

Graduate School of Business

**Influences of Interpersonal Relatedness on Work Motivation: An
Examination of Goal-setting Theory
Among Chinese Factory Workers**

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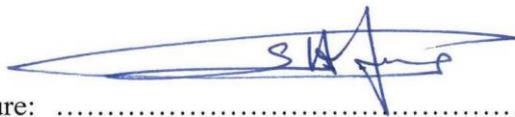
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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

A handwritten signature in blue ink, appearing to be 'S. A. J. P.', written over a dotted line.

Signature:

Date: 21 - Sep - 2012
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Abstract

This dissertation investigates the applicability of goal-setting theory on work motivation among Chinese factory workers. Locke and Latham's (1990) goal-setting theory has received much empirical support throughout the decades, but mainly within a Western context. The purpose of this research is to examine the influences of two Chinese cultural values, filial piety and loyalty to supervisor on goal-setting and work motivation among Chinese factory workers. These two cultural values of personal relatedness are employed to develop a model proposing that the levels of filial piety and loyalty to supervisor exert moderating effects on the relationship between goal commitment and productivity of factory workers in China.

The proposed hypotheses were tested by the statistical technique of Structural Equation Modeling with a sample of 397 respondent workers in the Guangdong Province of China. The robust statistical validity and reliability of the survey instruments is described. The result of this study suggests the partial workability of goal-setting theory in a Chinese context, but, lends support to the moderation effects of filial piety and loyalty to supervisor on the relationship between goal commitment and productivity of factory workers in China.

The findings of this dissertation provide a theoretical contribution to the extant literature on human resource management, and practically, this study reveals considerable implications for understanding and managing Chinese factory workers in China.

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Chapter 1 Introduction and Overview

This chapter discusses the rationale for studying the influences of interpersonal relatedness on work motivation by examining the applicability of Goal-setting Theory (Locke and Latham 1990) to Chinese factory workers. It introduces the background to the research, operational definitions of terms, research objectives, research questions, and both the practical and theoretical significance of this study. It describes the research method and finally gives an overview of all chapters of the research.

1.1 Background

Doubts have been cast on the universality of management and organisational theories because of inadequacies of cultural considerations (Lincoln, Hanada and McBride 1986; Jia 1996; Hofstede 2001; Lin and Germain 2003; Meyer, Becker and Vandenberghe 2004; Deresky 2006). Traditionally, these theories have been applied to the study of human behaviour in social, technological, economical and political dimensions without sufficiently taking into account cultural elements (Nevis 1983; Cheng 1998); thus the generalisability of Western theories to other cultures is questioned.

Human resources, one of the most valuable assets of an organisation, represent a

source of sustained competitive advantage (Lado and Wilson 1994; Pfeffer 1998). However, behind these resources, something must exist which motivates workers to work to accomplish the goals of a firm. While financial drivers are obvious, there are often other motivating forces. Understanding these forces and the factors that influence workers' motivation is essential to management teams and entrepreneurs, and should include cultural considerations.

Culture affects human motivation (Kashima 1997), and cultural differences have a strong influence on work motivation (Sanchez-Runde and Steers 2003). With a history of more than four thousand years, and a current population of about 1.3 billion people (Mitter 2008), China possesses a substantively different indigenous cultural and philosophical inheritance to the contemporary Chinese than that of Western nations (Lowe 2003) and these values inform their attitudes towards work making these different from their Western counterparts. Cheng (1989) notes that Chinese tradition follows a different path from the traditions of the West. Western theories, therefore, may not be entirely applicable to its society given its substantially different socio-cultural traditions (Lin and Germain 2003), and Western practices and attitudes may not work in a Chinese context (Jackson and Bak 1998). In particular, Chinese management of human resources differs in many aspects from that found in Western countries (Warner 1993, 1995a; Easterby-Smith, Malina and Lu 1995); for example, in hierarchical cultures such as China, conflict between members of the same social rank is more likely to be handled by a superior while egalitarian cultures like the United States prefer using direct face-to-face negotiation between the parties involved (Leung and Chan 1999; Brett 2000).

Research studies focusing on strategic, legal and management issues in foreign joint ventures in China have captured much attention in the past decade (Beamish 1993; Cannice and Daniels 1999; Zhang et al. 2004). These issues are crucial to organisational effectiveness and performance. Equally important are micro-issues such as the motivation and work behaviour of Chinese employees in such joint ventures. However, few studies examine the factors that influence Chinese workers' motivation and how these factors affect their in-role performance (Nevis 1983), particularly in factory workers. The present study tries to fill this research gap by investigating the impact of cultural values on work motivation and its concomitant job performance.

1.2 Operational Definitions

For the sake of this research, some conceptual terms will be defined to ensure unity and consistency. The definitions in this section will provide the broad conceptual framework in which the study will take place.

1.2.1 Culture

Culture is a collectivity of people who share a common language, historical period, and geographical location, as well as possessing shared beliefs, norms, roles, values, and attitudes (Triandis 1972). Culture presents itself on different levels, and for this research it refers to the highest level culture of a national society like the British or North Americans, versus Chinese or Japanese. This is distinct from other types of cultures such as those within organisations or functional professions (Trompenaars and Hampden-Turner 1997).

1.2.2 Work Motivation

Work motivation refers to the processes that account for an individual's willingness to exert a high level of effort to satisfy individual needs and/or to reach organisational goals (Robbins and Coulter 2009). In this research, it particularly denotes a set of energetic forces that originate both within as well as beyond an individual's being, to initiate work-related behaviour, and to determine its form, direction, intensity, and duration (Pinder 2008). Work motivation is abstract, but can be examined through the relationship between goals and the outcome measure – job performance.

1.2.3 Chinese Factory Workers

In this study, Chinese factory workers are those individuals working in garment factories in China. They are responsible for frontline production of men's shirts and women's coordinates in the factories, and they are paid on a piece-rated basis. The job performance of Chinese factory workers can be measured in terms of their actual output quantities. This group of Chinese workers is usually less educated and less exposed to Western influences than the white-collar Chinese. Therefore, they are more likely to preserve traditional Chinese cultural values (Jia 1996).

1.3 Research Objectives

In light of the concerns raised in the previous section, there are two overall aims which this research will address:

1. Does goal-setting theory sufficiently account for the work behaviours of Chinese factory workers?

2. Are cultural values a legitimate way of predicting the motivation of Chinese factory workers?

1.4 Research Questions

To address the aims of the research, three research questions are identified and described below. Item (a) addresses the first research aim, and items (b) and (c) address the second research aim.

(a). To examine whether factors identified in Western goal-setting theory can account for the job performance of Chinese factory workers.

(b). To identify other elements that are culturally sensitive in predicting the motivation of Chinese factory workers, in particular filial piety and loyalty to supervisor. In this study, filial piety, or *xiao* (孝) refers to a prominent, family-centered Chinese cultural value that adjusts adult children's attitudes and behaviours towards their aging parents to ensure their physical, financial, and emotional well-being (Mao and Chi 2011; Zhan et al 2011).

(c). To investigate in what ways – directly versus indirectly – these cultural factors influence Chinese factory workers' job performance.

In the course of this research, it is expected that a model can be developed that will assist human resource professionals better to understand the job performance of Chinese factory workers and the influence of cultural factors on the goal – performance relationship.

It is also expected that the findings of this research will contribute to the existing literature on the organisational behaviour of Chinese workers, as well as providing practical suggestions for managing this behaviour.

1.5 Significance of the Study

1.5.1 Practical Significance

In 1978, China implemented major economic reforms to create an “open door” policy (Pearson 1991; Tracy 1995; Yau and Steele 2000), which was intended to prepare China to enter the global market (Tseng et al. 1999). As a result, a host of foreign companies have entered China, especially after its admission to the World Trade Organisation (WTO) in 2001 (Panitchpakdi and Clifford 2002). From the practical perspective, there is a necessity to focus attention on the motivation of Chinese workers in such enterprises (Jackson and Bak, 1998) as their performance is linked to profitability. Economic gain is the major concern of business firm owners, so knowing how to motivate factory workers to work productively and perform efficiently is of great importance.

Recruitment, development, motivation, and retention of competent and high-performing workers have become major challenges to factories operating in

southern China, especially the Sino-Western joint ventures, because of the huge cultural divide (Björkman and Lu 1999) between Chinese and the West. The joint ventures always have to face the question of whether they should implement their global human resource management policies in China, or whether they should rather adapt the management of human resource to the Chinese culture and the local human resource management (personnel) policies. Often in China, the personal relationship network i.e. 'nepotism' is used as a means to recruit new staff members, without going through the formal selection processes commonly adopted in Western countries. As a result, the qualifications and competence of employees are not well judged by management (Björkman and Lu 1999). Job performance of employees is also affected by extrinsic motivating factors; for example, some workers may put family goals ahead of work goals despite attractive salaries and benefits (Björkman and Lu 1999). Such phenomena reveal that as well as monetary rewards and work-related goals, other factors may play a role in affecting the work motivation of Chinese factory workers. This study intends to investigate motivational factors within the Chinese context further.

1.5.2 Theoretical Significance

Leung (2001) stressed the importance of cross-cultural validity in studying work motivation. In an attempt to verify the degree of applicability of Western motivation theories to Chinese workers, this study will ultimately propose a model that can further address the issue of generalisability of Western theories in a Chinese context. Hofstede (1980a) introduced four cultural dimensions to capture differences between cultures, including power distance, individualism/ collectivism, masculinity/ femininity, and uncertainty avoidance. According to Hofstede and Hofstede

(2005), power distance refers to the degree of accepting an unequal distribution of power in institutions as legitimate versus illegitimate (from the viewpoint of less-powerful persons). Individualism/ collectivism is the notion of valuing loosely knit social relations in which individuals are expected to care only for themselves and their immediate families, versus tightly knit relations in which they can expect their wider in-group (e.g. extended family or clan) to look after them in exchange for unquestioning loyalty. Masculinity/ femininity refers to the concept of valuing achievement, heroism, assertiveness, and material success versus relationships, modesty, caring for the weak, and interpersonal harmony. Finally, the dimension of uncertainty avoidance refers to the uncomfortable or comfortable feeling with uncertainty and ambiguity and therefore valuing or devaluing beliefs and institutions that provide certainty and conformity.

China is an ideal place for testing the cross-cultural generalisability of Western motivational theories, as it differs substantially from the West in many aspects such as cultural development, socialization processes, and management styles (Hofstede 1980a; Shenkar and Von Glinow 1994); for example, in terms of cultural development and socialisation, China is a collective society with a strong need for social acceptance whereas North America is an individualistic culture with a strong need for personal achievement and autonomy (Hofstede 1980a; Nevis 1983; Triandis 1990, 2002). In Chinese society, social institutions are hierarchical, and inequality (e.g. power distance) is prevalent and accepted (Hofstede 1980a; Triandis 1990), which is in contrast to many Western institutions. The fundamental emphasis of relatedness (e.g. collectivism) among Chinese people also makes them value group goals over personal goals. Western motivation theories are based on the idea that,

an individual is a unique entity, and because of this, motivational theory may not be applicable in a Chinese organisation where group orientation and relatedness to each other are stressed (Shenkar and Von Glinow 1994). As a result of these issues, the theoretical significance of the transferability of Western motivation theory to Chinese collectivist cultures is worthy of further exploration.

1.6 Research Method

A self-report questionnaire for the Chinese respondent workers was used to investigate the research questions for this study. Throughout the study, steps were taken to ensure that the survey was carried out in an ethical manner. The study was approved by Curtin University of Technology's Ethics Committee. Respondents were assured that the information obtained on all aspects of the study would be managed confidentially. Anonymity was ensured at all times.

1.7 Overview of Thesis

This thesis is organised into seven different chapters, including this Introductory Chapter. Chapter 2 contains the literature review and is of necessity substantial, to adequately address the various perspectives of this research. It covers a variety of topics. The first part focuses on Western motivation theories. A substantial part of this review is to introduce and evaluate six important schools of contemporary motivation theories. The theoretical background of Locke and Latham's Goal-setting Theory is particularly elaborated, with connections being made to

specific cultural influences. The second part explores the literature on Chinese culture. A comprehensive overview of Confucianism is given, elaborating on the five moral/ cardinal human relationships honored in Chinese tradition. The two cultural values of interpersonal relatedness, namely filial piety and loyalty to supervisor, are also examined. The last part of the review focuses on Chinese workers in China. The background of economic development in China and the characteristics of Chinese workers are described. Finally, the effects of Chinese cultural factors on the workers are examined.

Chapter 3 provides an explanation of the conceptual framework for this study, and nine hypotheses are established. Chapter 4 describes the methods that have been employed in this study. This chapter introduces the correlational approach that will be used to examine the relationship between goal-setting and job performance. Then it discusses the nature of the participants in the questionnaire survey and the procedures for conducting the survey, including the findings of the pilot study that was carried out to determine the reliability and validity of the measurement instruments. Finally, measures of various variables are given in detail.

Chapter 5 mainly presents the quantitative measurement outcomes of the study. The process of data cleaning is introduced, and its use in ensuring the relevance of the data gleaned is explained. Demographic profiles are then given. The reliability of the measurement scales is scrutinised. Results of the variables of goal-setting and job performance, and family network are studied thoroughly. Correlations between various scale scores and job performance are examined. Finally, all the hypotheses are tested by the statistical technique of Structural

Equation Modeling with corresponding analyses and discussion.

Chapter 6 presents the discussion, and the limitations and implications, of this thesis. In the discussion, the demographic characteristics of the Chinese respondent factory workers are briefly outlined and analysed. Then the outcomes of the hypotheses of this study are discussed in detail, in light of the information from the literature review of Chapter 2. Limitations of this study are noted, as are suggestions for further research. Finally, both research and managerial implications arising from this study are considered.

Chapter 7 brings a close to this study by drawing conclusions that reiterate and summarise the key findings emanating from the discussion chapter.

Chapter 2 Literature Review

The review of related literature involves the systematic identification, location, and analysis of documents containing information related to the research problem... The major purpose of reviewing the literature is to determine what has already been done that relates to your problem..... It also provides the understandings and insights necessary for the development of a logical framework into which your problem fits. (Gay and Diehl 1992, p. 56)

This chapter critically reviews the literature related to the theory and research of the constructs in the proposed research model. The first part examines and evaluates several important Western motivation theories, with Goal-setting Theory selected as the dominant theoretical framework for this research. The second part discusses the Chinese culture, and in particular the prevailing influence of Confucianism that emphasises the cardinal human relationships. The two crucial cultural elements of filial piety and loyalty associated with interpersonal relatedness are examined. The last part explores the characteristics of contemporary Chinese factory workers and the effects of Chinese culture on them.

2.1 Western Motivation Theories

There are two somewhat different kinds of questions, which are typically dealt with in discussions of motivation. One of these is the question of the arousal or energizing of the organism. Why is the organism active at all? What conditions instigate action, determine its duration or persistence and finally its cessation? The second question involves the direction of behaviour. What determines the form that activity will take place? Under what conditions will an organism choose one response or another or move in one direction or another? (Vroom 1964, p. 8)

2.1.1 Introduction

The notion of motivation has received considerable attention over the course of this century (Porter, Bigley and Steers 2003), and organisational scientists as well as practitioners have long been particularly interested in employee motivation (Meyer, Becker and Vandenberghe 2004). Motivation is important in the sense that it stimulates work behaviours that are beneficial to the organisation as a whole (Miner 1992), such as increasing productivity and job satisfaction. Theories of work motivation that evolved out of more general theories of motivation (Steers, Porter and Bigley 1996) have largely been applied to explain task performance.

Motivation is a difficult concept to grasp, in part because there “are many philosophical orientations toward the nature of human beings and about what can be known about people” (Pinder 2008, p. 10).

The term “motivation” derives from the Latin *movere*, which means “to move” (Steers, Mowday and Shapiro 2004). This single word obviously does not adequately account for the various components and processes associated with how human behaviour is activated.

Although theorists of work motivation have their own definitions, Pinder’s (1998) definition is the most cited (Donovan 2001; Latham and Pinder 2005): he describes it as “a set of energetic forces that originates both within as well as beyond an individual’s being, to initiate work-related behaviour, and to determine its form, direction, intensity and duration” (Pinder 1998, p. 11).

According to this definition, motivation is a psychological process resulting from the interaction between the individual and the environment.

Motivation is also a basic psychological process representing the most important focus in the micro approach to organisational behaviour (Latham and Ernst 2006). It is the process resulting from the interaction between individual motives and environmental factors that affects a person’s choice, effort, and persistence (Latham and Ernst 2006). These initiate work-related behaviour and determine the nature, direction, intensity, and duration of an individual’s behaviour (Alpander and Carter 1995). The fundamental needs model (Maslow 1954) describes motivational forces as satisfying basic physiological and safety needs. Goals are often the outcomes of individuals striving to meet their needs, values and motives. An individual’s action is consequently directed to goal-specific domains. Rewards, and satisfaction of needs in the workplace must be based on the performance of the individual.

Motivation cannot be seen: all that can be seen is behaviour. Motivation is a hypothetical construct used to help explain behaviour, and cannot be equated with behaviour (Luthans 2005). The seminal works of Henry Murray (1938) and Abraham Maslow (1954) argued that individuals are largely motivated by various needs that serve to guide their behaviour (Porter, Bigley and Steers 2003): in other words, motivation is inner and implicit, being the cause; while behaviour is outer and explicit, being the effect.

Work motivation theories are developed in an attempt to understand, predict, and influence employee behaviours in general (Meyer, Becker and Vandenberghe 2004) as well as specific job behaviour such as labour turnover (Prestholdt, Lane and Mathews 1987; Richer, Blanchard and Vallerand 2002). Although motivation is critical to job behaviours, Maslow (1943) added that it is only one of the determinants of behaviour. While behaviour is almost always motivated, it is almost always biologically, culturally and situationally determined as well.

2.1.2 Review of Motivation Theories

Researchers have proposed two general categories of motivation theories to explain the entire process underlying employee motivation: content theories and process theories (Kreitner and Kinicki 2007).

The *content theories* of work motivation assume that factors exist within the individual that energise, direct, and sustain behaviour. These approaches to motivation are concerned with the identification of important internal elements and

the explanation of how these elements may be prioritised within the individual (Porter, Bigley and Steers 2003): in other words, these theories deal with specifically-defined motives like human needs (Maslow 1943) and hierarchical roles (Miner 1965). Needs are associated with motivation in a relatively static environment (Steers et al. 2004). Maslow's (1943, 1954), Alderfer's (1972, 1989) and McClelland's (1975, 1987) needs theories are examples of content theories.

In contrast to content theories of motivation, *process theories* attempt to describe how behaviour is energised, directed, and sustained. They attempt to explain how mechanisms operate to drive humans to change in order to address their needs. These theories adopt a dynamic perspective in considering work motivation, and focus on certain cognitive processes underlying action such as equity (Adams 1963, 1965), expectancy (Vroom 1964), and goal-setting (Locke 1968; Locke and Latham 1990). In particular, process theories place heavy emphasis on describing the functioning of the individual's decision system as it relates to behaviour. Equity theory (Adams 1963, 1965), expectancy theory (Vroom 1964), and goal-setting theory (Locke and Latham 1990) are three examples of process theories.

In the following sections, major content and process theories of work motivation will be reviewed and contextualised to Chinese society, followed by the rationale of adopting process theories – especially goal-setting theory – as the major focus in the present research.

2.1.3 Maslow's Needs-Hierarchy Theory

2.1.3.1 Overview

Abraham Maslow's (1943, 1954) needs-hierarchy theory captured much attention in its depiction of human needs and work motivation. He identified five important human needs and ranked them in a hierarchy of importance. According to his theory, hierarchy of needs, from lowest to highest, are: physiological needs, safety needs, social needs, esteem needs, and self-actualisation. Physiological needs refer to basic needs of the body such as food, water, sleep, sex, physical activity, and sensory satisfaction. Safety needs refer to the need to feel secure and free of danger. Social needs consist of the need to affiliate with others, and the desire for belongingness. Esteem needs include the needs of strength, achievement, confidence, independence, reputation, and appreciation from others. The need for self-actualisation is one's desire to realise one's full potential and capability.

Human needs influence and direct the behaviours of individuals. According to Maslow (1954), when lower-level needs are satisfied, higher-level needs emerge as the dominant motivators; for example, the need for water and food is gratified before one possesses the desire for safety or social relationships. Physiological, security, and social needs must be gratified before an individual can focus attention on satisfying higher level needs like achievement and self-actualisation. Moreover, deprivation at lower levels can shift the focus of behaviour downward; thus, physiological needs are a prerequisite of all other needs (Miner 1992), and there is a steady progression over time up a hierarchy as individuals grow and mature (Steers et al. 2004).

Maslow's theory can be applied to job settings, with human needs organised according to his hierarchy; for example, in ranking needs from lowest to highest, pay and overall working conditions would be considered basic needs. Workers' compensation and superannuation would be considered safety needs, whereas group contacts at work and the formation of cohesive work teams would address social needs. Promotion and recognition would be linked to esteem needs, and opportunities for challenging and creative jobs/ tasks address the need for self-actualisation (Avery and Baker 1990; Kamalanabhan, Uma and Vasanthi 1999, cited in Latham and Pinder 2005). Table 2.1 demonstrates the hierarchy of needs at work.

Table 2.1 Maslow's Needs-Hierarchy at Work

Maslow's Traditional Needs	Needs at Work Settings
Physiological	Pay
Safety	Workers' compensation and superannuation, health insurance, unions
Social	Social contract, formal and informal work groups or teams
Esteem	Promotion, titles, status symbols
Self-actualisation	Personal growth, realisation of potential

(Modified from Avery and Baker 1990; Luthans 2005)

Many organisations apply Maslow's approach to employee motivation through their job design, reward and compensation, and benefit programs (Stone 2005). IBM's compensation strategy, for example, aims to provide employees with significant financial incentives that encourage excellent performance and high levels of productivity (Rodgers 1986). Monetary rewards help to satisfy basic human needs for physiology and safety, so good performance and high productivity are motivated

by the underlying motives of needs gratification.

Previous studies have demonstrated that workers in countries with different levels of economic development attach different importance to needs. In developing countries such as Nigeria, for example, manufacturing workers regarded satisfying lower needs as most important, followed by the higher order growth needs (Ajila 1997, cited in Latham and Pinder 2005). Bank officers in India gave greater importance to growth needs than did clerks (Rao and Kulkarni 1998, cited in Latham and Pinder 2005). These findings reveal the practical significance of applying Maslow's theory in the workplace (Ajila 1997; Kamalanabhan et al 1999).

2.1.3.2 Evaluation of the Theory

Kanfer (1991) asserted the importance of needs as internal tensions that affect workers' cognitive processes, which in turn lead to behaviour variability. Latham and Ernst (2006) also pinpointed it as one of the major domains for studying work motivation. However, the theory is subject to criticism, such as that its original nature relates to human development rather than to descriptions of work motivation (Landy 1989). In particular, the abstract and ambiguous definition of self-actualisation (Miner 1992), and the failure to replicate the hierarchical order of the five needs in the studies based on Maslow's theory (Betz 1982; Furnham 2005) are noted.

Despite such critique, there has been a resurgence of interest in hierarchical needs theory (Latham and Pinder 2005). Recent research findings have supported part of the elements of the original theory (e.g. Haslam, Powell and Turner 2000; Ronen

2001); for example, Haslam and colleagues (2000) suggested that needs-hierarchies can act as reflections of oneself in a social context. The theories of social identity and self-categorisation (Turner et al. 1987) point out that the motivational impact of different needs changes as a function of the relevance of norms and goals associated with different levels of self-categories; for instance, an individual's needs may be amenable to group-based needs (Haslam, Powell and Turner 2000); for example, when a Chinese factory worker categorises himself/ herself as Chinese, he/ she tries to gratify social needs in accordance with Chinese culture first, rather than according to individual needs. In China, a workplace can serve as a vehicle for an individual employee to satisfy social needs arising from traditional culture or norms (Turner et al. 1987). When personal identity is salient, the need to self-actualise and to enhance self-esteem through personal achievement and growth becomes dominant. When social identity is salient, the need to enhance group-based self-esteem through relatedness, peer recognition, and attainment of group goals is dominant (Haslam et al. 2000). These results reveal that one's needs vary with one's self-identity (Worchel 1998), and is not constant within any individual.

Like other needs-based theories, Maslow's theory identified the motives that initiate human behaviours. These motives explain why a person acts, but do not explain why specific actions are chosen in specific situations (Latham and Pinder 2005). More important, they are unable to account for individual differences observed in job settings. If innate needs are the primary motivator of job behaviours, they are likely to have homogeneous performance outcomes among workers. Studies by Hofstede (1980b) do not support Maslow's needs-hierarchy, indicating that other factors, like a country's cultural values, may account for individual differences in work behaviours.

These limitations diminish the predictive value of Maslow's needs theory in understanding work motivation.

Research findings have also failed to support the needs-hierarchy theory of Maslow, and have questioned its conceptual validity (Wahba and Bridwell 1976). Nevis (1983) tested Maslow's needs-hierarchy in the context of Chinese management practices and proposed another hierarchy that could more accurately reflect the needs of the Chinese. It consists of four levels: (1) belonging, (2) physiological needs, (3) safety, and (4) self-actualisation in the service of society. This suggests that Western needs theories may not be applicable in predicting job behaviour in Chinese organisations. Cultural factors should be taken into consideration in understanding work motivation.

2.1.4 Alderfer's ERG Theory

2.1.4.1 Overview

Alderfer (1972) adapted Maslow's Needs-Hierarchy theory to encompass just three needs: existence, relatedness, and growth. This is commonly referred to as ERG Theory. Existence needs refer to basic needs necessary for human survival, such as what Maslow categorised as physiological and safety needs. Relatedness needs refer to those desires to build and maintain interpersonal relationships, like social acceptance, belongingness, and status. Growth needs are those desires for personal development, self-fulfilment and self-actualisation.

One of the major differences between Maslow's theory and Alderfer's ERG theory is

that Alderfer does not emphasise the hierarchical progressive order of needs. Indeed, he argued that levels of needs can be skipped, or coexist with each other; for example, increases in lower-need desires may be the outcome of higher-need dissatisfactions (Alderfer 1989). Alderfer also emphasised that relatedness needs are not simply the summation of Maslow's safety, social and esteem needs: in fact, some of Maslow's safety needs can be grouped into existence needs and some into relatedness needs, while some of Maslow's esteem needs can be categorised as relatedness needs and some as growth needs so that relatedness is a person's capacity to form relationships with others through giving and receiving.

Empirical studies support the proposition of ERG theory that needs influence job performance (Arnolds and Boshoff 2002). Arnolds and Boshoff's (2002) study revealed that workers in different job positions show different patterns of needs. In particular, top managers are primarily motivated by growth needs whereas frontline workers are motivated by relatedness needs, suggesting that people in low-level jobs are more concerned about satisfying needs such as relatedness whereas people in higher order jobs focus more on growth needs. It is reasonable to expect that factory workers might be more concerned about relatedness needs than growth needs: unlike workers at the managerial level, they are more likely to be motivated by need for affiliation and acceptance than by career advancement and success.

2.1.4.2 Evaluation of the Theory

Like Maslow, Alderfer (1972) suggested that needs motivate work-related behaviours. The major differences between the theories are that ERG theory does not stress the hierarchical progressive order of needs, and telescopes the number of needs to three

groups. Alderfer's growth-need concept has been widely accepted, especially in conjunction with work redesign (Miner 1992). Its strength is in its application to the work environment and its relevance to understanding and developing specific job functions.

Another strength is its focus on job-specificity and application to the work environment; for example, existence needs are developed with reference to pay and benefits, relatedness needs to relationships with coworkers and supervisors, and growth needs to satisfaction at work (Arnolds and Boshoff 2002). Maslow's needs-hierarchy theory has been criticised for its origin as a human developmental theory rather than a description of work motivation (Landy 1989); ERG theory addresses this weakness by demonstrating the types of needs through empirical research (Robbins 1998).

Like needs-hierarchy theory, ERG theory has not gained much popularity in comprehensive investigations (Rauschenberger, Schmitt and Hunter 1980). Its focus on needs as sole motivators takes a passive view of human motivation, neglecting the individual's conscious motives for some social behaviours including beliefs, reasoning, and choices (Locke 1996).

As discussed in the previous section, Nevis (1983) proposed a four-level hierarchy for reflecting the needs of the Chinese in particular: (1) belonging, (2) physiological needs, (3) safety, and (4) self-actualisation in the service of society. This finding suggests that the types of needs proposed by Alderfer, as well as other Western needs theories, may not be universally applicable as they tend to reflect the predominance

of individual needs in Western societies, and ignore the fact that other cultures may have their own set of unique needs (Deresky 2006); for instance, Eastern cultures focus on the needs of society rather than on the needs of individuals (Hoffman 2002). Since cultural values are deeply rooted in needs and they provide a fundamental basis for an individual's goal-setting and work motivation (Locke and Henne 1986; Latham and Pinder 2005), it is likely that ERG theory and other Western needs theories will fail to generate a reliable prediction of work behaviours among Chinese workers. Understanding the role of indigenous cultural factors becomes increasingly critical in order to obtain a reliable measure of motivation and Chinese work behaviours.

2.1.5 McClelland's Achievement Motivation Theory

2.1.5.1 Overview

According to David McClelland's (1975, 1987) theory, there are three types of needs: achievement, power, and affiliation. Achievement motivation is the desire to achieve success and excellence through one's efforts and competition. Power needs are defined as the need to have control over one's environment, and to play a predominant role in one's own success. Affiliation needs refer to the desire to establish and maintain friendly and warm relationships with others ((Porter, Bigley and Steers 2003). If a need such as affiliation is too strong, it may undermine effective managerial performance. In this case, if a manager with a high need for being liked tends to stay on good terms with everybody, the result is too many exceptions for subordinates (Miner 1992) and failure to enforce strong work habits.

Unlike Maslow, McClelland (1975) claimed that needs are learned and are not necessarily arranged in a hierarchy. He argued that, at any given time, individuals possess several competing needs that serve to motivate behaviour when activated; for instance, achievement produces a feeling of pleasure in some people. This may establish motivational drives, making these people more inclined to focus efforts in meeting the challenges of achievement over other needs (Miner 1992). Therefore, McClelland argues that needs vary from one person to another.

2.1.5.2 Evaluation of the Theory

The contribution of McClelland's theory lies in its identification of clearly defined needs which are related to workplace behaviours, in comparison with Maslow's abstract conceptualisation of needs (Steers et al. 2004). Achievement motivation is found to be an important factor of entrepreneurial success in organisations, and power needs are predictive of leadership-motivation patterns (Miner 1992). Because of these factors, McClelland's theory has gained popularity in research on work motivation (Miner 1992).

Achievement-Motivation Theory is particularly popular in studies of managerial or entrepreneurial performance and success; however, it pays little attention to the motives of lower-level workers. As reviewed in the previous sections, the results of other research (Ajila 1997; Rao and Kulkarni 1998; Arnolds and Boshoff 2002) demonstrate that low-skilled workers are more motivated by satisfaction of physiological, safety and relatedness needs. McClelland's focus on higher-level needs like achievement and power make the applicability of this theory less appropriate to the sample of Chinese factory workers in this research.

Locke (1996) has commented that McClelland's theory focuses too much on subconscious motives related to needs resulting in unpredictable and undependable findings. He suggests that human motivation should be considered more as elements of an individual's conscious purposes, plans, and intentions (Locke 1996).

As this brief overview of needs theories indicates, there is an increasing rejection of needs-based theories and an increasing focus on individual cognition (Latham and Ernst 2006; Steer et al. 2004) as factors in motivation; hence the strength of needs-based theories which emphasise more instinctual drives in motivation has received less and less attention in research over the last several decades.

2.1.6 Lawrence and Nohria's Four Drives Model

2.1.6.1 Overview

Recent thinking related to 'drives' as the basis of needs has recently been proposed by two Harvard Business School Professors, Paul Lawrence and Nitin Nohria. They presented a socio-biological model of motivation that is applicable to a workplace and those interested in organisational behaviour. They claim that human possess four primary innate drives: (1) the drive to *acquire* objects and experiences that improve one's status relative to others; (2) the drive to *bond* with others in long-term relationships of mutual caring and commitment; (3) the drive to *learn* and make sense of the world and of one's self; and (4) the drive to *defend* one's self, loved ones, beliefs, and resources from harm (Lawrence and Nohria 2002).

Lawrence and Nohria (2002) believe that these four drives are hard-wired in the brains of all humans and shape their choices. Harnessing these basic drives can

improve an individual's job productivity, innovation and job satisfaction; and an organisation should provide opportunities for employees to acquire, bond, learn and defend for achieving its maximum effectiveness (Nohria 2006).

2.1.6.2 Evaluation of the Model

The Four Drives model of Lawrence and Nohria has contributed to the understanding of human nature and organisational behaviour. However, the notion of an individual possessing different biological and social “drives” is hardly new (Olsen 2006). The drive to acquire – to get what one needs – from food or shelter (Lawrence 2011) seems equivalent to Maslow's physiological needs (Maslow 1943) and Alderfer's existence needs (Alderfer 1972). The drive to bond – to form positive, trusting, love and caring relationships with others (Nohria, Groysberg and Lee 2008) is likely a parallel for Maslow's social (1943) and Alderfer's relatedness (1972) needs. Despite the similarities with other antecedent needs theory, Nohria (2006) argued that new knowledge from the biology discipline was incorporated into the four drives model.

Nohria (2006) identified one weakness of the model in that the four human drives are not easy to bring into balance, particularly in terms of insatiability and conflict. Applying this model to this research, for example, a nimble-fingered piece-rated worker when earning more (to acquire) is likely to make his/ her fellows jealous (counter to bond). Consistently maintaining a reasonable balance among the four drives of the subordinates seemingly adds to a supervisor's burden.

Despite the addition of this recent motivation model into the scholarship of organisational behaviour, it appears that this model is merely a further elaboration of the traditional needs theory.

2.2 From Content Theories to Process Theories of Motivation

Content theories of motivation conceptualise behaviour as the product of innate psychological characteristics (e.g. needs) (Porter, Bigley and Steers 2003). The content theorists are concerned with identifying the needs and drives that employees have and how these needs and drives are prioritised. Content theories are ‘static’ in that they incorporate one or a few points in time and are past – or present – time-oriented. As a result they are not capable of predicting work motivation or behaviour (Luthans 2005). In contrast, process theories view behaviour as the result, at least in part, of human decision processes (Porter, Bigley and Steers 2003) and are more concerned with the cognitive antecedents that go into motivation and effort and, more importantly, with the way they relate to one another (Luthans 2005).

The above two views can be briefly distinguished in the way that content theories are concerned with *why* people work, and process theories with *what factors* determine an individual’s persistence or willingness at work (Foster 2000). As this research will examine what factors (e.g. culture) can affect a factory worker’s job performance, process theories are a more salient theoretical foundation for the study. The following sections will discuss and evaluate three crucial process theories in motivation: Equity Theory, Expectancy Theory and Goal Setting Theory.

2.2.1 Adams' Equity Theory

2.2.1.1 Overview

According to equity theory (Adams 1963, 1965) as applied to the workplace, workers perceive their work-related participation in an organisation as an exchange process where they provide inputs to the organisation (e.g. effort, education and experience) and receive valued outcomes in return (e.g. pay, promotions, recognition). In the exchange process, workers are motivated to attain fairness or equity by judging the outcomes relative to the amount of input.

Goodman (1974) stated that workers compare the ratio of perceived outcomes to perceived inputs (known as an equity ratio) to the equity ratio of a "referent other", which could be a coworker, a hypothetical ideal person, or a personal past experience (e.g. the salary in a previous job). When these two equity ratios are judged to be approximately equal, workers perceive their exchange in the organisation as equitable or fair, resulting in satisfied feelings (Adams 1963) and motivation. Conversely, when workers perceive a discrepancy between the two ratios, they may feel an inequity, which produces a state of tension within themselves. Such tension may motivate them to engage in various cognitive or behavioural measures in order to reduce the inequity, such as altering their inputs, changing their referent other, or cognitively re-evaluating their own inputs and outcomes (Donovan 2001). This kind of behaviour has been indicated by Leon Festinger's (1962) Cognitive Dissonance theory that employees do not like inconsistency, which upsets them and drives them to take action or to find new beliefs in order to restore the consistent cognitions. Cognitive dissonance can be viewed an antecedent condition which leads to activity

oriented toward dissonance reduction, just as hunger leads to activity oriented towards hunger reduction (Festinger 1962).

Attitude changes towards the job are always found as a way to preserve consistent cognitions (Cooper 2007); for example, people who perceive they are being underpaid may contribute less time and effort to the job, resulting in lower productivity and increased absenteeism and turnover. People who feel overpaid may donate a portion of their income to charity in order to reduce feelings of guilt (Miner 1992). Workers continually engage in such discrepancy reduction activities until the perception of equity is restored.

2.2.1.2 Evaluation of the Theory

Equity theory predicts that perceived inequities such as underpayment or overpayment, workload distribution, or attention from supervisor produce a tension within individuals which motivates them to engage in various behaviours to manage the inequity. However, experimental studies which have investigated pay discrepancies, for example, support reactions only to underpayment and not to overpayment (Greenberg 1982; Mowday 1991). It is suggested that individuals are more likely to tolerate overpayment than underpayment (Donovan 2001). Perceptions of over-reward inequities seem to be corrected through distortion of the perception of the level or importance of inputs and outcomes; for example, employees may justify disproportionately high outcomes by convincing themselves that they possess more job knowledge or intelligence than they actually do. Despite this, behaviour scientists believe that many over-reward inequalities do not have long-term effects on performance (Miner 1992).

The generalisability of laboratory findings investigating equity theory to organisational settings is also questioned by a number of researchers, regardless of their support for this theory (Greenberg 1982). Equity theory has received several criticisms: (a) equity restoration behaviours observed in experimental findings may be different from actual behaviours in work settings; (b) the theory fails to generate specific predictions of actual behaviours for restoring equity, and there seems to be much variety in the outcomes of work behaviours; (c) individual differences in decision-making processes such as moral maturity and self-esteem are largely neglected; and (d) the theory does not clearly specify how a person chooses a referent other for evaluating equity (Donovan 2001).

The emphasis of inequity as the major force of work behaviour seems to oversimplify the process of work motivation. It is likely that perceptions of overpayment and underpayment operate differently; for example, overpayment creates a need to reduce guilt and shame, whereas underpayment creates a need to reduce anger and hatred (Miner 1992). As a result, the calculation of an equity ratio may vary depending on whether a person is being overpaid or underpaid. Given these inherent problems of equity theory, its scientific value in explaining work motivation is relatively limited; and it only provides one insight into this complicated behaviour. What equity theory does emphasise is a fair exchange process by balancing one's inputs and outputs in the work context. However, different cultures may hold different views toward distributive justice and what constitutes fair allocation of resources (Leung and Chan 1999); for example, Japanese organisations emphasise the importance of seniority in allocating resources while Americans adopt equity strategies (Leung and Chan 1999). This finding reveals that East Asians may differ

from Westerners in resource allocation regardless of a person's input in the job, resulting in differences in perceived equity across cultural groups. Thompson and Loewenstein (2003) have commented that different strategies may be used in allocating resources between different parties; for instance, friends tend to use equality whereas acquaintances or non-friends use equity. Given that the Chinese are more aware than Westerners of the distinction between in-group and out-group members (Chan and Goto 2003), the Western concept of equity in work motivation may not hold true in some situations, making equity theories less applicable in Chinese contexts.

2.2.2 Vroom's Expectancy Theory

2.2.2.1 Overview

Expectancy theory (Vroom 1964) stresses that human behaviour is the result of conscious choices made by individuals using alternative courses of action. Individuals will choose to do whatever they believe will result in the highest payoff for them personally (Landy and Becker 1987).

Three perceptions are involved in the motivational processes of expectancy theory: expectancy, instrumentality, and valence. Expectancy refers to the perceived likelihood of a particular set of outcomes (known as first level outcomes) as the result of a given act or behaviour. Effort-to-performance expectancy is the expectation that, if effort is devoted, the result will be a successful performance, while performance-to-outcome expectancy refers to the expectation that, if a successful performance is produced, something that is desired will be obtained, such

as a financial reward (Miner 1992).

Instrumentality represents the perception of the relationship between attainment of first level outcomes and the subsequent attainment of second level outcomes; for instance, pay (the first level outcome) should be sufficient to attain a comfortable lifestyle (the second level outcome). If pay fails to gain what is desired, then it lacks instrumentality, and the motivational impact (Miner 1992) is lessened. The third component, valence, represents the affective orientation that individuals hold towards outcomes and rewards. Outcomes that are perceived as attractive or desirable have positive valence, while negative outcomes are regarded as undesirable or having negative valence (Donovan 2001).

In summary, expectancy theory suggests that individuals will engage in behaviours that are likely to lead to valued and attractive outcomes, particularly if they see that they can successfully produce such behaviours.

2.2.2.2 Evaluation of the Theory

Expectancy theory provides a clear and coherent model of the processes that individuals engage in when making choices in organisational settings (Pinder 1987). It offers an approximate prediction of what people may go through in the decision-making process (Ilgen and Klein 1989). It appears to yield reliable predictions of performance in companies where workers are recognised and rewarded in proportion to the excellence of their performance, and among workers who have an internal locus of control (Miner 1992).

The emphasis on the computation of efforts and outcomes in expectancy theory, however, seems unrealistic. This is because most individuals do not have complete knowledge of all possible causes and outcomes that may result from their behaviour (Wanous, Keon and Latack 1983). It is also unlikely that most individuals utilise optimising strategies in every decision driving their behaviours. They may simply choose a behaviour to satisfice or look for a level of performance that is satisfactory for generating rewards that are “good enough” (Simon 1997) instead of going through a series of complicated computations and evaluating all possible alternative choices in a given situation (Locke 1975; Donovan 2001). An example of a satisficing criterion would be an adequate bonus, in the eyes of the worker, for overtime work during holidays. Alternatively, working towards a production target that provides the worker with enough income to achieve personal goals and needs even though he/ she is capable of hitting a higher production target with greater effort.

The majority of Chinese factory workers are not well educated (Jia 1996). In support of what the research suggests, then, this cohort of all Chinese workers, as opposed to all Western workers, may not possess enough knowledge to select an optimal behaviour from among several alternatives, and as a result are likely to be motivated by basic needs and values. The principals of expectancy theory thus may not fully capture the motivation of Chinese factory workers.

2.2.3 Locke and Latham's Goal-Setting Theory

2.2.3.1 Overview

Goal-setting Theory (GST) is one of the most popular goal-based theories of motivation (Donovan 2001). This theory focuses on the relationship between conscious performance goals and level of task performance (Locke and Latham 2002), and emphasises the impact of performance goals on task performance.

Goal-setting theory (Locke and Latham 1990, 2002) stresses the importance of goals on motivating job behaviours. The theory receives much empirical support from both experimental and observatory studies (e.g. Locke, Frederick, Lee and Bobko 1984; Elliot and Dweck 1988; Locke, Smith, Erez, Chah and Schaffer 1994; Phillips and Gully 1997; Klein et al. 1999; Erez and Judge 2001; Drach-Zahavy and Erez 2002; Wiese and Freund 2005; see also meta-analytic studies: Mento, Steel and Karren 1987; Wood et al. 1987). Workers who set specific, difficult goals often show higher job performance than those with vague or no goals. The types of goals mediate the effects of needs, values, and external incentives on job performance (Locke 2001), indicating that the goals reflect the nature of one's needs, values, and expected rewards. In order to achieve their goals, workers increase their attention and effort toward goal-relevant activities, and evince persistence toward the tasks; thus, what workers do is powerfully influenced by their goals and intentions (Locke 1991).

According to GST (Locke and Latham 1990), specific, difficult goals consistently lead to higher levels of effort and job performance than no goals or vague goals. The preference for specific goals over do-your-best goals also gives individuals an

external referent (i.e. a device with an objective measurement of performance level). Specific goals help in setting the range of acceptable performance levels for employees' tasks (Locke and Latham 2002); for example, being set a specific goal of ironing at least 100 shirts a day for a worker will lead to higher performance than merely being asked to "do as much as possible". Goal specificity can help reduce ambiguity about what is to be attained.

Goals affect performance through four mechanisms (Locke and Latham 1990, 2002). First, goals serve a directive function. Goals direct attention and effort toward goal-relevant activities and away from irrelevant activities. Second, goals have an energising function. More challenging goals initiate greater effort than do less challenging goals, and people believe that greater effort will pay off in greater performance. Third, goals affect workers' persistence. Goals that are difficult to achieve prolong the amount of task effort one puts into a performance (LaPorte and Nath 1976), and ensure one will keep working for an extended period than would a vague or easily achieved goal (Locke and Latham 1990). Fourth, goals affect subsequent actions such as the use of task-relevant knowledge and strategies, planning, or the development of new strategies (Wood and Locke 1990); for example, a person who feels not sufficient to a task, may attempt to discover better strategies for performing it.

The goal-performance relationship can be moderated by several factors such as an individual's ability level, performance feedback, goal commitment (Locke and Latham 2002), and task complexity (Wood, Mento and Locke 1987). The impact of goals on performance is weaker if performance goals are beyond the individual's

capacity to carry out the task (Locke, Frederick, Bucker and Bobko 1984; Kanfer and Ackerman 1989). Workers with high self-efficacy tend to set difficult goals, are more committed to their goals, respond positively toward negative feedback or failure, and discover successful task strategies (Locke 1996). Self-efficacy is a generative capability in which the individual organises and orchestrates those skills needed to cope with the demands and circumstances being faced (Bandura 1982). Formally, self-efficacy is defined as one's judgment of how well (or poorly) one will cope with a situation, given the skills one possesses and the circumstances one faces (Bandura 1982, 1986, 1993, 1997). Self-efficacy is not the same as ability. Competent functioning requires not only the possession of skills (i.e. ability), but also the capacity to translate those skills into effective performance, especially under trying and difficult circumstances. Bandura (1977) proposed four main sources that influence self-efficacy. The first, and the most powerful source is personal accomplishment. Second, self-efficacy can be fostered by vicarious experience, which refers to observing how identified models manage similar tasks. Third, social persuasion, the conviction by others that one can perform a task, influences an individual's belief in his/her own efficacy. Finally, emotional arousal caused by the working environment (e.g. stressful and taxing situations), when managed in a fear-reducing manner (e.g. relaxation, support), also strengthens one's perceived self-competence.

The provision of feedback is also necessary for goal setting to work because it allows workers to compare their actual performance against their goals (Erez 1977; Miner 1992) in order to make adjustments. In addition, one's commitment to goals also enhances the goal-performance relationship, especially when goals are difficult to

achieve (Klein et al. 1999). Higher goal commitment results when individuals perceive that the goal is important and believe they can attain it (Locke and Latham 2002). The goal-setting effect on performance varies with task complexity: the more complex the task, the weaker the goal-setting effect on performance. Complex tasks, like making an investment decision, always involve indefinite outcomes despite the requirement for high skill and strategy in making the decision; hence the goal effects on performance are smaller. On the other hand, the magnitude of goal effects on performance is greater for simple tasks (e.g. piece-rated production works) because the outcome always produces distinct results (Wood et al. 1987).

2.2.3.2 Goal-setting Theory and the Motivation Hub Model

According to Locke (1991), the process of motivation can be treated as a sequence. The various motivation theories discussed hitherto are merely components of such a sequence. In an attempt to integrate them, Locke (1991) proposed a mediation model to indicate the entire motivation sequence of action. The model starts with needs (e.g. Maslow's needs-hierarchy), values and external incentives (e.g. McClelland's need for achievement, Vroom's expectancy, and Adams' equity), all of which are then mediated by a so-called *motivation hub*, and ends with action. The motivation hub refers to the "center of activity". In the context of motivation theory, it refers to the place where the action is, or more precisely, that part of the motivation sequence that is closest to action (Locke 2001). The hub consists of personal goals including goal-commitment, and self-efficacy. Self-efficacy refers to a person's beliefs about one's capability to produce certain performances (Bandura 1997). However, an individual may doubt whether a given outcome that is attained is

dependent on one's action (known as an internal *locus of control*) or is due to fate, chance or luck (known as an external locus of control) (Bandura 1997).

The components of personal goals and self-efficacy are the most immediate, conscious motivational determinants of action (Locke and Latham 1990; Locke 2001). They mediate the effects of needs, values, and external incentives (e.g. assigned goals, feedback, money, job design) on performance.

As GST describes the interrelationship between goals and performance only (Locke and Latham 2002), the motivation hub model can further assist in depicting the full motivation process, and is therefore included in this section for discussion. Figure 2.1 demonstrates the motivation hub model.

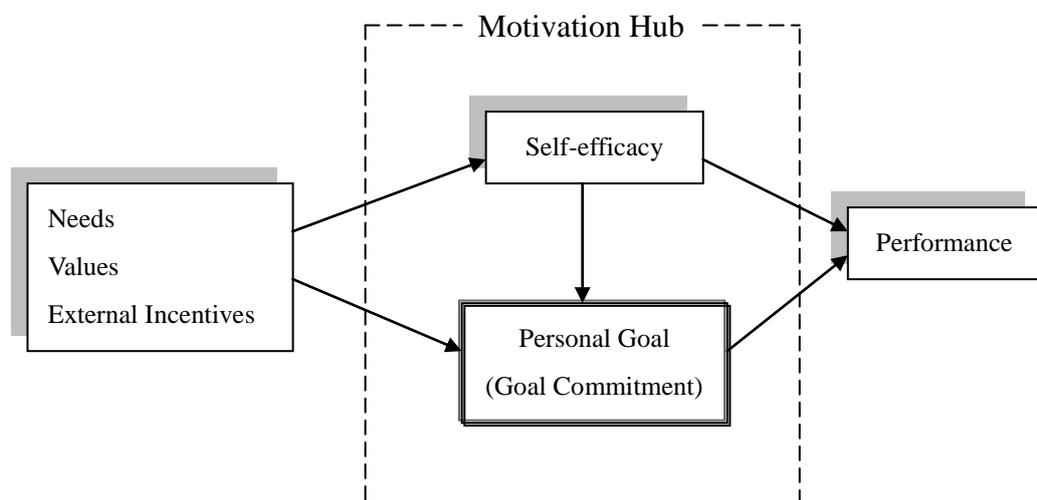


Figure 2.1 The Motivation Hub Model
(After Locke 2001)

The basic assumption of this model is that personal goals and self-efficacy, which are

task- and situation-specific, reflect the other motivational elements in the context of a specific situation. Needs, values, and incentives affect the ways individuals choose and frame the situation (Locke 1991, 2001); for example, individuals who highly value achievement are likely to set high achievement goals and be more committed to them, compared with those with a lower achievement-orientation (Locke 2001). External incentives are also reflected in the types of goals set by individuals: so that individuals who value monetary rewards highly would be likely to look for money-making opportunities, set goals for generating money, and be more committed to such goals (Locke 2001).

The motivation hub model predicts that goals and goal commitment are affected not only by needs, values and incentives, but also by the individual's degree of self-efficacy for the task involved. On the other hand, self-efficacy is affected by other motivational elements and has a direct effect on performance (Locke 2001). The motivation hub model, then, stresses that goals and self-efficacy are the most immediate determinants of an action, and the effects of needs, values and incentives on performance have to go through the hub under the mediating effects of two variables – goals and self-efficacy – so as to ultimately influence performance.

2.2.3.3 Evaluation of the Goal-setting Theory and the Motivation Hub Model

Goal Setting Theory is one of the most popular and well-accepted theories of work motivation (Pinder 1998). Tubbs (1986) has indicated that setting conscious performance goals can improve task performance, and that the effect is more profound for specific and difficult goals. Miner (1984), in his review of

organisational behaviour theories, commented that goal setting was one of four theories that were both valid and practical. Goal setting theory is supported by much empirical research and many field studies conducted by theorists and other researchers; for instance, Locke et al. (1989) found that goal specificity reduces variation in performance by reducing one's ambiguity about what is to be attained. Erez and Zidon (1984) discovered that difficult goals resulted in better performance because they required higher effort than easy goals. The mediating effect of self-set goals and self-efficacy on monetary incentive, as suggested by the motivation hub model, is also supported by empirical studies (Bandura and Cervone 1986; Lee, Locke and Phan 1997).

The goal-setting concept is widely applied in organisations in the form of individual and team management-by-objectives programs (Ambrose and Kulik 1999). These programs involve cycles of goal setting and evaluation, such as setting and recording objectives, working toward these objectives, and subsequently reviewing how well they are met, and the interaction between organisational goals and individual goals.

Understanding the difficulty level of goals is essential in GST because the actions that are required for achieving satisfactory achievement of a goal can be accurately measured. However, there is still no consensus on how goal difficulty is operationalised (Donovan 2001). It is commonly operationalised into four major categories: assigned goal level, self-set goal level, performance improvement, and difficulty perception (Wright 1990). *Assigned goal level* refers to the absolute level of performance by an individual required by his/her superiors without a measure reference to their ability (Wright 1990); for example, a production foreman may

require a sewing worker to accomplish 10 pieces of samples within a certain day in order to meet a special shipment schedule. *Self-set goal level* also refers to the absolute level of performance, but it is set by the individual himself/ herself (Wright 1990); for example, a piece-rated worker may set a goal of producing 50 more pieces of samples than his/her normal monthly output in order to earn more money to buy a new mobile phone. *Performance improvement* means setting a performance goal as a percentage of a past trial or block of trials (Wright 1990); for example, an industrial engineer may design a new production flow with a 10 per cent increase in output that has to be achieved by workers. *Difficulty perception* refers to the “subjective” measures of goal difficulty (Tubbs 1986). The data are provided by individuals about their intentions to perform well or their perceptions of the difficulty of the goal (Wright 1990); for example, when required to make a new and complicated sample, a worker would perceive difficulty in this job and therefore would have to set a different “targeted” completion date instead of the normal production lead time.

Different studies have adopted different operationalisations of goal difficulty: one laboratory study by Motowidlo et al. (1978) that asked 175 male undergraduates to solve arithmetic problems used 20 per cent of goal attainment probability as the cut-off point for difficult goals; other studies have used 15 per cent as the cut-off point (Klein et al. 1999). Notwithstanding these differences in the operationalisation of goal difficulty, there exists common ground that, within a set ability level, an increase in goal difficulty is followed by an increase in effort by an individual and hence in task performance (Locke 1968; Erez and Zidon 1984; Locke and Latham 1990; Martin et al. 1999).

Another concern about GST is that it fails to consider the possibility of perceived goal conflict (Locke and Latham 2002), including conflicts between work goals and other goals of individual workers, or conflicts between personal goals and organisational goals. Goal setting theory focuses largely on the relationship of one-to-one goal and task performance, but neglects the possibility of other conflicting goals; for example, factory workers may simultaneously have goals concerning work success and social life. Spending more time on work, for example by working overtime, decreases time on social activities, and vice versa. It seems that goals compete with each other in depriving one's resources in terms of time, energy and skills. Even though workers may set a specific and difficult goal for their jobs and possess high self-efficacy in achieving work success, it is possible that their performance may be influenced by their simultaneous desire for social commitment. Since GST mainly focuses on the impact of a single task goal on job performance, neglecting the co-existence of other goals among workers may lessen the predictive value of the real goal-task relationship (Donovan 2001).

2.2.4 General Evaluation of Motivation Theories

Work motivation has received much attention over the past five decades. The principal aim of content theories is to identify static factors associated with motivation, while process theories hold a dynamic view of work motivation and attempt to understand the cognitive processes that individuals go through in determining job-related behaviours in the workplace (Steers et al. 2004). Needs theories provide a conceptual framework for understanding basic motives in human behaviour by identifying different types of needs that workers pursue, such as a need

for self-actualisation, a need for achievement, and social needs. They also explain why a person must act in certain ways. However, they do not explain why specific actions are taken in specific situations in order to obtain specific outcomes. They are also not able to account for individual differences in work behaviours (Latham and Pinder 2005). When considering the cross-cultural applicability of needs theories, the hierarchy of needs embedded into these theories may be somewhat different from hierarchies of other cultures (Deresky 2006). Chinese culture, for example, focuses more than Westerners on social and relational needs in comparison to physiological needs (Nevis 1983). As noted earlier, this suggests that Western needs theories may not have the same relevance in predicting the job behaviours of Chinese workers.

Process theories such as equity, expectancy and goal setting, on the other hand, explain why an action may be carried out by an individual. From a cross-cultural perspective, Western theories often regard human beings as rational, analytic, and systems-oriented, as reflected in the theoretical implications of equity theory and expectancy theory. Chinese theoretical perspectives put more emphasis on relational, interactive and adaptive behaviours (Cheung et al. 1996; Whiteley, Cheung and Quan 2000), which are unlikely to be prioritised by Western motivation theories. A Chinese worker's job intention, therefore, is not necessarily driven by personal interest but may be directed to fulfilling one's moral duties (Munro 1977). This tradition contrasts sharply with the Western focus on improving a worker's personal satisfaction, and so weakens the predictability of equity theory and expectancy theory, for example, in Chinese organisations.

Unlike other motivation theories, goal setting theory receives much empirical support

and reliably generates an accurate prediction of the goal–performance relationship by taking into consideration goal difficulty and specificity. Setting a specific, difficult goal makes explicit to workers what needs to be attained, and identifies a meaningful referent for them to evaluate their performance. Goal pursuit, and attainment, in this instance, enhances task interest, pride in performance, a heightened sense of personal effectiveness, and possibilities for increases in remuneration (Latham 2007).

Goal setting theory is also concerned about understanding an individual's goals instead of personal needs and desires (Schneider 1985; Latham 2007). The motivation hub model discussed earlier reveals the mediating effect of goals and self-efficacy on needs, values and incentives. This suggests that regardless of individual differences in needs and values, understanding one's goal remains predictive of an employee's job performance. It implies that the goals set by workers are rooted in personal needs and values, and are the mechanism by which needs and values lead to action (Latham and Pinder 2005).

Despite empirical support, it still remains questionable if goal-setting theory is cross-culturally applicable. Leung (2001) questioned whether the prediction of goal setting theory (i.e. performance increases with goal difficulty) could be replicated in non-North American cultures. He argued that the stress of compliance to superiors among workers in high-power-distance countries in which individuals highly accept the unequal distribution of power between superiors and subordinates (Hitt, Miller and Colella 2006) might weaken or nullify the effect of goal difficulty on job performance, especially if the goals are set by the supervisor. Workers may receive negative supervisory feedback if they fail to perform well, which in turn affects their

future relationship with supervisors (Leung 2001). Studies examining cross-cultural differences consistently demonstrate that China differs from Western countries in various cultural dimensions such as power distance and collectivism (Hofstede 1980a; Triandis 1990; Markus and Kitayama 1991; Oyserman et al. 2002). Because of collectivistic behaviour, the group is often viewed as more important than individuals (Geen and Shea 1997). An experiment comparing Israeli and Chinese college students demonstrated that people from low-power-distance cultures such as Israel, set higher goals and sought higher performance outcomes than people from high-power-distance cultures such as China (Kurman 2001). Sue-Chan and Ong (2002) also found a cultural effect on goal setting, with self-efficacy mediating the effect of goal assignment on performance only for those people from low-power-distance cultures.

Cultural values are deeply rooted in needs and provide a principal basis for an individual's goal-setting and motivation at work (Locke and Henne 1986; Latham and Pinder 2005). Steers and Sanchez-Runde (2002) state that culture determines three distal factors of motivation: (a) self-concept, including personal beliefs, needs and values; (b) norms about work issues, such as the nature of achievement, tolerance of ambiguity; and (c) environmental factors like education and socialisation experiences, economic prosperity, and political and legal systems in the society. Putting these distal factors into a goal-setting model, they influence self-efficacy beliefs and goals, as well as the nature of incentives to perform. These reveal that culture may influence the goal-performance relationship through its influence on needs, values, self-efficacy beliefs and goals. Figure 2.2 suggests a different model of motivation by incorporating the impact of culture on Locke's (1991) motivation hub

model. The dotted lines indicate the proposed moderating effects of cultural influences on the original model.

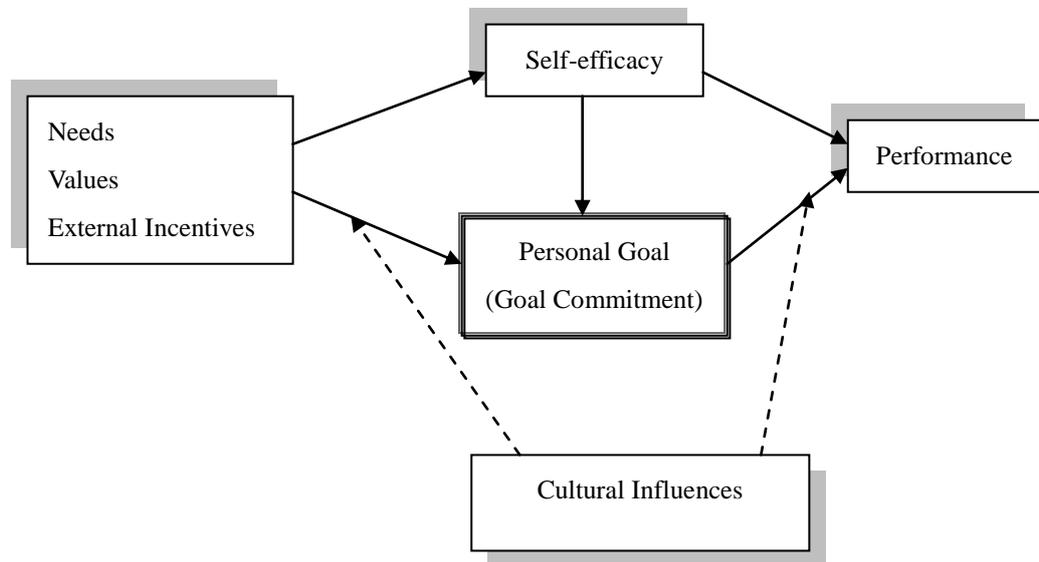


Figure 2.2 A Cultural Model of Work Motivation
(Modified from Locke's Motivation Hub Model 2001)

Hoffman (2002) asserts that there are important cultural differences in employee motivation between China and the West. Eastern cultures focus on the needs of society more than on the needs of self-interest: for example, in Chinese tradition, an employee's intention to work is not necessarily driven by self-interest but is directed by filial piety (Munro 1977). Trompenaars and Hampden-Turner (1997) challenge the assertion that everyone is motivated principally by monetary rewards to gratify basic needs. Workers might have to fulfill their cultural needs, prior to satisfying their own basic needs (Munro 1977). These ideas suggest that cultural values to be emphasised are different to a greater extent in the Chinese context than in the Western context.

The literature also suggests that workers' productivity may be affected by work-unrelated factors such as the desire for family reunion or relatedness goals (Björkman and Lu 1999). The co-existence of work goals alongside other goals may create goal conflict within individuals, which in turn affects commitment to work goals and job performance. Job-related behaviours like job satisfaction and job commitment are also subject to cultural influences (Dorfman and Howell 1988). Employees who are more satisfied with their jobs are less likely to be absent from work (Hackett and Guion 1985). Leung (2001) also suggests that productivity and work performance levels are more homogenous among workers in collectivistic cultures than those in individualistic cultures. As collectivists are sensitive to whether they are accepted by the group, and therefore sensitive to their work performance, they always achieve the goals by performing at a level that is similar to the performance of most members (Leung 2001). While there is still a growing body of literature on the cross-cultural aspects of job motivation, it still remains unclear how cultural values moderate the goal–performance relationship. This present study will attempt to explore the applicability of goal-setting theory among Chinese factory workers by investigating the influence of specific Chinese cultural practices in the goal–performance relationship.

2.3 Chinese Culture

Culture comes in layers, like an onion. To understand it, you have to unpeel it layer by layer. On the outer layer are the products of culture..... The layers of values and norms are deeper within the "onion", and are more difficult to identify.

(Trompenaars and Hampden-Turner 1997, p. 6)

2.3.1 Meaning of Culture

The term ‘culture’ may be loaded with different meanings and implications in different contexts. Providing an exact definition that both exposes and eliminates ambiguities would require great effort and may not be possible (Copi and Cohen 1994). Moreover, definitions inevitably bear limitations because of the definers’ personal stances and special requirements of usage. No single definition can, therefore, provide a comprehensive explanation of the word *culture*; for facilitating understanding of the term *culture*, this thesis examines the meaning of this term from several perspectives.

In the Chinese tradition, the term *culture* is sometimes mentioned, but very few scholars have formally defined it (Wei 1972). However, an authoritative Chinese dictionary gives one definition:

Human society evolved from barbarian to a civilised one with achievements obtained through efforts displayed in different aspects like science, arts, religion, ethics, legal system, customs, rituals, etc. The one integrating all is called “culture”.

(Ci Hai 1948, p. 608)

This study has to resort to the meanings of culture defined by Western academics and scholars. One well-known anthropological consensus definition is as follows:

Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their

embodiments in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values.

(Kluckhohn 1951, p. 86)

Kroeber and Parsons (1958, p. 583) provide a cross-disciplinary definition of culture as “transmitted and created content and patterns of values, ideas, and other symbolic-meaningful systems as factors in the shaping of human behaviour and the artefacts produced through behaviour”, while Hofstede (2001, p. 9) provides a very simple definition of “culture as a kind of collective programming of the mind, which distinguishes the members of one group or category of people from another”.

Collectively, these anthropologists define culture as a basic construct that determines the cognitive and behavioural patterns of the people that constitute a society (Van Maanen and Barley 1984; Trice and Beyer 1993; Aurelio 1995): for sociologists, a society’s culture comprises both intangible aspects – the beliefs, ideas and values which form the content of culture – and tangible aspects – the objects, symbols or technology which represent that content (Giddens 2001).

Common in all the definitions described above, *culture* implies a system of shared beliefs and values among the members of a national society. Cultural values and beliefs help the formation of social norms through socialisation processes, which in turn, affect psychological attitudes and behaviours of members within the culture (Smith, Bond and Kagitcibasi 2006).

2.3.2 Emic and Etic Approaches

Cross-cultural research suggests that there is a compartmentalization of the ‘etic’ and ‘emic’ nature of its component theory (Brislin 1976; Smith et al. 2006). Emic studies, for example, are those that examine unique and specific theoretical components which are drawn from the immediate cultural context being studied and make no assumption that there is a general pattern of behaviours across cultures: in other words, ‘emic’ constructs are culture-specific (Cheung et al. 1996). Alternatively, ‘etic’ studies are those that hold a provisional assumption that the phenomenon being studied is universal and comparable across cultures (Smith et al. 2006). In ‘etic’ studies, Western concepts and measures are often applied in non-Western contexts, on the assumption that the theoretical concepts and measures will possess the same meaning in the new contexts. This is known as “imposed-etic”: in other words, ‘etic’ constructs are culture-comparable (Cheung et al. 1996). Such distinctions between ‘etic’ and ‘emic’ approaches to theory building has led to the search for a theoretical construct to explain complex ‘emic’ concepts such as the Chinese construct of *guanxi* (interpersonal relationship) for understanding dynamic and contextually-sensitive components of work motivation among Chinese workers (Wood, Whiteley and Zhang 2002).

Even though some researchers argue that human resource management and industrial relations in Chinese enterprises are all undergoing drastic changes to become ‘marketised’ and more ‘convergent’ with Western management practices (Ding, Lan and Warner 2001), traditional cultural values still prevail and dominate in Chinese societies. The present study will adopt an ‘emic’ approach to investigate the impact of cultural factors in work motivation of Chinese workers. It is suggested that

traditional values like filial piety and loyalty (Yang and Huang 1991; Wong, Wong and Ngo 2002) may enhance the strength of goal-setting in work motivation among Chinese workers as a result of complementary goals, thus strengthening or validating predictions of goal-setting theory (Leung 2001) in China.

Cultural differences in values and needs (Hofstede 1980a; Nevis 1983; Deresky 2006; Smith et al. 2006), however, increasingly raise questions about the generalisability of Western motivations theories among Asian workers. Chinese people emphasise interdependence to a greater extent than do North Americans and Western European counterparts (Ho 1991; Oyserman et al. 2002; Cheung and Cheung 2003). Interdependence refers to the phenomenon of a person describing him/ herself as embedded in groups and interconnected with others (Markus and Kitayama 1991). Unlike North Americans who possess high levels of independent self-construal, Asians are more likely to define themselves with reference to others and their affiliated groups such as family or work groups (Smith et al. 2006). The concern for harmony with one's group can influence a person's motivation and subsequent behaviours (Markus and Kitayama 1991). Chinese people value familism (Yang 1988; Szalay, Strohl, Fu and Lao 1994) and are expected to care for their family members and relatives in fulfilment of social and family obligations. Fulfilling filial duties to parents and ancestors and being loyal to supervisor, are two important constructs emphasised in Chinese society (Chen et al. 1998; Wong et al. 2002; Ho et al. 2006), which guide and affect social behaviours and interactions among Chinese people. Putting these in an organisational context, it is plausible to predict that such cultural values may strengthen the positive impact of goals on performance among Chinese workers.

Studies of cross-cultural comparisons consistently demonstrate that China, regardless of its large geographical size and ethnic diversity, scores high in collectivism as compared to Western countries like the United States and United Kingdom (Hofstede 1980a; Triandis 1990; Markus and Kitayama 1991; Oyserman, Coon and Kimmelmeier 2002). Chinese cultural values such as those that emphasise interpersonal relatedness (Cheung et al. 2001) and filial piety (Yang 1994) are prevalent in Chinese society and widely endorsed by Chinese people regardless of the country's economic development. China is experiencing rapid economic development, although this has slowed recently due to global economic factors. Within this context, the focus of this study is on the influence of Chinese cultural values such as interpersonal relatedness and filial piety on work motivation among Chinese adult workers.

2.3.3 Chinese Culture: Confucianism

Chinese culture is rich in content and history (Wong 2001). The Chinese mind can be understood through its philosophy, and the dominant Chinese philosophical tradition is Confucianism (Allinson 1989). Confucianism is a vast corpus of beliefs, rituals and codes of conduct developed by the Chinese philosopher Confucius (Tan and Chee 2005). Confucian values can be found in people's mentality and behaviours (Le 2003) and have been observed to be one of the strongest cultural influences in Asian regions even in the present day (Oh 1991). Traditional values such as hierarchical systems, loyalty, and interpersonal relationships are still treasured in Chinese enterprises (Anderson, Li and Harrison 2003).

The life of the Chinese is permeated with Confucianism (Fung 1976). For Chinese

people, ethics, rather than religious beliefs, inform Chinese civilisation and religious ideas and activities are not the most important and absorbing part of life: Confucian ethics provide the spiritual basis of Chinese civilisation (Bodde 1942; Lee 2003).

Research into Chinese cultural values has shown that these have provided a clear and consistent system for generations despite the change of time (Ho 1996; Park and Luo 2001). Core cultural values such as relationship (*guanxi* 關係), loyalty (*zhong* 忠), righteousness (*yi* 義) and reciprocity (*bao* 報) tend to change only gradually over generations rather than years (Hsu 1981; Kindle 1983; Lockett 1988; Park and Luo 2001; Ho, Peng and Chiu 2006). The family is one force that constantly socialises and embeds cultural values from one generation to the next (Smith et al. 2006). Throughout time, traditional values such as relational obligations, family collectivities, virtuous behaviour toward others and moderate living (i.e. preserving resources as individuals and economies) (Chapel 1998) are incorporated into the moral standards and principles of living, among Chinese people. Various cultural values form a set of guiding principles for Chinese social behaviours (Zhang and Bond 1998). The cultural values like *guanxi*, *bao* and *zhong* set the norms governing how individuals should act and behave in relation to others in a social hierarchy in order to attain and maintain social harmony (Redding and Wong 1986; Hofstede and Bond 1988). Given the complexity of Confucian values embedded in Chinese society, it is not surprising that cultural values exert influences on the work-related behaviours and motivation of Chinese factory workers.

In the Confucian system, gender and age are critical indicators of power in a

hierarchy (Ho et al. 2006). Specifically, females have lower social status than males, and juniors have to show veneration to seniority. Respect for seniority and authority tends to result in wide acceptance of hierarchy in Chinese societies (Björkman and Lu 1999), including in the workplace. These traditional values are still practised and emphasised.

According to Hwang (1995), there are three major Confucian ethics for Chinese people. They are benevolence (*ren* 仁), righteousness (*yi* 義), and propriety (*li* 禮). Benevolence refers to behaviours that favour those people with whom one has a close relationship; righteousness refers to the respect afforded to superiors; and propriety means acting according to social norms and traditional rituals (Hwang 2002): for example, in the supervisor-subordinate relationship, the subordinate should obey and be loyal to the supervisor, while the supervisor should make decisions in line with the principles of benevolence and righteousness.

Confucian values are deeply rooted among Chinese people. Motivational techniques such as monetary rewards and needs for personal achievement which are dominant in the West may not hold true in China (Hutchings and Weir 2006) although one can speculate that the opening up of China to the West over the past 31 years (Yau and Steele 2000) and desires by the Chinese for a better life through monetary reward may be putting pressure on traditional cultural values. Nonetheless, Chinese workers historically are motivated to work hard because of their strong moral obligation, which requires them to make a contribution for the family's material well-being (Westwood and Lok 2003). This reveals that cultural obligations for others rather than for oneself may be far more important than basic physiological and

esteem needs in motivating workers in China.

2.3.4 The Five Moral/ Cardinal Human Relationships: *Wu Lun* (五倫)

To teach people the moral bonds of human community: affection between father and son, duty between emperor and courtier, distinction between husband and wife, precedence of the elder over the younger and loyalty between friends. (Mencius) (Xie et al. 1978, p.331)

Confucianism emphasises the five fundamental moral/cardinal relationships (*Wu Lun*) (五倫): emperor–courtier (君臣), father–son (父子), husband–wife (夫婦), elder–younger (兄弟), and friend–friend (朋友) (Xie et al. 1978). *Wu Lun*, as it is called, forms the moral system that sets the norms governing acts and behaviours of individuals in relation to others in a social hierarchy in a Confucian culture (Redding and Wong, 1986; Hofstede and Bond, 1988). These five relationships reveal the significance of relational networks between pairs – known as *guanxi* – in Chinese society, and prescribe role behaviours for members within the network (Wood et al. 2002; Hui, Lee and Rousseau 2004).

For each dyadic relationship, members have specific roles and obligations (Wang, Zhang and Goodfellow 2003), as listed in the next paragraph. Individuals are thus expected to adopt multiple standards of behaviours when interacting with persons of different roles and status (Hwang 1987; Bond 1991). Through these roles and obligations, the moral system has been maintained for thousands of years, and regulates every aspect of life such as communication within the family or social

interactions with one's supervisor and friends.

Specific roles and obligations in each dyadic relationship (Wang, Zhang and Goodfellow 2003) are described below.

- a. Emperor (kindness) – Courtier (loyalty)
- b. Father (support and consideration) – Son (piety and obedience)
- c. Husband (protection) – Wife (submission)
- d. Elder brother (care) – Younger brother (modeling subject)
- e. Friends (loyalty and trust) – Friends (loyalty and trust).

Individuals in each of these dyadic relationships are guided by their specified roles and obligations in social interactions. Individuals who occupy the inferior role (i.e. courtier, son, wife, younger brother) are expected to be obedient and loyal to their respective superiors (Chen, Tsui and Farh 2002). As a result, *Wu Lun* implants the root of loyalty to those in superior positions among the Chinese, which may be illustrated by willingness to sacrifice one's interest and provide complete dedication to the superior (Farh and Cheng 2000; Chen et al. 2002). Such cultural emphasis of loyalty to superiors is still observed among contemporary Chinese; for example, Cheng (1995, cited in Chen et al. 2002) found that loyalty was used by Taiwanese firm owners as one of the key criteria to classify subordinates into in-group vs. out-group members.

Guanxi is an important concept in Chinese culture (Davies et al. 2003; Yang, Van de Vliert and Shi 2005). It originates from each dyadic relationship of *Wu Lun* and

conveys the idea of a relationship network, a traditional system of acquaintances linked by mutual obligations that provide protection, help, and support in case of need, in dealing with the broader society and the state. *Guanxi* refers to a broad range of relationships, including family and kinship ties (close or distant), having the same natal or ancestral origin, coming from the same home province or village, being a former neighbor, classmate or colleague, having the same hobbies, and so on (Chiao 1982; King 1991; Faure and Ding 2003).

When a Chinese individual is faced with a problem, he/she naturally seeks help from his/her *guanxiwang* (relationship network) for assistance (Hutchings and Weir 2006). *Guanxiwang* is not limited to those social partners a person knows, but may also cover the networks of those with whom he/she has *guanxi*; for example, a man's high-school classmates are regarded as friends of his wife even though she may not know them. In addition to this instrumental purpose, *guanxi* also implicitly entails the commitment to the relationship, bounding a sense of responsibility and obligation towards those who have relationships with each other (Wong and Kung 1999).

There are three major characteristics in the concept of *guanxi*: familiarity, trustworthiness, and reciprocal obligations (Bian and Ang 1997). Familiarity refers to the development of a *guanxi* in which the two persons must know about each other to a greater extent and share a good deal with each other. Trust is a necessary component of *guanxi* as a result of long-term interactions and provides the basis for facilitating future exchanges. Reciprocal obligations are the most important component of *guanxi* as they are not limited to family and kinship but extend to non-kinship ties. Among Chinese, close friends may call and treat each other as

brothers and sisters, while close neighbors refer to each other as uncle or aunt (Bian and Ang 1997). People in these dyadic relationships are expected to help each other and are bound by moral obligations similar to those given to their family members; thus, *guanxi* is regarded as the most important mechanism in social interaction between individuals (Vanhonacker 2004).

Trust between individuals is established from *guanxi* (Whitley 1991; Peng 2001). In the workplace, a *guanxi* tie provides a foundation of trust in the network, in which all the members are willing to share secrets and provide assistance to each other in the event of a crisis. This, in turn, enhances team effectiveness like satisfaction with team cooperation and team commitment (Chou, Cheng, Huang and Cheng 2006). These all reveal the importance of *guanxi* in understanding social behaviours in Chinese societies.

In the five moral relationships, the ethical significance of a hierarchical system is governed by a number of key norms. These include filial piety (*xiao* 孝), loyalty (*zhong* 忠), trust (*xin* 信), and fraternity (*ti* 悌). Because of their particular relevance to goal setting, this present study focuses only on the impact of filial piety and loyalty to supervisor on the work motivation of Chinese workers and only these two constructs are defined in greater detail in the following sections. In particular, goals related to fulfilling filial duty (such as family union or ancestor worship) and the concomitant tension of compliance to supervisor's demand (loyalty) will be studied, as will the way in which they influence job-related goals and performance.

2.3.5 Filial Piety

Filial piety towards parents is heavily stressed in Confucianism because it is one of the two key components for differentiating mankind from animals (Tang 1978). Animals can display love towards their offspring just like human beings, but they cannot be constantly fraternal to their siblings, and are unlikely to display filial respect towards their parents. Filial piety is the first and foremost directive principle in the socialisation of a Chinese child (Ho et al. 2006), and the expression of filial piety by the devotion of the young to the old is the cornerstone of Chinese civilisation (Kutcher, 1999). When children begin to learn, they are conditioned to accept their filial duty for their entire life (Ho et al. 2006). In the past, children often listened to stories about filial piety from a book named *The Twenty-Four Kinds of Filial Piety*. This cultural value, as a result, is deeply embedded early in childhood and remains relatively stable over time (Adler 2002). More importantly, a Chinese person may also internalise this value by transforming externally prescribed regulations or norms into an internally endorsed code of behaviour (Ryan, Rigby and King 1993).

The Confucian idea of filial piety is constructed on the simple fact that one's body exists solely because of one's parents. In fact, Confucianism conceptualises family members as one body (Hwang 1999).

Father and son are one body; husband and wife, brothers, are all one body. The relationship between father and son is like that between head and feet. Husband and wife are a combination of two separate parts of one body; brothers are the four limbs. (Confucian Book of Rites:

Chapter on Mourning Dress) (Wang 2001).

Filial piety is an essential domain in Confucian culture, and no comparable concept is found elsewhere (Hwang 1999). According to Ho and colleagues (2006), the Chinese form of filial piety has three dimensions: filial respect, filial obedience and filial provisions. *Filial respect* is the great esteem of sons and daughters for their parents. Their inner minds show deferential subscription to their parents. *Filial obedience* means following orders from the parents and coming to heed their guidance. Sons and daughters have to fulfill their parents' reasonable requirements. Finally, *filial provisions* require sons and daughters to do their utmost to provide and care for their parents when they are aged or disabled.

As a cornerstone of the Confucian ethic, filial piety goes far beyond the demand of simply obeying and honouring one's parents, as outlined below (Ho 1994). Other dimensions of this cultural value are also stressed in society such as providing material and mental well-being to one's aged parents along with performing ceremonial duties of ancestral worship, both important values. In the rites of ancestor worship, a Chinese person expresses reverential gratitude to those from whom they have received life, and the sense of duty to those not yet born. This ancestral worship is performed unbroken in Chinese society and is part of the mechanism by which an orderly and harmonious society is sustained (Chao 2006). In addition to this, taking care to avoid harm to one's own body, ensuring the continuity of the family line, and conducting oneself in a general way that brings honour and not disgrace to the family name are core tenets of filial piety (Ho 1994). Accomplishing filial obligations may override the importance of other social

obligations; as a result, work participation and other social interactions may give way to filial duty when conflicts among them arise.

Filial piety reflects a fundamental norm in traditional Chinese culture of reciprocating parents' kindness between two generations, namely between parents and their children. This requital seems uncontroverted inasmuch as the kindness of bringing up the children by parents must be repaid through duty by their sons and daughters. Failure to provide this duty undermines the fundamental equity in the relationship. It is important to note that this requital is not deemed a fair exchange. Rather, it ideally originates from a genuine feeling in the hearts of sons and daughters to act in a dutiful manner to their parents (Ho 1996; Ho et al. 2006). Fulfilling one's obligations to one's parents is culturally expected by both the Confucian tradition and the new ethics of one's economic success in contemporary China (Hwang 1987; Yang 1994). A person who ignores obligations is likely to lose kinship connections (Lin 1990).

The very fundamental act of such filial reciprocation is not simple. If the filial obligation of reciprocating benefits and care to parents is infinitely magnified, because of ancestral worship, for example, such requital or duty of care to parents may never come to an end within the lifespan of the sons and daughters. As a result, reciprocation of parents' kindness often becomes the most crucial goal of children. Obedience to parents lasts for the whole life of sons and daughters as one of the means of reciprocation (Ho et al. 2006).

According to the *Classics of Filial Piety*, Confucius said, "In serving his/her parents,

a filial son/daughter reveres them in daily life; he/she makes them happy while he/she nourishes them; he/she takes anxious care of them in sickness; he/she shows great sorrow over their death; and he/she sacrifices to them with solemnity” (Chai and Chai 1965, p. 331). When the parents get old or sick, their sons or daughters are expected to stay at home, to live together, and take care of them.

One filial duty is to have offspring by the sons carrying the family name. There is a Chinese saying: “there are three kinds of unfilial behaviours and bearing no children is the greatest” 【不孝有三，無後爲大】 (Legge 1933, p. 725). With such a cultural emphasis on filial piety and the responsibilities therein, it is not uncommon that workers withdraw from their jobs in order to fulfill their filial duty. It can be reflected in the work of Pun’s (2005) book, *Made in China: Women Factory Workers in a Global Workplace*, which won the Wright Mills Award in 2005. In her ethnographic research, one of the participants, Xiaoming, a 21-year-old migrant worker from a village in Hubei, was working in Shenzhen in the southern part of China. She decided to leave her jobs because she went back home for marriage after saving money (Pun 2005). This case clearly shows cultural values still have an impact on the motivation and goal-setting behaviours of Chinese workers. After working in cities for several years, most workers from rural areas leave their jobs and return home to get married. As a result, workers work very hard in the factories to earn enough money to support the intended family. Such acts are driven by the inner force of filial duty, to establish their own families in their own village in order to carry out the social obligations stressed in their culture: in other words, filial piety turns out to be an inner driver for workers to set high goals and to achieve high job performance.

The construct of fulfilling filial duty to ancestors, called ancestor worship, may also influence goal commitment among Chinese workers (Björkman and Lu 1999): for instance, during the ancient traditional Ching Ming Festival (清明節) falling in the third lunar month or around April 5 in the solar calendar, the Chinese have the custom of sweeping graves, offering sacrifices to ancestors, taking an outing in the countryside, and wearing a willow twig on the head (Ren 2005). Filial obligations of this sort may have an influence on the strength of a performance goal and job performance; for example, some workers may prefer to quit their jobs in order to return to their villages and pay tribute to the tombs of their parents, showing remembrance and respect to them. Because of this, again, workers will work hard to earn more money before going back home. These patterns of withdrawal behaviours are rarely observed in Western cultures but are common in Chinese societies, indicating that cultural values such as filial piety do play a critical role in influencing Chinese workers' work motivation, and, in turn, job performance. It can be argued that the goal–performance relationship will be strengthened if workers have a high level of filial piety.

2.3.6 Filial Provision

Filial piety can also be expressed in terms of filial provision, which emphasises the supply of material goods that support well-being (Ho et al. 2006). One example is providing practical things like food and shelter, rather than the psychological or mental concerns of filial respect and obedience noted in the previous section. Parents, whether Chinese or not, typically have an unshakable commitment to rearing and educating the next generation (Liu 1994). However, for the Chinese, this kind

of behaviour bears a further hidden meaning of reciprocation from the children (Ho et al. 2006). There is a Chinese saying that “children are for old age as corn is for a famine”【養兒防老，積穀防饑】. Chinese parents expect their adult children to feed and shelter them when they are aged or disabled.

In addition to their filial responsibilities to parents, parents-in-law and their children, Chinese individuals also bear the duty of filial provision to their younger siblings. The fraternal relationship among brothers and sisters in a Chinese family is known as *ti* (悌) (Wang 1997), which, is in fact, an extension of filial piety (Chan 1999). Confucian once said, “a competent provision was secured for the aged till their death, and the means of growing up to the young” 【使老有所終，幼有所長】. (Confucian *Book of Rites: Chapter on Li Yun*) (Chan 1999). The most basic behaviour displayed within the concept of filial piety is the provision of materials that support the well-being of parents: failure to provide in this way is considered an unfilial act (Lin 1992). The relationship among brothers and sisters represents a more horizontal relationship than the vertical relationship between parent and child. Historically, in the ancient Chinese royal court, when an Emperor died, his younger brother could succeed to the throne. Similarly, in contemporary Chinese society, when a father dies, the eldest brother will be treated as the “father” and can command respect from his younger siblings (Wang 1997). This extension of filial piety, therefore, necessitates that all siblings in a Chinese family to have a duty to take care of other members in need (Han 2001). As a result of the care-giving burden (Liu et al. 1997), Chinese workers work hard to earn more and support their extended family members.

Filial piety can be considered an abstract notion which dictates certain behaviours and actions one must demonstrate to their family. Filial provision can be conceptualised as the number of family members a Chinese person, and in the case of this research, a factory worker, has to support.

2.3.7 Loyalty to Supervisor

One of the virtues in Confucian ethics is loyalty (*Zhong* 忠). Given the habit of conceptualising abstract ideas in concrete terms, the Chinese developed this kind of virtue in concrete forms of behaviour (Wong 2001), with the loyalty of subordinates towards superiors becoming a norm.

A traditional Chinese saying maintains that “if an emperor asks a courtier to forfeit his life, the courtier has no choice but to do so; and a son must sacrifice himself, if his father asks him to do so”. 【君要臣死、臣不得不死，父要子亡、子不得不亡】 (Wang, Zhang and Goodfellow 2003).

There was a strong moral tie between the Emperor and his courtiers. The courtier had to show loyalty to the royal court until the courtier’s death. This was displayed in the changing of dynasties in Chinese history, in that the courtier of a defeated dynasty would not join the workforce of the new dynasty. Some loyal courtiers even killed themselves to show their absolute loyalty and genuineness to their ex-emperor. This represents the so-called “moral courage” that a courtier should possess (Wang et al. 2003).

Despite the change of time, the influence of these virtues is still prominent in Chinese societies (Bond and Hofstede 1989; Ng 1998): for example, Redding and Wong (1986) found that the diligence of Hong Kong workers was partly due to their willingness to accept the autocratic demands of their supervisors because of their need to demonstrate loyalty to superiors. Selmer (2000, 2001) demonstrated the positive relationship between loyalty to superiors and promotion opportunities and well-being in Hong Kong; thus, the traditional Confucian values of social duty and obligations lead to an emphasis on respect and loyalty to superiors at work (Wong et al. 2002).

It is well established that Chinese society is a collectivistic culture (Earley 1989) and that this construct is reflected in the traditional values of Chinese business (Ralston et al. 2006). Collectivism versus individualism, as identified by Hofstede (1980a), is often applied to reflect the dimensions of cultural variability and differences (Leung 1997; Bazerman, Curhan, Moore and Valley 2000). Members of individualistic cultures, such as Americans and Germans, stress loose relationship ties and value independence, uniqueness and individual goals, whereas members of collectivistic cultures, such as Chinese and Japanese, emphasise a close relationship with others and value interdependence, compliance to authority figures, and collective goals (Hofstede 1980a; Triandis 1990).

Because of this collectivist focus, the Chinese tend to show more respect for and conformity to superiors than their Western counterparts (Wong et al. 2002). This reflects the underlying mechanism of loyalty to superiors, including identification with, and attachment and dedication, to a particular supervisor (Chen, Farh and Tsui

1998). Identification takes place when subordinates admire certain attributes of the supervisor, such as personality, attitudes, or accomplishments. They may feel proud if they are associated with a supervisor who exhibits these attributes (Becker, Billings, Eveleth and Gilbert 1996; Chen et al. 1998). The dimensions of dedication (e.g. dedicating oneself to a supervisor) and attachment (e.g. a desire to be attached to the supervisor) reveal the indigenous constructs of loyalty to supervisors among Chinese people (Chen et al. 1998; Wong et al. 2002). Chen et al (1998) have argued that loyalty to another individual goes beyond the western concepts of mere identification or internalisation of another's values. In the Chinese relationship-oriented context, loyalty is associated with indebtedness toward another individual for favours, or role obligation (Chen et al. 1998; Farh and Cheng 2000). Past studies showed that loyalty to a supervisor was more strongly associated with the in-role and extra-role performance of Chinese workers than organisational commitment (Chen et al. 1998), revealing the significance of personal loyalty in the Chinese context.

Leung (2001) proposed that motivational strategies could be more effective if they were initiated and implemented by superiors with high status in high-power-distance societies. Authority figures are better able to motivate subordinates (Leung 2001; Smith et al. 2006), and as a result workers dedicate greater effort to their job tasks if these tasks are assigned by their supervisors. It is reasonable to expect that in China, a high-power-distance country (Hofstede 1980a), difficult goals set by supervisors will lead to higher performance outcomes in factory workers.

Redding (1990) suggested that loyalty to a person is more important than loyalty to an organisation among Chinese people. Putting this in an organisational setting,

loyalty to a supervisor becomes far more influential on work performance than commitment to the company (Chen et al 2002). Lee (1992) found that workers who were loyal to their employer tended to be conscientious, enthusiastic about their work, and willing to comply with their employer's decisions. Cheng (1995) described loyalty to a supervisor as being faithful, willing to take extra effort, and demonstrating unreserved dedication. Chen et al (2002) demonstrated that loyalty to a supervisor was more strongly associated with both in-role and extra-role performances than with organisational commitment. These findings suggest Chinese loyalty to a supervisor is not limited to the Western concept of identification with and internalisation of the supervisor's values: rather, it expresses the subordinates' behavioural tendency to exert extra effort and comply with the supervisor's decision (Chen et al. 2002).

Loyalty to a supervisor is found to be positively associated with job performance and organisational citizenship behaviours (Chen et al. 2002; Wong et al. 2002). The willingness to put in extra effort and comply with a superior's commands, as prescribed by the traditional Chinese value, could enhance one's motives of achieving good performance, especially when the work goals are assigned by the supervisor. This is because subordinates are more motivated to put effort into their tasks if goals are assigned by authority figures (Leung 2001). This idea was first proposed by Leung (2001), although no study has yet tested the impact of loyalty to a supervisor on the goal-performance relationship.

2.4 Chinese Factory Workers in China

2.4.1 Economic Development in China

China became a socialist society with the launch of a new government – The People’s Republic of China – in 1949. Under the philosophy of socialist egalitarianism, every individual’s basic survival needs were taken care of by the government (Hui and Tan 1996). Workers were assigned jobs by the state, and employment usually lasted until retirement (Price and Fang 2002). Workers were weakly motivated because they got almost the same share of returns (e.g. wage and social benefits) however much effort that they put into their jobs (Price and Fang 2002). Until recently, employee turnover rates were negligible as the central government exercised strict control over the labour market and job mobility (Warner 1995b; Hui and Tan 1996).

However, the picture of the labour market has changed gradually. Since the Open Door Policy of 1978, when China began transforming itself into a market economy, attempts to motivate workers through ideology and politics have become less and less effective (Lockett 1988). The opening of the socialist system to global markets has attracted foreign-owned companies to set up manufacturing factories in various cities in China such as Shenzhen, Dongguan, Zhuhai, and Zhongshan in the south and Nantong, Pinghu, and Kunshan in the north. China is renowned as the “world factory” for global production, offering an abundant and cheap supply of labour and natural resources (Pun 2005).

Rapid and dramatic economic development has lead to a huge demand for manpower

(Lee 1998). Many young people, especially those from rural areas, have relocated to cities to look for jobs with higher pay, improved working conditions and better prospects. They are known as migrant workers, and China has about 130 million of them at present — the largest migrant population in human history (Chang 2008). Economic development and modernisation in China have led to an increasing focus by individuals on personal and extrinsic rewards such as high wages and better living standards (Ding, Lan and Warner 2001).

Young adults from rural areas usually work in factories in cities for four to five years and then return to their home towns (Pun 2005). They are known as transient labour. Tong (1995) reported that this “floating population” of transient workers in Beijing, Shanghai, and Guangzhou comprised 30 per cent, 43.7 per cent, and more than 60 per cent of the urban areas’ working populations respectively. Since the families of these floating migrants do not move with them, the workers’ objective is simply to earn as much money as possible in a short period of time. According to a nation-wide survey, the total time that these floating migrants spend away from their households averaged only 207 days in 1993 (Li and Han 1994). A study examining production line workers revealed a high turnover rate in the factories located in the newly developed coastal provinces (Wong et al. 2001). It is quite clear that the ultimate objective of transient workers is to return home after working in cities for a few years (Hare 1999).

2.4.2 Effects of Chinese Cultural Factors on Workers

Rapid economic and trade development in the past two decades has resulted in great

changes to Chinese societies, bringing modifications to the social fabric, exposure to the Western world, and the adoption of values like capitalism, materialism and individualism. In China, working in manufacturing is generally better than working in agriculture, in terms of both wages and benefits one may receive. A rise in wages normally enhances the purchasing power of a worker, which in turn improves his/her material well-being and living standard. From the perspective of Western theories on motivation, especially the works of Maslow (1954) and Vroom (1964), this welfare or “personal satisfier” would boost the morale of workers. Wang (1992) reported that workers in China ranked “good pay” as their top, most important work goal.

It is commonly believed that these economic changes may strongly modify traditional values and attitudes; however, values like interpersonal relationships and group responsibility still have a strong influence on the job behaviours of workers in China (Wang 1992; Wong et al. 2001). Chen (2001a) argued that Chinese workers, unlike their Western counterparts whose focus is primarily on economic factors, are also motivated by social factors. A recent local survey of Chinese workers from eight provinces revealed that traditional Chinese values such as respect and obligation were still emphasised to a greater extent than the pursuit of money and power (Jin and Liu 2005). Their study also showed that workers from villages put greater emphasis on family values than those from larger towns.

Confucianism has provided a fertile soil in which the Chinese cultural tradition has been cultivated and has flourished (Ames and Rosemont 1998). Confucian thinking has been, and is still, affecting the personal characteristics of the majority of Chinese, who continued to display such cultural influences in their workplace. Cultural values

thus are important in the Chinese setting and influence workers' job performance (Wong et al. 2002) in spite of the growth of Westernisation. The "linchpin" of motivating people to work is still rooted in Confucian-emphasised non-materialistic properties such as trust, altruistic sentiments, norms of reciprocity, and a moral duty to act and perform out of a spirit of spontaneous consensus (Kao and Ng 1997).

2.4.3 Characteristics of Chinese Workers

Migrant workers from villages and towns are heavily influenced by traditional Chinese cultural values, as compared to those born in cities (Jin and Liu 2005). Values related to family and kinship relationships are stressed among these Chinese workers: for example, young workers are expected to return home for marriage in their late twenties, or to take care of their sick or aged parents if needed. Fulfilling the obligation of filial provision, Chinese migrant workers may remit cash from their earnings to their parents or siblings in their home villages every month (Whyte 2004); the money sent home by the workers represents the biggest source of wealth accumulation in rural China (Chang 2008). Chang (2008, p. 13) once wrote, "On the brick walls of rural villages, pro-migration slogans appeared: GO OUT FOR MIGRANT WORK, RETURN HOME TO DEVELOP. LABOUR FLOWS OUT, MONEY FLOWS BACK." Workers also commonly group themselves according to their regional and ethnic identities (e.g. home town, language dialect); consequently, their network affiliation in the organisation in which they work is often based on their home province, which in turn determines their status in the factories as well as their supporting network (Pun 2005).

Family is dominant among Chinese people's responsibilities. There is no doubt that

people in other countries also have important values concerning their family, but the Chinese seem to prioritise it over other values. Filial piety justifies absolute parental authority over children, and prescribes the mode of conduct of children towards their parents and their ancestors (Ho 1996). Adult children have to take care of the material and mental well-being of their aged parents, perform ceremonial duties of ancestral worship, ensure the continuity of the family line, and behave properly in order to avoid bringing disgrace to the family name (Ho 1996). All of these “demands” affect on the job motivation of Chinese workers. The desire to fulfill family duties, such as pressure to get married to a fellow townsman/townswoman, taking care of younger siblings or failing parents, or attending ancestral ceremonies in their home village, may influence goals at work (Björkman and Lu 1999). The driver of filial piety influences the usual strength of goal-setting in motivating workers, resulting in a distinctive pattern of job behaviours among Chinese factory workers.

Guanxi is also important and beneficial to workers, varying from job referral (Bian and Ang 1997; Cheung and Gui 2006) to resource allocation (Leung and Chan 1999). Leung and Bond (1984) indicated that when allocating rewards to employees, Chinese supervisors tend to give more returns to those subordinates with whom they have a closer relationship; having ties with workers from the same clan in a factory may lead to advantages in getting a job and getting a better share of rewards. For instance, if a worker comes from the same home village as the production line leader in the factory, it is likely that he/ she will receive a greater bonus than workers from other provinces. This same worker’s supporting network of social and emotional support is also likely to be larger than others’ because the recruitment of new workers

is often based on the personal network ties of the management team and on prejudices against different groups' ethnic traits and working capacity (Pun 2005). Production line leaders are in a privileged position to recommend home-town kinship members to take up any job vacancies, further enlarging their power and network in the factory. Such *guanxi* enhances the concept of loyalty among factory workers. They are more likely to be motivated by goals that are set by their leaders with whom they have *guanxi* ties, which in turn influence the goal-setting effects of productivity.

2.4.4 Summary of Chinese Workers in China

Confucian doctrines still appear to prevail in contemporary Chinese societies in spite of drastic economic and social reforms (Bond and Hofstede 1989; Ng 1998). With the emphasis on *guanxi* in interpersonal interactions, and the constructs of filial piety and loyalty to supervisor as two of its essential components, many of the social actions performed by persons in dyadic workplace relationships are pre-conditioned. Endorsement of filial piety may increase the likelihood of goal congruence among Chinese factory workers because they are likely to place family goals ahead of work goals, putting more time and effort into their job tasks and so are likely to enhance their performance. Under the one-child policy in China, it is particularly relevant as an only son/ daughter might seek more quasi-family relatedness in a factory.

Loyalty to a supervisor may either strengthen or weaken the goal-performance relationship. On the one hand, authority figures are better able to motivate subordinates in high-power-distance societies (Leung 2001), and compliance to authority may enhance the goal-setting effect. On the other hand, subordinates may worry about negative supervisory feedback if they fail to meet difficult goals set by

their supervisor. Leung (2001) identified such fear as an overshadowing effect of authority, which may trigger defensive and demoralising reactions among subordinates and interfere with their future relationship with the supervisor as well as affect their job performance. In this case, it is possible that loyalty to a supervisor may hamper goal-setting effects.

Considering the impacts of these cultural factors, it is reasonable to question the effectiveness of goal-setting theory alone in predicting the work motivation of Chinese factory workers. Examining types of goals, goal commitment and self-efficacy without consideration of cultural aspects is a flawed approach. This present study, therefore, investigates the role of filial piety and loyalty to supervisor on work motivation. In particular, it is expected that work-competing goals such as those related to filial obligation and compliance to a superior will moderate the predicted effect of a specific, difficult work goal on the productivity of Chinese factory workers. To better capture workers' endorsement of cultural values and its subsequent impact on goal-setting, the present study will adopt a field study approach to examine the relationship between work goals and job performance in a Chinese setting.

Chapter 3 Conceptual Model and Hypotheses

3.1 Assumptions of Quantitative Paradigm

This research adopts a quantitative methodology, which is defined by Levin (1988) as a scientific approach to studying the observable world that stresses systematic, objective measurement aimed at the discovery and explanation of stable order in that world. It attempts to attach numerical values in the evaluation of the qualities of objects, behaviours, or relationships.

During the process of knowledge claims (Creswell 2003), quantitative researchers approach their studies with a certain paradigm or worldview, a basic set of beliefs or assumptions that guide their inquiries (Creswell 1998). These assumptions of quantitative paradigms are based on ontological, epistemological, axiological, rhetorical, and methodological approaches. It is crucial to examine these assumptions since they will provide direction for designing all phases of a research study (Creswell 1994).

On the ontological issue of what is the nature of reality, the quantitative researcher views reality as singular, “objective” and “out there”, independent of the researcher (Creswell 1994). It is something that may be measured by employing a questionnaire or an instrument (Creswell 1994). This research attempts to measure and explain the influences on work motivation by examining the impact of cultural

factors on goal setting theory among Chinese factory workers. It is about studying motivation as part of human behaviour, within a Chinese context.

Epistemology deals with the study of knowledge and what we understand and accept as being valid knowledge, and concerns itself with the relationship between knower and known (Dooley 2001). Quantitative researchers believe that only observable and measurable phenomena can be validly regarded as knowledge (Creswell 1994). Epistemology raises the basic question: “what is the relationship of the researcher to that being researched?” (Creswell 1994, p. 6). The researcher must stick to the doctrine of independence from that being researched. Guba and Lincoln (1994) highlight that if a natural phenomenon like the work motivation of an individual is assumed under this ontological domain, then the position of the knower must be one of objective detachment or value freedom in order to be able to discover “how things really are” and “how things really work”. This study endeavours to stay objective in assessing the influence of interpersonal relatedness on the work motivation of Chinese factory workers by examining goal setting theory. Unlike the qualitative paradigm (Gavin 2008), the researcher of this quantitative study has to be conscious of his own values and opinions (Hoover and Donovan 2004), which must not enter into the research (May 1997) or be allowed to influence the decisions made by respondents in the course of the study (Hessler 1992).

The axiological assumption is concerned with the role of values in a quantitative project. The researcher’s values must be kept separate from the study without any bias: that is, detachment or objectivity must be maintained (Gavin 2008). Given these criteria, quantitative research must omit statements about personal values,

using impersonal language and merely reporting the “facts”, – arguing closely from the evidence gleaned in the research (Creswell 1994). This study aims at measuring a particular phenomenon of work motivation among Chinese workers, measuring the relationships among several variables and reporting the outcome after analyses.

The rhetorical assumption involves the language of research. The language of quantitative research should be not only impersonal and formal, but also based on accepted words such as *relationship*, *comparison*, and *within-group*. Constructs, notions and variables should be well defined from accepted definitions. This orientation marks a quantitative study, and guides the way of research reporting (Creswell 1994). Throughout this study, the rhetoric discipline is adopted.

From the above four distinctions in research designs (Creswell 1994), the relationship between the researcher and the topic being researched, the roles of values, and the rhetoric of the study, a methodology emerges which refers to the entire process of a research study. A quantitative approach will use a deductive form of logic wherein theories and hypotheses are tested in a cause-and-effect manner. Constructs, notions, variables, and hypotheses are selected prior to the commencement of study and remain fixed throughout (in a static design). The researcher is not expected to venture beyond these predetermined hypotheses (i.e. the research is context-free) (Creswell 1994). The goal of the study is to develop generalisations that contribute to theory and that aid in better prediction, explanation and understanding of some phenomena. These generalisations are enhanced if the information and instruments employed are valid and reliable.

3.2 Hypotheses

From the management perspective, it is critical to understand the factors that explain why some workers perform better on work tasks than others (Locke 1996). According to goal setting theory, one's personal goals affect one's subsequent actions and behaviours. The present study will adopt a correlational design to replicate Western studies that have been carried out on the goal-performance relationship. In particular, it will measure the impact of Chinese factory workers' goals set in their job (including the goal levels, specificity, and difficulty), the workers' degree of self-efficacy, perceived goal conflict, and goal commitment; and will examine their relationship with job performance. These relationships are depicted in Figure 3.1 below:

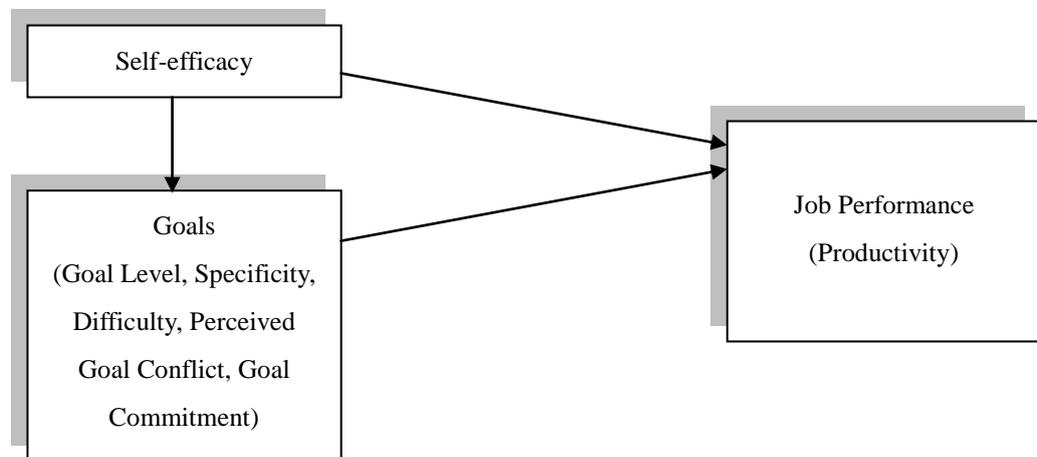


Figure 3.1: Goal–performance Relationship (Modified from Locke’s Motivation Hub Model 2001)

To replicate prior findings on goal–performance relationships in a Western context to that of Chinese factory workers (e.g. Locke et al. 1994; Phillips and Gully 1997; Klein et al. 1999; Erez and Judge 2001; Drach-Zahavy and Erez 2002; Wiese and

Freund 2005), nine hypotheses have been formulated in the present study.

LaPorte and Nath (1976) discovered that when an individual is allowed to control the time spent on a job, specific and challenging goals can stimulate effort and lead to better job performance. Even though there is always a trade-off in work between time and intensity of effort, it is possible for an individual to work faster and more intensely for a short period when faced with a specific and difficult goal; therefore, employees will always set a higher level of goal in their jobs to achieve better work outcomes and, in turn, enhanced remuneration or benefits. Section 4.4 expands on the concept of goal-setting and associated measurement scales.

A specific goal of a job, once accepted, can lead to better performance than a non-specific and easy goal (Latham and Yukl 1975; Dossett, Latham and Mitchell 1979). This is due to the “where to go” concept (Lee and Schuler 1980) developed to achieve a certain target of performance for employees such as factory workers. Goal specificity, therefore, refers to the manner of doing a job and the metric used to measure job performance (Locke and Latham 1990; Lee et al. 1991): for example, a worker might desire to increase output by at least 20 per cent by making 1200 pieces of shirts compared to 1000 pieces the month before. This would be a specific goal for the worker to attain. For this study, the term ‘goal level’ is used to indicate the goal, set by the worker, for achieving certain targeted production quantities. In terms of goal specificity, then, it is hypothesised that:

H1: A specific goal will be positively associated with the goal level set in the job in terms of output to be achieved.

Goal difficulty can directly and positively influence one's general satisfaction on the job (Lee and Schuler 1980), and can be defined as "the extent to which an individual's goal is discrepant (either positively or negatively) from that individual's capacity to achieve the goal" (Wright 1992). In this study, the construct of goal difficulty is measured by an individual's subjective assessment (Locke and Latham 1990). Notwithstanding the fact that the term "goal difficulty" bears connotations of challenge, extra effort, persistency and "difficult-to-reach" outcomes in a job (Locke and Latham 1990; Wright 1990; Lee et al. 1991; Wiese and Freund 2005), there also exists a positive linear relationship between goal difficulty and job performance (Latham, Mitchell and Dossett 1978; Dossett, Latham and Mitchell 1979; Mowen, Middlemist and Luther 1981); for example, a worker who undertakes more overtime in order to achieve a difficult yet attainable goal of an increase of at least 30 per cent in piecework production in the forward month would be demonstrating an increase in job performance. In terms of a hypothesis, therefore, it suggests the following:

H2: A difficult goal will be positively associated with the goal level set in the job in terms of output to be achieved.

The goal-performance relationship is strongest when people are committed to their goals. Commitment is found to be the most important and relevant when goals are difficult (Klein et al. 1999). This is because goals that are difficult to achieve for an individual require high effort and are associated with lower chances of success than easy goals (Erez and Zidon 1984); therefore, goal commitment can be expressed as the level of one's determination to reach a difficult goal (Klein et al. 1999) and

unwillingness to abandon the job (Hollenbeck et al. 1989). Unlike goal specificity and goal difficulty, which refer to the output of an individual, goal commitment relates to an employee's subjective motivation that enables him/her to achieve the job goal. Accordingly, when applying this concept of goal commitment to the context of Chinese piece-rated workers who express their determination to achieve an increase of 20 per cent output for better remuneration in the forward month, the following hypothesis is proposed:

H3: The level of goal commitment will be positively associated with the goal level set in the job in terms of output to be achieved.

Locke and his colleagues (1994) defined goal conflict as a state that arouses "incompatible action tendencies" that would undermine performance. Goals on one performance dimension may conflict with, or at least may be perceived as conflicting with, goals on another performance dimension (Dalal and Hulin 2008); for example, after setting a goal of 20 per cent increase in production for the forward month, a piece-rate worker may experience goal conflict when the supervisor imposes a higher quality output than the previous month. As a result, the worker may reduce his/her targeted additional output from 20 per cent to 10 per cent in order to achieve the quality target. Hence, it is hypothesised that:

H4: The level of perceived goal conflict between conflicting goals will be negatively associated with the goal level set in the job in terms of output to be achieved.

Self-efficacy is central to goal-directed behaviour and performance (Landy and Conte 2004). It is believed to have direct effects on performance by enhancing motivation levels, and individuals with high self-efficacy beliefs are likely to be high performers, inclined to set high-level goals in their jobs (Pinder 2008): for example, a factory worker with significant experience in making a specific style of shirt would be more confident in achieving a 20 per cent increase in output in the forward month. Therefore, the following hypothesis is established:

H5: The level of self-efficacy will be positively associated with the goal level set in the job in terms of output to be achieved.

Filial provision is the obligation of adult children to provide for the material well-being and care of their aged or disabled parents or siblings in need (Ho et al. 2006). In this study, the filial provision relationship is a concrete variable represented by the actual number of nuclear family members. It is an objective means to measure the motivational effects of Chinese workers. Young Chinese workers work hard to earn money for rearing and educating their children, in order to set an example of reciprocity for when they are old. As a result, the greater the number of filial provision relationships a Chinese factory worker is responsible for, the higher the set goal level; for example, a Chinese worker may establish a target of producing 20 per cent more shirts in the forward month so that more money can be earned for his/her children's school fees for a new semester. Therefore, it is hypothesised that:

H6: The level of filial provision relationship will be positively associated with the goal level set in the job in terms of output to be achieved.

Finally, according to Locke and Latham (1990, 2002), the level of goal set in the job can achieve both directive and energising functions that can positively influence the performance of an individual; for example, after establishing a goal of an increase of 20 per cent of output in the forward month, a worker then works harder and faster, thus achieving the goal. Hence, it is hypothesised that:

H7: The goal level set in the job in terms of output to be achieved will be positively associated with productivity (job performance).

The two Chinese values of filial piety and loyalty to supervisors are particularly selected among other values noted in the literature review because of their particular relevance to the goal-setting paradigm. One's intention to comply with filial duties induces intra-individual congruence between family and job goals, which in turn help to improve job performance. On the other hand, loyalty to a supervisor may capture the impact of the level of goal commitment on job performance. Of goals assigned by supervisors, workers may pay greater effort and be more committed to achieving them than they are to other goals. In comparison, other cultural factors like *guanxi* and *bao* are general guides that prescribe social behaviours, such as remembering and reciprocating favours (Smith et al. 2006). As there are no specific subjects in this study for measuring the impact of *guanxi* and *bao* obligations, this is not undertaken. Further, their potential impact would be too vague to measure within the goal-setting paradigm. Because of these concerns and in order to obtain a precise and valid prediction of cultural influences on job behaviours, the present study will only examine the impact of filial piety and loyalty to supervisors as it relates to the goal–job performance relationship among Chinese factory workers.

Interpersonal relatedness is an indigenous Chinese personality factor, identified by Cheung and colleagues (Cheung et al. 1996; Cheung et al. 2001; Cheung and Cheung 2003). This factor captures the dimensions of interdependence, which stresses the importance of the self as it is embedded in in-groups and inter-connected with others (Markus and Kitayama 1991). This interaction with others is the basic condition involving the relatedness need, which requires satisfaction by creating a social bond between the self and another with the promise of care, trust and mutual concern (Reeve 2005). Interpersonal relatedness affects social interactions in multiple ways.

Work-related goals may be reinforced by one's goals for family reunion and fulfilling filial obligations, and as a result, the amount of effort and attention exerted to work tasks would be enhanced. Consequently, it is possible that the impact of goal setting on job performance is strengthened among Chinese workers who endorse higher level of filial piety and interconnectedness with family and community.

The present study hypothesises that the goal–performance relationship will be moderated by an individual's level of filial piety. In particular, it is expected that the positive relationship of goal commitment on productivity will be observed among Chinese factory workers with high levels of filial piety, but will become less significant among factory workers with low levels of filial piety. Figure 3.2 displays the proposed moderation effect of filial piety on goal commitment and productivity. The relation of goal commitment (values on the vertical axis) to productivity (value on the horizontal axis) depends on the level of filial piety, which adjusts the causal connection between two variables (Dooley 2001). When the level of filial piety is low, goal commitment does not vary with changing values of productivity, but when

filial piety is high, goal commitment rises sharply, with an increase in productivity. The following hypothesis for this moderation effect is thus proposed:

H8: The positive relationship between goal commitment and productivity is moderated by the level of filial piety.

Moderation Effect of Filial Piety on Goal Commitment and Productivity

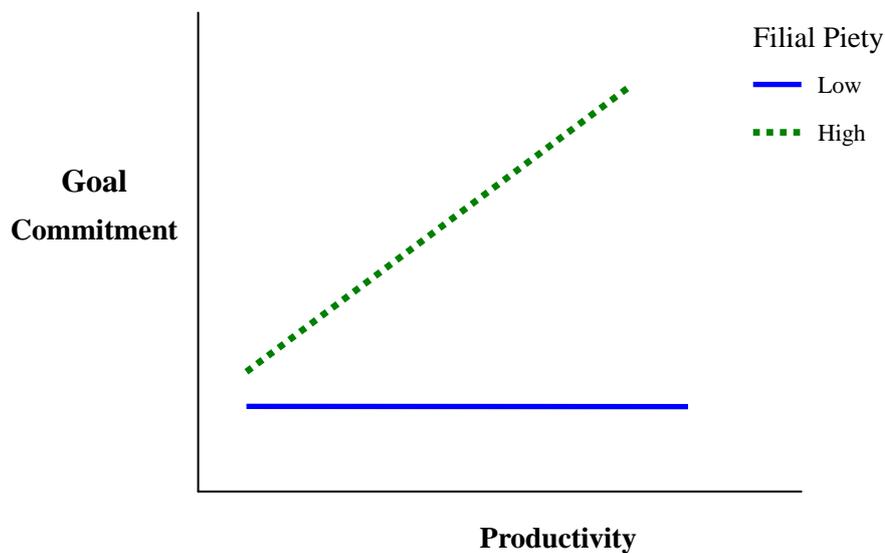


Figure 3.2 Proposed moderation effect of filial piety on goal commitment and productivity

Monitoring and improving employee performance is an explicit function of a supervisor (Yukl 2009). Becker et al. (1996) found in their study that commitment to supervisors was positively related to performance. The present study aims at testing the proposition that the goal–performance relationship will be moderated by loyalty to supervisor. In particular, it is expected that the positive effect of goal commitment on productivity will be stronger among workers with higher loyalty to their supervisors than among those with lower loyalty. Figure 3.3 demonstrates the proposed moderation effect of loyalty to a supervisor on the goal–performance

relationship. When the level of loyalty to a supervisor is low, goal commitment does not vary with changing values of productivity, but when loyalty is high, goal commitment rises sharply, with an increase in productivity. Accordingly, it is hypothesised that:

H9: The positive relationship between goal commitment and productivity is moderated by the level of loyalty to supervisor.

Moderation Effect of Loyalty to Supervisor on Goal Commitment and Productivity

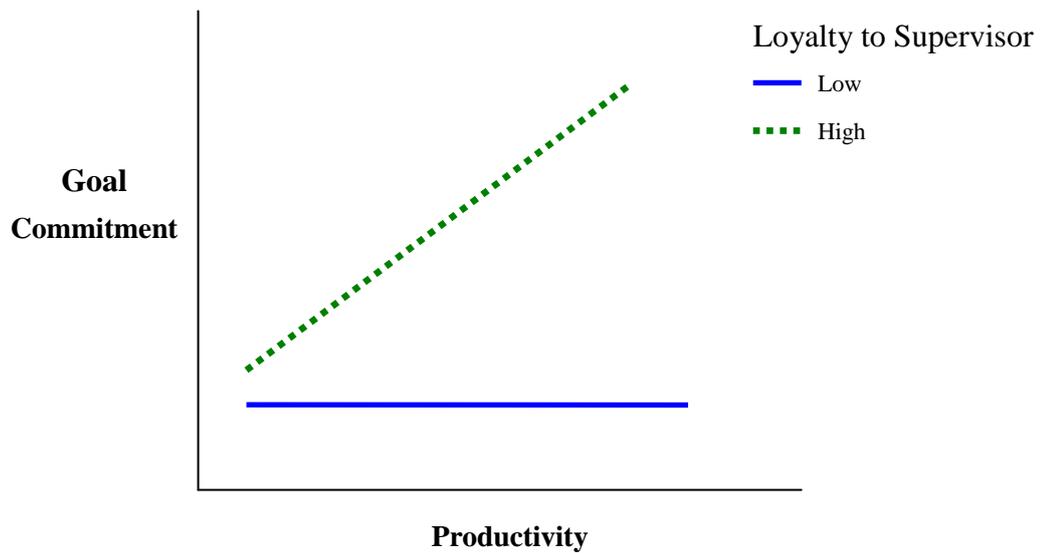


Figure 3.3 Proposed moderation effect of loyalty to supervisor on goal commitment and productivity

In summary, this study attempts to replicate the earlier Western-based research on goal–performance, but within a Chinese context. It will investigate the relationship between Chinese factory workers’ goals, self-efficacy, and goal commitment and their relationship to job performance or productivity. Past studies have revealed

that Chinese people emphasise interpersonal relatedness to a greater extent than do North Americans, where most goal–performance studies have been conducted. This study argues that specific cultural factors may moderate the goal–performance relationship; hence, the influence of the Chinese cultural values of filial piety and loyalty to supervisor on productivity will be tested to examine the way they moderate the positive impact of goal commitment on productivity. Finally, Figure 3.4 displays the hypothetical relationships among variables and moderators:

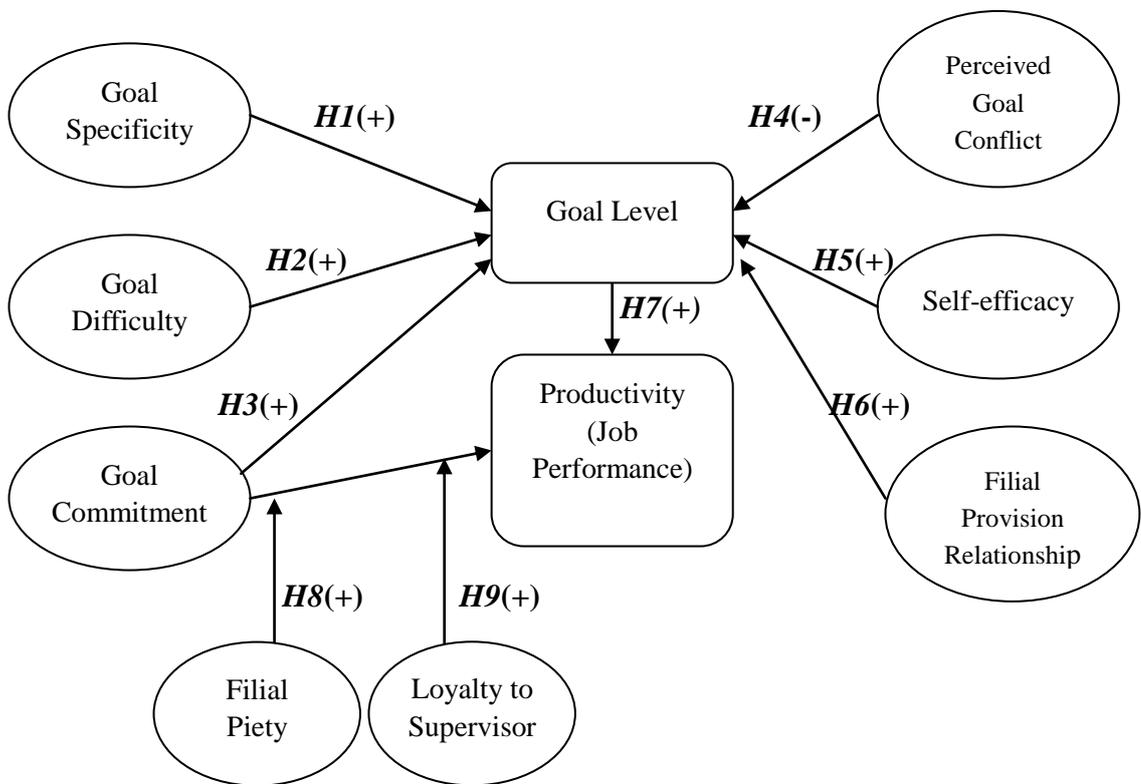


Figure 3.4 The Hypothetical Relationships among variables and moderators

Note: “+” and “-” denote the positive and negative relationships respectively

Chapter 4 Research Methodology

Through its use of a correlational design, this research produced several hypotheses and measured Chinese factory workers' goals in the job (including goal level, specificity and difficulty), goal commitment, perceived goal conflict, self-efficacy, filial provision relationships, filial piety, loyalty to supervisor and productivity (job performance) in order to draw deductive generalisations to add to the literature about work motivation particularly in a Chinese setting.

4.1 Correlational Design

Locke (1991) commented that goals, as an application of values to specific situations, are the most direct and immediate motivational determinants of job performance. An examination of the goal–performance relationship allows us to understand how Chinese factory workers are motivated in their job and how cultural factors moderate the relationship between goals and job performance. The present study adopted a correlational design using Pearson's product-moment correlation coefficient (Cohen 1988), to examine the relationship between goal setting and job performance. It also tested whether workers' endorsement of two cultural factors, filial piety and loyalty to supervisors, moderated the relationship. The study adopted a correlational design examining the goal–performance relationship influenced by the following two considerations: first, that the results obtained in a laboratory setting may not be generalisable to actual work settings (Locke et al. 1994) because the manipulation of experimental conditions is largely artificial. Experiments usually measure

performance in simple, unusual algorithmic tasks, which may not be a representative index of actual job performance. Second, cultural values are integrated into one's beliefs, attitudes and behaviours through earlier socialisation processes (Smith et al. 2006). This makes manipulation of cultural variables of dubious effectiveness, as tracing the psychological development of an adult worker from his/her childhood is substantially difficult.

In addition to Pearson's correlation coefficient, this study employed the statistical technique of Structural Equation Modeling (SEM) for confirmatory factor analysis as well for as testing the theoretical models. The technique of SEM represents a series of hypotheses about how the variables in the analysis are generated and related (Chou and Bentler 1995). It is a comprehensive statistical approach to testing hypotheses about relations among observed and latent variables (i.e. not measured directly) (Hoyle 1995). In a study, some variables are often latent in nature (i.e. unobserved concepts)(Cooper and Schindler 2006). SEM covers three general sets of methodological considerations (Hoyle 2011): -

- (a) assessing the reliability and validity of measures;
- (b) determining the appropriate nature of the relationships between measures and constructs; and
- (c) interpreting path coefficients, determining model adequacy, and selecting a final model from the available set of alternatives.

SEM was considered an appropriate tool for this study.

With reference to a prior study of Locke and colleagues (1994), this study used a self-report questionnaire survey to examine the moderation effects of the two cultural

factors on the relationship between goals and job performance.

4.2 Participants

The present study examined the goal–performance relationship among factory workers in China. A sample of 429 adult workers out of 625 in total of a piece-rate workforce (a figure provided by the human resource departments of two factories) in Zhuhai City and Zhongshan City of Guangdong Province in the southern part of China, was recruited for this study. The respondents were limited to piece-rate workers as their monthly output can be measured, unlike that of their daily- or monthly-paid counterparts. Participants were recruited from garment factories specialising in men’s shirts and ladies’ coordinates. The sample size was considered adequate for obtaining a power of .80 with anticipated moderate effect sizes of .35 (Cohen 1988).

The proportion of male and female workers in the study was not balanced in that it did not fit the population distribution of adult males (31.0 per cent of the total population) and females (30.9 per cent of the total population) within the age bracket 15 – 54 (China Statistical Year Book, 2010). There were more female respondents in the study because garment factories typically find women possess particular skill in handling fragile fabrics and threads. Past studies have demonstrated inconsistent relationships between gender and filial piety (Liu, Ng, Weatherall and Loong 2000; Zhang and Montgomery 2003): for example, when asking men and women about cultural norms regarding elderly care and whether it should be under a patrimonial family structure, men scored higher than women (Zhang and Montgomery 2003). A study by Liu and colleagues (2000), however, did not show any gender difference

concerning filial obligations. As there is no clear trend in these findings, no specific hypothesis relating to gender effects on filial piety were formulated in this study. The lack of a gender effect may be explained by the fact that all children share the same filial duty to their parents.

Garment workers aged between 18 and 50 years old were recruited to participate in this study. This is the normal age range of factory workers in China (Guangzhou Statistics Department 2005). It is likely that older workers, for example those aged more than 55, do not have surviving parents, possibly reducing the filial responsibility of this subgroup of participants. They were therefore not included in the sample. However, the emphasis on filial piety is not limited to the respect, care and material provision to the surviving parents, but also applies even after the death of parents (Zhang and Montgomery 2003), in ancestor worship and maintaining family reputation. To minimise the potential impact of family status, an item on nuclear family members was assessed as a covariate. In particular, participants were asked to indicate if they have surviving members in their nuclear family networks including parents, parents-in-law, children, elder brothers/sisters and younger brothers/sisters. These variables were associated with the level of filial piety to test if the presence of surviving family members affected the endorsement of filial piety.

Demographic variables including age, gender, marital status, education level, affiliated job unit (i.e. men's shirts or women's coordinates), and tenure were captured on the survey questionnaire and reported and summarised in the results chapter. Participants were expected to have a primary education in order to complete the questionnaire themselves; for six respondents without the ability to read the

questionnaire, an independent, experienced researcher who administered the survey provided assistance on the spot.

4.3 Procedures

4.3.1 Data Collection

An independent, experienced researcher was recruited to implement and administer the data collection procedure in order to minimise any potential bias throughout the procedure that the principal researcher, as a manager of the factories, might unknowingly introduce. Responses regarding goals and goal-related measures, self-efficacy, filial piety, and loyalty to supervisors were obtained from participants. This study measured workers' actual productivity as the index of job performance or productivity; the information was collected from the wage offices of the factories at the end of the forward month by matching the participant's ID number to their productivity score.

As noted earlier, frontline piece-rate workers in garment factories in Zhuhai City and Zhongshan City of Guangdong Province, in the southern part of China, were invited to join the study. Zhuhai, a Special Economic Zone, is one of the cities in China where a great number of foreign investors have set up manufacturing concerns. It has also attracted workers from various regions of the country looking for job opportunities. Zhongshan is well known for its prosperous textile industry in China; quite a number of garment factories are established here. These two cities were considered to provide some degree of representativeness of garment workers across China. An invitation letter with a detailed description of the study was sent to the

management team of the factories to obtain their consent to collecting data from their frontline workers (Appendix A).

Once the management team approved of the study, a list of all frontline workers in the factory was acquired. A subject ID number was allocated to each participant in order to collect their actual productivity from the wage office at the end of the forward month, and to avoid their names being recorded in the questionnaires, to preserve anonymity and confidentiality. The personal information of each participant (e.g. names, job position) and his/her subject ID number were recorded in a password-protected electronic file, which could be accessed only by the researcher administering the data collection. The identifying information was deleted after the completion of the study.

The data collection occurred at the beginning of the forward month, in order to record the participants' goals (for example, any increase in the percentage of the products) in their jobs for this forward month. Questionnaires distributed to the participants included measures on goal levels, goal commitment, perceived goal conflict, self-efficacy, filial piety and loyalty to supervisor. Goal levels can be understood in the following manner: in the previous month, say August, a worker may have completed 1000 shirts, but for the next forward month, September, they may set 1200 shirts as the target, a 20 per cent increase in productivity. Participation in the study was voluntarily and a monetary reimbursement of RMB10.0 (RMB: Renminbi is the official currency of China) was given to each respondent for their time. As all the respondents were piece-rate workers, a reimbursement was considered necessary as they may have lost income when they

stopped work to complete the questionnaire. An information sheet, a questionnaire and an envelope all in simplified Chinese characters were given to each participant. To ensure that individual responses were not revealed to other members of the factory, each person was required to put the completed questionnaire into the envelope and seal it to ensure confidentiality. The questionnaires were collected immediately after completion by the independent researcher. Participants were assured that the information they provided would be kept strictly confidential. At the completion of the questionnaire, each worker was given RMB10.0 as compensation for their time without the necessity of a signature to acknowledge receipt, again in order to protect their identity. At the end of the forward month, the researcher contacted the wage office in each factory to obtain the actual productivity (in terms of the number of output) for each participant ID number.

4.3.2 A Pilot Study

A pilot study of the questionnaire using 50 participants was conducted prior to full data collection to ensure the reliability and validity of all measurement scales used in the actual study. The pilot enabled the researcher to identify and change unclear, confusing and awkward words or phrases (Cooper and Schindler 2006) arising from the literal translation of the questionnaire from English to Chinese. The questionnaire was translated from English to Chinese through a back-translation procedure by bilingual translators to assure the equivalence of measures between English and Chinese versions (see details in Section 4.4). All discrepancies between the researcher and the translators were resolved (Appendices D and E).

For the pilot study, the processes mirrored those that were to be used for the

full-scale study. Sample participants were garment workers aged between 18 and 50 years, with a primary education level or above.

The pilot study examined the participants' understanding of the items in each measurement scale. If difficulties in understanding the items in the questionnaire were noted, the questionnaire was modified and re-tested. The results of this pilot study provided valuable data on testing the reliability and validity of the Chinese version of the measurement scales and in exploring the general pattern of goal-performance relationships. The reliability analysis of each measurement scale was conducted to examine internal consistency across items, as indicated by the value of Cronbach's alpha (α). In social sciences studies, it is widely accepted that the alpha should be .70 or higher (Nunnally and Bernstein 1994); the present study also used .70 as a cut-off point to evaluate the internal consistency of each measurement scale. The pilot study also helped the researcher to gain familiarity with the work setting in the factories in China and to make corresponding modifications to the data collection procedures.

After collecting data from the pilot study, the researcher investigated the reliability of all measurement scales, making sure the Chinese version of the questionnaire demonstrated a satisfactory internal consistency. Each hypothesis was tentatively tested by using the pilot data to ensure that the pattern of relationships among major variables moved in the expected direction. Testing the association between major variables (e.g. goal difficulty and specificity, self-efficacy, perceived goal conflict, goal commitment, and job performance) also provided a means of assessing the predictive validity of the measurement scales: for instance, the measure of goal

commitment should be able to predict how well a person will perform a job. A high correlation between scores on the measure of goal commitment and productivity provided evidence of the predictive validity of the measures. The analysis of the correlation statistics is shown in Table 5.6.

4.4 Measures

The questionnaire was designed in English, as most of the measurement scales used in the study were only available in English except for the measures of filial piety and self-efficacy. As noted earlier, to ensure the equivalence of measures between English and Chinese versions, the questionnaires were translated from English to Chinese through a back-translation procedure. A Chinese-English bilingual speaker first translated the English version into Chinese. After this translation, another bilingual speaker translated the Chinese version back into English, and a third bilingual speaker compared the original English version with the back-translated English version to look for discrepancies. All discrepancies were resolved by discussion (Appendices D and E).

4.4.1 Goal-setting

According to Locke and Latham (1990, 2002), it is important to understand: (1) the level of goals individuals set in the job related to productivity (job performance) (**H7**); (2) the specificity (**H1**) and difficulty (**H2**) of the goals; (3) the level of goal commitment (**H3**); and (4) the level of self-efficacy (**H5**) in achieving the goals. In addition to these dimensions, this study also investigated perceived goal conflict (**H4**)

and the level of filial provision relationship (**H6**) on each participant. Prior studies have measured job-related goals, specificity and difficulty along with goal commitment, self-efficacy, and perceived goal conflict (e.g. Locke and Latham 1990; Lee, Bobko, Earley and Locke 1991; Locke et al. 1994; Phillips and Gully 1997). These measures were modified to fit the job context of the garment workers. In the pilot study, reliability analyses for these measures along with strategies to ensure predictive validity were conducted to ensure that each modified scale possessed a satisfactory internal consistency and validity.

4.4.2 Measurement of Job-related Goals

With reference to prior studies (Locke et al. 1994; Phillips and Gully 1997), a self-report index of goals was used in the present study. The workers' job-related goal was measured by one item, "My goal is to get _____ pieces of output (productivity) this month." This actual productivity goal was used for calculating the worker's actual wage every month, and each participant had their own record of productivity in order to avoid miscalculation under the factory policy; it was therefore used to indicate the worker's baseline level of goal-setting for the forward month. The difference between the expected productivity of the forward month and the actual productivity for the previous month indicated whether participants set a higher goal based on their past experience; the score of the goal was equal to the difference between the expected productivity of the forward month and the actual productivity of the previous month. From this information, the percentage of the expected change in productivity was calculated: for example: -

Worker A I want to make 500 shirts this month (last month I actually made 470): difference score is + 30 (an increase of 6.38 per cent).

Worker B I want to make 150 coordinates this month (last month I actually made 150): difference score is 0 (no increase).

With reference to Phillip and Gully (1997), responses to this goal item were transformed by the use of standardisation (*z*-scores). The percentage of expected change in productivity was standardised into a *z*-score representing the distance between the raw score and the sample mean in units of the standard deviation of the sample. The mean *z*-score is 0, with a standard deviation of 1. A *z*-score is negative when the raw score is below the mean, while a positive *z*-score indicates a raw score above the mean. This score is a continuous variable, with higher scores indicating a higher level of goal-setting. No categorisation was carried out at group level goal, for example, into high vs low (medium split), or high vs medium vs low (tercile split), to avoid misclassification of participants (MacCallum et al. 2002). Using a continuous variable in analysis better reflects the association between set goals and job performance by means of correlation analysis and regression analysis (MacCallum et al. 2002).

Goal-setting theory identifies goal specificity and difficulty as the core goal attributes motivating workers to achieve higher performance (Locke and Latham 1990, 2002; Lee et al. 1991). To assess these two goal attributes, seven items were extracted from the Goal-setting Questionnaire (Lee et al. 1991) and prior empirical studies on the goal–performance relationship (Locke and Latham 1990; Lee et al. 1991; Wiese and Freund 2005). Three items assessed goal specificity in the following manner:

- (1) I have a specific, clear goal to aim for on my job;
- (2) I understand how my performance is measured on this job; and
- (3) I understand exactly what I am supposed to do on my job (Locke and Latham 1990; Lee et al. 1991).

Four items were used to measure goal difficulty:

- (1) The goals I have on this job are challenging but reasonable (neither too hard nor too easy);
- (2) It takes a lot of effort on my part to achieve the results expected for my job;
- (3) It requires persistence to reach the goal; and
- (4) It seems difficult to me to reach the goal (Locke and Latham 1990; Wright 1990; Lee et al. 1991; Wiese and Freund 2005).

Participants rated these items on a 5-point Likert scale ranging from 1 (never) to 5 (almost always). These items were found to be significantly associated with job performance, job satisfaction and psychological health problems and, demonstrated satisfactory internal consistency with alphas ranging from .67 to .88 in the study by Lee et al. (1991).

4.4.3 Measurement of Goal Commitment

The participants' degree of goal commitment was measured by a modified goal commitment scale developed by Hollenbeck, Williams and Klein (1989). Locke and Latham (1990) commented that this scale showed a significant association with goal

change and performance when goals were difficult. It was originally designed for assessing goal commitment in academic goals and was modified to fit with job goals in the present study. The scale consists of seven items which participants rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree):

- (1) I am strongly committed to pursuing this job goal;
- (2) Quite frankly, I don't care if I achieve this job goal or not;
- (3) It is quite likely that this job goal may need to be revised, depending on how things go this month;
- (4) It wouldn't take much to make me abandon this job goal;
- (5) It's unrealistic for me to expect to reach this job goal;
- (6) Since it's not always possible to tell how tough tasks are until you've been in them a while, it's hard to take this goal seriously; and
- (7) I think this job goal is a good goal to shoot for.

The reliability of this scale was found satisfactory in the study by Hollenbeck and his colleagues (1989) with an alpha coefficient of .88.

4.4.4 Measurement of Perceived Goal Conflict

Locke et al (1994) defined goal conflict as a state that arouses "incompatible action tendencies", which would undermine performance (p. 70). In order to examine if workers experienced any conflict between their personal, unrelated job goals and job goals, and how they prioritise their goals, a goal conflict subscale from a goal-setting questionnaire was adopted for this study (Lee et al. 1991). This scale contained eight items describing goal-induced conflict such as conflict with personal values and too

many goals. The reported reliability coefficient of this scale was .85 in the study by Lee and her colleagues (Lee et al. 1991). Participants rated these items on a 5-point scale ranging from 1 (never) to 5 (almost always). The eight items were:

- (1) I have too many goals on this job (I am too overloaded);
- (2) Some of my goals conflict with my personal values;
- (3) I am given incompatible or conflicting goals by different people (or even by the same person);
- (4) I have unclear goals on this job;
- (5) My job goals lead me to take excessive risks;
- (6) My job goals serve to limit rather than raise my performance;
- (7) The goals I have on this job lead me to ignore other important aspects of my job; and
- (8) The goals I have on this job focus only on short-range accomplishment and ignore important long-range consequences.

In addition to the above eight questions, the respondent factory workers were also asked to respond to two items from Locke et al. (1994):

- (1) How much conflict do you feel between the desire to achieve the job goal and the desire to achieve personal, job-unrelated goals?
- (2) To what extent do you prioritise personal, job-unrelated goals over job goals?

Participants responded to these two items on a 5-point scale ranging from 1 (none) to

5 (extremely).

4.4.5 Measurement of Self-efficacy

Self-efficacy refers to a person's judgment of his/her capabilities to organise and execute courses of action required to attain designated types of performance (Bandura 1986). Participants' perception of self-efficacy was assessed by the Chinese version of the General Self-Efficacy Scale (Zhang and Schwarzer 1995), originally developed to assess general self-efficacy; the present study modified the ten items to measure participants' perceived self-efficacy in a job context. Participants rated the items on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree):

- (1) I can always manage to solve difficult problems on my job if I try hard enough;
- (2) If someone opposes me, I can find the means and ways to get what I want;
- (3) It is easy for me to stick to my aims and accomplish my goals;
- (4) I am confident that I could deal efficiently with unexpected events on my job;
- (5) Thanks to my resourcefulness, I can handle unforeseen situations on my job;
- (6) I can solve most problems on my job if I invest the necessary effort;
- (7) I can remain calm when facing difficulties on my job because I can rely on my coping abilities;
- (8) When I am confronted with a problem on my job, I can find several solutions;

- (9) If I am in a bind, I can usually think of something to do; and
- (10) No matter what comes my way, I am usually able to handle it.

The internal consistency of the scale is .91 in the study by Zhang and Schwarzer (1995).

4.4.6 Measurement of Filial Provision Relationship

Filial provision relationship refers to the number of nuclear family members to whom a Chinese worker is most likely to offer material support. It is measured in the demographic section of the worker's profile by asking them how many parents, parents-in-law, sons/daughters, elder brothers/sisters and younger brothers/sisters in their current social network.

4.4.7 Measurement of Filial Piety

The 13-item filial piety and ancestral worship subscale of the Chinese Individual Traditionality Scale (Yang and Huang 1991) was adopted to assess participants' attitudes toward traditional Chinese ethical principles in guiding family relationships, in particular, the parent-child relationship:

- (1) There is no crime worse than being unfilial;
- (2) Sons and daughters should not do dangerous things to avoid getting their parents worried;
- (3) When interacting with senior members, young children should show respect and behave properly;
- (4) Sons and daughters should not do bad things to avoid ruining the reputation of their parents;

- (5) The great debt that you have to repay your parents is as boundless as the sky;
- (6) Serving parents-in-law properly is the responsibility of daughters-in-law;
- (7) Sending aged parents to a nursing home is an unfilial act;
- (8) To worship their ancestors regularly on the proper occasions is the primary duty of sons and daughters;
- (9) To glorify one's ancestors should be the motives of getting ahead;
- (10) The success of sons and daughters should be attributed to their parents;
- (11) Everyone should go home and reunite with family members on Chinese New Year or other festivals;
- (12) Sons and daughters should not go to faraway places while their parents are still living; and
- (13) To continue the family line is the responsibility of sons and daughters.

Participants were asked to rate these items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate a higher level of filial obligation. The scale was originally developed in Chinese and showed satisfactory internal consistency, with alpha coefficient values ranging from .75 to .80 (Yang and Huang, 1991).

4.4.8 Measurement of Loyalty to Supervisor

Participants' loyalty to their immediate supervisor was measured by the Chinese loyalty to supervisor scale (Chen et al. 2002). The scale consisted of 17 items, covering five dimensions: dedication to supervisor (4 items), extra effort for

supervisor (3 items), attachment to supervisor (4 items), identification with supervisor (3 items), and internalisation of supervisor's values (3 items).

Dedication to supervisor refers to a subordinate's willingness to dedicate himself/herself to the supervisor and to protect the supervisor's welfare even at the expense of personal interest:

- (1) When my supervisor is treated unfairly, I will defend him/her;
- (2) When somebody speaks ill of my supervisor, I will defend him/her immediately;
- (3) I will put myself in my supervisor's position to consider his/her interests; and
- (4) I would support my supervisor under all circumstances.

Extra effort for supervisor reflects a subordinate's willingness to exert additional effort on behalf of the supervisor:

- (1) Even if my supervisor is not present, I will try my best to do the job assigned by him/her well;
- (2) I will try my best to accomplish the job assigned by my supervisor; and
- (3) I will do my job conscientiously so that my supervisor will not worry about it.

Attachment to supervisor refers to a subordinate's desire to attach to and follow the supervisor:

- (1) Even if there may be better alternatives, I will still remain to work under my supervisor;

- (2) I will feel satisfied as long as I can work under my supervisor;
- (3) No matter whether it will benefit me or not, I will be willing to continue working under my supervisor; and
- (4) If it is possible, I would like to work under my supervisor for a long time.

Identification with supervisor indicates a subordinate's respect and pride for the successes of the supervisor:

- (1) When someone praises my supervisor, I take it as a personal compliment;
- (2) When someone criticizes my supervisor, I take it as a personal insult; and
- (3) My supervisor's successes are my successes.

Internalisation of supervisor's values refers to the congruence in values between the subordinate and the supervisor:

- (1) My attachment to my supervisor is primarily based on the similarity of my values and those represented by my supervisor;
- (2) The reason I prefer my supervisor than another is because of what he/she stands for, that is, his/her values; and
- (3) Since starting this job, my personal values and those of my supervisor have become more similar.

Cronbach's alphas for these five dimensions were .72, .79, .76, .68, and .67 respectively (Chen et al. 2002).

According to Chen et al. (2002) and Wong et al. (2002), the first three dimensions of the Chinese loyalty to supervisor scale (i.e. dedication to, extra efforts for, and

attachment to supervisor) are Chinese indigenous factors while the last two dimensions are the same as Western dimensions (i.e. identification with the supervisor and internalisation of the supervisor's values (Becker 1992; Becker, Billings, Eveleth and Gilbert 1996); thus the indigenous dimensions were more suited to capture the unique effect of subordinates' loyalty to supervisors' on-job performance among the sample of Chinese factory workers. Participants rated the 17 items (both indigenous and Western) on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). This particular instrument uses a 7-points scale, which was retained, so as not to alter its psychometric properties (Chen et al. 2002) even though all other measurements used a 5-point scale.

4.4.9 Measurement of Productivity (Job Performance)

To examine the impact of goal productivity on actual performance, the participants' job performance was assessed using their actual productivity. In a garment factory, a piece-rate worker is always assigned a repetitive task in light of his/her sewing competency e.g. collar-running, to ensure optimum efficiency; and this task is remunerated at a fixed rate e.g. RMB0.05 per collar: defective output, must be rectified by the piece-rate worker before delivery for no additional wage. The wages a worker receives can therefore genuinely reflect the actual number of outputs he/she has produced each month. At the end of the month in which this study was implemented, the workers' actual number of outputs (pieces of products) was extracted and wages recorded from the finance office of the factory, by matching the subject ID number of each participant.

4.4.10 Measurement of Demographic Variables

Participants' demographic variables included age, gender, marital status, education level, tenure and affiliated job unit. Age and tenure were continuous variables; participants were asked to write down their exact age and the length of their working experience in the factory respectively. Participants indicated their marital status by choosing from (1) single; (2) married; (3) divorced/separated; and (4) widowed/widowed. Education level was categorised into (1) no formal education; (2) primary school; (3) middle school (secondary school to form 3 for aged 16); (4) high school; and (5) university or above. A summary of demographic variables is provided in Sections 5.2.1 and 5.2.2.

4.5 Statistical Analysis

Reliability analyses were conducted to check the internal consistency of each measurement scale, namely, goal specificity, goal difficulty, perceived goal conflict, goal commitment, self-efficacy, filial piety and loyalty to supervisor. Before assessing the moderation effects of filial piety and loyalty to supervisor, the potential problem of multicollinearity was addressed by multiple regression analyses, to ensure valid interpretation of the results. Multicollinearity measures the interdependence among variables; it markedly affects the stability of statistical values, and a high value could, for instance, have an impact on the valid interpretation of the results as it becomes difficult to determine and understand how each independent variable uniquely contributes to predicting dependent variable(s) in a model (Rockwell 1975). All responses were coded so that higher scores indicated higher agreement with the variable.

To test the hypotheses regarding main effects, correlations and ANOVA of each independent variable and dependent variable were computed to provide preliminary insights. Although Structural Equation Modeling (SEM) analyses can provide statistical evidence, ANOVA is still extensively used by researchers to get supplementary confirmation. As indicated by Rutherford (2011), ANOVA is an ideal statistical technique when one compares average mean score differences among groups or conditions in terms of dependent variables. To further investigate the hypothesised model in this study, a two-step model-building SEM procedure was employed. The measurement model and the structural model were both tested. SEM is a statistical tool that formulates structural equations for unobservable, latent variables and tests their modeling relationships (Klein and Muthén 2007). The proposed model, including six variables, was tested for the full sample ($N = 429$) by confirmatory factor analysis (CFA) as implemented by the software EQUATION S (EQS) 6.1 computer program (Bentler and Wu 2003). The fit of the measurement model to the data was examined with chi-square statistics, Comparative Fit Index (CFI), Non-normed Fit Index (NNFI) (Hoyle, 1995), and the root-mean-square of approximation (RMSEA) (Browne and Cudeck, 1993).

The interactive effects of filial piety and loyalty to supervisor on the goal–performance relationship were examined using multiple regression analysis (Shavelson 1996) as it can retain individuality in terms of not dichotomising data (MacCallum et al. 2002). Multiple regression analysis provides an index of the functional relationship between a set of independent and dependent variables. The index takes the form of a beta value, which is a measure of how strongly the independent variables affect the dependent variables (Stevens 2002). In this study,

it was carried out using a 2-step regression in which Goal Specificity, Goal Difficulty, Goal Commitment, Perceived Goal Conflict, and Self-efficacy were first put in Model One; interaction terms of the variables mentioned were created and added into the second step – Model Two. By testing against the 0.05 significance critical value between Model One and Model Two, it indicated the presence of interaction effects of filial piety and loyalty to supervisor (Stevens 2002). Justification for using a separate regression analysis model to test for interaction is given in Section 5.6.1.

Chapter 5 Results

In this chapter, the data collected from the survey are tabulated and analyzed. Descriptive statistics for the questionnaires are presented along with Cronbach's alpha measures for reliability of the measurement scales used in the questionnaire survey. The hypotheses formulated for this research are tested and the research findings are presented.

5.1 Data Cleaning

Overall, 429 respondents out of 625 factory workers were successfully recruited to participate in the questionnaire survey conducted for this study. This represents a response rate of 68.6 per cent. In addition to the responses they provided in the questionnaire, their employment status (i.e. whether they had left the factory before the end of the forward month), wages and productivity (in terms of output quantities) for both the previous and forward month were obtained from the personnel department and wages office of the factories concerned.

The dataset was reviewed and cleaned for those respondent workers who had left before the end of the forward month in which their productivity was to be measured. Similarly, those who received their wages or generated outputs with an increase or decrease of more than 200 per cent from the previous to forward month were discarded in order to eliminate any outlier effects. Cases (Labour World, 2000)

have been reported when Chinese workers wishing to earn money for a specific purpose, for example, arranging his/her own wedding ceremony in their home town, not only worked hard in normal duty hours but were willing to perform more overtime work. According to Article 44 of the Labour Law of China (LabourNet, 2010), an employee is entitled to 150 per cent of normal wages for regular overtime work, 200 per cent for overtime work during rest days and 300 per cent during statutory holidays: for example, Saturday is the rest day and Sunday, National Day (5 days) and Chinese New Year (10 days) are statutory holidays. A 200 per cent increase in wages for a month earned by a piece rate worker was selected as the upper limit for this study because of the infeasibility of achieving such an output. Through this cleaning approach, it was found that a total of 32 subjects (or approximately 7.5 per cent of the sample population) were ultimately rejected. After this cleaning process, a total of 397 worker respondents comprised the dataset.

5.2 Demographic Profile

A fundamental task in many statistical analyses is to characterise the *location* and *variability* of a data set. A further characterisation of the data includes skewness and kurtosis. Skewness is a measure of symmetry- or, more precisely, of a lack of symmetry (Bickel and Lehmann 1975a, 1975b; Balanda and MacGillivray 1988). A distribution, or data set, is symmetric if it looks the same to the left and right of the centre point (Berenson et al. 2009). Kurtosis is a measure of whether the data are peaked or flat relative to a normal distribution: that is, data sets with high kurtosis tend to have a distinct peak near the mean, decline rather rapidly, and have heavy tails. Data sets with low kurtosis tend to have a flat top (light-tailed) near the mean

rather than a sharp peak (heavy-tailed) (Aron, Aron, and Coups 2009). According to Shapiro, Wilk and Chen (1968), skewness and kurtosis coefficients are powerful tools for assessing departures from normality when the sample size of a statistical study is greater than 20.

Both the skewness and kurtosis of the variables of this study were reviewed, to avoid items that deviated unreasonably from a normal distribution, for subsequent analysis. Of those items under examination, the results demonstrated that no variables had skewness and/or kurtosis indices over 10 or above (they ranged from -1.17 to 4.92 with more than 90 per cent of the items falling within -1.0 to 1.0). This implies that all items and variables displayed normal distribution (Klein 1998).

5.2.1 Numeric Demographic Variables

The two variables of age and tenure of employment used in this study are numerically continuous variables in the sense that they offer, in theory, an infinite number of possible values between any two values (Zikmund 2003; Jaccard and Becker 2010). This is in contrast to those variables that are nominal or categorical in nature (Aron, Aron, and Coups 2009), such as the respondent workers' gender, marital status, educational level, the affiliated job unit, and surviving family members.

The factory worker respondents were aged from 17 to 52 years old (range: 35 years), with a mean age of 27.46 (standard deviation: 7.41). The mode age was 19, which demonstrates that most of the workers belonged to the young adult group. The distribution of the age of the respondent workers is illustrated in Figure 5.1.

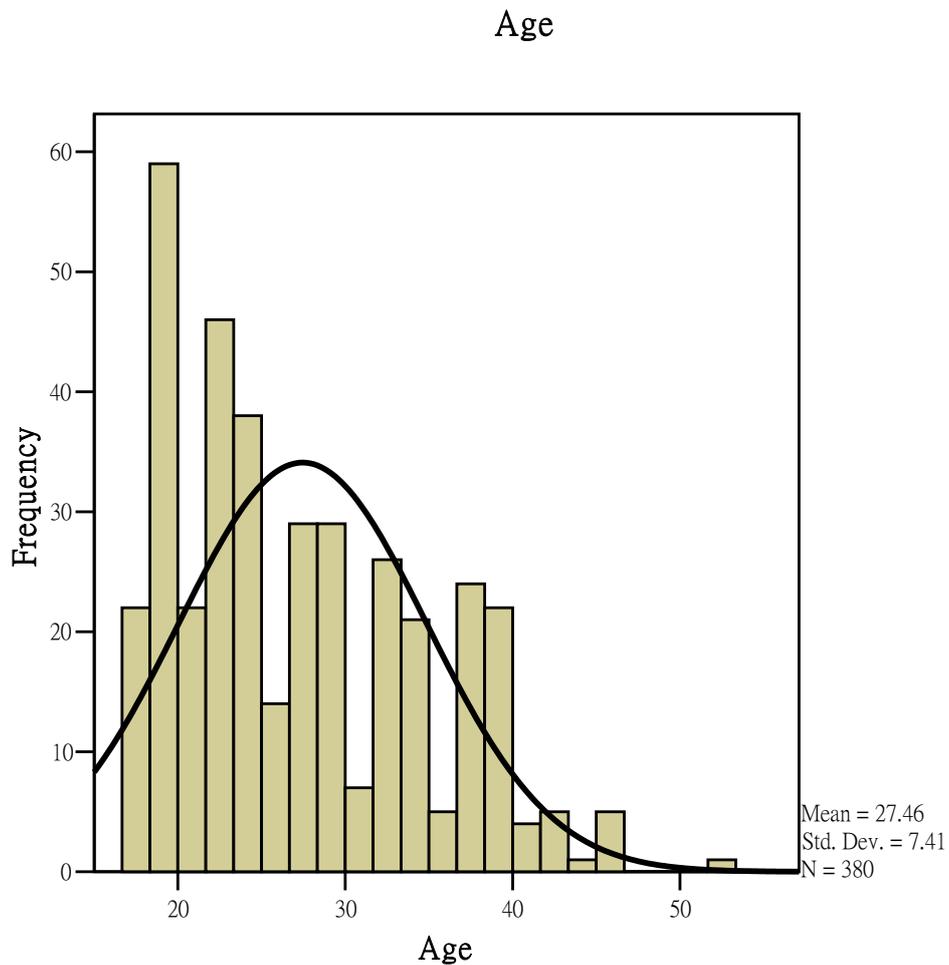


Figure 5.1 Distribution of Respondent Workers' Age

The respondents had been in the factory workforce from less than one month (newly hired when answering the questionnaire) to 191 months (more than three years), with a range of 191 months and a mean of 28.82 months (standard deviation: 34.92). The mode of tenure is six months, which indicates that the respondents had joined the workforce within a short period of time, and suggests a high degree of mobility of the workforce in this industry. The distribution of tenure of the respondent workers is illustrated in Figure 5.2.

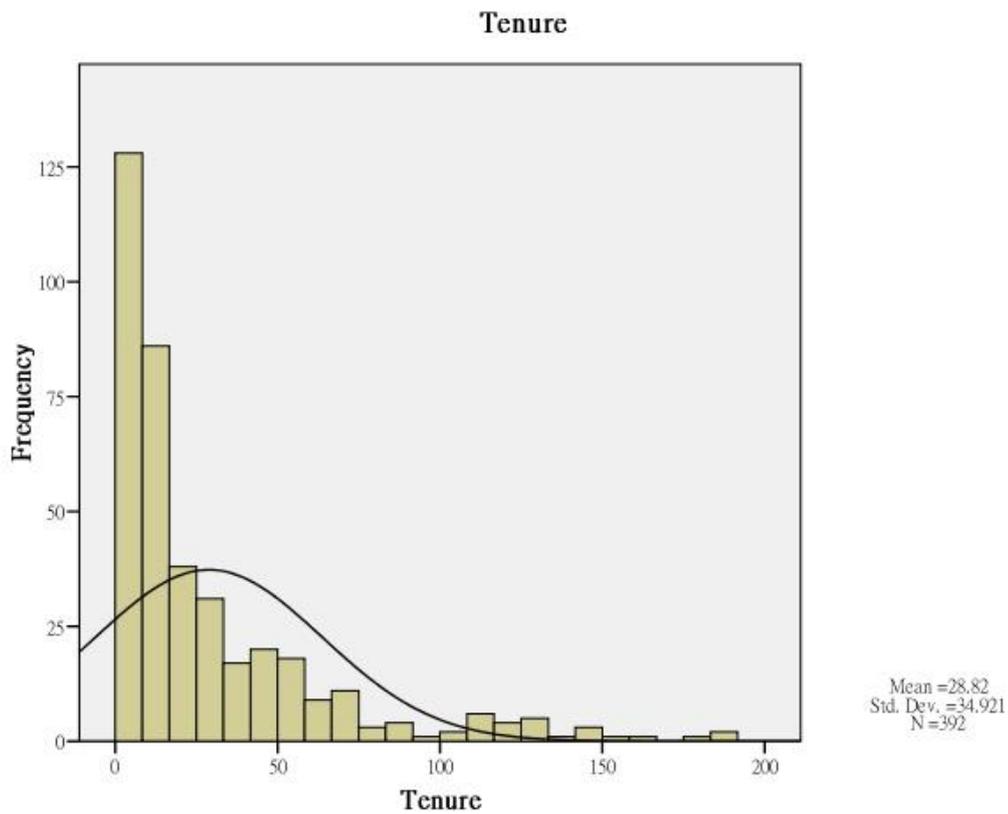


Figure 5.2 Distribution of Respondent Workers' Tenure

5.2.2 Nominal Demographic Variables

The nominal demographic characteristics of the factory worker respondents in the survey are shown in Table 5.1. The respondent workers were originally expected to have a primary education level that fitted them for completing the questionnaires themselves; however, for six respondents without the ability to read the questionnaires, an independent, experienced researcher provided assistance for their completion on the spot. It is noted that there were more respondents from the factory in Zhuhai than Zhongshan, as the former is bigger in terms of the number of overall employees. Almost two-thirds of the respondents (64.9 per cent) were women, just over half were married and just over two-thirds had middle school

education. In terms of family network, over 80 per cent have a surviving parent or parents, and about 50 per cent have siblings. These data suggest that an individual respondent may have more than one sibling in spite of the one-child policy in China. A more detailed discussion of this is given in Section 6.1. The fact that most of the sample were women is not surprising given that the needs of the garment manufacturing industry requires workers capable of completing the handiwork associated with fragile fabrics and threads, a skill base more common among women. The sample reflects the population gender proportions of a typical Chinese garment manufacturing organisation.

Table 5.1 Demographic Statistics of Respondent Workers

Factory Workers	N	%	Total
Zhuhai	305	77%	397
Zhongshan	92	23%	

Gender	N	%	Total
Male	139	35%	397
Female	258	65%	

Marital Status	N	%	Total
Single	173	44%	397
Married	204	51%	
Divorced	4	1%	
Widowed	3	1%	
Not Reported	13	3%	

Education Level	N	%	Total
None	6	2%	397
Primary	48	12%	
Middle	281	71%	
High	52	13%	
Tertiary or above	1	0%	
Not Reported	9	2%	

Department	N	%	Total
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Men's Shirts	253	64%	397
Ladies' Coordinates	133	34%	
Not Reported	11	2%	

Family Network	Yes (%)		No (%)		Total N
Parent(s)	333	84%	64	16%	
Parent(s)-in-law	146	37%	251	63%	
Children	179	45%	218	55%	
Elder Siblings	204	51%	193	49%	
Younger Siblings	207	52%	190	48%	

Number of Filial Provision Relationship	Yes (%)		Total N
0	14	4%	
1	132	32%	
2	110	28%	
3	51	13%	
4	90	23%	

In this study, it is noted that respondents with more filial provision relationships tend to stay longer with the factories. The analysis reveals a significant Pearson's Coefficient of 0.277 (significant at the .01 level).

5.3 Reliability of Measurement Scales

The reliability of a measure is established by testing for consistency, which indicates how well the items measuring a construct hang together as a set (Tucker and Lewis 1973). Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another (Sekaran 2003). Technically speaking, Cronbach's alpha is not a statistical test but a coefficient of consistency (UCLA 2009). It is computed in terms of the average inter-correlations among the

items measuring the concept (Sekaran 2003). Table 5.2 presents the reliability results for the scales and sub-scales in the pilot study and full study, as well as previous studies that have employed the scale.

Table 5.2 Reliability Results (Cronbach's α) of Scales in Previous Studies, Pilot Test and Full Study

Scale/ Sub-scale	Previous Studies	Pilot Test	Full Study
Goal Setting		0.68	0.83
Goal Specificity		0.52	0.67
Goal Difficulty	0.67 (Lee et al., 1991)	0.57	0.60
Perceived Goal Conflict	0.85 (Lee et al., 1991) 0.75 (Locke et al., 1994)	0.67	0.82
Goal Commitment *	0.88 (7 items) (Hollenbeck et al., 1989)	0.24 (7 items) 0.42 (5 items)	0.66(5 items)
Self-efficacy	0.91 (Zhang and Schwarzer, 1995)	0.76	0.78
Filial Piety	0.78 (Mean α) (Yang and Huang, 1991)	0.75	0.77
Loyalty to Supervisor	0.72(Mean α) (Chen et al., 2002)	0.85	0.88

** Two items were removed from the original scale in later analyses as the results from the reliability tests suggested that the reliability of Goal Commitment would be improved thereby.*

The overall results of reliability of the measurement scales of the full study were found to be satisfactory as most of them approximated the benchmark value of .70 with some even exceeding this value; for example, Loyalty to Supervisor and Goal

Setting were over .80. For the three scales, Goal Difficulty, Goal Specificity and Goal Commitment, those alphas were slightly below the benchmark value of .70. However, the alpha reported in the full study for Goal Difficulty read .60, which is similar to the literature of .67 (Lee et al. 1991), and therefore the argument for using this slightly lower value is strengthened. A possible reason for the low level of Goal Specificity may be due to too few test items (three only in this study) to measure the construct (Downing 2004). A plausible explanation for the lower reliability level for Goal Commitment is the difficult nature of this item (Downing 2004). Commitment is a relatively abstract construct that participants found hard to quantify; the reliability of assessment might fluctuate according to the subjective interpretation of each individual respondent. As a result, it may be difficult to get scores over .70 for this item. The same rationale applies to Goal Difficulty, which also entails subjective properties like the degree of challenge, the degree of thought, and the amount of tenacity required (rather than simply a consideration of whether or not goals are too difficult) (Lee et al. 1991).

A researcher has the flexibility to respond to the patterns revealed in the preliminary analysis of the data (Cooper and Schindler 2006) by eliminating some questions in the survey to improve the reliability of the measure. For the measurement scale of Goal Commitment, two questions were removed to improve the reliability of this factor: item number 20 (I am strongly committed to pursuing this job goal) and item number 26 (I think this job goal is a good goal to shoot for) were discarded and, this resulted in an improvement of Cronbach's alpha from .54 to .66 after using the Exploratory Factor Analysis (EFA), which allows the researcher to reduce the variables to a smaller set to account for most of the variance in the original set of

variables (Kim and Mueller 1978; Stevens 2002). The researcher attempts to determine how many factors are present, and checks whether the factors are correlated or not, and whether to name these emergent factors (Stevens 2002). The two items noted above were found to be appropriate for removal from the other items in the scale and were thus eliminated from the Goal Commitment measure. This flexible approach in responding to the patterns of data revealed in the analysis is not an uncommon approach (Cooper and Schindler 2006). The rationale behind analysing the results of the 2-factors solution in EFA may have been related to the positive phrasing of the items in comparison to the other five items, which were more negatively phrased. With the adjustments, it was found that the scale used in the study possessed a more satisfactory reliability.

5.4 Results of Goal-setting and Job Performance

Table 5.3 provides a summary of the goal setting data for the factory workers. It provides information on goal direction: namely, if the worker's goal increased, decreased or remained the same in the forward month. It also delineates who imposed the change in the goal: the worker, the supervisor or both. The breakdown of the total numbers of each goal direction category by the type of decision maker is provided in Table 5.3. For goal level, the majority of the respondents (N=325) set an increase in productivity in the forward month, and 46 respondents indicated no change, and five respondents set a decrease in productivity; 21 subjects did not respond.

To decide the goal level, the majority of the respondents (N=272) determined the

goal level of productivity in the forward month on their own, and 32 workers indicated that the goal level was set by their supervisors; a further 77 determined the goal level in the forward month collaboratively with their supervisors. A total of 16 participants offered no response for this item.

The sub-category “Goal Level by Decision Maker”, as shown in Table 5.3, is presented using a two-dimension matrix, i.e. the direction of goal level and the role of decision maker. In brief, the majority of the respondents (N=220) set an increase in productivity in the forward month on their own and 69 subjects did so in collaboration with their supervisors. As expected, no worker had a goal of “decrease in productivity” set by supervisors.

Finally, the information on goal setting by the respondent workers is presented in terms of change in percentage of output quantities from the previous month to the forward month.

Table 5.3 Descriptive Statistics of Goal-setting Data

Categories				
Goal Level				(N)
Increase				325
No Change				46
Decrease				5
Not reported				21
Decision Maker of Goal				(N)
Workers Themselves				272
Workers' Supervisors				32
Together				77
Not reported				16
Goal Level by Decision Maker	Workers Themselves	Workers' Supervisors	Together	Nil
Increase	220	26	69	10
No Change	42	2	2	0
Decrease	4	0	1	0
Not reported	6	4	5	6
Goal Setting Percentage				
Min				-50.00%
Max				200.00%
Range				250.00%
Mean				32.29%
Std. Dev.				30.21%

Goal setting percentage data had a range of 250 per cent. The minimum and maximum range allowed was -50 per cent to +200 per cent. Overall the data presented a mean increase in output of 32.29 per cent with a standard deviation of 30.21. The actual range was originally found to be 50 per cent to 400 per cent (two responses were reported way out of line). After deleting these two outliers, the mean increase in output was found to be 31.39 per cent with a standard deviation of 27.89 per cent; omission of the two outliers did not inflate the data. Just over 80 per cent of the workers set their own goals for their forward month.

Table 5.4 provides a summary of the actual productivity (job performance) of the

respondents in the study in terms of the wage difference between the previous month and the forward month. It should be noted that in this study, some respondents did not receive any wages under the piece-rate system in the forward month because certain procedures for making a new style of garment were not required. Following normal practice in Chinese garment factories, these workers were given time off and were provided with a basic subsidy from the factory.

Table 5.4 Descriptive Statistics of Productivity (Job Performance) Rate

	Wages (RMB) (Previous Month)	Wages (RMB) (Forward Month)	Productivity (Job Performance) in terms of wages differences in Percentage
Min	163.26	0.00	-100.00%
Max	3,310.00	4,275.35	200.00%
Range (Max – Min)	3,146.74	4,275.35	300.00%
Mean	1,355.90	1,565.93	20.97%
Std. Dev.	461.74	703.25	48.57%

Wages of the previous month's data had a range of RMB 3,146.74 with the minimum wage of RMB 163.26 and maximum RMB 3,310.00. Overall the data presented with a mean of RMB 1,355.90, with a standard deviation of RMB 461.74.

Wages of the forward month's data had a range of RMB 4,275.35 with the minimum wage of RMB 0.00 and maximum RMB 4,275.35. Overall the data presented with a mean of RMB 1,565.93, with a standard deviation of RMB 703.25.

The actual productivity data were calculated in terms of the wage difference between the previous month and the forward month of an individual respondent. To avoid any outlier effect, data for the increase in wages were limited to 200 (see Section 5.1). The data had a range of 300.00 per cent with the minimum -100.00 per cent and the maximum 200.00 per cent. Overall the data indicated a mean increase of 20.97 per cent, with a standard deviation of 48.57 per cent. The data implied that the productivity of the workers in terms of wage differences generally increased by 20 per cent after having workers and/or their supervisors reset their goals for the forward period. Figure 5.3 below demonstrates a normal distribution of wage differences as revealed by a Kurtosis index of 1.22.

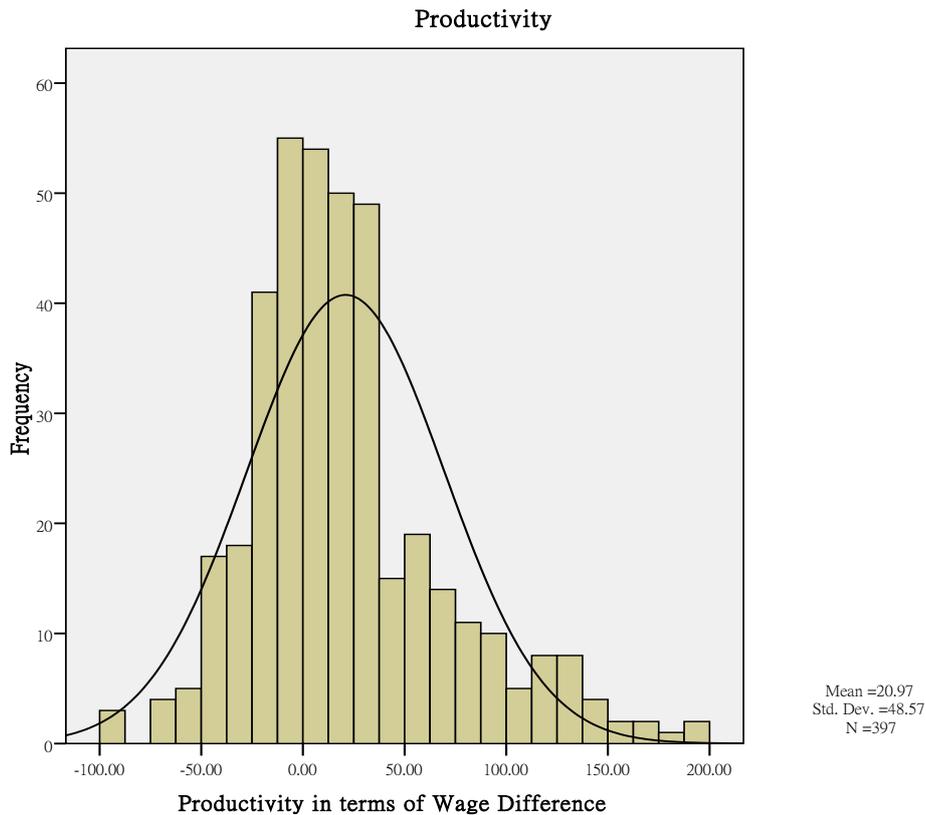


Figure 5.3 Productivity (in terms of the Wage Difference Between the Previous and Forward Months)

5.5 Correlation between Scale Scores and Productivity

Correlation tests were conducted on the demographic variables (Age, Gender, Education Level, and Filial Provision Relationships in a family network) against the dependent variables of Goal Level and Productivity (Job Performance). These are depicted in Table 5.5.

Table 5.5 Correlation Statistics of Demographic and Dependent Variables

Demographic Variables		Dependent Variables			
		Goal Level	Productivity (Job Performance) (Wages)		
			Previous Month	Forward Month	Difference between two months (%)
Filial Provision Relationship	Pearson Correlation	.179**	0.021	.159**	.167**
	Sig. (2-tailed)	0.001	0.677	0.001	0.001
Age	Pearson Correlation	0.103	0.086	.125*	0.06
	Sig. (2-tailed)	0.051	0.095	0.015	0.246
Gender	Pearson Correlation	-0.057	0.04	-0.02	-0.078
	Sig. (2-tailed)	0.273	0.431	0.692	0.122
Education Level	Pearson Correlation	-0.002	-.119*	-0.05	0.057
	Sig. (2-tailed)	0.976	0.019	0.324	0.266
Goal Level	Pearson Correlation		-.124*	.138**	.263**
	Sig. (2-tailed)		0.017	0.008	0

Note: * $p < .05$, ** $p < .01$

The above results demonstrate that the demographic variables of Age, Gender, and

Education Level did not display significant correlations with the dependent variables of Goal Level and Productivity. However, the Filial Provision Relationship results were significantly correlated with the Goal Level ($r = .179$, $p = .00$) thereby supporting

H6:

H6: The level of filial provision relationship will be positively associated with the goal level set in the job in terms of output to be achieved.

In addition to the positive correlation with Goal Level above, the level of Filial Provision Relationship revealed a significant correlation with Job Performance ($r = .167$, $p = .00$).

Table 5.6 depicts the correlation coefficients of each independent variables (Goal Specificity, Goal Difficulty, Perceived Goal Conflict, Goal Commitment, Self-efficacy, Filial Piety and Loyalty to Supervisor) against the dependent variables of Goal Level and Productivity:

Table 5.6 Correlation Statistics of Independent and Dependent Variables

Independent Variables		Dependent Variables			
		Goal Level	Productivity (Wages)		
			Previous Month	Forward Month	Difference between two months (%)
Goal Specificity	Pearson Correlation	0.04	0.09	0.057	0.007
	Sig. (2-tailed)	0.444	0.076	0.259	0.893
Goal Difficulty	Pearson Correlation	0	0.043	0.021	-0.011
	Sig. (2-tailed)	1	0.394	0.673	0.834
Perceived Goal Conflict	Pearson Correlation	-0.028	-.139**	-0.065	0.006
	Sig. (2-tailed)	0.584	0.00	0.195	0.902
Goal Commitment	Pearson Correlation	.106*	0.02	0.061	0.096
	Sig. (2-tailed)	0.042	0.697	0.226	0.058
Self-Efficacy	Pearson Correlation	0.092	0.03	0.043	0.042
	Sig. (2-tailed)	0.076	0.55	0.393	0.399
Filial Piety	Pearson Correlation	.124*	-.137**	-0.041	0.099
	Sig. (2-tailed)	0.01	0.006	0.422	0.051
Loyalty to Supervisor	Pearson Correlation	.152**	-0.012	0.018	0.064
	Sig. (2-tailed)	0.003	0.808	0.726	0.204
Goal Level	Pearson Correlation		-.124*	.138**	.233**
	Sig. (2-tailed)		0.017	0.008	0

Note: * $p < .05$, ** $p < .01$

Regarding the main effects, the results showed that Goal Level was positively correlated and significant with Goal Commitment ($r = .106$, $p = .04$) thus providing support to **H3**:

H3: The level of goal commitment will be positively associated with the goal level set in the job in terms of output to be achieved.

Goal Specificity ($r = .040$, $p = .44$), Goal Difficulty ($r = .000$, $p = 1.00$), Perceived Goal Conflict ($r = -.028$, $p = .58$) and Self-efficacy ($r = .092$, $p = .07$) were not significantly correlated with Goal Level and therefore, under the above correlation analyses, the hypotheses **H1**, **H2**, **H4** and **H5** were NOT supported:

H1: A specific goal will be positively associated with the goal level set in the job in terms of output to be achieved.

H2: A difficult goal will be positively associated with the goal level set in the job in terms of output to be achieved.

H4: The level of perceived goal conflict between conflicting goals will be negatively associated with the goal level set in the job in terms of output to be achieved.

H5: The level of self-efficacy will be positively associated with the goal level set in the job in terms of output to be achieved.

The results revealed that Productivity (Job Performance) (i.e. the difference in wages received by the respondent workers from previous to forward month) was significant and positively correlated with Goal Level ($r = .263$, $p = .00$), which therefore

supported the hypothesis **H7**:

H7: The goal level set in the job in terms of output to be achieved will be positively associated with productivity (job performance).

The results of the correlation analyses also provided preliminary support to the moderating effects of hypotheses **H8** and **H9** as the Goal Level was significant and positively correlated with Filial Piety ($r = .124, p = .02$) and Loyalty to Supervisor ($r = .152, p = .00$): -

H8: The positive relationship between goal commitment and productivity is moderated by the level of filial piety.

H9: The positive relationship between goal commitment and productivity is moderated by the level of loyalty to supervisor.

Job performance in terms of Productivity between the previous and forward months was found to be marginally significant and positively correlated with Filial Piety ($r = .10, p = .05$).

In summary, Goal Level was found to be significant and positively correlated with Goal Commitment (**H3**) and the numbers of Filial Provision Relationships (**H6**) respectively. The hypothesis that setting a higher goal by workers would result in a higher improvement in Productivity (Job Performance) (**H7**) in terms of actual wages received was also found to be significant and positively correlated. Finally, the hypotheses in relation to the positive moderating effects of filial piety (**H8**) and

loyalty to supervisor (**H9**) on the relationship between Goal Commitment and Productivity were supported ($r = .124, p = .02$) and ($r = .152, p = .00$) respectively.

On the other hand, counter to the hypotheses proposed in this research, the goal-related factors of Goal Specificity (**H1**), Goal Difficulty (**H2**), and Perceived Goal Conflict (**H4**), and the personality factor of Self Efficacy (**H5**) did not exert an effect on motivating the respondents to perform better (i.e. Job Performance).

5.6 Testing the Hypothesised Model by SEM

5.6.1 Testing Main Hypotheses using SEM

In order to test the conceptual model and its attendant hypotheses stated in Chapter 3, the technique of Path Analysis in Structural Equation Modeling (SEM) was used. SEM is a useful statistical tool for testing relationships between an array of unobservable and latent variables with measurement errors in structural equations (Klein and Muthén 2007). This study has strictly followed SEM research procedures (Byrne 2006) and provided the necessary statistics for estimating the parameters in Table 5.7 below used to specify a model. Model fit is then compared against model fit indices as mentioned in Section 4.5. The path parameters suggest the relationships among the constructs (Stevens 2002). EQS 6.1 was employed to run the SEM in this analysis. Table 5.7 shows the means, standard deviations, and correlations of all scales to be tested in the proposed model.

Variable	Mean	Standard Deviation	1.GS	2.GD	3.GC	4.PGC	5.SE	6.FPR	7.FP	8.LS	9.GL
1. Goal Specificity (GS)	3.60	.96									
2. Goal Difficulty (GD)	3.24	.90	.324*								
3. Goal Commitment (GC)	3.05	.77	-.01	-.181**							
4. Perceived Goal Conflict (PGC)	2.34	.81	.195*	.468**	-.418**						
5. Self-efficacy (SE)	3.57	.64	.258*	.201**	-.095	.188**					
6. Filial Provision Relationship (FPR)	2.18	1.2	.069	-.108*	-.024	.024	.039				
7. Filial Piety (FP)	3.73	.61	.152	.218**	-.099	.265**	.424**	.121*			
8. Loyalty to Supervisor (LS)	4.54	.99	.278*	.267**	-.108*	.224**	.495**	.025	.488**		
9. Goal Level (GL)	32.29	30.21	.04	.000	.106*	-.028	.092	.179**	.124*	.152**	
10. Productivity (Job Performance) (P)	20.97	48.57	.007	-.011	.096	.006	.042	.167**	.099	.064	.263**

Note. * $p < .05$; ** $p < .01$.

In the original hypothesised model, the scale scores of Goal Specificity, Goal Difficulty, Perceived Goal Conflict, Goal Commitment, Self Efficacy, Filial Provision Relationship, Filial Piety, and Loyalty to Supervisor were considered as independent variables used for explaining the variance of Goal Level. The latter, in turn, served as a variable to further explain the covariance of Productivity.

As revealed in other studies such as Bakker et al.'s (2007) EQS analysis on moderating effects, exogenous variables were examined in the main effect model during the initial stage to test whether the variables fitted into the proposed model.

As this study focused on the moderation effects of the two exogenous variables (Filial Piety and Loyalty to Supervisor) on Goal Commitment to other endogenous variables (Goal Level and Productivity), it was, therefore, worthwhile to include them in the initial stage of the EQS analysis before proceeding to the next level analysis on moderation effect.

These relationships between independent, dependent and moderating variables are illustrated in Figure 5.4, which illustrates all path coefficients of the variables mentioned in the initial model. The reason for including the two moderating variables in the initial model is the suggestion made by Aiken and West (1991) that

the main effects of any moderating variables are primary to any further testing of interaction effects. The coefficients indicated in Figure 5.4 are the standardised effect sizes, which are interpreted further in the next section.

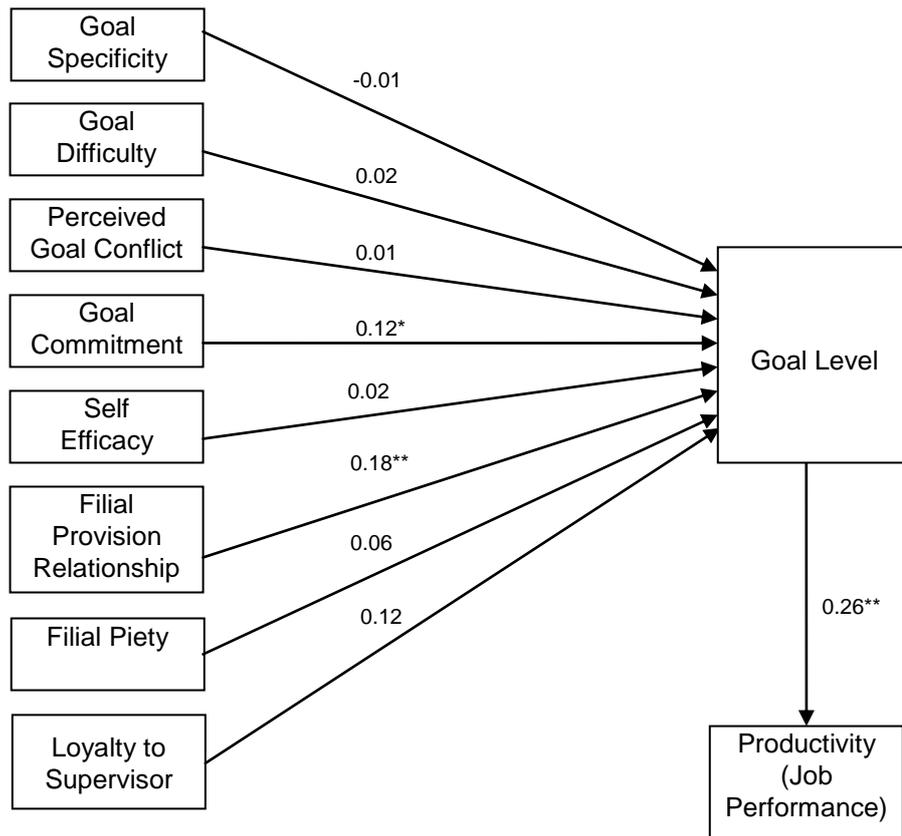


Figure 5.4 Initial Theoretical Model and Results

Notes: 1. * $p < .05$, ** $p < .01$

2. Path coefficient indicates the standardised effect size

5.6.2 Interpretation of Results of the Proposed Model

The initial model of path analysis showed that the model fitted together very well.

The Chi-square test proved to be non-significant ($\chi^2(8) = 7.96, p = .44, n.s.$), as did with some major indices such as CFI (1.000), NNFI (1.001), and RMSEA (0.00) (see Section 4.5) demonstrating that the model fitted together very well: in other words, the structure among the variables was well explained by the hypothesised relationships in covariation terms (Stevens 2002); hence, it was legitimate to carry out the sequential path analyses.

When analyzing the path coefficients, Goal Commitment ($r = .12, p < .05$) and Filial Provision Relationship ($r = .18, p < .05$) were significant. In other words, **H3** and **H6** relating to main effects of Goal Level were supported in the SEM analysis. Specifically, for **H3**, the level of goal commitment will be positively associated with the level of goal set in the job in terms of output to be achieved. For **H6**, the level of filial provision relationship will be positively associated with the level of goal set in the job in terms of output to be achieved. Moreover, it was found that Goal Level ($r = .26, p < .05$) was significantly associated with Productivity, which then supported **H7**, that the level of goal set in the job in terms of output to be achieved will be positively associated with actual Productivity (Job Performance).

However, as a number of paths in the initial model were found to be redundant in light of the non-significant path coefficients illustrated in Figure 5.4, the initial model was revised further by removing these non-significant paths. The model was simplified to a scenario in which the Goal Level was associated with Goal Commitment and the number of Filial Provision Relationship inside a family network, whereas Productivity (Job Performance), in terms of wages difference between previous and forward months, was separately predicted by Goal Level. The revised model and associated results are illustrated in Figure 5.5:

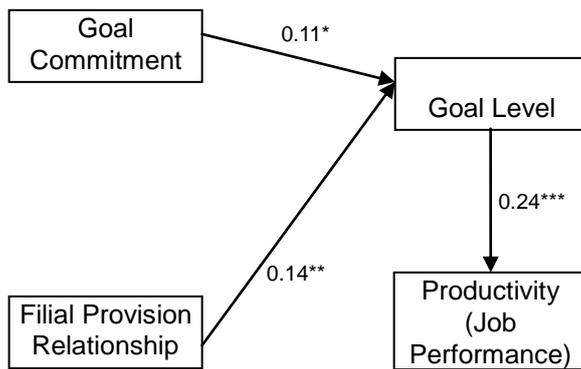


Figure 5.5 Revised Theoretical Model and Results

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

The results in Figure 5.5 indicate that the revised model still fitted together well. The Chi-square test proved to be non-significant ($\chi^2(3) = 4.96$, $p = .17$. n.s.), together with some major indices such as CFI (0.946), NNFI (0.820), and the RMSEA (0.042). The model fit indices displayed in Figure 5.5 were highly comparable with the previous model in Figure 5.4, which ensures that a simpler model could be presented. As a result of further analysis, this revised model was subject to further analysis and discussion.

The revised model was able to demonstrate both direct and indirect significant relationships between the two variables (Goal Commitment and Filial Provision Relationship) and Goal Level, and between Goal Level and Productivity respectively. Goal Level was significantly explained by Goal Commitment ($r = .11$) and the number of Filial Provision Relationship inside the family ($r = .18$), and therefore both **H3** and **H6** were supported: the level of Goal Commitment (**H3**) and the number of Filial Provision Relationship (**H6**) are positively associated with the level

of goal set in terms of output to be achieved. In the meantime, Productivity (Job Performance) was significantly explained by Goal Level ($r = .24$), and **H7** was supported in that the level of goal set in terms of output to be achieved will be positively associated with actual productivity (Job Performance).

To check if there was any partial mediation effect in the revised final model (Figure 5.6), the Sobel Test was employed (Sobel 1982; Baron and Kenny 1986). This test aims to examine the direct, indirect and total effect of each independent variable on the mediating variable and dependent variable. It generates three possible combinations of direct and indirect effects: (a) significant direct effect and non-significant indirect effect, indicating the absence of mediation; (b) non-significant direct effect and significant indirect effect, denoting a full mediation model; and (c) both direct and indirect effects are significant, indicating that partial mediation exists in the model.

The results of the study revealed that only the variable of Filial Provision Relationship showed significant results for both direct and indirect effects ($\gamma_{46} = .10$, $p > .01$, $\gamma_{46\beta_{56}} = .03$, $p < .05$); hence, a partial mediation effect was demonstrated: that is, in addition to a direct relationship between the number of Filial Provision Relationship and Productivity as indicated in Table 5.7, a positive relationship was also found between the number of Filial Provision Relationship and Goal Level, which could further exert positive impacts on Productivity. Note that the results demonstrated a non-significant direct and significant indirect effect on Productivity by Goal Commitment ($\gamma_{16} = .05$, n.s., $\gamma_{16\beta_{56}} = .026$, $p = .05$) and therefore, a full mediating effect of Goal Level between Goal Commitment and Productivity (Job

Performance) was demonstrated. In other words, Goal Level of productivity is a potent and necessary condition to account for the relationship between Goal Commitment and Productivity.

Based on the above Sobel test results, SEM was conducted to investigate the possibility of a direct path from Filial Provision Relationship to Productivity (Job Performance). Results showed that the revised model still fitted well. The Chi-square test proved to be non-significant ($\chi^2(2) = .612, p = .74$), together with some major indices such as CFI (1.000), NNFI (1.19), and the RMSEA (0.00). Goal Commitment ($r = .11, p < .05$) and Filial Provision Relationship ($r = .18, p < .001$) were able to significantly predict Goal Level, which subsequently predicted Productivity ($r = .24, p < .001$). The direct path from Filial Provision Relationship to Productivity was also found to be significant ($r = .11, p < .01$). In comparison with the previous model, the R-square of this revised model increased from 6.6 per cent to 7.7 per cent, further supporting the validity of this model. The revised final model is presented in Figure 5.6 below.

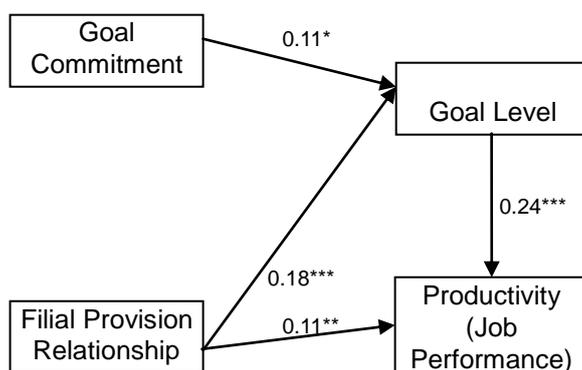


Figure 5.6 Revised Final Model and Results

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

5.6.3 Testing the Influence of the Decision Maker

To test whether the role of the decision maker would influence each antecedent variable for setting goals for the output level in the forward month and the subsequent changes in actual productivity by the factory workers, the multi-sample analysis of the SEM was used (Lee 2007). The sample was divided into three groups made up of the different decision maker groups that set the goal for the forward month. The first, the self-set-goal group, comprised workers who set their productivity goals independently. The second, the supervisor-set-goal group, comprised workers whose productivity goal was set by their supervisors. Lastly, the conjointly-set-goal group comprised of workers whose productivity goal was set jointly by the workers and their supervisors. The sample size for these three groups was 272, 32 and 77 respectively after excluding non-reported data.

The test started with establishing three models with the same structure across the three groups, and then constraining equal factor loadings across groups. Next, factorial invariance was tested by constraining variances and covariances among factors across the three groups. Then, equal path coefficients were tested by specifying constraints to the path/direction of factors, i.e. independent variable 1 to dependent variable 1, across the three groups, step by step. The baseline model, χ^2 (df = 9, N = 381) = 6.561, p = .683, allowed a comparison of restrictive models. By definition, one model is restrictive compared to the baseline when the parameter constraints are fixed without changing the number of variables. When making comparisons across groups, researchers usually set the same parameter constraints across different groups because if there is any significance in chi-square change, there exists a cross-group difference (MacCallum and Austin 2000). For the influence of the decision maker's role, it was

found that the more restrictive model, after fixing factor correlations, resulted in χ^2 (df = 21, N = 381) = 227.00, $p = .279$. As the χ^2 difference between these two models was not significant $\Delta \chi^2$ (df = 12, N = 381) = 17.738, n.s., the possibility that the decision maker influenced the generalisability of the revised model was rejected.

5.7 Testing Moderation Effects

5.7.1 Moderating Effects of Filial Piety and Loyalty to Supervisor

In examining the moderating effects of Filial Piety and Loyalty to Supervisor on Productivity (Job Performance), multiple regression analyses were adopted. One common way to test the moderating effect in SEM is the multi-sample analysis which in principle, examines whether a specified model fits data across subgroups (Byrne 2006). In this study, for example, the subgroups include those with high and low filial piety and high and low loyalty to their supervisor. A major critique of conducting a multi-sample analysis in SEM is that it requires researchers to dichotomise a continuous variable before analyzing the structural equations, for example by using a median split to divide participants into high vs. low filial piety groups. MacCallum et al. (2002) provided examples where dichotomisation is subject to substantial disadvantages. In particular, they noted that it results in loss of information about individual differences, which defeats a core principle of conducting psychological research; for example, if there are four participants with scores of 2, 4, 7 and 9 in a sample and one assigns an arbitrary value 5 to split them into two groups, the split demonstrates an obvious difference between the pair in

the “low” group and the pair in the “high” group. Nevertheless, the research simply ignores the difference after categorising them. MacCallum et al. also noted that dichotomisation can lead to incorrect calculations of effect size and power because it usually increases deviation from the mean value and overlooks non-linear relationships as well. They suggested that applying dichotomisation to a continuous variable is possible when it is highly skewed. Figures 5.7 and 5.8 illustrate the distribution of Filial Piety and Loyalty to Supervisor scores. Considering that they were well-aligned with a normal distribution curve (i.e. they were not skewed at all), the present study adopted a multiple regression model suggested by Aiken and West (1991) to investigate the interacting effects. The rationale of abandoning EQS for moderating effect analysis is to retain full information conveyed by the continuous variables (Bagozzi, Baumgartner and Yi 1992).

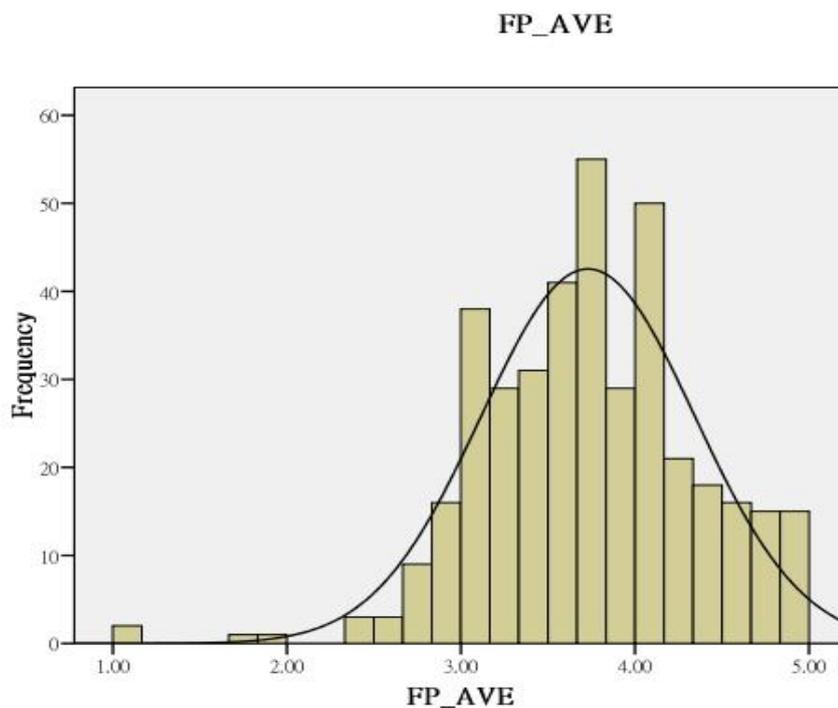


Figure 5.7 Frequency Distribution of Average Score of Filial Piety

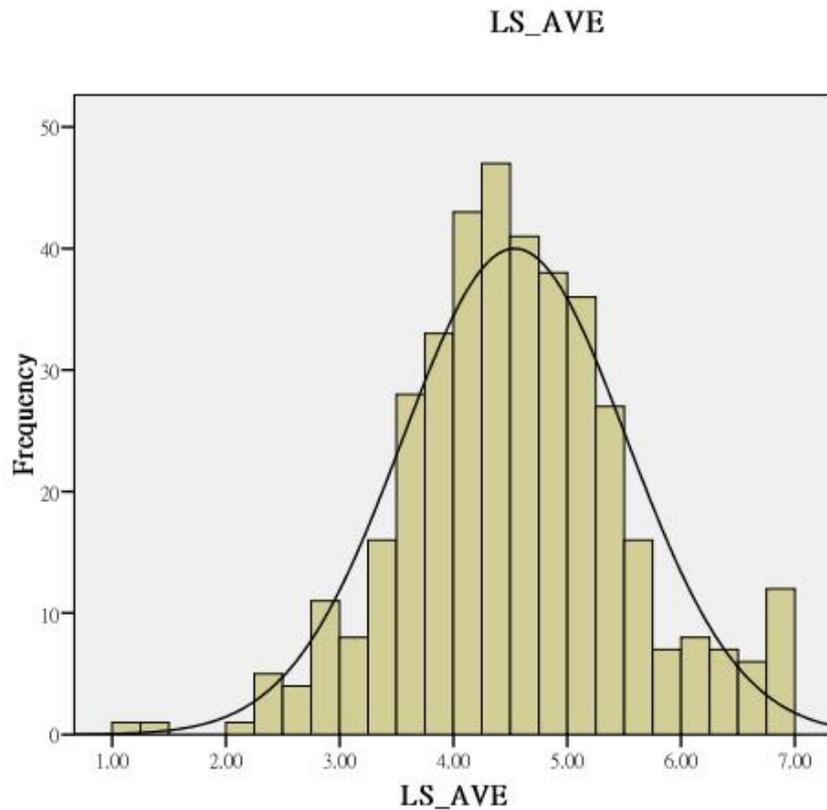


Figure 5.8 Frequency Distribution of Average Score of Loyalty to Supervisor

Tests were conducted on the validity of the interaction roles of Filial Piety and Loyalty to Supervisor on the relationship between the dependent variable of Productivity (Job Performance) and the statistically significant independent variable of Goal Commitment found in the SEM analysis. Table 5.8 shows the summary of the moderated multiple regression analysis.

Table 5.8 Summary of Moderated Multiple Regression Analysis of Goal Commitment and Filial Piety/Loyalty to Supervisor to predict Productivity

Variable	β	F(df)	R ²	ΔR^2	p
<u>Independent Variable: Filial Piety</u>					
Model One		4.128*(2,385)	.016	.021	.017
Filial Piety	.109*				
Goal Commitment	.107*				
Model Two		6.744**(1,384)	.043	.029	.001**
Filial Piety	-.339*				
Goal Commitment	-.639**				
Goal Commitment x Filial Piety	.849**				
<u>Independent Variable: Loyalty to Supervisor</u>					
Model One		2.898(2,386)	.010	.015	.056
Loyalty to Supervisor	.075				
Goal Commitment	.104*				
Model Two		4.299**(1,385)	.025	.018	.008**
Loyalty to Supervisor	-.305*				
Goal Commitment	-.383*				
Goal Commitment x Loyalty to Supervisor	.600**				
Note: * $p < .05$; ** $p < .01$					

Goal Commitment interacted with Filial Piety on Productivity (Job Performance), which was measured by actual productivity changes in the way that given the same level of commitment, workers who were found to be more filial would perform better than those who were less filial ($b = 11.93, p < .001$).

In a similar vein, Goal Commitment interacted with Loyalty to Supervisor on Productivity ($b = 6.30, p < .05$). Given the same level of commitment, workers who were found to be more loyal to their supervisors would perform better than those less loyal.

In sum, the results of the interaction test revealed that two moderating relationships were found to be statistically significant. The hypotheses **H8** and **H9** were supported: i.e. the positive relationship between Goal Commitment and Productivity will be moderated by the level of Filial Piety (**H8**) and Loyalty to Supervisor (**H9**). In particular, the positive impact of Goal Commitment on Productivity (Job Performance) will be stronger among workers with higher Filial Piety (**H8**) and Loyalty to Supervisor (**H9**) than on those with lower.

5.7.2 Conclusion of SEM and Regression Method Results

Table 5.9 provides a summary of the hypotheses proposed in Chapter 3, along with an indication of whether they were supported or unsupported using SEM and Regression methods.

Table 5.9 Results of Hypotheses Testing with Moderators

Hypothesis	Result
<i>H1</i> A specific goal will be positively associated with the goal level set in the job in terms of output to be achieved.	Not Supported
<i>H2</i> A difficult goal will be positively associated with the goal level set in the job in terms of output to be achieved.	Not Supported
<i>H3</i> The level of goal commitment will be positively associated with the goal level set in the job in terms of output to be achieved.	Supported
<i>H4</i> The level of perceived goal conflict between conflicting goals will be negatively associated with the goal level set in the job in terms of output to be achieved.	Not Supported
<i>H5</i> The level of self-efficacy will be positively associated with the goal level set in the job in terms of output to be achieved.	Not Supported
<i>H6</i> The level of filial provision relationship will be positively associated with the goal level set in the job in terms of output to be achieved.	Supported
<i>H7</i> The goal level set in the job in terms of output to be achieved will be positively associated with productivity (job performance).	Supported
<i>H8</i> The positive relationship between goal commitment and productivity is moderated by the level of filial piety.	Supported
<i>H9</i> The positive relationship between goal commitment and productivity is moderated by the level of loyalty to supervisor.	Supported

Chapter 6 Discussion, Limitations and Implications

This chapter discusses and analyses the research findings of the data collected from the survey questionnaires as presented in Chapter 5, and links it to the literature discussed in Chapter 2. First, the analyses of the demographic data are presented. This is necessary to achieve a better understanding of the general population of the factory workers in the southern part of China. Next, the nine hypotheses presented in Chapter 3 are explored and discussed. Limitations of the study, together with areas of further research, are presented. Finally, this chapter interprets both the research and managerial implications from the study in a Chinese context.

6.1 Demographic Data

The number of respondents from the factory in Zhuhai (N=305) is larger than the one in Zhongshan (N=92) because the former is bigger in terms of more employees recruited. The majority of the workers (64 per cent) were engaged in producing men's shirts and the remaining 34 per cent in producing ladies' coordinates.

In a garment factory, the dominant process is sewing (Carr and Latham 1988). The employees in the garment manufacturing sector in this survey were predominantly female (65 per cent). This phenomenon suggests that operating sewing machines with fragile fabrics, interlinings, and thread requires dexterous sewing skill that is

more common among women. Men are mainly hired for tasks requiring more physical strength, like fabric cutting, ironing, and packing.

About 51 per cent of the respondent workers were married; 44 per cent reported being single. The closeness of these figures indicates the “easy-entry” into the garment manufacturing industry by Chinese workers and that their marital status or gender is not a concern. This lack of concern regarding demographics has been driven by an ongoing labour shortage (in 2004, there was a shortfall of two million workers), which is still a very serious problem in the Pearl River Delta of the Guangdong Province in China (Ming Pao 2004) where the factories were located. According to a recent survey by the Federation of Hong Kong Industries in 2010, 43 per cent of Hong Kong manufacturers in this region suffer from an approximate 29 per cent shortage ratio (i.e. for every 100 existing employees, 29 more positions are available) (Ming Pao 2010b). As a result of this severe shortage of workers, all newcomers are likely to be welcome.

The mean age for the 397 factory workers was approximately 27, the youngest being 17 and the oldest 52. The mode age was 19. The figures propose that the garment manufacturing industry relies on younger workers and that older individuals seem less inclined to seek this type of work. This result is consistent with the widely held belief that younger workers prefer more effort-intensive, piece-rate jobs in order to get higher earnings (Rubin and Perloff 1993). Physically, older workers are likely to be less dexterous and not fast enough to handle piece-rate garment manufacture. Culturally, they may have already returned to their home towns to fulfill filial duties and are now caught up in child rearing and parental care. Chinese families tend to

emphasise family respect, support and assistance when socialising their children, with the aim of inculcating them with a sense of filial duty (Ho 1981). Such way of nurturing by the Chinese parents can lead their children into a tradition of filial obligation to reciprocate their efforts in raising them when their parents become aged or disabled (Ho 1996; Huang 1989).

More than 83 per cent of the respondents did not complete a high school education, with only 13 per cent graduating from high school. None of the factory workers had been educated above high school level. This indicates the general low level of education of the workers in the garment manufacture industry in China. Broadly speaking, the data on both age and literacy illustrate that education levels among young Chinese factory workers are still low. Despite these low levels of education, Chinese youth at least possess the basic ability to read and understand basic Chinese characters.

The respondents had been in the factory workforce from less than one month to 191 months, with an average tenure of 28.8 months. However, the mode of tenure was six months, which indicates that the respondents joined the workforce for a short period of time, thus suggesting a high degree of mobility of the workforce in this industry.

In 1979, the Chinese government launched its one-child policy, aiming to restrict population growth by reducing fertility through family planning and thereby to conserve the country's resources to advance economic development (Chow and Zhou 1996). This state policy is still in place and remains strictly enforced in urban areas;

however in rural villages a couple may have a second child after three years if their first child is a girl (Hardee et al. 2004; Wenweipo 2011). In this study, about half of the respondents have either elder (51 per cent) or younger (52 per cent) siblings suggesting that they likely come from villages in other provinces; the presence of such migrant workers is a common phenomenon in the Pearl River Delta of the Guangdong Province (Solinger 1991) where the two factories under the study are located. According to Naisbitt (2010), during the last decade 250 million Chinese migrant workers, one-third of them women, left their villages for jobs in cities. A poll by the Federation of Hong Kong Industries in 2008 indicated that about 60,000 factories in the Pearl River Delta employed about 10 million migrant workers from the rural areas of other provinces in China (South China Morning Post, 2011b).

6.2 Hypotheses

The scholarship on work motivation essentially aims at studying its effect upon the job performance of an individual. Goals are often the outcomes of employees' needs and values; this study considers whether, and how much the action and performance of a worker is directed to goal-specific domains like wages, rewards, and the fulfillment and satisfaction of other needs relating to filial piety and loyalty to the supervisor.

Many firms still apply Maslow's needs-hierarchy to boost employee motivation through their award, compensation and benefit programs (Stone 2005). Mary Kay Inc., for example, employs this needs-hierarchy to motivate its one million beauty consultants in 34 markets worldwide, and is best known for its award of the Mary

Kay Pink Cadillac for outstanding sales and team building. Consultants report that they are motivated by such commissions and incentives (Ivancevich, Konopaske and Matteson 2005). Monetary rewards help to satisfy basic human physiology and safety needs and so good performance and high productivity are motivated by the underlying motives of needs gratification.

In addition to financial rewards, a study by Hofstede (1980b) indicates that other factors like a country's cultural values, for example, and the constructs of filial piety, filial provision relationship and loyalty to supervisor in China, may account for individual differences in work behaviour and motivation. These limitations diminish the predictive value of content theories of motivation like Maslow's needs theory and Alderfer's ERG theory in understanding work motivation in general, and Chinese workers in particular.

As a process theory of motivation emphasising the importance of goals in motivating job behaviour and its impact on task performance, the goal-setting theory of Locke and Latham (1990, 2002) provides a more valid and practical framework (Miner 1984) for the hypotheses and models proposed by this study. The following sections will discuss the results of the goal-performance relationship within a Chinese context. It will indicate how cultural influences on employees' work motivation have to be considered within this cultural context.

The main objective of establishing the nine hypotheses in Chapter 3 was to identify types of antecedents and to examine their impacts on goals set in the Chinese factory workers' job. It was hypothesised that goal specificity, goal difficulty, degree of self-efficacy, perceived goal conflict, and goal commitment, as well as the filial

provision relationship, would exert impacts on the level of goal set in a job, and permit exploration of relationship to job performance in terms of output quantity. The moderating effect of the two cultural factors of filial piety and loyalty to supervisor on the relationship between goal commitment and job performances of workers was also investigated.

6.2.1 Goal Specificity

Goal specificity is one of the factors that can affect an individual's behaviour and attitudes by enhancing the motivation to perform a task better (Lee and Schuler 1980); for example, setting a specific goal of ironing at least 100 shirts a day for a worker will lead to higher performance than merely asking them to "do as much as possible". Goal specificity can help reduce ambiguity about what is to be attained. However, in this study, it seems that goal specificity does not significantly correlate with the level of goal set in the job.

Goal specificity refers both to the manner in which a job is to be done, and to the way to measure performance (Locke and Latham 1990; Lee et al. 1991). Chinese factory workers under the piece-rate system are required to perform repetitive routine tasks every day in accordance with their ability. Their job performance is measured by the quantities of output at a fixed remuneration rate. As a result, Chinese piece-rate workers do not need to bother with new work procedures or ways to measure their job performance from time to time. It is, therefore, highly likely that goal specificity does not produce an effect in terms of the level of goal set in their job, as far as the workers are concerned. One might argue from this that goal specificity does not correlate with the levels of goal set in the job of Chinese piece-rate workers,

but it is questionable whether this inference would apply to other types of workers under a fixed-wage contract, such as daily- or monthly-paid employees in China. It has been argued in a wider context (Rubin and Perloff 1993) that time-rate contracts do not seem to provide workers with a specific goal to work harder and faster and gain more earnings in a given period. It is also indicated that fixed-wage payment schemes reduce working efforts, compared to piece-rate schemes (Foster and Rosenzweig 1994) since an individual's pay is independent of output and no benefit accrues from making more products (Paarsch and Shearer 2000).

6.2.2 Goal Difficulty

The results of the study did not reveal that a difficult goal will be positively associated with the level of goal set and subsequently with job performance. This finding contradicts the presupposition of such a positive relationship, proposed by the goal-setting theory as reviewed in the literature, to the effect that within a set ability level, an increase in goal difficulty is followed by an increase in effort by an individual and hence in task performance (Locke 1968; Latham and Yukl 1975; Erez and Zidon 1984; Locke and Latham 1990; Martin et al. 1999; Wiese and Freund 2005).

The respondents in this study were all trained to perform "same and singular" tasks e.g. button-holing in a production line, which they carry out day by day. The attribute of goal difficulty may be irrelevant to the level of goal set in their job because the routine work is straightforward and they do not need to acquire new skills to perform other sewing procedures.

As one of the main components of the goal-setting theory (Fried and Slowik 2004) with empirical validity in driving motivation, goal difficulty is likely to provoke discussion on its general applicability among different cultures. Leung (2001), for example, queried the tenability of the positive relationship between goal difficulty and job performance outside North America. He contended that the tension arising from the unquestioning obedience to the superiors from inferiors in high-power-distance nations in which individuals highly accept the unequal distribution of power between supervisors and subordinates (Farh, Hackett and Liang 2007) might abate or even negate the effect of goal difficulty on job performance, in particular when the goals are fixed by the supervisor. When workers fail to meet the pre-set job goals, they may have a negative performance appraisal from supervisors that may consequently damage their future relationships (Leung 2001).

On the other hand, goal-setting theory, which has traditionally focused on a single-goal framework, may not be fully feasible in a multiple-goal context (Cheng, Luckett and Mahama 2007). Neglecting the co-existence of other goals may lessen the predictive value of the real goal-task relationship (Donovan 2001); for example, when a worker perceives a high level of difficulty in achieving the single goal of making an extra 200 pieces of shirts in the forward month, his/her perception of goal conflict increases in a multiple-goal setting situation (e.g. when he/she is also assigned the goal of 'zero defects' for this lot by the supervisor). Multiple-goal conflict may result in a reduction of task performance. Cheng, Luckett and Mahama (2007) suggested that the mediating effect of goal conflict must be taken into consideration in a multiple-goal setting environment. The finding of a positive relationship between goal difficulty and job performance under a single-goal setting

context is perhaps not generalisable to multiple-goal scenarios. This point represents a rich area for future research.

6.2.3 Goal Commitment

Higher goal commitment results when the individual perceives the goal is important, and believes it is achievable (Locke and Latham 2002). Campion and Lord (1982) defined goal commitment as the extension of effort, over time, toward accomplishment of a goal, emphasising that the individual holds an unwillingness to abandon or change his or her goal. Before goals can positively effect workers' job behaviour, they have to accept the goals as their own or exercise commitment to pursuing them (Diefendorff and Lord 2003). When every worker is assigned the same or similar goals, those individuals who are committed to achieving the goals should perform better than individuals who are not committed (Locke, Frederick, Lee and Bobko 1984). This effect of goal commitment on job performance was reiterated by Hollenbeck and Klein (1987), who argued that goal commitment is a necessary condition if goal-setting is to work. On the other hand, an employee's willingness to commit to pursuing a goal depends upon the degree to which the goal can be measured within a performance range (Liccione 2009).

The findings of this study are consistent with extant theories (Klein et al. 1999; Locke and Latham 2002) that emphasise a positive relationship between goal commitment and the level of goal set, which in turn positively affects job performance. For piece-rate factory workers in particular, the outcome of their work can be objectively measured providing a driver for easy measurement of their goal (Liccione 2009). The measurability of goals, in turn, offers further support to

the predictive value of goal commitment leading to better job performance under goal-setting theory (Locke, Latham and Erez 1988).

6.2.4 Perceived Goal Conflict

Locke and his colleagues (1994) defined goal conflict as a state that arouses “incompatible action tendencies” that can undermine job performance as a result of conflicts between work goals and other goals held by individuals, or of conflicts between personal goals and organisational goals. Goal-setting theory focuses largely on the relationship of one-to-one goal and task performance, but neglects the possibility of other conflicting goals in influencing task performance (Slocum, Cron and Brown 2002): for example, in addition to a job goal of producing a certain number of products, factory workers may simultaneously have other goals, like engaging in social activities such as a family reunion, that may demands on their resources in terms of time, energy and skills (Björkman and Lu 1999).

In this study, the findings do not demonstrate a correlation between perceived goal conflict and the level of goal set in the job by the respondents. A plausible explanation for this finding is that, unlike workers who are paid on daily or monthly-basis, they may not have many conflicting goals built into their job; for example, a monthly-paid foreman may have to get involved in supervisory management issues along with their core work requirements, whereas piece-rate workers only have to make a set amount of product to an established standard: in other words, piece-rate workers possess only one simple and clear goal, of making products faster, to a designated quality requirement, to earn more money. The more the work, the more the reward (Rubin and Perloff 1993). In addition, the

opportunity of promotion, while not impossible, is far less for a piece-rate worker, and work goals are, therefore, not so complicated.

Perceived goal conflict of piece-rate workers may also be less because supervision and monitoring are minimal (Lazear 1986), and employees can control their own working speed (Lloyd 1986). In addition, piece-rate workers are likely to take time off for their own reasons when necessary (Heywood and Wei 1997) and can easily quit their jobs, unlike monthly-paid workers who normally have to submit one month's advance notice in China. The demographic data of this study that give the mode age and mode tenure of respondent as 19 and six months respectively. It can be inferred from their youth that young workers are less likely to have complexity in their lives and their parents are probably still young and healthy. They enjoy a large degree of mobility in the labour market, especially in the Pearl River Delta, where there have been labour shortages (Ming Pao 2004); however, to fulfill filial obligations they are expected to return their home village for marriage and giving birth (Pun 2005), for family reunions, and for ancestral worship (Björkman and Lu 1999).

It is likely that the nature of the piece-rate jobs of the respondents in this study, and any perceived goal conflicts, exert little or no effect on the level of goal set.

6.2.5 Self-efficacy

Self-efficacy refers to a person's beliefs in the ability to deliver a certain performance (Bandura 1997), and a concept central to goal-directed behaviour and job performance (Landy and Conte 2004). For a factory worker, self-efficacy is a

generative capability in which an individual organises and orchestrates his/her skills to cope with work demands (Bandura 1982). It is believed that self-efficacy has a direct effect on job performance by raising motivation levels (Pinder 2008). The motivation hub model (Locke 2001) discussed in Chapter 2, further suggests the positive influence of self-efficacy on the level of goal set by an individual. This study does not demonstrate a significant correlation between self-efficacy and the level of goal set in the job.

For a garment factory in China, the output of each piece-rate worker is distinct and easily measured (Heywood and Wei 1997), and observable (Paarsch and Shearer 2000). Each worker's remuneration is easily calculated. Incentives are attractive, as workers are paid for the work they actually do (Gibbons 1987): in other words, the more efficient and more productive they are, the more money they receive (Xu 2000). The sewing techniques, once learned, are quite simple and workers can easily obtain success in performing them (Bandura 1977). The ease of achieving self-efficacy in this kind of job is quite different from that of a more complex task like supervising a team of foremen in the factory. As long as a piece-rate factory worker's skill and experience are adequate to perform their routine tasks in an efficient and effective manner, their output will remain steady and sufficient earnings are secured for living. In such circumstances the factor of self-efficacy does not seem significant enough to exert any effect on the level of goal set by the workers.

Most studies of self-efficacy have been conducted in western settings, so its relationship with job performance for non-western individuals has yet to be explored: as the literature review reveals, cultural factors have not been sufficiently considered

by theorists such as Locke (1996) and Bandura (1982, 1986, 1993, 1997). Klassen (2004) addressed differences in self-efficacy between the Chinese and Westerners, using individualism/collectivism and power distance paradigms. Specifically, his study found that worker's belief in efficacy was lower for Asians (Chinese and Japanese) than for their western counterparts. In a society characterised by high power distance, Chinese factory workers without much power might be less likely to believe in their ability (Earley 1994).

6.2.6 Filial Provision Relationship

There appears to be meagre research examining the relationship between filial provision relationship and goal-setting theory, although considerable conceptual work suggests that with increasing numbers of individuals within a filial provision relationship, a Chinese factory worker would have to set a higher goal level in his/her job and in turn achieve better job performance. On the other hand, one could argue that such causal relationships might also apply to western factory workers with dependants. Nevertheless, a Chinese factory worker's motivation to work is more likely to originate from the filial duty of reciprocation under Confucianism (Hwang 1987; Yang 1994; Ho 1996; Ho et al. 2006).

Filial piety is an abstract concept and can be manifested by the dimension of filial provision relationship, expressed as the actual number of nuclear family members a Chinese employee has to support in a material way. Filial provision relationship can therefore serve as an objective means to measure the motivational factor of Chinese workers.

There is a long-standing Confucian tradition that emphasises adult children's obligation to support their aged or disabled parents (Fan 2006). This is not to say that children in other cultures do not feel a similar obligation, but it is particularly deeply embedded in Chinese culture. Within China, children have to provide sustenance to their parents in a respectful fashion: a kind of "reverent caring" (Knapp 2004). In addition to filial responsibilities between parents, parents-in-law and their adult children, a Chinese person also bears the duty of filial provision to any younger siblings, such as meeting their education expenses (Salaff 1995). The fraternal relationship among brothers and sisters in a Chinese family is known as *ti* (悌) (Wang 1997), which is an extension of filial piety (Chan 1999). Traditionally, Confucianism holds that family care remains the principle moral ideal for people to pursue (Fan 2006).

On a social level, the Chinese Government aims to preserve the Confucian tradition of filial piety going so far as to enact a "Chinese Marriage Law" which in Chapter 3, Article 21 stipulates that "Children shall have the duty to support and assist their parents... If children fail to perform the duty, parents who are unable to work or have difficulty in providing for themselves shall have the right to demand support payments from their children" (Procedural Law, 2010). For the Chinese, this kind of filial behaviour bears a further, hidden meaning of reciprocation to the providers by the receivers (Ho et al. 2006), which assumes that favours will be returned to the givers when they are old, disabled or needy (Snell and Tseng 2003). Failure to provide for their well-being is considered an unfilial act (Lin 1992). As a result of this culturally embedded expectation of filial piety and care-giving (Liu et al. 1997), Chinese workers will endeavour to work hard, to earn and support their nuclear

family members. In line with the expectations of this study, the data reveal a positive relationship between the filial provision relationship and the level of goal set in the job by factory workers in China.

6.2.7 Goal Level and Job Performance

According to Locke and Latham (1990, 2002), the level of goal set in a job can achieve both directive and energising functions that can positively influence the performance of an individual; for example, after establishing a goal to increase output by 20 per cent in the forward month, a worker will then perform his/her job efficiently and effectively to achieve the goal.

It is probable that garment counting in piece-work factories give the workers a sense of achievement. The number of shirts or blouses made assumes meaning, in that the worker is able to determine the extent to which his/her performance was above average. It may be that this “meaningful” dimension contributes to the theory that a higher level of goal setting leads to effective job performance (Latham and Kinne 1974).

Consistent with the expectation of this study, the results reveal a positive relationship between the level of goal set in the job and work performance (actual productivity) among Chinese factory workers. Unlike most previous studies using subjective ratings to measure job performance, this study used actual pieces of output for measurement, thus contributing to a better understanding of goal-setting theory.

6.2.8 Moderation Effect of Filial Piety on Goal Commitment

Filial piety represents a perfect virtue: Confucianism holds that a perfect virtue originates from a particular form of personal interrelatedness: the parent–child relationship (Fan 2006). Nearly every aspect of Chinese society a child encounters stresses the virtue of filial piety: television programs, advertising, relatives, friends, and teachers contribute to socialising children with the norms of filial piety (Yeh and Bedford 2004). Within a Chinese context that puts emphasis on Confucian traditions, the question of whether this cultural factor of filial piety will contribute to an individual’s work motivation warrants scholarly attention. This study makes the first attempt to examine empirically the link between the moderating influence of filial piety and the relationship between goal commitment and the level of goal set by factory workers in a Chinese context.

Filial piety is unique to Chinese culture, and no equivalent concept can be identified in western countries (Hwang 1999). To fulfill their filial duties such as caring for their aged or disabled parents, marriage and ancestral worship in hometown, Chinese factory workers are expected to work hard and earn significant amounts of money in a short period of time: in other words, filial piety becomes a motivational driver for them to set high goals, with strong commitment to them. This leads to better job performance.

The findings in the current study support the researcher’s original hypothesis (**H8**) that the positive relationship between goal commitment and productivity will be moderated by the level of filial piety. In particular, the positive impact of goal commitment on job performance will be stronger among workers with higher filial

piety than those with lower.

6.2.9 Moderation Effect of Loyalty to Supervisor on Goal Commitment

Another cultural factor in China, loyalty to one's supervisor, is crucial for understanding the work behaviour of Chinese workers (Wong and Kung 1999) as it stands for an important relationship and co-operation between subordinates and superiors in a work setting (Lui and Wong 2005). In fact, the work relationship between a supervisor and his/her subordinates is an integral part of any work reality (Han and Altman 2009).

Loyalty to Supervisor refers to the relative strength of a subordinate's identification with, and attachment and dedication to, a particular supervisor (Chen et al. 1998). Kim (1984) speculated that support from a supervisor is one of the keys for employee commitment to job goals. Chen (2001b) indicated that Chinese workers' loyalty to a supervisor can lead to both job satisfaction and the intention to stay within an organisation. Loyalty in the Chinese sense can also be seen as an extension of filial piety, transferred from the family to the workplace by a process known as "pan-familism" (Yang and Yeh 2005). Under the influence of familism, Chinese employees often take the factory they are working for as a "big family" (Yang 1988) to which every member should be loyal.

The findings in the current study support the researcher's original hypothesis (*H9*) that the positive relationship between goal commitment and productivity will be moderated by the level of loyalty to supervisor. In particular, the positive impact of

goal commitment on job performance will be stronger among workers with higher levels of loyalty to their supervisor than among those with lower levels.

As supervisors are essential agents of an organisation, their behaviour embodies some of the firms' priorities, values and orientations (Zhang et al. 2008); therefore, when workers are loyal to their supervisors, they will in effect be striving to achieve the goals of the company; and higher productivity may be one of these goals.

6.3 Limitations of the Study

Several limitations concerning this study should be noted. First, the sample for this study comprised 397 workers in two factories in Guangdong Province in the southern part of China only. As such, one limitation of the current study is the size and nature of the sample and its representativeness, because China possesses a huge population of 1.34 billion people over an area of 9,572,900 sq. km. (Britannica Online Encyclopaedia 2011). The factory workers under this study were all resident citizens on the mainland of China. Job attitudes and work behaviours of Chinese workers in Hong Kong, Macau, Taiwan and overseas Chinese communities may be different: the findings of Cheung and Chow (1999) indicate, for instance, that power distance among employees in mainland China is higher than in Hong Kong and Taiwan.

Second, the study only covers piece-rated factory workers because of the ease of measurement of actual productivity. Consideration should also be given to Chinese fixed-wage employees with respect to their motivational causes and the moderation

effects of filial piety and loyalty to supervisors on their goal setting and job performance. Further studies are encouraged to compare the job attitudes and performance of different types of workers in China.

Third, this study was entirely conducted in the context of garment manufacturing. The majority of respondents were young women with a mode age of 19; 85 per cent of them past the age of 13 had not received high school education. It is not clear that the findings are valid for other industries like servicing or education, where employees with different demographic backgrounds may display different job behaviours; this study should be seen as expanding upon an area of investigation for researchers interested in exploring employee motivation across different industries; and in particular, whether specific cultural factors like filial piety and loyalty to supervisor generate similar effects on motivation.

Fourth, apart from the measures of filial provision relationship, filial piety and loyalty to supervisor, all other measures were entirely extracted from western studies, mainly from the United States. Their applicability to the Chinese setting is questionable. Indigenous development of such measures within the Chinese context is, therefore, recommended for future studies.

Finally, as all hypotheses under this study were tested only with a Chinese sample, the results may not be generalisable to other cultural groups since each culture has a unique character (Schaefer 2008). This “emic” approach of developing and using variables within a specific cultural context (Neuman 2006) of Chinese factory workers further limits the generalisability of the results, further studies emphasising the “etic” paradigm (Neuman 2006) are needed to test these measures and the related

hypotheses in a cross-cultural setting.

Despite the limitations outlined above, this study contributes to an expanding body of knowledge on organisational behaviour and human resource management in a non-western country, and provides support for further cross-cultural management research on motivation.

6.4 Areas of Further Research

This study was based on Chinese samples only. However, when conducting cross-cultural research such as this, data from counterpart western subjects should be collected at the same time so that the interpretation of the results and the process of drawing conclusions are more statistically rigorous. As this study involves two levels of variables, the *group* level (the Chinese national cultural factor) and the *individual* level (the Chinese personality trait factor) (Raudenbush and Bryk 2002), analyses of the variance in outcome variables at multiple hierarchical levels might be more appropriate. For hierarchical analysis, a much larger sample size would be needed to assure robust hierarchical grouping.

In statistics, the hierarchical linear modeling (HLM), also known as multi-level analysis, is a more advanced form of simple linear and multiple linear regression. Multilevel analysis allows variance in outcome variables to be analysed at multiple hierarchical levels, whereas in simple linear and multiple linear regression all effects are modeled to occur at a single level. HLM is appropriate when researchers consider using national-level variables to explain individual-level variables; for example, further research could take into account the separation between

national-level data (such as the GDP) and individual-level data (such as the working behaviour of factory workers) of China and Western countries in testing the main effects and the interactions within and between levels.

In light of goal-setting theory, further research may focus on the effects of worker level predictor variables at the individual level, such as goal commitment, on goal level setting and job performance. The outcomes from this individual level may be further analysed at the national level, for example, by considering cultural variables (such as different attitudes towards filial piety) across various cultural settings.

Hoffman and Gavin (1988) differentiated possible paradigms in organisational settings between individual and group levels, including mediating relationships (such as how the influence of group level variables on individual outcomes are mediated by individual variables) and the moderating relationships (such as how the relationship between two individual level variables is moderated by a group level variable). Future research on these multi-level cross-cultural comparisons by using more advanced statistical tools like HLM would be rewarding.

6.5 Implications of the Study

This study endeavours to add to the extant literature on human resource management in China for future research, and contains both research and managerial implications.

The credibility of the results of this study is believed to be high, as all data were collected from both the ratings of the participants directly and their actual output productivity. This approach was able to eliminate the limitation of common method

variance which is attributable to the measurement method rather than the constructs of interests (Campbell and Fiske 1959). The term *method* refers to the form of measurement such as the content of specific items, scale type, response format, and general context (Podsakoff et al. 2003). The problem of common method variance is well acknowledged. Cote and Buckley (1987) conducted comprehensive meta-analyses and concluded that typical job performance measures contained an average of 22.5 per cent method variance. Spector (1992) suggested that self-report questionnaires in studies of organisational behaviours can only explain 10–20 per cent of “true” variance within a construct. There would likely be leniency effects if the factory workers of this study had been asked to appraise their job performance on their own without the balance/confirmation provided by their work records because of the fundamental characteristics of the samples (e.g. personality traits) rather than the hypothesised relations among the constructs. An objective measurement of actual productivity by calculating workers’ wage differences between two consecutive months might improve the validity of data. Because of this, other researchers and human resource practitioners should feel more confident applying the findings of this study, in particular the strategies for enhancing goal commitment among workers, to boost work motivation in workplaces in China.

6.5.1 Research Implications

This study is the first known attempt to examine the cultural factors of personal relatedness in terms of filial piety and loyalty to supervisor in China in relation to western goal-setting theory. The findings contribute to a growing body of literature on the scholarship of organisational behaviour and human resource management,

particularly within China.

This study reveals a positive linkage between goal commitment and job performance in China, and supports the evidence of the reinforcing impact of goal commitment on work motivation in field settings in western contexts (see Locke, Latham and Erez 1988). This study is particularly notable because relatively few goal-setting studies have examined variables by utilising field data, or actual productivity, as indicators of job performance.

This study has enhanced the understanding of the roles of filial provision relationship, filial piety and loyalty to supervisor in the motivation of Chinese employees. In particular, it is the first known study to use actual field data to examine interpersonal relationships among employees' job motivation in the Chinese context. From this, other researchers and practitioners can learn more about how cultural factors in the workplace, particularly those in China, influence employees' job motivation and in turn their work performance.

6.5.2 Managerial Implications

The findings of this study provide several practical implications for the management of Chinese factory workers. In research like this, the purpose of studying sample workers is to draw inferences about the entire working population in China, to indicate practical approaches by which senior management may formulate effective human resource strategies in China. This issue is of particular importance today since factory workers in the traditional manufacturing belts of the Pearl River and

Yangtze River deltas are in very short supply, a problem compounded by high turnover due to workers ever searching for better wages in alternative factories (Pomfret 2011). To recruit and retain an adequate workforce for a factory, or any other business, is a high priority for human resource practitioners in China at present. This area seems particularly significant when it has been reported that 13 Chinese workers committed suicide (11 jumped to their deaths and two slashed their wrists) within the first five months in 2010 in Foxconn, which is a mammoth listed electronic factory employing about 420,000 workers in Shenzhen, Guangdong Province (Ming Pao 2010a), and the main supplier of all iPhone products worldwide (South China Morning Post 2010b). This warrants management reflection: it was remarked that Foxconn adopted an inhumane style of management without taking into consideration human factors; for example, communication among workers was not encouraged (Ming Pao 2010a). It was reported that a 21-year-old worker made the complaint, “the atmosphere inside Foxconn is so tight and depressing that we are not allowed to speak to each other for 12 hours or you’ll be reproached by supervisors.” (South China Morning Post 2010a). This strict style of management ignores traditional Chinese cultural values that emphasise personal relatedness and family networks. It is believed that the lack of such networks among workers at Foxconn led to the spate of suicides. Although, afterwards, Foxconn announced across-the-board wage rises, the effectiveness of this as a way of averting further suicides has been questioned by the scholars from mainland China, Hong Kong, and Taiwan (Pun et al. 2011). Waves of strikes continue to take place in Guangdong Province (Zhu, Warner and Fen 2011) and labour unrest continues to spread across mainland China (South China Morning Post 2010c), notwithstanding the fact that Chinese leadership is working towards a so-called ‘Harmonious Society’ (Warner

and Zhu 2010).

Such strategies warrant that management reflect on employee motivation in general and consider the personal relatedness needs of Chinese workers in particular. As discussed in Chapter 2, an employee is always in need of social affiliation (Maslow 1943, 1954), and a Chinese factory worker is no exception. Personal relatedness needs, as pointed out in ERG theory (Alderfer 1972), further indicate the desires of Chinese factory workers to build and maintain interpersonal relationships. This kind of behaviour, as manifested by social/relatedness needs, dovetails with traditional Chinese Confucian culture that emphasises *guanxi* (the personal relationship network) among factory workers (Davies et al. 2003; Yang, Van de Vliert and Shi 2005). Such networks can offer protection, assistance, and support when dealing with broader society or a factory environment (Chiao 1982; King 1991; Faure and Ding 2003). However, both motivation and cultural considerations appear to have been ignored in the Foxconn event, which provides a useful example to frame the outcomes of this research.

Senior management in China should seriously consider their management philosophy to ensure it is implemented in a culturally sensitive way. American sociologist George Ritzer has commented that Western contemporary society has been, and is still, eroded by the process of McDonaldisation: an emphasis on efficiency, calculability, predictability, and control (Ritzer 2008) in which the human factor seems to be ignored. This study has pinpointed and revealed the importance of personal relationships in a culture-sensitive and high-context cultural setting like China (Hall 1989). Human resource management in China needs to consider the

importance of cultural factors like filial piety and loyalty to supervisor in their operations, as a recruitment and retention factor, in addition to the wage equation.

All in all, this study illustrates that the influence of traditional Chinese culture leads Chinese factory workers to emphasise personal relatedness in terms of filial provision relationship, filial piety and loyalty to supervisor at their workplaces, and that this influences goal commitment and job performance. This is particularly true given that the one-child policy has, in part, forced the new generation entering the workforce to seek quasi-filial ties in the workplace with people they interact with on an ongoing basis. The development of such personal interrelatedness as *guanxi* should be fostered (Han and Altman 2009) in a Chinese factory setting as it may smooth the process of coordination and cooperation for task completion, and are likely to bring positive outcomes for the employees and for the factory (Chen and Peng 2008).

The results of this study suggests that the two cultural values of filial piety and loyalty to supervisor are critical elements in enhancing goal commitment, which in turn can lead better job performance among Chinese factory workers.

Aiming at increasing productivity, human resource practitioners of factories in China may request new workers to furnish information about how many family members they have to support. Those workers with more filial provision relationships could be favoured for selection as this study reveals that a greater number of filial provision relationships leads to more goal commitment and better job performance by the workers. This may also help to reduce turnover because workers with more filial provision relationships will tend to stay longer with the factory as discussed in

Chapter 5. Encouraging personal relatedness among workers may ease tensions in the collective wage bargaining between employers and factory workers, who are now demanding more and more power in China, especially in the Pearl River Delta (South China Morning Post 2011a).

As goal commitment has been found to be a strong predictor of goal level to be set, managers might find ways to support workers to be committed to their goals. Similarly, strategies that encourage loyalty to a supervisor would strengthen the positive impacts of goal commitment on job performance. Supervisors' positive attributes such as integrity, trustworthiness, and ability would attract subordinates to work under them (Han and Altman 2009), and the loyalty to supervisor construct may then be gradually established. Such personal interrelatedness will in turn enhance production efficiency among workers, and encourage retention. However, a possible negative effect of loyalty to a supervisor is also possible. Some cases have been reported in China where a company had laid off a supervisor and their subordinates voluntarily left together with the same supervisor (Tencent 2012; XinhuaNet 2012). Organisations should have strategic, sound recruitment and retention processes and strategies for both supervisors and factory workers.

Senior management in China might also consider developing leadership training programs for supervisors in order to improve the management skills of this cohort, to enable them to win the loyalty of their subordinates. Leadership is the process of influencing the activities of an organised group toward goal achievement (Katz and Kahn, 1978; Rauch and Behling, 1984; Bryman, 1992). Since the early 1980s there has been a massive amount of research endorsing the notion that leaders should have

a clear vision, and inspire loyalty and emotional attachment (Den Hartog and Koopman 2001). This study suggests a need for the inclusion of leadership training programs in the emerging managerial agenda in China.

Chapter 7 Conclusion

The central objective of this research was to test the generalisability and applicability of western goal-setting theory (Locke and Latham 1990, 2002) in a Chinese setting and to explore additional cultural factors in predicting the motivation of Chinese factory workers.

This study provides empirical evidence that goal-setting theory is *partially* workable in this context, in line with studies conducted in western settings (see Locke and Latham 1990). The effect of goal-setting attributes, including goal specificity, goal difficulty, perceived goal conflict, and self-efficacy, on job motivation among Chinese factory workers, in relation to goal levels and concomitant job performance, were found not to be significant, probably because of the nature of piece-rate garment work, as discussed in Chapter 6. Nonetheless, the goal-related variable of goal commitment, in particular, was found to be an important motivating factor that could induce a higher level of goal setting in factory worker jobs and in turn enhance job performance. The significant influence on job performance by goal commitment, as demonstrated in this study, was found to be further reinforced by the cultural factors of filial piety and loyalty to a superior.

In addition to goal-related predictors, this study identifies some culturally sensitive elements that play significant roles in the goal-setting process. First, the numbers of filial provision relationships were found to be an important variable that not only

assisted in the prediction of goal level set in a job, but also bore a direct and positive impact on job performance: in other words, the more family members a Chinese individual has to support in economic terms, the higher the goal set in their job and the better their job performance. It should be noted that, in contrast to their Western counterparts who may also be driven by family obligations, the motivation for better job performance of Chinese factory workers, stemming from their family obligations, more likely arises from their filial duty of reciprocation under Confucianism (Hwang 1987; Yang 1994; Ho 1996; Ho et al. 2006).

Personal relatedness factors in terms of filial piety and loyalty to one's superiors are strongly emphasised in the Chinese culture. These two core values were found to fortify the positive and direct relationship between goal commitment and level of goal set in the job among Chinese factory workers in this study. This study, therefore, appears to empirically support the linkage of motivation and culture (Munro 1997).

This study confirms the goal commitment construct of goal-setting theory in the Chinese context. It also provides some preliminary evidence on how traditional Chinese cultural values influence the motivation of Chinese factory workers.

Rather than being a closed country, China has almost always been a society open to outside influence, and Chinese culture and society cannot be understood in isolation from the outside world. In other words, China cannot be treated as a special case of an isolated society, but rather as part of a changing regional and global culture (Mitter 2008).

As China continues its unprecedented economic growth and emergence as a world power (Newman 2005), new approaches that recognise and leverage Chinese human resources and productivity must be forthcoming to meet the challenges of sustaining economic growth and maintaining a competitive edge (Luthans et al. 2008).

Although the findings of this study should be cross-validated by larger samples with different kinds of workers in different provinces of different organisational settings in China, the results of this study indicate the importance and influence of cultural factors on the work motivation of Chinese factory workers.

References

- Adams, JS 1963, "Towards an understanding of inequity", *Journal of Abnormal and Social Psychology*, vol. 67, pp. 422 – 436.
- Adams, JS 1965, "Inequity in social exchange", in L Berkowitz (ed.), *Advances in experimental social psychology*, Vol. 2, Academic Press, New York, pp. 267 – 299.
- Adler, N 2002, *International dimensions of organisational behaviour*, 4th edn, South-Western/Thomson Learning, Ohio.
- Aiken, LS and West, SG 1991, *Multiple regression: testing and interpreting interactions*, Sage, California.
- Ajila, CO 1997, "Maslow's hierarchy of needs theory: applicability to the Nigerian industrial setting", *IFE Psychologia*, vol. 5, pp. 162 – 174.
- Alderfer, CP 1972, *Existence, relatedness, and growth: human needs in organisational settings*, Free Press, New York.
- Alderfer, CP 1989, "Theories reflecting my personal experience and life development", *Journal of Applied Behavioural Science*, vol. 25, no. 4, pp. 351 – 365.
- Allinson, R 1989, "An overview of the Chinese mind", in R Allinson (ed.), *Understanding the Chinese mind: the philosophical roots*, Oxford University Press, New York.
- Alpander, G and Carter, K 1995, "Strategic multinational intra-company differences in employee motivation", in T Jackson (ed.), *Cross-cultural management*, Butterworth-Heinemann, Oxford.

- Ambrose, ML and Kulik, CT 1999, "Old friends, new faces: motivation research in the 1990s", *Journal of Management*, vol. 25, no. 3, pp. 231 – 292.
- Ames, R and Rosemont, H 1998, *The analects of Confucius: a philosophical translation*, Ballantine, New York.
- Anderson, A, Li, J and Harrison, R 2003, "The effects of firm ownership and culture on TQM in China", in I Alon (ed.), *Chinese culture, organisational behaviour, and international business management*, Praeger, Virginia.
- Arnolds, C and Boshoff, C 2002, "Compensation, esteem valence and job performance: an empirical assessment of Alderfer's ERG theory", *International Journal of Human Resource Management*, vol. 13, no. 4, pp. 697 – 719.
- Aron, A, Aron, E, and Coups, EJ 2009, *Statistics for Psychology*, 5th edn, Pearson, New Jersey.
- Aurelio, J 1995, "Using Jungian archetypes to explore deeper levels of organisational culture: facing your organisation's psyche", *Journal of Management Inquiry*, vol. 4, no. 4, pp. 347 – 368.
- Avery, G and Baker, E 1990, *Psychology at work*, 2nd edn, Prentice Hall, New York.
- Bagozzi, RP, Baumgartner, H and Yi, Y 1992, "State versus action orientation and the theory of reasoned action: an application to coupon usage", *Journal of Consumer Research*, vol. 18, no. 4, pp. 505 – 518.
- Bakker, AB, Demerouti, E, Hakanen, JJ and Xanthopoulou D, 2007, "Job resources boost work engagement, particularly when job demands are high", *Journal of Educational Psychology*, vol. 99, no. 2, pp. 274 – 284.
- Balanda KP and MacGillivray, HL 1988, "Kurtosis: a critical review", *The American Statistician*, vol. 42, no. 2, pp. 111 – 119.

- Bandura, A 1977, "Self-efficacy: toward a unifying theory of behavioural change", *Psychological Review*, vol. 84, no. 2, pp. 191 – 215.
- Bandura, A 1982, "Self-efficacy mechanism in human agency", *American Psychologist*, vol. 37, no. 2, pp. 122 – 147.
- Bandura, A 1986, *Social foundations of thought and action: a social cognitive theory*, Prentice-Hall, New Jersey.
- Bandura, A 1993, "Perceived self-efficacy in cognitive development and Functioning", *Educational Psychologist*, vol. 28, pp. 117 – 148.
- Bandura, A 1997, *Self-efficacy: the exercise of control*, W.H. Freeman, New York.
- Bandura, A and Cervone, D 1986, "Differential engagement of self-reactive influences in cognitive motivation", *Organisational Behaviour and Human Decision Processes*, vol. 38, no.1, pp. 92 – 113.
- Baron, RM and Kenny, DA 1986, "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations". *Journal of Personality and Social Psychology*, vol. 51, pp. 1173 – 1182.
- Bazerman, MH, Curhan, JR, Moore, DA and Valley, KL 2000, "Negotiation", *Annual Review of Psychology*, vol. 51, pp. 279 – 314.
- Beamish, P 1993, "The characteristics of joint venture in the People's Republic of China", *Journal of International Marketing*, vol. 1, no. 2, pp. 29 – 48.
- Becker, TE, Billings, DM, Eveleth, DM and Gilbert, NL 1996, "Foci and bases for employee commitment: implications for job performance", *Academy of Management Journal*, vol. 39, no. 2, pp. 464 – 482.

- Bentler, PM, and Wu, EJC, 2003, *EQS 6.1 - Computer Software*. Multivariate Software, California.
- Berenson, ML, Levine, DM and Krehbiel, TC 2009, *Basic business statistics: concepts and applications*, 11th edn, Pearson, New Jersey.
- Betz, EL 1982, "Need fulfillment in the career development of women", *Journal of Vocational Behaviour*, vol. 20, no. 1, pp. 53 – 66.
- Bian, Y and Ang, S 1997, "Guanxi networks and job mobility in China and Singapore", *Social Forces*, vol. 75, no. 3, pp. 981 – 1005.
- Björkman, I and Lu, Y 1999, "The management of human resources in Chinese-Western joint ventures", *Journal of World Business*, vol. 34, no. 3, pp. 306 – 324.
- Bodde, D 1942, "Dominant ideas in the formation of Chinese culture", *Journal of the American Oriental Society*, vol. 62, no. 4, pp. 293 – 299.
- Bond MH 1991, *Beyond the Chinese face: insights from psychology*, Oxford University Press, Hong Kong.
- Bond, MH and Hofstede, G 1989, "The cash value of Confucian values", *Human Systems Management*, vol. 8, pp. 195 – 200.
- Brett, JM 2000, "Culture and negotiation", *International Journal of Psychology*, vol. 35, pp. 97 – 104.
- Bickel, PJ and Lehmann, EL 1975a, "Descriptive Statistics for Nonparametric Models. I. Introduction", *The Annals of Statistics*, vol. 3, no. 5 pp. 1038 – 1044.
- Bickel, PJ and Lehmann, EL 1975b, "Descriptive Statistics for Nonparametric

Models. II. Location”, *The Annals of Statistics*, vol. 3, no. 5 pp. 1045 – 1069.

Britannica Online Encyclopedia, *China*, viewed 24 June 2011,
<<http://www.britannica.com/easyaccess1.lib.cuhk.edu.hk/EBchecked/topic/111803/China>>.

Browne, MW and Cudeck, R 1993, “Alternative ways of assessing model fit”, in
KA Bollen and JS Long (eds.), *Testing structural equation models*, Sage,
California.

Brislin, R 1976, “Comparative research methodology: cross-cultural studies”,
International Journal of Psychology, vol. 11, no. 3, pp. 215 – 229.

Bryman, A 1992, *Charisma and leadership in organisations*, Sage, London.

Byrne, BM 2006, *Structural equation modeling with EQS: basic concepts,
applications, and programming*, 2nd ed., Lawrence Erlbaum Associates, New
Jersey.

Campbell, DT and Fiske, DW 1959, “Convergent and discriminant validation by the
multitrait-multimethod matrix”, *Psychological Bulletin*, vol. 56, no. 2, pp. 81 –
105.

Campion, MA and Lord, RG 1982, “A control systems conceptualization of the goal
setting and changing process”, *Organisational Behaviour and Human
Performance*, Vol. 30, pp. 265 – 287.

Cannice, M and Daniels, J 1999, “Silicon valley firms’ operational tactics and
venture performance in Greater China”, *Business Forum*, vol. 24, no. 3, pp. 7 –
23.

Carr, H and Latham, B 1988, *The technology of clothing manufacture*, BSP
Professional Books, Oxford.

Chai, C and Chai, W 1965, *The sacred books of Confucius and other Confucian*

classics, University Books, New York.

- Chan, DKS and Goto, SG 2003, "Conflict resolution in the culturally diverse workplace: some data from Hong Kong Employees", *Applied Psychology: An International Review*, vol. 52, pp. 441 – 460.
- Chan, YN (陳耀南)1999, *Filial Piety, Mind* (孝道 · 心), Chinese Christian Literature Council, Hong Kong (in Chinese).
- Chang, LT 2008, *Factory girls: from village to city in a changing China*, Spiegel and Grau, New York.
- Chao, PK 2006, *Chinese culture and Christianity*, University Press of America, Maryland.
- Chapel, W 1998, "Effective management communication for China", in J Selmer (ed.), *International management in China: cross cultural issues*, Routledge, London.
- Chen, M 2001a, *Inside Chinese business: a guide for managers worldwide*, Harvard Business School Press, Massachusetts.
- Chen, XP and Peng, SQ 2008, "Guanxi dynamics: shifts in the closeness of ties between Chinese workers", *Management of Organisation Review*, vol. 41, no. 1, pp. 63 – 80.
- Chen, Z 2001b, "Further investigation of the outcomes of loyalty to supervisor: job satisfaction and intention to stay", *Journal of Managerial Psychology*, vol. 16, no. 8, pp. 650 – 660.
- Chen, ZX, Farh, JL and Tsui, AS 1998, "Loyalty to supervisor, organisational commitment, and employee performance: the Chinese case", *Academy of Management Best Paper Proceedings '98*, pp. J1 – 9.

- Chen, ZX, Tsui, AS and Farh, JL 2002, "Loyalty to supervisor vs. organisational commitment: relationships to employee performance in China", *Journal of Occupational and Organisational Psychology*, vol. 75, pp. 339 – 356.
- Cheng, BS 1995, "Chinese CEO's employee categorization and managerial behaviour", paper presented at the symposium on indigenous behaviour in effective management and organisation, sponsored by the International Association of Applied Psychology, Guangzhou, China.
- Cheng, C 1989, "Chinese metaphysics as non-metaphysics: Confucian and Daoist insights into the nature of reality", in R Allison (ed.), *Understanding the Chinese mind: The philosophical roots*, Oxford University Press, New York.
- Cheng, MM, Lockett, PF and Mahama, H 2007, "Effect of perceived conflict among multiple performance goals and goal difficulty on task performance", *Accounting and Finance*, vol. 47, pp. 221 – 242.
- Cheng, T 1998, "The influence of Chinese cultural values on management behavioural in the People's Republic of China and Hong Kong", PhD Thesis, University of Hong Kong, Hong Kong.
- Cheung, C and Gui Y 2006, "Job referral in China: the advantages of strong ties", *Human Relations*, vol. 59, no. 6, pp. 847 – 872.
- Cheung, FM, and Cheung, SF 2003, "Measuring personality and values across cultures: imported versus indigenous measures" in WJ Lonner, DL Dinnel, SA Hayes and DN Sattler (eds.), *Online readings in psychology and culture* (<http://www.wwu.edu/~culture>), Center for Cross-Cultural Research, Western Washington University, Bellingham, Washington, USA, Ch.5.
- Cheung, FM, Leung, K, Fan, R, Song, WZ, Zhang, JX and Zhang, JP 1996, "Development of the Chinese personality assessment inventory (CPAI)", *Journal of Cross-Cultural Psychology*, vol. 27, no. 2, pp. 181–199.

- Cheung, FM, Leung, K, Zhang, JX, Sun, HF, Gan, YI, Song, WZ and Xie, D 2001, "Indigenous Chinese personality constructs: is the five-factor model complete?", *Journal of Cross-Cultural Psychology*, vol. 32, pp. 407 – 433.
- Cheung, GW and Chow, IH 1999, "Subcultures in Greater China: a comparison of managerial values in the People's Republic of China, Hong Kong, and Taiwan", *Asia Pacific Journal of Management*, vol. 16, pp. 369 – 387.
- Chiao, C 1982, "Guanxi: a preliminary conceptualization", in KS Yang and CI Wen (eds), *The sinicization of social and behavioural science research in China*, Academia Sinica, Taipei, pp. 345 – 360 (in Chinese).
- China Statistical Year Book, 2010, National Bureau of Statistics of China, viewed 14 December 2010, < <http://www.stats.gov.cn/tjsj/ndsj/2010/indexch.htm>>.
- Chou, CP and Bentler PM 1995, "Estimates and tests in structural equation modeling", in RH Hoyle (ed.), *Structural equation modeling: concepts, issues and applications*, Sage, California.
- Chou, LF, Cheng, BS, Huang, MP and Cheng, HY 2006, "Guanxi networks and members' effectiveness in Chinese work teams: mediating effects of trust networks", *Asian Journal of Social Psychology*, vol. 9, pp. 79 – 95.
- Chow, EN, and Zhao SM 1996, "The one-child policy and parent-child relationships: a comparison of one-child with multiple-child families in China", *The International Journal of Sociology and Social Policy*, vol. 16, no. 12, pp. 35 – 62.
- Ci Hai 1948, *A Chinese dictionary*, Chung Hwa Publishing, Shanghai (in Chinese).
- Cohen, J 1988, *Statistical power analysis for the behavioural sciences*, Lawrence Erlbaum Associates, New Jersey.

- Cooper, DR and Schindler, PS 2006, *Business research methods*, 9th edn, McGraw-Hill, New York.
- Cooper, J 2007, *Cognitive dissonance: fifty years of a classic theory*, Sage, London.
- Copi, IM and Cohen, C 1994, *Introduction to logic*, 9th edn, Macmillan, New York.
- Cote, JA and Buckley, R 1987, "Estimating trait, method, and error variance: generalising across 70 construct validation studies", *Journal of marketing research*, vol. 24, no. 3, pp. 315 – 318.
- Creswell, JW 1994, *Research design: qualitative and quantitative approaches*, Sage, California.
- Creswell, JW 1998, *Qualitative inquiry and research design: choosing among five traditions*, Sage, California.
- Creswell, JW 2003, *Research design: qualitative and quantitative and mixed methods approaches*, 2nd edn, Sage, California.
- Dalal, RS and Hulin, CL 2008, "Motivation for what? A multivariate dynamic perspective of the criterion", in R Kanfer, G Chen and RD Pritchard (eds.), *Work motivation: past, present, and future*, Routledge, New York.
- Davies, H, Leung, T, Luk, S and Wong, Y 2003, "Guanxi and business practices in the People's Republic of China", in I Alon (ed.), *Chinese culture, organisational behaviour, and international business management*, Praeger, Connecticut.
- Den Hartog, DN and Koopman, PL 2001, "Leadership in organisations", in N Anderson, DS Ones, HK Sinangil and C Viswesvaran (eds.), *Handbook of Industrial, Work and Organisational Psychology, Volume 2: Organisational Psychology*, Sage, London.
- Deresky, H 2006, *International management: managing across borders and cultures*, Pearson Prentice Hall, New Jersey.

- Diefendorff, JM and Lord, RG 2003, "The volitional and strategic effects of planning on task performance and goal commitment", *Human Performance*, vol. 16, no. 4, pp. 365 – 387.
- Ding, D, Lan, G and Warner, M 2001, "A new form of Chinese human resource management? Personnel and labour-management relations in Chinese township and village enterprises: a case-study approach", *Industrial Relations Journal*, vol. 32, no. 4, pp. 328 – 343.
- Donovan, J 2001, "Work motivation", in N Anderson, D Ones, H Sinangil and C Viswesvaran (eds), *Handbook of industrial, work and organisational psychology, vol. 2: organisational psychology*, Sage, California, pp. 53 – 76.
- Dooley, D 2001, *Social Research Methods*, 4th ed., Prentice Hall, New Jersey.
- Dorfman, P and Howell, J 1988, "Dimensions of national culture and effective leadership patterns: Hofstede revisited", in R Farmer (ed.), *Advances in international comparative management*, vol. 3, JAI Press, Greenwich, pp. 127 – 150.
- Dossett, DL, Latham, GP, and Mitchell, TR 1979, "Effects of assigned versus participatively set goals, knowledge of results, and individual differences on employee behaviour when goal difficulty is held constant", *Journal of Applied Psychology*, vol. 64, no. 3, pp. 291 – 298.
- Downing, SM 2004, "Reliability: on the reproducibility of assessment data", *Medical Education*, vol. 38, no. 9 pp. 1006 – 1012.
- Drach-Zahavy, A and Erez M 2002, "Challenge versus threat effects on the goal–performance relationship", *Organisational Behaviour and Human Decision Processes*, vol. 88, no. 2, pp. 667 – 682.
- Earley, PC 1989, "Social loafing and collectivism: a comparison of the United States and the People's Republic of China", *Administrative Science Quarterly*, vol. 34,

no. 4, pp. 565 – 581.

Earley, PC 1994, “Self or group? Cultural effects of training on self-efficacy and performance”, *Administrative Science Quarterly*, vol. 39, no. 1, pp. 89 – 117.

Easterby-Smith, M, Malina, D and Lu, Y 1995, “How culture-sensitive is HRM?: a comparative analysis of practice in Chinese and UK companies”, *International Journal of Human Resource Management*, vol. 6, no. 1, pp. 31 – 59.

Erez, M 1977, “Feedback: a necessary condition for goal setting/performance relationship”, *Journal of Applied Psychology*, vol. 62, pp. 624 – 627.

Erez, M and Dweck, C 1988, “Goals: an approach to motivation and achievement”, *Journal of Personality and Social Psychology*, vol. 54, pp. 5 – 12.

Erez, M and Earley, P 1993, *Culture, self-identity, and work*, Oxford, New York.

Erez, M and Judge, TA 2001, “Relationship of core self-evaluations to goal setting, motivation, and performance”, *Journal of Applied Psychology*, vol. 86, no. 6, pp. 1270 – 1279.

Erez, M and Zidon, I 1984, “Effect of goal acceptance on the relationship of goal difficulty to performance”, *Journal of Applied Psychology*, vol. 69, no. 1, pp. 69 – 78.

Fan, R 2006. “Confucian filial piety and long term care for aged parents”, *HEC Forum*, vol. 18, no. 1, pp. 1 – 17.

Farh, JL and Cheng, BS 2000, “A cultural analysis of paternalistic leadership in Chinese organisations”, in JT Ku, AS Tsui and E Wedlon (eds), *Management and organisations in the Chinese context*, MacMillan, London, pp. 84 – 127.

Farh, JL, Hackett, RD and Liang, J 2007, “Individual-level cultural values as

moderators of perceived organizational support–employee outcome relationships in China: comparing the effects of power distance and traditionality”, *Academy of Management Journal*, vol. 50, no. 3, pp. 715 – 729.

Faure, G and Ding, Y 2003, “Chinese culture and negotiation: strategies for handling stalemates”, in I Alon (ed.), *Chinese culture, organisational behaviour and international business management*, Praeger, Connecticut.

Festinger, L 1962, *A theory of cognitive dissonance*, Stanford University Press, California.

Foster, AD and Rosenzweig, MR 1994, “A test for moral hazard in the labour market: contractual arrangements, effort, and health”, *The Review of Economic and Statistics*, vol. 76, no. 2, pp. 213 – 227.

Foster, J 2000, “Motivation in the workplace”, in N Chmiel (ed.), *Introduction to work and organisational psychology*, Blackwell, Oxford.

Fried, Y and Slowik LH 2004, “Enriching goal-setting theory with time: an integrated approach”, *Academy of Management Review*, vol. 29, no. 3, pp. 404 – 422.

Fung, Y 1976, *A short history of Chinese philosophy*, ed. D Bodde, Free Press, New York.

Furnham, A 2005, *The psychology of behaviour at work: the individual in the organisation*, Psychology Press, Hove, East Sussex.

Gavin, H 2008, *Understanding research methods and statistics in psychology*, Sage, London.

Gay, LR and Diehl, PL 1992, *Research Methods for Business and Management*, Macmillan, New York.

- Geen, R and Shea, J 1997, "Social Motivation and Culture", in D Munro, J. Schumaker and S Carr (eds.), *Motivation and culture*, Routledge, New York.
- Gibbons, R 1987, "Piece-rate incentive schemes", *Journal of Labour Economics*, vol. 5, no.4, pp. 413 – 429.
- Giddens, A 2001, *Sociology*, 4th edn, Polity, Cambridge.
- Goodman, PS 1974, "An examination of the referents used in the evaluation of pay", *Organisational Behaviour and Human Performance*, vol. 12, pp. 170 – 195.
- Greenberg, J 1982, "Approaching equity and avoiding inequity in groups and organisations", in J Greenberg and RL Cohen (eds.), *Equity and justice in social behaviour*, Academic, New York, pp. 389 – 446.
- Guba, EG and Lincoln, YS 1994, "Competing paradigms in qualitative research", in N Denzin, and Y Lincoln (eds.), *Handbook of qualitative research*, Sage, California.
- Hackett, R and Guion, R 1985, "A reevaluation of the absenteeism-job satisfaction relationship", *Organisational Behaviour and Human Decision Processes*, vol. 35, no. 3, pp. 340 – 381.
- Hall, ET 1989, *Beyond culture*, Anchor, New York.
- Han, DM(韓德民) 2001, *Filial concern(孝親的情懷)*, Beijing Language and Culture University Press, Beijing (in Chinese).
- Han, Y and Altman Y 2009, "Supervisor and subordinate *guanxi*: a grounded investigation in the People's Republic of China", *Journal of Business Ethics*, vol. 88, supp. 1, pp. 91 – 104.
- Hardee, K, Xie, Z and Gu, B 2004, "Family planning and women's lives in rural

China”, *International Perspectives on Sexual and Reproductive Health*, vol. 30, no. 2, pp. 68 – 76.

Hare, D 1999, “‘Push’ versus ‘pull’ factors in migration outflows and returns: determinants of migration status and spell duration among China’s rural population”, *The Journal of Development Studies*, vol. 35, no. 3, pp. 45 – 72.

Haslam, S, Powell, C and Turner, J 2000, “Social identity, self-categorization, and work motivation: rethinking the contribution of the group to positive and sustainable organisational outcomes”, *Applied Psychology: An International Review*, vol. 49, no. 3, pp. 319 – 339.

Hessler, R 1992, *Social Research Methods*, West, Minnesota.

Heywood, JS and Wei, X 1997, “Piece-rate payment schemes and the employment of women: the case of Hong Kong”, *Journal of Comparative Economics*, vol. 25, no. 2, pp. 237 – 255.

Hitt, MA, Miller, CC, and Colella, A 2006, *Organisational behaviour: a strategic approach*, John Wiley, New Jersey.

Ho, DYF 1981, “Traditional patterns of socialization in Chinese society”, *Acta Psychologica Taiwanica*, vol. 23, pp. 81 – 95.

Ho, DYF 1991, “Relational orientation and methodological relationalism”, *Bulletin of the Hong Kong Psychological Society*, vol. 26-27, pp. 81 – 95.

Ho, DYF 1994, “Filial piety, authoritarian moralism and cognitive conservatism in Chinese societies”, *Genetic, social and general psychology monographs*, vol. 120, no. 3, pp. 349 – 465.

Ho, DYF 1996, “Filial piety and its psychological consequences”, in MH Bond (ed.), *The handbook of Chinese psychology*, Oxford University Press, Hong Kong, pp. 155 – 165.

- Ho, D, Peng, S and Chiu, C 2006, *The Dao of the world and the human heart: an investigation in the psychology of Chinese people*, Joint Publishing, Hong Kong (In Chinese).
- Hoffman, DA, and Gavin, MB 1998, "Centering decisions in hierarchical linear models: implications for research organisations", *Journal of Management*, vol. 24, no. 5 pp. 623 – 641.
- Hoffman, E 2002, *Psychological testing at work*, McGraw-Hill, New York.
- Hofstede, G 1980a, *Culture's consequence: international differences in work-related values*, Sage, California.
- Hofstede, G 1980b, "Motivation, leadership, and organisation: Do American theories apply abroad?", *Organisational Dynamics*, vol. 9, no.12, pp. 42 – 63.
- Hofstede, G 2001, *Culture's consequences: comparing values, behaviours, institutions, and organisations across nations*, 2nd edn, Sage, California.
- Hofstede, G and Bond, M 1988, "The Confucius connection: from cultural roots to economic growth", *Organisational Dynamics*, vol. 16, no. 4, pp. 4 – 21.
- Hofstede, G and Hofstede, GJ 2005, *Culture and organisations: software of the mind*, 2nd edn, McGraw-Hill, New York.
- Hollenbeck, JR and Klein HJ 1987, "Goal commitment and the goal setting process: problems, prospects and proposals for future research", *Journal of Applied Psychology*, vol. 72, no. 2, pp. 212 – 220.
- Hollenbeck, JR, Williams CR, and Klein HJ 1989, "An empirical examination of the Antecedents of Commitment to Difficult Goals", *Journal of Applied Psychology*, vol. 74, no. 1 pp. 18 – 23.
- Hoover, K and Donovan, T 2004, *The Elements of Social Scientific Thinking*, 8th edn,

Thomson Wadsworth, California.

Howell, DC 1999, *Fundamental statistics for the behavioural sciences*, 4th edn, Duxbury Press, California.

Hoyle, RH 1995, “The structural equation modeling approach: Basic concepts and fundamental issues”, in RH Hoyle (ed), *Structural equation modeling: concepts, issues and applications*, Sage, California.

Hoyle, RH 2011, *Structural equation modeling for social and personality psychology*, Sage, London.

Hsu, F 1981, *Americans and Chinese: passage to differences*, 3rd edn, University Press of Hawaii, Honolulu.

Huang JH 1989, “Practice of filial piety in modern life”, in KS Yang (ed.), *The psychology of Chinese*, Guiguan, Taipei, (in Chinese), pp. 25 – 38.

Hui, CH and Tan, CK 1996, “Employee motivation and attitudes in the Chinese workforce”, in MH Bond (ed.), *The handbook of Chinese psychology*, Oxford University Press, Hong Kong, pp. 155 – 165.

Hui, C, Lee, C and Rousseau, D 2004, “Employment relationships in China: do workers relate to the organisation or to people?”, *Organisation Science*, vol. 15, no. 2, pp. 232 – 40.

Hutchings, K and Weir, D 2006, “Guanxi and wasta: a comparison”, *Thunderbird International Business Review*, vol. 48, no. 1, pp. 141 – 156.

Hwang, KK 1987, “Face and favour: the Chinese power game”, *American Journal of Sociology*, vol. 92, no. 4, pp. 944 – 974.

Hwang, KK 1995, *Knowledge and action: a social-psychological interpretation of Chinese cultural tradition*. Sin-Li, Taipei (in Chinese).

- Hwang, KK 1999, "Filial piety and loyalty: two types of social identification in Confucianism", *Asian Journal of Social Psychology*, vol. 2, pp. 163 – 183.
- Hwang, KK 2002, "Chinese relationalism: theoretical construction and methodological considerations", *Journal for the Theory of Social Behaviour*, vol. 20, no. 2, pp. 155 – 178.
- Ilgel, DR and Klein, HJ 1989, "Organisational behaviour", *Annual Review of Psychology*, vol. 40, pp. 327 – 351.
- Ivancevich, JM, Konopaske, R and Matteson, MT 2005, *Organisational Behaviour and Management*, 7th edn, McGraw-Hill, New York.
- Jaccard J. and Becker, MA 2010, *Statistics for the behavioural sciences*, 5th ed., Wadsworth/Cengage Learning, California,
- Jackson, T and Bak, M 1998, "Foreign companies and Chinese workers: employee motivation in the People's Republic of China", *Journal of Organisational Change Management*, vol. 11, no. 4, p. 282.
- Jia, L 1996, "Karasek's model in the People's Republic of China: effects of job demands, control, and individual differences", *The Academy of Management Journal*, vol. 39, no. 6, pp. 1594 – 1618.
- Jin, S and Liu, B 2005, "The value orientation of contemporary Chinese workers: status and characteristics", *Psychological Science (China)*, vol. 28, no. 1, pp. 244 – 247 (in Chinese).
- Kamalanabhan, TJ, Uma J and Vasanthi M 1999, "A Dephi study of motivational profile of scientists in research and development organisations", *Psychological Reports*, vol. 85, pp. 743 – 749.
- Kanfer, R 1991, "Motivation theory and industrial and organisational psychology", in

M Dunnette and L Hough (eds), *Handbook of industrial and organisational psychology*, Consulting Psychologists Press, California, pp. 75 – 170.

Kanfer, R and Ackerman, PL 1989, “Motivation and cognitive abilities: an integrative aptitude/treatment interaction approach to skill acquisition”, *Journal of Applied Psychology*, vol. 74, no. 4, pp. 657 – 690.

Kao, H and Ng, S 1997, “Work motivation and culture”, in D Munro, J. Schumaker and S Carr (eds.), *Motivation and culture*, Routledge, New York.

Kashima, Y 1997, “Culture, narrative, and human motivation”, in D Munro, J. Schumaker and S Carr (eds.), *Motivation and culture*, Routledge, New York.

Katz, D, and Kahn, R L 1978, *The social psychology of organisations*, 2nd edn, John Wiley, New York.

Kim, JO and Mueller, CW 1978, “Factor analysis: statistical methods and practical Issues”, in MS Lewis-Beck (Series ed) and EM Uslaner (Vol. ed), *Quantitative applications in the social sciences*, vol. 14, pp. 5 – 88, Sage, California.

Kim, JS 1984, “Effect of behaviour plus outcome goal setting and feedback on employee satisfaction and performance”, *Academy of Management Journal*, vol. 27, pp. 139 – 149.

Kindle, I 1983, “A partial theory of Chinese consumer behaviour: marketing strategy implications”, *Hong Kong Journal of Business Management*, vol. 1, pp. 97 – 109.

King, AY 1991, “Kuan-his and network building: a sociological interpretation”, *Daedalus*, vol.120, no.1, pp. 63 – 84.

Klassen, RM 2004, “Optimism and realism: a review of self-efficacy from a cross-cultural perspective”, *International Journal of Psychology*, vol. 39, no. 3, pp. 205 – 230.

- Klein, AG, and Muthén, BO 2007, “Quasi-maximum likelihood estimation of structural equation models with multiple interaction and quadratic effects”, *Multivariate behavioural research*, vol. 42, pp. 647 – 673.
- Klein, H, Wesson, M, Hollenbeck, J and Alge, B 1999, “Goal commitment and the goal-setting process: conceptual clarification and empirical synthesis”, *Journal of Applied Psychology*, vol. 84, no. 6, pp. 885 – 896.
- Kline, RB 1998, *Principles and practice of structural equation modeling*, Guilford, New York.
- Kluckhohn, C 1951, “The study of culture”, in D Lerner and H Lasswell (eds.), *The policy sciences*, Stanford University Press, California.
- Knapp, KN 2004, “Reverent caring: the parent-son relationship in early medieval tales of filial offspring”, in AK Chan and S Tan (eds.), *Filial piety in Chinese thought and history*, RoutledgeCurzon, London.
- Kreitner, R and Kinicki, A 2007, *Organisational behaviour*, 7th edn, McGraw-Hill, New York.
- Kroeber, AL and Parsons, T 1958, “The concepts of culture and social systems”, *American Sociological Review*, vol. 23, pp. 582 – 583.
- Kurman, J 2001, “Self-enhancement: is it restricted to individualistic cultures?” *Personality and Social Psychology Bulletin*, vol. 27, pp. 1705 – 1716.
- Kutcher, N 1999, *Mourning in late imperial China: filial piety and the state*, Cambridge University Press, Cambridge.
- Labour World (勞動世界), 2000, “Can the Employing Unit extend the Working Hours of Staff at will ? (用人單位能否隨便延長職工的工作時間?)”, Issue 1, p. 41. (in Chinese).

LabourNet, 2010, Legislative Affairs Commission of the Standing Committee of the National People's Congress of the People's Republic of China, viewed 29 June 2010, <<http://www.labournet.com.cn/english/fagui/4.htm>>.

Lado, A and Wilson, M 1994, "Human resource systems and sustained competitive advantage: a competency-based perspective", *Academy of Management Journal*, vol. 19, no. 4, pp. 699 – 727.

Landy, FJ 1989, *Psychology of work behaviour*, 4th edn, Brooks/Cole, California.

Landy, FJ and Becker, WS 1987, "Motivation theory reconsidered", *Research in Organisational Behaviour*, vol. 9, pp. 1 – 38.

Landy, FJ and Conte, JM 2004, *Work in the 21st century: an introduction to industrial and organisational psychology*, McGraw-Hill, New York.

LaPorte, R and Nath, R 1976, "Role of performance goals in prose learning", *Journal of Educational Psychology*, vol. 68, no. 3, pp. 260 – 264.

Latham, GP 2007, *Work motivation: history, theory, research, and practice*, Sage, California.

Latham, GP and Ernst, CT 2006, "Keys to motivating tomorrow's workforce", *Human Resource Management Review*, vol. 16, no. 2, pp. 181 – 198.

Latham, GP and Kinne, SB 1974, "Improving job performance through training in goal setting", *Journal of Applied Psychology*, vol. 59, no. 2, pp. 187 – 191.

Latham, GP, Mitchell, TR and Dossett, DL 1978, "Importance of participative goal setting and anticipated rewards on goal difficulty and job performance", *Journal of Applied Psychology*, vol. 63, no. 2, pp. 163 – 171.

Latham, GP and Pinder, C 2005, "Work motivation theory and research at the dawn

of the twenty-first century”, *Annual Review of Psychology*, vol. 56, no. 1, pp. 485 – 516.

Latham, GP and Yukl, GA 1975, “A review of research on the application of goal-setting in organisations”, *Academy of Management Journal*, vol. 18, no. 4 pp. 824 – 845.

Lawrence, PR, 2011, “What leaders need to know about human evolution and decision making”, *Leader to Leader*, Spring Issue, pp. 12 – 16.

Lawrence, PR and Nohria, N 2002, *Driven: how human nature shapes our choices*, Jossey-Bass, California.

Lazear, EP 1986, “Salaries and piece rates”, *Journal of Business*, vol. 59, no. 3, pp. 405 – 431.

Le, L 2003, “Influences of Confucianism on the market economy of China”, in I Alon (ed.), *Chinese culture, organisational behaviour, and international business management*, Praeger, Connecticut.

Lee, C, Bobko, P, Earley, PC and Locke, EA, 1991, “An empirical analysis of a goal setting questionnaire”, *Journal of Organisational Behaviour*, vol. 12, no. 6, pp. 467 – 482.

Lee, C and Schuler, RS 1980, “Goal specificity and difficulty and leader initiating structure as strategies for managing role stress”, *Journal of Management*, vol. 6, no. 2, pp. 177 – 187.

Lee, CK 1998, *Gender and the South China miracle: two worlds of factory women*, University of California Press, California.

Lee, MH 1992, *An explanation of the significance, influencing factors, and the results of behaviours of loyalty to organisation: a case of middle and small*

enterprises in Taiwanese. Masters Dissertation: Institute of Applied Psychology of Fu Ren University, Taiwan (in Chinese).

Lee, SY 2007, *Structural equation modeling : a Bayesian approach*, John Wiley, Chichester.

Lee, T, Locke, EA and Phan, S 1997, "Explaining the assigned goal-incentive interaction: the role of self-efficacy and personal goals", *Journal of Management*, vol. 23, no. 4, pp. 541 – 559.

Legge, J 1933, *The four books*, The Chinese Book Company, Shanghai.

Leibenstein, H 1957, "Underemployment in backward economies", *Journal of Political Economy*, vol. 65, pp. 91 – 103.

Leung, K 1997, "Negotiation and reward allocation across cultures", in PC Earley and M Erez (eds.), *New perspectives on international industrial/organisational psychology*, New Lexington, California, pp. 640 – 675.

Leung, K 2001, "Different carrots for different rabbits: effects of individualism-collectivism and power distance on work motivation", in M Erez, U Kleinbeck and H Thierry (eds), *Work motivation in the context of a globalizing economy*, Lawrence Erlbaum, New Jersey, pp. 329 – 339.

Leung, K and Bond, MH 1984, "The impact of cultural collectivism on reward allocation", *Journal of Personality and Social Psychology*, vol. 46, pp. 793 – 804.

Leung, K and Chan, DKS 1999, "Conflict management across culture", in J Adamopoulos and Y Kashima (eds.), *Social psychology and cultural context: essays in honor of Harry C. Triandis*, Sage, California, pp.177 – 188.

Levin, WC 1988, *The scientific perspective and quantitative research methods*, Wadsworth, California.

- Li, F and Han, X 1994, "Age groups and educational composition of peasants leaving for nonagricultural work: studies of rural labour migration", *China's Rural Economy*, vol. 8, pp. 10 – 14.
- Liccione, WJ 2009, "Goal Commitment", *Performance Improvement*, vol. 48, no. 7, pp. 26 – 30.
- Lin, AH (林安弘) 1992, *Study on the thinking of Confucian filial piety* (儒家孝道思想研究), Wen Jin Publishing, Taipei (in Chinese).
- Lin, N 1990, "Social resources and social mobility: a structural theory of status attainment", in R Breiger (ed.), *Social mobility and social structure*, Cambridge University Press, New York, pp. 247 – 271.
- Lin, X and Germain, R 2003, "Organisation structure, context, customer orientation, and performance: lessons from Chinese state-owned enterprises", *Strategic Management Journal*, vol. 24, no. 11, pp. 1131 – 1151.
- Lincoln, J, Hanada, M and McBride, K 1986, "Organisational structures in Japanese and U.S. manufacturing", *Administrative Science Quarterly*, vol. 31, no 3, pp. 338 – 364.
- Liu, JH, Ng, SH, Weatherall, A and Loong, C 2000, "Filial piety, acculturation, and intergenerational communication among New Zealand Chinese", *Basic and Applied Social Psychology*, vol. 22, no. 3, pp. 213 – 223.
- Liu, SL, 1994, *Parental attitudes and expectations toward childrearing and filial piety: harmony and conflict between two generations among Taiwanese families*. D. Ed. Dissertation, University of Massachusetts, Massachusetts.
- Liu WT, Yu ES, Gong SS and Kean Y 1997, *Filial piety and caregiving burden in Shanghai, People's Republic of China*, Lingnan College, Hong Kong.

- Lloyd, PA 1986, *Incentive payment schemes: a review of current practice in 245 organisations*. Management survey report No. 34, British Institute of Management, London.
- Locke, EA 1968, "Towards a theory of task motivation and incentives", *Organisational Behaviour and Human Performance*, vol. 3, pp. 157 – 189.
- Locke, EA 1975, "Personnel attitudes and motivation", *Annual Review of Psychology*, vol. 26, pp. 457 – 480.
- Locke, EA 1991, "The motivation sequence, the motivation hub and the motivation core", *Organisational Behaviour and Human Decision Processes*, vol. 50, no. 2, pp. 288 – 299.
- Locke, EA 1996, "Motivation through conscious goal setting", *Applied and Preventive Psychology*, vol. 5, pp. 117 – 124.
- Locke, EA 2001, "Self-set goals and self-efficacy as mediators of incentives and personality", in M Erez, U Kleinbeck and H Thierry (eds.), *Work motivation in the context of a globalizing economy*, Lawrence Erlbaum, New Jersey, pp. 13 – 26.
- Locke, EA, Chah, D, Harrison, S and Lustgarten, N 1989, "Separating the effects of goal specificity from goal level", *Organisational Behaviour and Human Performance*, vol. 43, pp. 270 – 287.
- Locke, EA, Frederick, E, Bucker, E and Bobko, P 1984, "Effect of previously assigned goals on self-set goals and performance", *Journal of Applied Psychology*, vol. 69, pp. 694 – 699.
- Locke, EA, Frederick, E, Lee, C and Bobko, P 1984, "Effect of self-efficacy, goals, and task strategies on task performance", *Journal of Applied Psychology*, vol. 69, no. 2, pp.241 – 251.

- Locke, EA and Henne, D 1986, "Work motivation theories", in C Cooper and I Robertson (eds.), *International review of industrial-organisational psychology*, Wiley, New York, pp.1 – 36.
- Locke, EA and Latham, GP 1990, *A theory of goal setting and task performance*, Prentice-Hall, New Jersey.
- Locke, EA and Latham, GP 2002, "Building a practically useful theory of goal-setting and task motivation: a 50-year odyssey", *American Psychologist*, vol. 57, no. 9, pp. 705 – 717.
- Locke, EA, Latham, GP, and Erez, M 1988, "The determinants of goal commitment", *Academy of Management Review*, vol. 13, no. 1, pp. 23 – 29.
- Locke, EA, Smith, KG, Erez, M, Chah, DO and Schaffer, A 1994, "The effects of intra-individual goal conflict on performance", *Journal of Management*, vol. 20, no. 1, pp. 67 – 91.
- Lockett, M 1988, "Culture and the problems of Chinese management", *Organisation Studies*, vol. 9, no. 4, pp. 475 – 496.
- Lowe, S 2003, "Chinese culture and management theory", in I Alon (ed.), *Chinese culture, organisational behaviour, and international business management*, Praeger, Connecticut.
- Lui, HK and Wong, YT 2005, "Do loyalty subordinates get higher wages? Experience from China", *Applied Economics Letters*, vol. 12, no. 10, pp. 649 – 652.
- Luthans, F 2005, *Organisational behaviour*, 10th edn, McGraw-Hill, New York.
- Luthans, F, Avey, JB, Clapp-Smith, R, and Li, W 2008, "More evidence on the value of Chinese workers' psychological capital: A potentially unlimited competitive

resource?”, *The International Journal of Human Resource Management*, vol. 19, no. 5, pp. 818 – 827.

MacCallum, RC, and Austin, JT 2000, “Applications of structural equation modeling in psychological research”, *Annual Review of Psychology*, vol. 51, pp. 201 – 226.

MacCallum, RC, Zhang, S, Preacher, KJ and Rucker, DD 2002, “On the practice of dichotomization of quantitative variables”, *Psychological Methods*, vol. 7, no. 1, pp. 19 – 40.

Mao, W and Chi, I 2011, “Filial piety of children as perceived by aging parents in China”, *International Journal of Social Welfare*, vol. 20, no. S1, pp. 99 – 108.

Markus, H and Kitayama, S 1991, “Culture and self: implications for cognition, emotion and motivation”, *Psychological Review*, vol. 98, pp. 224-253.

Martin, BA, Snell, AF and Callahan, CM 1999, “An examination of individual differences in the relation of subjective goal difficulty to performance in a goal-setting model”, *Human Performance*, vol. 12, no. 2, pp. 115 – 135.

Maslow, A 1943, ‘A theory of human motivation’, *Psychological Review*, vol. 50, no. 4, pp. 370 – 396.

Maslow, A 1954, *Motivation and personality*, McGraw-Hill, New York.

May, T 1997, *Social Research: Issues, Methods and Process*, 2nd edn, Open University Press, Buckingham.

McClelland, DC 1975, *Power: the inner experience*, Irvington, New York.

McClelland, DC 1987, *Human motivation*, Cambridge University Press, New York.

- Mento, AJ, Steel, RP and Karren, RJ 1987, “A meta-analytic study of the effects of goal setting on task performance: 1966-1984”, *Organisational behaviour and human decision processes*, vol. 39, pp. 52 – 83.
- Meyer, J, Becker, T and Vandenberghe, C 2004, “Employee commitment and motivation: a conceptual analysis and integrative model”, *Journal of Applied Psychology*, vol. 89, no. 6, pp. 991 – 1007.
- Miner, JB 1965, *Studies in management education*, Organisational Measurement Systems Press, New York.
- Miner, JB 1984, “The validity and usefulness of theories in an emerging organisational science”, *Academy of Management Review*, vol. 9, no. 2, pp. 296 – 306.
- Miner, JB 1992, *Industrial-organisational psychology*, McGraw-Hill, New York.
- Ming Pao (明報) 2004, “Pearl River Delta lacks 200 million workers, 60 thousands Hong Kong manufacturers struggle to hire people” (珠三角缺勞工 200 萬 6 萬港商請人難), 3 July, p. A6 (a Hong Kong-based Chinese newspaper).
- Ming Pao (明報) 2010a, “Foxconn — Enterprise with rich materials but a factory with tears and blood” (富士康 — 物質豐腴企業 精神血汗工廠) 26 May, p. A3 (a Hong Kong-based Chinese newspaper).
- Ming Pao (明報) 2010b, “HKI : Hong Kong manufacturers on Mainland China struggle to put up with the pressure of increasing wages” (工總:內地港商難抵加薪壓力), 11 August, p. A8 (a Hong Kong-based Chinese newspaper).
- Mitter, R 2008, *Modern China: a very short introduction*, Oxford University Press, Oxford.

- Mowday, RT 1991, "Equity theory predictions of behaviour in organisations", in RM Steers and LW Porter (eds.), *Motivation and work behaviour*, 5th ed., McGraw-Hill, New York, pp. 111 – 131.
- Mowen, J, Middlemist, R and Luther, D 1981, "Joint effects of assigned goal level and incentive structure on task performance: A laboratory study", *Journal of Applied Psychology*, vol. 66, pp. 598 – 603.
- Munro, D 1977, *The concept of man in contemporary China*, University of Michigan Press, Michigan.
- Munro, D 1997, "Levels and processes in motivation and culture", in D Munro, J. Schumaker and S Carr (eds.), *Motivation and culture*, Routledge, New York.
- Murray, H 1938, *Explorations in personality*, Oxford University Press, New York.
- Naisbitt, J and Naisbitt, D 2010, *China's megatrends: the 8 pillars of a new society*, HarperCollins, New York.
- Nevis, EC 1983, "Cultural assumptions and productivity: the United States and China", *Sloan Management Review*, vol. 24, no. 3, pp. 17 – 29.
- Neuman, WL 2006, *Social research methods: qualitative and quantitative approaches*, 6th ed., Pearson, Boston.
- Newman, R 2005, "The Rise of a New Power", *US News and World Report*, vol.138, no.23, pp. 40 – 51.
- Ng, RMC 1998, "Culture as a factor in management: the case of the People's Republic of China", *International Journal of Management*, vol. 15, no. 1, pp. 86 – 93.
- Nohria, N, 2006, "The core four", *People Management*, 26th October 2006, pp. 42 – 205

47.

Nohria, N, Groysberg, B and Lee, LE 2008, "Employee motivation: a powerful new model", *Harvard Business Review*, July-August, pp. 78 – 84.

Nunnally, JC and Bernstein, I 1994, *Psychometric Theory*, 3rd edn, McGraw-Hill, New York.

Oh, TK 1991, "Understanding managerial values and behaviour among the Gang of Four: South Korea, Taiwan, Singapore, and Hong Kong", *Journal of Management Development*, vol. 10, pp. 46 – 56.

Olsen, RA, 2006, "A review of driven: how human nature shapes our choices", *The Journal of Behavioral Finance*, vol. 7, no. 1, p. 63.

Oyserman, D, Coon, HM and Kemmelmeier, M 2002, "Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses", *Psychological Bulletin*, vol. 128, pp. 3 – 72.

Panitchpakdi, S and Clifford, M 2002, *China and the WTO: changing China, changing world trade*, John Wiley, Singapore.

Paarsch, HJ and Shearer, B 2000, "Piece rates, fixed wages, and incentive effects: statistical evidence from payroll records", *International Economic Review*, vol. 41, no.1 pp. 59 – 92.

Park, SH and Luo, Y 2001, "Guanxi and organisational dynamics: organisational networking in Chinese firms", *Strategic Management Journal*, vol. 22, pp. 455 – 477.

Pearson, M 1991, *Joint ventures in the People's Republic of China: the control of foreign direct investment under socialism*, Princeton University Press, New Jersey.

- Peng, SQ 2001, "The building of trust: the *guanxi* operation and legal institutions", in CF Yang (ed.), *Interpersonal relationship, affection and trust of the Chinese: from an international perspective*, Yuanliou Publications, Taipei, pp. 330 – 337 (in Chinese).
- Pfeffer, J 1998, *The human equation: building profits by putting people first*, Harvard Business School Press, Massachusetts.
- Phillips, JM and Gully, SM 1997, "Role of goal orientation, ability, need for achievement, and locus of control in the self-efficacy and goal-setting process", *Journal of Applied Psychology*, vol. 82, no. 5, pp. 792 – 802.
- Pinder, CC 1987, "Valence-instrumentality-expectancy theory", in RM Steers and LW Porter (eds.), *Motivation and work behaviour*, 4th edn, McGraw-Hill, New York, pp. 144 – 164.
- Pinder, CC 1998, *Work motivation in organisational behaviour*, Prentice Hall, New Jersey.
- Pinder, CC 2008, *Work motivation in organisational behaviour*, 2nd edn, Psychology Press, New York.
- Podsakoff, PM, MacKenzie, SB, Lee, JY, and Podsakoff, NP 2003, "Common method biases in behavioural research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, vol. 88 no. 5, pp. 879 – 903.
- Pomfret, J 2011, "Lunar new year highlights China labour woes", *Star (Malaysia)*, 5 Feb., p. SBW 20.
- Porter, L, Bigley, G and Steers R (2003), *Motivation and work behaviour*, 7th edn, McGraw-Hill, New York.

Prestholdt, P, Lane, I and Mathews, R 1987, "Nurse turnover as reasoned action: development of a process model", *Journal of Applied Psychology*, vol. 72, no. 2, pp. 221 – 227.

Price, RH and Fang, L 2002, "Unemployed Chinese workers: the survivors, the worried young, and the discouraged old", *International Journal of Human Resource Management*, vol. 13, no. 3, pp. 416 – 430.

ProceduralLaw, 2010, Chinese University of Political Science and Law, viewed 28 July 2010, <http://www.procedurallaw.cn/english/law/200807/t20080724_40987.html>.

Pun, N 2005, *Made in China: women factory workers in a global workplace*, Duke University Press, Durham.

Pun N (潘毅), Lu H (盧暉臨), Guo, Y (郭于華), Shen Y (沈原), eds, 2011, *Suicides behind Foxconn's success (富士康:輝煌背後的連環跳)*, Commercial Press, Hong Kong (in Chinese).

Ralston, D, Terpstra-Tong, J, Terpstra, R, Wang, X and Egri, C 2006, "Today's state-owned enterprises of China: are they dying dinosaurs or dynamic dynamos?", *Strategic Management Journal*, vol. 27, no. 9, pp. 825 – 843.

Rao, PUB and Kulkarni AV 1998, "Perceived importance of needs in relation to job level and personality make-up", *Journal of the Indian Academy of Applied Psychology*, vol. 24, no. 1-2, pp. 37 – 42.

Rauch, CF and Behling, O 1984, "Functionalism: basis for alternate approach to the study of leadership", in JG Hunt, DM Hosking, CA Schriesheim and R Stewart (eds.), *Leaders and managers : International perspectives on managerial behaviour and leadership*, Pergamon, New York.

Raudenbush, SW and Bryk, AS 2002. *Hierarchical linear models: applications and*
208

data analysis methods, 2nd edn., Sage, California.

Rauschenberger, J, Schmitt, N and Hunter, JE 1980, “A test of the need hierarchy concept by a Markov model of change in need strength”, *Administrative Science Quarterly*, vol. 25, pp. 654 – 670.

Redding, SG 1990, *The spirit of Chinese capitalism*, Walter de Gruyter, Berlin.

Redding, SG and Wong, GYY 1986, “The psychology of Chinese organisational behaviour”, in MH Bond (ed.), *The psychology of Chinese people*, Oxford University Press, Hong Kong, pp. 267 – 295.

Reeve, Johnmarshall 2005, *Understanding motivation and emotion*, 4th edn, John Wiley, New Jersey.

Ren, Q 2005, *Common knowledge about Chinese culture*, Hong Kong China Tourism Press, Hong Kong.

Richer, S, Blanchard, U and Vallerand, R 2002, “A motivational model of work turnover”, *Journal of Applied Social Psychology*, vol. 32, pp. 2089 – 2113.

Ritzer, G 2008, *The McDonaldization of society* 5, 5th edn, Pine Forge, California.

Robbins, S 1998, *Organisational behaviour: concepts, controversies, applications*. Prentice-Hall, New Jersey.

Robbins, S and Coulter M 2009, *Management*, 10th edn, Pearson, New Jersey.

Rockwell, RC 1975, “Assessment of Multicollinearity: The Haitovsky Test of the Determinant”, *Sociological Methods and Research*, vol. 3, no. 3, pp. 308 – 320.

Rodgers, B 1986, *The IBM way*, Harper and Row, New York.

Ronen, S 2001, “Self-actualization versus collectualization: implications for

motivation theories”, in M Erez, U Kleinbeck and H Thierry (eds.), *Work motivation in the context of a globalizing economy*, Lawrence Erlbaum, New Jersey, pp. 341 – 368.

Rubin, DK and Perloff, JM 1993, “Who works for piece rates and why”, *American Journal of Agricultural Economics*, vol. 75, no. 4, pp. 1036 – 1043.

Rutherford, A 2011, *ANOVA and ANCOVA: a GLM approach*, John Wiley, New Jersey.

Ryan, R, Rigby, S and King, K 1993, “Two types of religious internalization and their relations to religious orientations and mental health”, *Journal of Personality and Social Psychology*, vol. 65, pp. 586 – 596.

Salaff, JW 1995, *Working daughters of Hong Kong: filial piety or power in the family?*, Columbia University Press, New York.

Sanchez-Runde, C and Steers, R 2003, “Cultural influences on work motivation and performance”, in L Porter, G Bigley and R Steers (eds.), *Motivation and work behaviour*, 7th edn, McGraw-Hill, New York.

Schaefer, RT 2008, *Sociology*, 11th edn, McGraw-Hill, New York.

Schneider, B 1985, ‘Organisational behaviour’, *Annual Review of Psychology*, vol. 36, pp. 573 – 611.

Sekaran, U 2003, *Research methods for business: a skill-building approach*, 4th edn, John Wiley, New York.

Selmer, J 2000, “A quantitative needs assessment technique for cross-cultural work adjustment training”, *Human Resource Development Quarterly*, vol. 11, no. 3, pp. 269 – 281.

- Selmer, J 2001, 'Antecedents of expatriate/local relationships: pre-knowledge vs socialization tactics', *International Journal of Human Resource Management*, vol. 12, no. 6, pp. 916 – 925.
- Shapiro, SS, Wilk, MB and Chen, HJ 1968, "A comparative study of various tests for normality", *Journal of the American Statistical Association*, vol. 63, no. 324, pp. 1343 – 1372.
- Shavelson, RJ 1996, *Statistical reasoning for the behavioural sciences*, 3rd edn, Allyn and Bacon, Massachusetts.
- Shenkar, O and Von Glinow, M 1994, "Paradoxes of organisational theory and research: using the case of China to illustrate national contingency", *Management Science*, vol. 40, no. 1, pp. 56 – 71.
- Simon, HA 1997, *Administrative behaviour: a study of decision-making processes in administrative organisations*, 4th edn, Free Press, New York.
- Slocum, JW, Cron, WL, and Brown, SP 2002, "The effect of goal conflict on Performance", *Journal of Leadership and Organisational Studies*, vol. 9, no.1, pp. 77 – 89.
- Smith, PB, Bond, MH and Kagitcibasi C 2006, *Understanding social psychology across cultures: living and working in a changing world*, Sage, London.
- Snell, RS and Tseng, CS 2003, "Images of the virtuous employee in China's transitional economy", *Asia Pacific Journal of Management*, vol. 20, pp. 307 – 331.
- Sobel, ME 1982, "Asymptotic intervals for indirect effects in structural equations models", in Leinhardt, S (ed.), *Sociological methodology*, Jossey-Bass, California.

- Solinger, DJ 1991, *China's transients and the State: A form of civil society?*, USC Seminar Series no. 1, Hong Kong Institute of Asia-Pacific Studies, Hong Kong.
- South China Morning Post 2010a, "Ninth Foxconn worker commits suicide", 26 May, p. A6 (a Hong Kong-based newspaper).
- South China Morning Post 2010b, "Foxconn tragedies a sign of wider problems. Suicides expose workers' anguish", 28 May, pp. A1 and A4 (a Hong Kong-based newspaper).
- South China Morning Post 2010c, "Toyota hit again as pay claims escalate", 19 June, p. A1 (a Hong Kong-based newspaper).
- South China Morning Post 2011a, "Guangdong scheme gives workers power to negotiate pay", 15 January, p. B1 (a Hong Kong-based newspaper).
- South China Morning Post 2011b, "Guangdong offers help to HK factories", 8 July, p. B1 (a Hong Kong-based newspaper).
- Spector, PE 1992, "A consideration of the validity and meaning of self-report measures of job conditions", in CL Cooper and IT Robertson (eds.), *International Review of Industrial and Organisational Psychology*, Wiley, New York, pp. 123 – 151.
- Szalay, LB, Strohl, JB, Fu, L and Lao, PS 1994, *American and Chinese perceptions and belief systems: A People's Republic of China-Taiwanese comparison*, Plenum, New York.
- Steers, RM, Mowday, RT and Shapiro, DL 2004, "The future of work motivation theory", *Academy of Management Review*, vol. 29, no. 3, pp. 379 – 387.
- Steers, RM, Porter, L and Bigley, G 1996, *Motivation and leadership at work*, 6th edn, McGraw-Hill, New York.

- Steers, RM and Sanchez-Runde, CJ 2002, "Culture, motivation, and work behaviour", in MJ Gannon and KL Newman (eds.), *Blackwell handbook of principles of cross-cultural management*, MPG, Bodmin, UK, pp. 190 – 216.
- Stevens, J 2002, *Applied multivariate statistics for the social sciences*, 4th edn, Lawrence Erlbaum Associates, New Jersey.
- Stone, RJ 2005, *Human resource management*, 5th edn, John Wiley, Queensland.
- Sue-Chan, C and Ong, M 2002, "Goal assignment and performance: assessing the mediating role of goal commitment and self-efficacy and the moderating role of power distance", *Organisational Behaviour and Human Decision Processes*, vol. 89, pp. 1140 – 1161.
- Tan, HH and Chee, D 2005, "Understanding interpersonal trust in a Confucian-influenced society", *International Journal of Cross Cultural Management*, vol. 5, no. 2, pp. 197 – 212.
- Tang, JY (唐君毅) 1978, *Youth and knowledge* (青年與學問), San Min, Taipei (in Chinese).
- Tencent, 2012, "Collective resignation led by the CTO for his new venture", viewed 22 August 2012, <<http://tech.qq.com/a/20111221/000255.htm>>.
- Thompson, L and Loewenstein, J 2003, "Mental models of negotiation: descriptive, prescriptive, and paradigmatic implications", in MA Hogg and J Cooper (eds.), *The SAGE handbook of social psychology*, Sage, London, pp. 494 – 511.
- Tong, X 1995, "The tidal wave of rural migrant workers and urbanization", *Open Times*, vol. 105, pp. 61 – 65 (in Chinese).
- Tracy, N 1995, "Transforming southern China: the role of the Chinese diaspora in the

era of reform”, in H Davies (ed.), *China business: context and issues*, Longman, Hong Kong.

Triandis, HC 1972, *The analysis of subjective culture*, John Wiley, New York.

Triandis, HC 1990, “Cross-cultural studies of individualism and collectivism”, *Nebraska Symposium on Motivation*, vol. 37, pp. 41 – 133.

Triandis, HC 2002, “Motivation to work in cross-cultural perspective”, in JM Brett and F Drasgow (eds), *The psychology of work: theoretically based empirical research*, Lawrence Erlbaum Associates, New Jersey, pp. 101 – 117.

Trice, H and Beyer, J 1993, *The cultures of work organisations*, Prentice Hall, New Jersey.

Trompenaars, F and Hampden-Turner, C 1997, *Riding the waves of culture*, 2nd edn, Nicholas Brealey, London.

Tseng, H, Ip, W and Ng, K 1999, “A model for an integrated manufacturing system implementation in China: a case study”, *Journal of Engineering and Technology Management*, vol. 16, pp. 83 – 101.

Tucker, LR and Lewis, C 1973, “A reliability coefficient for maximum likelihood factor analysis”, *Psychometrika*, vol. 38, no. 1, pp. 1 – 10.

Tubbs, ME 1986, “Goal setting: a meta-analytic examination of the empirical evidence”, *Journal of Applied Psychology*, vol. 71, no. 3, pp. 474 – 483.

Turner, J, Hogg, M, Oakes, P, Reicher, S and Wetherell, M 1987, *Rediscovering the social group: a self-categorization theory*, Basil Blackwell, Oxford.

UCLA 2009. Retrieved May 26, 2009, from
<http://www.ats.ucla.edu/stat/Spss/faq/alpha.html>

- Van Maanen, J and Barley, S 1984, "Occupational communities: culture and control in organisation", *Research in organisational behaviour*, vol. 6, pp. 216 – 268.
- Vanhonacker, WR 2004, "When good *guanxi* turns bad", *Harvard Business Review*, vol. 82, no. 4, pp. 18 – 19.
- Vroom, VH 1964, *Work and motivation*, John Wiley, New York.
- Wahba, MA and Bridwell. LG 1976, "Maslow reconsidered: a review of research on the need hierarchy theory", *Organisational Behaviour and Human Performance*, vol. 15, pp. 212 – 240.
- Waldman, DA and Avolio, BJ 1986, "A meta-analysis of age differences in job performance", *Journal of Applied Psychology*, vol. 71, pp. 33 – 38.
- Wang, WJ 2001, *Translation and Interpretation of Confucian Rites*, Zhonghua Book Company, Beijing.
- Wang, Y, Zhang, X and Goodfellow, R 2003, *Chinese business culture: strategies for success*, Talisman, Singapore.
- Wang, YD, 1997, *Filial piety*, Xinhua Book Store, Guangxi (in Chinese).
- Wang, Z 1992, "Managerial psychological strategies for Sino-foreign joint ventures", *Journal of Managerial Psychology*, vol. 7, no. 3, pp. 10 – 16.
- Wanous, JP, Keon, TL and Latack, JC 1983, "Expectancy theory and occupational/organisational choices: a review and test", *Organisational Behaviour and Human Performance*, vol. 32, pp. 66 – 86.
- Warner, M 1993, "Human resource management 'with Chinese characteristics'",

International Journal of Human Resource Management, vol. 4, no. 1, pp. 45 – 65.

Warner, M 1995a, “Managing China’s human resources”, *Human Systems Management*, vol. 14, no. 3, pp.239 – 248.

Warner, M 1995b, *The management of human resources in Chinese industry*, Macmillan, London.

Warner, M and Zhu, Y 2010, “Labour and management in the People’s Republic of China: seeking the ‘harmonious society’”, *Asia Pacific Business Review*, vol. 16, no. 3, pp. 285 – 298.

Wei, ZT (韋政通) 1972, *An introduction to Chinese culture* (中國文化概論), Buffalo Book Company, Taipei (in Chinese).

Wenweipo, 2011, “Review of the planned birth policy in China” (中國計劃生育政策回顧), viewed 21 June 2011, <<http://paper.wenweipo.com/2011/04/15/ED1104150018.htm>>.

Westwood, R and Lok, P 2003, “The meaning of work in Chinese contexts: a comparative study”, *International Journal of Cross Cultural Management*, vol. 3, no. 2, pp. 139 – 165.

Whiteley, A, Cheung, S and Quan, Z 2000, *Human resource strategies in China*, World Scientific, Singapore.

Whitley, RD 1991, “The social construction of business systems in East Asia”, *Organisational Studies*, vol. 12, pp. 1 – 28.

Whyte, MK, 2004, “Filial obligations in Chinese families: paradoxes of modernization” in Charlotte Ikels (ed.), *Filial piety: practice and discourse in contemporary East Asia*, Stanford University Press, California.

- Wiese, BS and Freund, AM 2005, "Goal progress makes one happy, or does it? Longitudinal findings from the work domain", *Journal of Occupational and Organisational Psychology*, vol. 78, no. 2, pp. 287 – 304.
- Wong, CS and Kung, HL 1999, "An exploratory investigation on commitment to specific constituencies in Taiwan", *Chinese Journal of Psychology*, vol. 40, no. 1, pp. 1 – 13.
- Wong, C, Wong, Y, Hui, C and Law, K 2001, "The significant role of Chinese employees' organisational commitment: implications for managing employees in Chinese societies", *Journal of World Business*, vol. 36, no. 3, pp. 326 – 340.
- Wong, K 2001, "Chinese culture and leadership", *International Journal of Leadership in Education*, vol. 4, no. 4, pp. 309 – 319.
- Wong, YT, Wong, CS and Ngo, HY 2002, "Loyalty to supervisor and trust in supervisor of workers in Chinese joint ventures: a test of two competing models", *International Journal of Human Resource Management*, vol. 13, no. 6, pp. 883 – 900.
- Wood, R and Locke, E 1990, "Goal setting and strategy effects on complex tasks", in B Staw and L Cummings (eds.), *Research in organisational behaviour*, vol. 12, JAI, Connecticut, pp. 73 – 109.
- Wood, R, Mento, A and Locke, E 1987, "Task complexity as a moderator of goal effects: a meta-analysis", *Journal of Applied Psychology*, vol.72, no. 3, pp. 416 – 425.
- Wood, E, Whiteley, A and Zhang, S 2002, "The cross model of *Guanxi* usage in Chinese leadership", *Journal of Management Development*, vol. 21, no. 4, pp. 263 – 271.
- Worchel, S 1998, "A development view of the search for group identity", in S

Worchel, J Morales, D Páez and J Deschamps (eds.), *Social identity: international perspectives*, Sage, London.

Wright, PM 1990, "Operationalization of goal difficulty as a moderator of the goal difficulty-performance relationship", *Journal of Applied Psychology*, vol. 75, no. 3, pp. 227 – 234.

Wright, PM 1992, "A theoretical examination of the construct validity of operationalizations of goal difficulty", *Human Resource Management Review*, vol. 2, no. 4, pp. 275 – 298.

Wright, PM 1992, "An examination of the relationships among monetary incentives, goal level, goal commitment, and performance", *Journal of Management*, vol. 18, no.4, pp. 677 – 693.

Xie, B, Li, X, Liu, Z, Qiu, X 1978, *The four books (new translation)*, 7th edn, San Min, Taipei (in Chinese).

XinhuaNet, 2012, "Collective resignation by employees because of the leave of their supervisor", viewed 22 August 2012,
<http://news.xinhuanet.com/employment/2004-02/17/content_1317179.htm>

Xu, F 2000, *Women migrant workers in China's economic reform*, Macmillan Press, Hampshire.

Yang, CF 1988, "Familism and development: an examination of the role of family in contemporary China mainland, Hong Kong and Taiwan", in D Sinha and HSR Kao (eds.), *Social values and development: Asian perspectives*, Sage, California, pp. 93 – 123.

Yang, H, Van de Vliert, E and Shi, K 2005, "Siding in a workplace dispute in China: the impact of legitimacy, sanction, and *guanxi*", *International Journal of Cross Cultural Management*, vol. 5, no. 3, pp. 329 – 347.

- Yang, KS and Huang, GG 1991, *Psychology and behaviour of Chinese people*, Gui Guan, Taipei, Taiwan (in Chinese).
- Yang, KS and Yeh, MH 2005, "Familism and pan-familism", in KS Yang, KK Hwang and CF Yang (eds.), *Chinese indigenous psychology*, vol. 1, Yuan-Liou, Taipei (in Chinese), pp. 249 – 292.
- Yang, MM 1994, *Gifts, favours, and banquets: the arts of social relationships in China*, Cornell University Press, New York.
- Yau, O., and Steele, H 2000, *China business: challenges in the 21st Century*, The Chinese University Press, Hong Kong.
- Yeh, K and Bedford, O 2004, "Filial belief and parent-child conflict", *International Journal of Psychology*, vol. 39, no. 2, pp. 132 – 144.
- Yukl, GA, *Leadership in organisations*, 7th edn, Prentice Hall, New Jersey.
- Zhan, HJ, Feng, Z, Chen, Z and Feng, X 2011, "The role of the family in institutional long-term care: cultural management of filial piety in China", *International Journal of Social Welfare*, vol. 20, no. S1, pp. 121 – 134.
- Zhan, HJ and Montgomery, RJV 2003, "Gender and elder care in China: the influence of filial piety and structural constraints", *Gender and Society*, vol. 17, no. 2, pp. 209 – 229.
- Zhang, AY, Tsui, AS, Song, LJ, Li, C and Jia, L, 2008, "How do I trust thee? The employee-organisation relationship, supervisory support, and middle manager trust in the organisation", *Human Resource Management*, vol. 47, no. 1, pp. 111 – 132.
- Zhang, JX and Bond, MH 1998, "Personality and filial piety among college students

in two Chinese societies: the added value of indigenous constructs”, *Journal of Cross-Cultural Psychology*, vol. 29, pp. 402 – 417.

Zhang, JX and Schwarzer, R 1995, “Measuring optimistic self-beliefs: a Chinese adaptation of the General Self-Efficacy Scale”, *Psychologia: An International Journal of Psychology in the Orient*, vol. 38 no. 3, pp. 174 – 181.

Zhang, Y, Zhang, Z, Men, X and Huang, S 2004, “Determinants of structural change to sequential foreign direct investment across China: a synthesized approach”, *Singaporean Management Review*, vol. 26, no. 1, pp. 63 – 80.

Zhu, Y, Warner, Malcolm and Feng, Tongqing 2011, “Employment relations “with Chinese characteristics”: the role of trade unions in China”, *International Labour Review*, vol. 150, no. 1-2, pp. 127 – 143.

Zikmund, WG, *Business research methods*, 7th edn, Thomson, Ohio.

"Every reasonable effort has been made to acknowledge the owners of copyright material. I would be pleased to hear from any copyright owner who has been omitted or incorrectly acknowledged."

Appendix A: Invitation Letter

Dear [Manager],

A Study on Goal, Culture and Job Performance

I am a doctoral student in Business Administration from the Curtin University of Technology in Australia in collaboration with Lingnan University in Hong Kong under the joint supervision of Dr Richard K Ladyshevsky in Australia and Dr Wu Weiping in Hong Kong. I am now conducting a dissertation study on goal, culture, and job performance among factory workers in the mainland China. I am writing to seek your permission to conduct a survey among garment workers in your factory.

The study aims at investigating the relationship between work goal and job performance and how cultural factors may influence the goal–performance relationship. Findings of the study will contribute to a better understanding of work motivation and behaviours of factory workers, and provide insights for organisational management and productivity improvement. The survey includes measures on workers' goals in the job, goal-commitment, self-efficacy, filial piety, loyalty to supervisor and their productivity. An independent, experienced researcher will be assigned to implement and coordinate the whole procedure of data collection in order to obtain unbiased responses from your employees.

Participation in the study is entirely voluntary. All information collected will be kept strictly confidential. All information gathered from the survey will be stored securely and once the information has been analysed all questionnaires will be destroyed. At

no time will any individual or organisation be identified in any reports resulting from this study.

Thank you for your interest. The results of the study will surely help understand organisational management as well as work motivation of factory workers. Your company's participation is crucial to the success of this study.

If you have any concerns about the study, please feel free to contact me by sending email to simonshf@netvigatior.com or calling at (852) 9034 1945.

Yours sincerely,

Simon Fung

Appendix B: Information Sheet

Project Title : Work Motivation of Chinese Garment Workers

Researcher : Mr. Simon Fung

Supervisor : Dr. Richard K. Ladyshevsky, Graduate School of Business, Curtin
University of Technology, Perth, Australia.
(E-mail Address: Rick.Ladyshevsky@gsb.curtin.edu.au)

I am a doctoral student under the supervision of Associate Professor Richard K Ladyshevsky of Curtin University of Technology, Australia in collaboration with the Lingnan University in Hong Kong. I am now conducting a research project on work motivation of Chinese garment workers. The purpose of the study is to understand the factors influencing work motivation of Chinese workers. You will be asked to respond to questions about your job, goals, and attitudes towards work in order to advance our knowledge of the relationship between work motivation and job performance. These data will be kept and accessed only by an independent research administrator who will not release your personal data and response to your company. All data collected is absolutely **NOT** related to your performance appraisal in your company.

If you consent to participate, you will be involved in completing an **ANONYMOUS** questionnaire, which will take approximately 25 minutes. After completing the questionnaire, please put it into the attached envelope and seal it before returning to the research administrator. Upon returning the questionnaire, you will receive RMB10.0 as remuneration without any signing for acknowledging receipt.

The risks associated with this study are minimal. Your participation in this study is **entirely voluntary and your responses are completely confidential**. Your decision whether or not to participate in this study will not affect your employment and performance appraisal in the company. You have the right to withdraw or discontinue participation at any time, and have the right to refuse to answer particular questions. There will be no negative consequences if you decide not to complete the questionnaire.

All information collected from the questionnaire will be kept **strictly confidential** without your name on the questionnaire but only a questionnaire ID code. All data gathered from this study will be analysed as a group of participants and only accessed by the independent research administrator. Your individual privacy will be absolutely maintained in all published materials resulting from this study.

If you have any questions or concerns about this research project, you should contact the Project Investigator, Mr. Simon Fung by email: simonshf@netvigator.com or phone: (852) 9034 1945.

"This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 85/2008). The Committee is comprised of members of the public, academics, lawyers, doctors and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784 or by

emailing hrec@curtin.edu.au.”

We again much appreciate your support for this study.

Yours sincerely,

Simon Fung
Doctoral Candidate of Business Administration
Curtin University of Technology, Australia

Appendix C: Information Sheet in Simplified Chinese Characters

问卷研究内容

研究名称 : 中国制衣工人的工作动力研究

研究员 : 蔡银雪小姐

指导员 : 黎李察博士 (Dr. Richard K. Ladyshevsky), 西澳柏斯科庭科技大学
商管學研究院

本人正協助一名澳洲科庭科技大学(Curtin University of Technology)及香港岭南大学协办课程的博士生。在黎李察副教授的指导下，這学生正进行一项有关中国制衣工人的工作动力的学术研究。这个研究的目的是想了解影响中国制衣工人工作动力的因素。你将会被询问到一些有关你的工作、工作目标和态度的问题。这些评估资料只会由一位独立的研究员负责处理及保存，他/她不会透露你的个人及此问卷的资料给予你的公司。所有收集的资料绝对**不会**影响你在本厂的工作表现评价。

假若你同意参加是次研究，你将要填写一份毋须写上姓名的问卷，需时约二十五分钟。在你完成整份问卷之后，请把问卷放入我们预先准备的信封内并密封好，然后直接交还研究员。收回问卷时，你将会得到人民币 10 元作为酬劳，而你毋须签收。

参与是次研究的**风险是极之非常低的**。你的参与**完全属于自愿性质**，你填写的**所有资料是绝对保密的**。你是否参与是次研究的决定不会影响你的就业及工作表现评价。你有权在任何时候退出或终止参与是項研究，你也有权不回答问卷

内某些题目。如果你决定不完成这次问卷调查，也不会对你造成任何负面的影响。

是次研究里所有的资料将以不记名的形式处理，每份问卷只会编上问卷编号，所有问卷资料**绝对保密处理**。我们会由一名独的研究员合并所有参与者的资料作研究分析，而不会作任何个人的分析。你的个人资料一定会绝对保密，不会在任何文献发布。

若你对是次研究有任何问题或查询，你可以电邮到：ngansuet@hotmail.com。

“此项研究项目已获得科庭大学人类研究操守委员会的批准认可(核准编号为HR85/2008)。此委员会由公众人士、学者、律师、医生及牧职人员组成，其主要目的为保护参与是项研究者。若有需要查核，可写信到西澳柏斯邮编 6845 号邮政信箱 U1987 号科庭科技大学研究及发展部转交科庭大学研究操守委员会收或致电：(61) 9266 2784 或 电邮到：hrec@curtin.edu.au。”

就您对这次研究的支持，我在此再次衷心表示感谢!

Appendix D: Self-conducted Questionnaire

Questionnaire ID: _____

WORK MOTIVATION QUESTIONNAIRE

Part I

1. Last month, my productivity was _____ pieces of output.

2. In this month:

- (a) My goal is to: increase _____% of output (with reference to last month)
 maintain the same amount of output
 decrease _____% of output (with reference to last month)

- (b) This goal is set by: myself
 my supervisor
 jointly by my supervisor and me

Part II

We are interested in how you set your goals at work. Please use the scale 1 (never) to 5 (almost always) to indicate your answer to each question.

	Never	A small amount of the time	Half of the time	Most of the time	Almost Always
3. I have a specific, clear goal to aim for on my job.	1	2	3	4	5
4. I understand how my performance is measured on this job.	1	2	3	4	5
5. I understand exactly what I am supposed to do on my job.	1	2	3	4	5
6. The goals I have on this job are challenging but reasonable (neither too hard nor too easy).	1	2	3	4	5

7. It takes a lot of effort on my part to achieve the results expected for my job.	1	2	3	4	5
8. It requires persistence to reach the goal.	1	2	3	4	5
9. It seems difficult to me to reach the goal.	1	2	3	4	5
10. I have too many goals on this job (I am too overloaded).	1	2	3	4	5
11. Some of my goals conflict with my personal values.	1	2	3	4	5
12. I am given incompatible or conflicting goals by different people (or even by the same person).	1	2	3	4	5
13. I have unclear goals on this job.	1	2	3	4	5
14. My job goals lead me to take excessive risks.	1	2	3	4	5
15. My job goals serve to limit rather than raise my performance.	1	2	3	4	5
16. The goals I have on this job lead me to ignore other important aspects of my job.	1	2	3	4	5
17. The goals I have on this job focus only on short-range accomplishment and ignore important long-range consequences.	1	2	3	4	5

	None	A little	Somewhat	Quite a bit	Extremely
18. How much conflict do you feel between the desire to achieve the job goal and the desire to achieve personal, job-unrelated goals?	1	2	3	4	5
19. To what extent do you prioritise personal, job-unrelated goals over job goals? (Please specify the goal if you choose between 2 and 5: _____)	1	2	3	4	5

Part III

The following questions are concerning about your commitment to work-related goals. Please use the scale 1 (never) to 5 (almost always) to indicate your answer to each question.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
20. I am strongly committed to pursuing this job goal.	1	2	3	4	5
21. Quite frankly, I don't care if I achieve this job goal or not.	1	2	3	4	5
22. It is quite likely that this job goal may need to be revised, depending on how things go this month.	1	2	3	4	5
23. It wouldn't take much to make me abandon this job goal.	1	2	3	4	5
24. It's unrealistic for me to expect to reach this job goal.	1	2	3	4	5
25. Since it's not always possible to tell how tough tasks are until you've been in them a while, it's hard to take this goal seriously.	1	2	3	4	5
26. I think this job goal is a good goal to shoot for.	1	2	3	4	5

Part IV

The following questions are concerning about your ways to deal with your work. There is no right or wrong answer, please respond to the questions according to your personal opinions. Please use the scale 1 (strongly disagree) to 5 (strongly agree) to indicate your level of agreement to each question.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
27. I can always manage to solve difficult problems on my job if I try hard enough.	1	2	3	4	5
28. If someone opposes me, I can find the means and ways to get what I want.	1	2	3	4	5
29. It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4	5
30. I am confident that I could deal efficiently with unexpected events on my job.	1	2	3	4	5
31. Thanks to my resourcefulness, I can handle unforeseen situations on my job.	1	2	3	4	5
32. I can solve most problems on my job if I invest	1	2	3	4	5

the necessary effort.					
33. I can remain calm when facing difficulties on my job because I can rely on my coping abilities.	1	2	3	4	5
34. When I am confronted with a problem on my job, I can find several solutions.	1	2	3	4	5
35. If I am in a bind, I can usually think of something to do.	1	2	3	4	5
36. No matter what comes my way, I am usually able to handle it.	1	2	3	4	5

Part V

The following questions are concerning about your personal opinions toward family. There is no right or wrong answer, please respond to the questions according to your personal opinions. Please use the scale 1 (strongly disagree) to 5 (strongly agree) to indicate your level of agreement to each question.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
37. There is no crime worse than being unfilial.	1	2	3	4	5
38. Sons and daughters should not do dangerous things to avoid getting their parents worried.	1	2	3	4	5
39. When interacting with senior members, young children should show respect and behave properly.	1	2	3	4	5
40. Sons and daughters should not do bad things to avoid ruining reputation of their parents.	1	2	3	4	5
41. The great debt that you have to repay your parents is as boundless as the sky.	1	2	3	4	5
42. Serving parents-in-law properly is the responsibility of daughters-in-law.	1	2	3	4	5
43. Sending aged parents to a nursing home is an unfilial act.	1	2	3	4	5
44. To worship their ancestors regularly on the proper occasions is the primary duty of sons and daughters.	1	2	3	4	5
45. To glorify one's ancestors should be the motives of getting ahead.	1	2	3	4	5
46. The success of sons and daughters should be attributed to their parents.	1	2	3	4	5

47. Everyone should go home and reunite with family members on Chinese New Year or other festivals.	1	2	3	4	5
48. Sons and daughters should not go to faraway places while their parents are still living.	1	2	3	4	5
49. To continue the family line is the responsibility of sons and daughters.	1	2	3	4	5

Part VI

The following questions are concerning about your personal opinions toward your supervisor. There is no right or wrong answer, please respond to the questions according to your personal opinions. Please use the scale 1 (strongly disagree) to 7 (strongly agree) to indicate your level of agreement to each question.

	Strongly Disagree	Disagree	Slightly Disagree	Neither agree nor disagree	Slightly Agree	Agree	Strongly Agree
50. When my supervisor is treated unfairly, I will defend him/her.	1	2	3	4	5	6	7
51. When somebody speaks ill of my supervisor, I will defend him/her immediately.	1	2	3	4	5	6	7
52. I will put myself in my supervisor's position to consider his/her interests.	1	2	3	4	5	6	7
53. I would support my supervisor under all circumstances.	1	2	3	4	5	6	7
54. Even if my supervisor is not present, I will try my best to do the job assigned by him/her well.	1	2	3	4	5	6	7
55. I will try my best to accomplish the job assigned by my supervisor.	1	2	3	4	5	6	7
56. I will do my job conscientiously so that my supervisor will not worry about it.	1	2	3	4	5	6	7
57. Even if there may be better alternatives, I will still remain to work under my supervisor.	1	2	3	4	5	6	7
58. I will feel satisfied as long as I can work under my supervisor.	1	2	3	4	5	6	7
59. No matter whether it will benefit me or not, I	1	2	3	4	5	6	7

will be willing to continue working under my supervisor.

60. If it is possible, I would like to work under my supervisor for a long time.	1	2	3	4	5	6	7
61. When someone praises my supervisor, I take it as a personal compliment.	1	2	3	4	5	6	7
62. When someone criticises my supervisor, I take it as a personal insult.	1	2	3	4	5	6	7
63. My supervisor's successes are my successes.	1	2	3	4	5	6	7
64. My attachment to my supervisor is primarily based on the similarity of my values and those represented by my supervisor.	1	2	3	4	5	6	7
65. The reason I prefer my supervisor than another is because of what he/she stands for, that is, his/her values.	1	2	3	4	5	6	7
66. Since starting this job, my personal values and those of my supervisor have become more similar.	1	2	3	4	5	6	7

Part VII

Demographic Information

1. Age: _____ years old

2. Gender:

Male

Female

3. Marital Status:

Single

Married

Divorced

Widowed

4. Education:

None

Primary school

Middle school

High school

Tertiary education or above

5. Affiliated job unit:

Men's shirts

Women's coordinates

6. Tenure: _____ years

7. We are interested in your family network, please indicate the surviving members in your nuclear family network:

Parents

Parents in-law

Son(s) / daughter(s)

Elder brother(s) / sister(s)

Younger brother(s) / sister(s)

End of Questionnaire

Thank You !!

Appendix E: Self-conducted Questionnaire in Simplified Chinese Characters

问卷编号： _____

第一部份：生产量及工作目标

1. 在 8 月份

我在 8 月份的生产量是 _____ 件数

2. 本月份（即 9 月份）

- (a) 我的目标生产量是..... 较 8 月份增加 _____ 个百分比 (%) 的件数
 维持 8 月份生产量相同的件数
 较 8 月份减少 _____ 个百分比 (%) 的件数

例子：如 8 月份生产量为 100 件，而本月份目标为 150 件，即增加 50 个百分比。若本月份目标为 50 件，即减少 50 个百分比。

- (b) 订立以上（a 项）目标的人是 我自己
 我的上司
 我的上司与我自己共同订立

第二部份：心理范畴量表

我们想了解您如何订立您的工作目标。请回答以下问题，这些问题没有正确或错误的答案，若您每次订立工作目标时都遇到题目所描述的情况，请「✓」5（所有时间）。若从不遇到该情况，请「✓」1（从不）。

	从不	少许 时间	一 半 时 间	大部 份 时 间	所有 时间
3 我有一个具体、清晰的工作目标。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
4 我知道我的工作表现是如何评价的。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
5 我完全了解在这份工作上我被预期要完成的事情。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
6 我订立的工作目标虽具挑战性但却合	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅

理（不太困难也不太容易）						
7	我需要付出很大的努力才能达到预期的工作成绩。	<input type="checkbox"/>				
8	要达到我的目标是需要毅力的。	<input type="checkbox"/>				
9	要达到我的目标似乎有点困难。	<input type="checkbox"/>				
10	在这份工作上，我定立了很多目标（因此我的工作量超负荷）。	<input type="checkbox"/>				
11	我的一些工作目标与我的个人价值观有冲突。	<input type="checkbox"/>				
12	不同的人（或甚至同一个人）给我互相矛盾或冲突的工作目标。	<input type="checkbox"/>				
13	在这份工作上，我没有清晰的工作目标。	<input type="checkbox"/>				
14	我的工作目标令我承担过度的风险。	<input type="checkbox"/>				
15	我的工作目标限制了而不是提升了我的工作表现。	<input type="checkbox"/>				
16	我这工作目标使我忽略工作上其它重要的事情。	<input type="checkbox"/>				
17	我这工作目标只看重短期成绩，而忽略长期后果。	<input type="checkbox"/>				

请回答以下问题，这些问题没有正确或错误的答案，若您经常遇到题目所描述的情况，请「✓」5〔非常多〕。若从不遇到该情况，请「✓」1〔一点也没有〕。

	一点也 没有	甚少	一些	颇多	非常 多	
18	您有多强烈感受到渴望达成工作目标与渴望达成个人、非工作目标之间的冲突？	<input type="checkbox"/>				
19	您将个人、非工作目标优先编排于工作目标之前的情况多吗？	<input type="checkbox"/>				

我们想了解您对工作目标的投入程度。请回答以下问题，这些问题没有正确或错误的答案，请根据您的个人意见回答以下的问题，若您非常同意题目所描述的情况，请「✓」5（非常同意）。若非常不同意，请「✓」1（非常不同意）。

	非常 不 同意	不 同意	中立	同意	非常 同意
20 我强烈投入追求我的工作目标。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
21 坦白说,我不在乎我能否达成我的工作目标。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
22 视本月的情况,我可能会修改我的工作目标。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
23 要我放弃这工作目标并不是非常困难。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
24 期望我达成这工作目标是不切实际的。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
25 除非经历一段时间,否则很难知道实际工作情况有多困难,所以我很难认真地完成这工作目标。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
26 我想这个工作目标是一个很值得追求的目标。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅

以下的问题是有关您如何处理您的工作。这些问题没有正确或错误的答案,请根据您的个人意见回答以下的问题,若您非常同意题目所描述的句子,请「✓」5(非常同意)。若非常不同意,请「✓」1(非常不同意)。

	非常 不 同意	不 同意	中立	同意	非常 同意
27 如果我尽力去做的话,我总是能够解决难题的。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
28 即使别人反对我,我仍有办法取得我想要的。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
29 对我来说,坚持理想和达成目标是轻而易举的。	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
30 我有信心能有效地应付任何突如其	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅

来的事情。

- 31 以我的才智,我定能应付意料之外的情况。 ₁ ₂ ₃ ₄ ₅
- 32 如果我付出必要的努力,我一定能解决大多数的难题。 ₁ ₂ ₃ ₄ ₅
- 33 我能冷静地面对困难,因为我可信赖自己处理问题的能力。 ₁ ₂ ₃ ₄ ₅
- 34 面对一个工作难题时,我通常能找到几个解决的方法。 ₁ ₂ ₃ ₄ ₅
- 35 有麻烦的时候,我通常能想到一些应付的方法。 ₁ ₂ ₃ ₄ ₅
- 36 无论什么事在我身上发生,我都能够应付自如。 ₁ ₂ ₃ ₄ ₅

以下的问题是有关您对**家庭**的看法。这些问题没有正确或错误的答案,请根据您的个人意见回答以下的问题,若您非常同意题目所描述的句子,请「✓」5(非常同意)。若非常不同意,请「✓」1(非常不同意)。

- | | 非常
不
同意 | 不
同意 | 中立 | 同意 | 非常
同意 |
|-------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 37 子女最大的罪过,是不孝顺父母。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 38 子女不应该做危险的事,以免父母担心。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 39 在长辈面前,小孩子应举止端庄,恭恭敬敬。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 40 子女不应做坏事,以免伤害父母的名声。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |
| 41 子女善尽孝道,必能感动天地,得到保佑。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ |

- 42 好好侍奉公婆，是媳妇应尽的责任。 ₁ ₂ ₃ ₄ ₅
- 43 把父母送入老人院，是不孝的行为。 ₁ ₂ ₃ ₄ ₅
- 44 祖先的生辰忌日，应按时烧香祭拜。 ₁ ₂ ₃ ₄ ₅
- 45 为了光宗耀祖，一个人应该努力上进。 ₁ ₂ ₃ ₄ ₅
- 46 子女的成就应该归功于父母。 ₁ ₂ ₃ ₄ ₅
- 47 逢年过节，每个人都应回家与亲人团聚。 ₁ ₂ ₃ ₄ ₅
- 48 父母在世时，子女不应该远离。 ₁ ₂ ₃ ₄ ₅
- 49 传宗接代是子女应负的责任。 ₁ ₂ ₃ ₄ ₅

以下的问题是有关您对上司的看法。这些问题没有正确或错误的答案，请根据您的个人意见回答以下的问题，若您非常同意题目所描述的句子，请「✓」7（非常同意）。若非常不同意，请「✓」1（非常不同意）。请注意有别于刚才您作答的量表，这个量表有 7 个选项供您选择。

- | | 非常不同意 | 颇不同意 | 有点不同意 | 中立 | 有点同意 | 颇同意 | 非常同意 |
|----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 50 当我的上司受到不公平的对待时，我会为他 / 她辩护。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| 51 当某人诋毁我的上司时，我会即时为他 / 她辩护。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| 52 我会站在我上司的立场去考虑他 / 她的利益。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| 53 在任何情况下，我都会支持我的上司。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |
| 54 即使我的上司不在现场，我也会尽力做好他 / 她分派的工作。 | <input type="checkbox"/> ₁ | <input type="checkbox"/> ₂ | <input type="checkbox"/> ₃ | <input type="checkbox"/> ₄ | <input type="checkbox"/> ₅ | <input type="checkbox"/> ₆ | <input type="checkbox"/> ₇ |

- 55 我会尽力完成我上司分派的工作。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 56 我会认真地做好我的工作，那么我的上司便不用担心。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 57 即使可能有较佳的选择，我仍然会留下为我的上司工作。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 58 只要可以为我的上司工作，我便会感到满足。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 59 不管是否对我有利，我愿意继续为我的上司工作。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 60 如果可以的话，我希望为我的上司工作一段长的时间。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 61 当有人称赞我的上司时，我当作这是对我个人的赞赏。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 62 当有人批评我的上司时，我当作这是对我个人的羞辱。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 63 我上司的成就便是我的成就。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 64 我对我上司的情感主要是基于我们有共同的价值观。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 65 我更喜欢我的上司多于其它人是因为他 / 她所主张的价值观。 ₁ ₂ ₃ ₄ ₅ ₆ ₇
- 66 自从开始这份工作后，我的个人的价值观与我上司的价值观越来越相近。 ₁ ₂ ₃ ₄ ₅ ₆ ₇

第三部份：个人资料

我们想收集您的一些背景资料，请注意，收集这些资料纯粹作研究用途，个人身份将绝对保密，不被识别及公开。

1	您的年龄	_____岁				
2	您的性别	<input type="checkbox"/> ₁ 男	<input type="checkbox"/> ₂ 女			
3	您的婚姻状况	<input type="checkbox"/> ₁ 单身	<input type="checkbox"/> ₂ 已婚	<input type="checkbox"/> ₃ 离异	<input type="checkbox"/> ₄ 丧偶	
4	您的教育情况	<input type="checkbox"/> ₁ 没有正式上学	<input type="checkbox"/> ₂ 小学	<input type="checkbox"/> ₃ 初中	<input type="checkbox"/> ₄ 高中	<input type="checkbox"/> ₅ 大学或以上
5	您的工作部门	<input type="checkbox"/> ₁ 男装衬衫	<input type="checkbox"/> ₂ 女装套装			
6	您在这间工厂工作了 多久?	_____年	_____个月			
7	您在世的核心家庭成 员有	<input type="checkbox"/> ₁ 父母	<input type="checkbox"/> ₂ 姻亲父母	<input type="checkbox"/> ₃ 子女	<input type="checkbox"/> ₄ 哥哥/姐姐	<input type="checkbox"/> ₅ 弟弟/妹妹

问卷完·多谢您的参与!