contract. Human Resource Management, 33, 373-382.

Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: the roles of distributive, procedural, and interactional justice. Journal of Applied Psychology, 82, 434-443.

Skarlicki, D. P., & Latham, G. P. (1996). Increasing citizenship behaviour within a labor union: A test of organizational justice theory. Journal of Management Journal, 42, 100-108.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: dimensions, measurement, and validation. Academy of Management Journal, 38, 1442-65.

Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. Academy of Management Journal, 39, 483-504.

Spreitzer, G. M., Kizilos, M. A., & Nason, S. W. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness, satisfaction, and strain. Journal of Management, 23, 679-704.

Steel, R. P., & Ovalle, N. K. (1984). A review and Meta-analysis of research on the relationship between behavioural intentions and employee turnover. Journal of Applied Psychology, 69, 673-686.

Sweeney, P. D., & McFarlin, D. B. (1993). Workers' evaluation of the "end" and the "means": An examination of four models of distributive and procedural justice. Organizational Behaviour and Human Decision Processes, 55, 23-40.

Tabachnick, B. G., & Fidell, L. S. (2001). Using multivariate statistics, New York: Harper Collins College Publishers.

Thibaut, J., & Walker, L. (1975). Procedural justice: A psychological analysis. Hillsdale, NJ: Erlbaum.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. Academy of Management Review, 15, 666-81.

Thompson, B., & Vacha-Haase, T. (2000). Psychometrics is datametrics: The reliable. Educational and Psychological Measurement, 60, 174-195.

Thorlakson, A., & Murray, R. P. (1996). An empirical study of empowerment in the workplace. Group and Organization Management, 21, 67-83.

Tsui, A. S., Ashford, S. J., St. Clair, L., & Xin, C. (1995). Dealing with discrepant expectations: Response strategies and managerial effectiveness. Academy of Management Journal, 38, 1515-1540

Tsui, A., & Lau, C. (2002), "Research on the management of enterprises in the people's republic of China". In A. Tsui & C. Lau (Eds.). Management of Enterprises in the People's Republic of China. Kluwer Academic Press.

Turner, J. C. (1987). Rediscovering the social group: A self-categorization theory. New York: Basil Blackwell.

Turnley, W. H., Bolino, M. C., Lester, S. W., & Bloodgood, J. M. (2003). The impact of psychological contract fulfillment on the performance of In-role and organizational citizenship behaviours. Journal of Management, 29, 187-206.

Turnley, W. H., & Feldman, D. C. (1999). The impact of psychological contract violations on exit, loyalty and neglect. Human Relations, 52, 895-922.

Turnley, W. H., & Feldman, D. C. (2000). Re-examining the effects of psychological contract violations: Unmet expectations and job dissatisfaction as mediators. Journal of Organizational Behaviour, 21-25-42.

Tyler, T. R. (1987). Conditions leading to value-expressive effects in judgments of procedural justice: A test of four models. Journal of Personality and Social Psychology, 52, 333-344.

Tyler, T. R. (1989). The psychology of procedural justice: A test of the group-value model. Journal of Personality and Social Psychology, 57, 830-838.

Tyler, T. R. (1994). Psychological models of the justice motive: Antecedents of distributive and procedural justice. Journal of Personality and Social Psychology, 67, 850-863.

Tyler, T. R., & Bies, R. J. (1990). Beyond formal procedures: The interpersonal context of procedural justice. In J. S. Carroll (Eds.), Applied social psychology and organizational settings (pp.77-98). Hillsdale, NJ: Erlbaum.

Tyler, T. R., & Blader, S. (2000). Cooperation in groups: Procedural justice, social identity, and behavioral engagement. Philadelphia, Pa.: Psychology Press.

Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 25, pp. 115-191). San Diego, CA: Academic Press.

Tyler, T. R., Lind, E. A, & Huo, Y. (1995). Culture, ethnicity, and authority: Social categorization and social orientation effects on the psychology of legitimacy. University of California working paper.

Tylor, M. S., Tracy, K. B., Renard, M. K., Harrison, J. K., & Carroll, S. J. (1995). Due process in performance appraisal: A quasi-experiment in procedural justice. Administrative Science Quarterly, 40, 495-523.

Tzafrir, S. S., Harel, T. L. G., Baruch, Y., & Dolan, S. L. (2004). The consequences of emerging HRM practices for employees' trust in their managers. Personnel Review, 33, 628-647.

Van Dyne, L., Cumming, L. L., & Mclean Parks, J. M. (1995). Extra-role behaviours: In pursuit of construct and definitional clarity (A bridge over muddied waters). In L. L. Cummings & B. M. Staw (Eds.), Research in organizational behaviour (Vol. 17, pp. 215-285). Greenwich, CT: JAI Press.

Van Maanen, J. (1976). Breaking in: Socialization to work. In R. Dubin (Eds.). Handbook of work, organization, and society (pp. 67-130). Chicago: Rand McNally,

Varona, F. (1996). Relationship between communication satisfaction and organizational commitment three Guatemalan organizations. Journal of Business Communication, 33, 111-140.

Walker, L., Lind, E. A., & Thibaut, J. (1979). The relation between procedural justice and distributive justice. Virginia Law Review, 65: 1401-1420.

Walster, E., Walster, G, W., & Berscheid, E. (1978). Equity: Theory and research. Boston: Allyn, & Bason.

Wanous, J. P. (1977). Organizational entry: Newcomers moving from outside to inside. Psychological Bulletin, 84, 601-618.

Warner, M. (1995). The management of human resources in Chinese industry. New York: St. Martin's press.

Wayman, J. C. (2003). Multiple Imputation for Missing Data: What is it and how can I use it? Paper presented at the 2003 Annual Meeting of the American Educational Research Association, Chicago, IL.

Wayne, S. J., Shore, L.M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. Academy of Management Journal, 40: 82-111

Werbel, J. D., & Bedeian, G. (1989). Intended turnover as a function of age and job performance. Journal of Organizational Behaviour, 10, 275-281.

Williams, R. (1993). Culture is ordinary. In A. Gary & J. McGuigan (Eds.), Studying culture: An introductory reader (pp. 5-14). London: Edward Arnold.

Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. Journal of Management, 18, 295-320.

Xie, J. L. (1996). Karasek's model in the People's Republic of China: Effects of job demands, control, and individual differences. Academy of Management Journal, 39, 1594-1618.

Yen, H. R., & Niehoff, B. P. (2004). Organizational citizenship behaviours and organizational effectiveness: Examining relationships in Taiwanese Banks, 34, 1617-1637.

Yeung, I. Y. M., & Tung, R. L. (1996). Achieving business success in Confucian societies: the importance of guanxi (connections). Organizational Dynamics, Autumn, 54-65.

Zhu, C. J. (2005). Human resource management in China: Past, current and future HR practices in the industrial sector. New York: RoutledgeCurzon.

Zimmerman, M. A. (1990). Taking aim on empowerment research: On the distinction between individual and psychological conceptions. American Journal of Community Psychology, 16, 725-750.

Zimmerman, M. A., Israel, B. A., Schulz, A., & Checkoway, B. (1992). Further explorations in empowerment theory: An empirical analysis of psychological empowerment. American Journal of Community Psychology, 20(6), 707-727.

Appendix A

Empowerment Scale

The following statements relate to your feelings about the organization that you are working for, please indicate the degree of your agreement or disagreement with each statement below by circling one number per statement using the following scale:

1 = Strongly Disagree; 2 = Moderately Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Moderately Agree; 6 = Strongly Agree

1. I have significant autonomy in determining how I do my job.

2. I can decide on my own how to go about doing my work.

3. I have considerable opportunity for independence and freedom in how I do my job.

4. My impact on what happens in my department is large.

5. I have a great deal of control over what happens in my department.

6. I have significant influence over what happens in my department.

7. The work I do is very important to me.

8. My job activities are personally meaningful to me.

9. The work I do is meaningful to me.

10. I am confident about my ability to do my job.

11. I am self-assured about my capabilities to perform my work activities.

12. I have mastered the skills necessary for my job.

Appendix B

Psychological Contract Fulfillment Scale

Please indicate how the amount of each of the following aspects you have actually received compared to the amount that the organization has committed to provide them.

1 = Receive much less than promised; 2 = Receive less than promised; 3 = Receive about the same as promised; 4 = Receive more than promised; 5 = Receive much more than promised

1.   Training opportunities

2.   Compensation

3.   Promotion

4.   Nature of job

5.   Job security

6.   Feedback on job performance

7.   Decision-making input

8.   Job challenge

9.   Safe and pleasant work environment

10.   Opportunities for personal growth

Appendix C

Communication Satisfaction Scale

Listed below are several kinds of information often associates with a person's job. Please indicate how satisfied you are with the amount and/or quality of each kind of information by circling the appropriate number.

1 = Very Dissatisfied; 2 = Dissatisfied; 3 = Somewhat Dissatisfied; 4 = Somewhat Satisfied; 5 = Satisfied; 6 = Very Satisfied

1.   Information about my progress in my job

2.   Information about organizational policies and goals

3.   Information about how my job compares with others

4.   Information about how I am being judged

5.   Recognition of my efforts

6.   Information about departmental policies and goals

7.   Information about the requirements of my job

8.   Information about changes in our organization

9.   Information about our organization profit and financial standing

10. Extent to which my supervisor listens and pays attention to me

11. Extent to which my supervisor offers guidance for solving job related

     problems

12. Extent to which my supervisor is open to ideas

13. Extent to which written directives and reports are clear and concise

14. Extent to which the attitudes toward communication in the organization are

     basically healthy

15. Extent to which the our meetings are well-organized

16. Extent to which the organization's communication makes me identify with it

     or feel a vital part of it

17. Extent to which I receive in time the information needed to do my job

18. Extent to which the organization's communication motives and stimulates an

     enthusiasm for meeting its goals

Appendix D

Distributive Justice Scale

Following are some items that ask your opinion about fairness in your workplace.

Please circle one number per statement using the following scale:

1 = Strongly Disagree; 2 = Moderately Disagree; 3 = Slightly Disagree; 4 = Slightly

Agree; 5 = Moderately Agree; 6 = Strongly Agree

1.   I have been fairly rewarded considering the responsibility.

2.   I have been fairly rewarded in view of the amount of experience I have.

3.   I have been fairly rewarded in view of my education level.

4.   I have been fairly rewarded for the amount of effort you put forth.

5.   I have been fairly rewarded for the work you have done well.

6.   I have been fairly rewarded for the stress and strains of your jobs.

Appendix E

Procedural Justice Scale

Following are some items that ask your opinion about fairness in your workplace.

Please circle one number per statement using the following scale:

1 = Strongly Disagree; 2 = Moderately Disagree; 3 = Slightly Disagree; 4 = Slightly

Agree; 5 = Moderately Agree; 6 = Strongly Agree

1. Job-related decisions are made by the company in an unbiased manner.

2. The company makes sure that all employee concerns are heard before job
    decisions are made.

3. To make job decisions, the company collects accurate and complete
    information.

4. The company clarifies decisions and provides additional information when
    requested by employees.

5. All job decisions are applied consistently across all affected employees.

6. Employees are allowed to challenge or appeal job decisions made by the
    company.

Appendix F

Interactional Justice Scale

Following are some items that ask your opinion about fairness in your workplace.

Please circle one number per statement using the following scale:

1 = Strongly Disagree; 2 = Moderately Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Moderately Agree; 6 = Strongly Agree

1. My supervisor treats me with kindness and consideration.

2. My supervisor treats me with respect and dignity.

3. My supervisor is sensitive to my personal needs.

4. My supervisor deals with me in a truthful manner.

5. My supervisor shows concern for my rights as an employee.

6. My supervisor discusses the implications of the decisions with me.

7. My supervisor offers explanations that make sense to me.

8. My supervisor explains very clearly any decision made about my job.

9. My supervisor offers adequate justification for decisions made about my job.

Appendix G

OCB Scale

Following are some items that assess your behaviours at work. Please evaluate your own behaviours in the workplace using the following scale and circle one number per statement.

1 = Strongly Disagree; 2 = Moderately Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Moderately Agree; 6 = Strongly Agree

1. Attendance at work is above the norm

2. Does not take extra breaks

3. Obeys company rules and regulations even when no one is watching

4. I am the most conscientious employees

5. Believes in giving an honest day's work for an honest day's pay

6. Attends meetings that are not mandatory, but are considered important

7. Attends functions that are not required, but help the company image

8. Keeps abreast of changes in the organization

9. Reads and keeps up with organization announcements, memos, and so on

10. Helps others who have been absent

11. Helps others who have heavy workloads

12. Helps orient new people even though it is not required

13. Willingly helps others who have work related problems

14. Is always ready to lend a helping hand to those around me

Appendix H

Turnover Intention Scale

Please circle one number per statement using the following scale:

1 = Strongly Disagree; 2 = Moderately Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Moderately Agree; 6 = Strongly Agree

1. I often think about quitting my job with my present organization.

2. It is very likely that I will look for a new job within the next year.

3. I will leave this organization if possible.