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**THE EFFECTS OF LEADERSHIP STYLES ON INDIVIDUALS'
TIME USE ORIENTATION, WELL-BEING AND EFFECTIVENESS**

Submitted by

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For the Degree of Master of Philosophy

At the Hong Kong Polytechnic University

In 2002

Dissertation Supervisor: Dr. Warren C.K Chiu



ABSTRACT

Abstract of Thesis Entitled ' The Effects of Leadership Styles on Individuals' Time Use Orientation, Well-Being and Effectiveness' Submitted by Tse Ho Man Herman for The Degree of Master of Philosophy at The Hong Kong Polytechnic University in 2002

The present study aims to examine the effects of leadership styles on the relationship between individuals' time use orientation, well-being and effectiveness. On the basis of the literature review, a theoretical model was developed for examining the effects of transformational and transactional leadership styles on the relationship between polychronicity, subordinates' work stress and job performance. Hypotheses were then formulated to test the validity of the model.

Measures on five forms of transformational leadership (idealized attribute, idealized behavior, individualized consideration, inspirational motivation, and intellectual stimulation), three forms of transactional leadership (contingent reward, active management-by-exception and passive management-by-exception), polychronicity, work stress, and self-rated performance were obtained from 260 sales agents working for seven multinational life insurance companies in Hong Kong. Corresponding evaluations on the performances of these sales agents were obtained from 94 immediate supervisors as the objective performance measure to overcome the common method biases.

The results of the hierarchical regression analysis indicated that transformational leadership had weaker positive effects on subordinates' self-rated performance than transactional leadership. Polychronicity was negatively related to work stress and found to be unrelated to the two forms of performance measures (self-rating and supervisory rating). The interaction between transactional leadership and polychronicity was found to have significant effects on self-rated performance but not on subordinates' work stress and supervisor-rated performance.

The present study has contributions to the theory and practice of leadership. It provides preliminary evidences to support the interaction effects of transactional leadership and polychronicity on subordinates' job performance. The evidences also suggest that transactional leadership may be superior to transformational leadership in managing subordinates in the Asian context. Thus, organizations should revisit and evaluate the effectiveness of their leadership training by increasing the practices of transactional leadership among sales managers. Finally, future researches should continue to examine the present model in different jobs and organizational contexts as well as the effects of leadership styles on work attitudes and behaviors at both the individual and group levels.

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*“But He said to me, my grace is sufficient for you,
for my power is made perfect in weakness”*

Bible NIV version - 2 Corinthians 12:9

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Globalization has drastically changed the business environment of many organizations. As a strategy to cope with the keen market competition and ensure survival, organizations have escalated the pace of restructuring in order to sustain their competitive advantages. The rapid restructuring of organizations, however, has led to a continual change in job nature and increased the workload for employees. Employees are expected to be flexible and responsive to different job demands and working environments. This appears to align with the concept of polychronicity, which describes individuals who prefer to manage several activities simultaneously. As polychronicity involves the capability of handling interruptions by modifying preset appointments or schedules (Hall & Hall, 1990), polychronic individuals can accommodate to unexpected activities (Bluedorn, Kalliath, Strube, & Martin 1995). Taylor, Locke, Lee and Gist (1984) suggested that faculty members working on multiple projects simultaneously appear to perform better than academics who tend to focus on completing only one project at a time. Such a time use orientation would enhance an individual's flexibility by switching his/her effort and mental gears between projects at hand. The flexible use of time allows its efficient allocation that leads to better job

performance (Bluedorn, 1998). However, employees working in such a manner may also experience stress and possibly other undesirable effects. Manager's role becomes important as he/she has to ensure the well-being and effectiveness of polychronic subordinates by exhibiting the appropriate leadership style. An important question thus arises -- which style(s) is/are effective for a manager to motivate polychronic subordinates and alleviate their stress level?

Over the last two decades, transformational leadership has emerged to increase our understanding on leadership effectiveness. Transformational leadership involves the development of a closer relationship between leaders and followers based on mutual trust, respect and commitment rather than contractual agreements. Transformational leaders help followers to recognize the importance of transcending their own self-interest for the sake of the vision of their organizations. By building followers' self-esteem, such leaders have a strong and positive influence on their followers' level of identification, motivation, and goal achievement (Gardner & Avolio, 1998; Klein & House, 1995; Shamir, House, & Arthur, 1993). In contrast, transactional leadership has been characterized as a contractual or exchange process between leaders and followers. Transactional leaders identify followers' specific expectations and provide rewards in exchange for followers' performance. Typically, the role of transactional leaders in an exchange is on setting goals, clarifying the link

between performance expectations and rewards, providing constructive feedback and administering punishments to keep followers on task (Bass, 1985).

Empirical evidences demonstrated that transformational leadership is more effective than transactional leadership in terms of subordinates' extra effort, in-role performance, commitment and contribution to organizations (Avolio & Bass, 1988; Bass, Avolio, & Goodheim, 1987; Bass, Waldman, Avolio & Bebb, 1987; Boal & Bryson, 1988). Other researchers (e.g., Seltzer, Numerof, & Bass, 1988) found that transformational leadership is conducive to reducing the stress level among followers but transactional leadership is ineffective in helping subordinates to cope with stressful conditions (Bass 1998).

Although these researches have contributed substantially to explicating the transformational leadership theory on subordinates' well-being and effectiveness, they are not without limitations. Firstly, the number of cross-cultural research looking into the effect of transformational leadership on subordinates' well-being and effectiveness in the Asian context is small relative to those conducted in the Western context. Nevertheless, leadership is highly cultural specific -- Asian leaders may behave differently towards subordinates in work groups as compared to their Western counterparts.

Secondly, most studies on transformational leadership sampled respondents at the top-level management but little was done at the lower-level management staff (Bass, 1985; Avolio, Waldam & Yammarino, 1991). Transformational leaders at the middle-level management may not perform as effectively as those at the top management (Bass, 1985). They are perceived with lesser power than senior managers in respect to decision-making and resources allocation in response to urgent requests from subordinates. This situation may be stronger especially in hierarchically structured organizations because the decision-making power is centralized. Subordinates question their middle manager's leadership for their managers have to ask for approval from top management before making a decision.

Thirdly, little is known about the impact of leadership styles on subordinates' work stress because previous studies on transformational leadership have mainly focused on subordinates' effectiveness. Understanding the above-mentioned relationship is important because the increasingly complex organizational environment has given rise to a corresponding increase in subordinates' work demand. Subordinates are more likely to face greater emotional demand and stress than ever before.

Fourthly, most of the leadership studies emphasized the effects transformational leadership

has on subordinates' self-rated measures rather than an objective measure. Bommer, Johnson, Rich, Padsakoff and MacKenzie (1995) indicated that subjective and objective measures of performance are not highly correlated. The positive relationship between transformational leadership and self-rated performance could not be generalized to other objective performance indicators in the Asian context. In addition, Cote and Buckley (1987) and Podsakoff and Organ (1986) suggested that measures of subordinates' performance have typically been obtained from the same source as the ratings of leadership behavior and various outcome variables, thereby introducing perhaps common method variance. Thus, it would be appropriate to examine the effects of transformational and transactional leadership on both self-rated and supervisor-rated performance.

Finally, Bass' research emphasized the conceptualization of transformational leadership as an independent variable and the examination of its effects on various outcome variables. However, little has been done to examine the effects of transformational leadership on subordinates' well-being and effectiveness. An examination of the emergence and functioning of leadership styles as moderators for the relationship between individuals' time use orientation, well-being and effectiveness should enhance our understanding of the motivational underpinning of subordinates' well-being and effectiveness in a competitive economy. Consequently, the present study aims to address the preceding limitations by

providing a preliminary step towards bridging the gap between conceptual development and empirical support on the effects of transformational and transactional leadership styles on the relationship between polychronicity, subordinates' work stress and performance. Additionally, this study examines the relationship between polychronicity, individuals' work stress and performance. Thus, the present study proposes two research questions as follow:

1.2 Research Questions

1. How does time use orientation relates to individuals' well-being and effectiveness?
2. Which leaders style(s) is/are more effective to affect the well-being and effectiveness of subordinates who have polychronic time use orientation?

1.3 Research Objectives

On the basis of these questions, three research objectives were developed for this study:

1. To examine the effects of polychronicity and leadership styles on individuals' work stress and job performance,
2. To identify and examine the differential effects of leadership styles on the relationship between polychronicity, subordinates' work stress and job performance; and

3. To offer recommendations to practitioners to revisit the existing training programs on leadership and time management in light of the results of the present study.

1.3 Structure of The Dissertation

This chapter is an introduction to the present study, which describes the research background and highlights the research problems of this study. Chapter 2 is a literature review, which will focus on delineating the past and present documents relating to leadership, polychronicity, work stress and job performance. Chapter 3 concerns the theoretical development and hypotheses formulation. The researcher will integrate the literature discussed in chapter 2 for each variable and develop a theoretical model and hypotheses for examination. A survey will also be carried out to collect the required data. Chapter 4 will discuss the details on methodology -- sample characteristics, research design, measurements of different constructs and the proposed analytical techniques. The descriptive analysis on the survey results, hypotheses testing and control variables will be reported in chapter 5. The discussion of the findings, contributions, limitations and future research directions of this study will be presented in chapter 6.

CHAPTER 2

LITERATURE REVIEW

Introduction

This chapter aims to provide literature support for outlining the research framework and ascertain the originality of the present study. It is conducted by reviewing the existing body of relevant theories and models. The literature of leadership research is firstly discussed and followed by an overview of the literature on time use orientation – polychronicity. Finally, literature concerning the outcome variables of work stress and job performance is presented.

2.1 Historical Underpinnings of Leadership Research

Leadership is one of the most researched and controversial topics in organizational studies. Over the past 50 years, scholars have attempted to identify desirable ways to conceptualize it, measure it, develop it and recognize when it is ineffective. Despite the elusive nature of the concept, it is one of the most important factors in explaining what makes individuals effective in order to constitute the success of organizations. Bass (1990) stated that effective leadership is solely regarded as the critical element in determining organizational success.

He discovered that the term "leadership" has been widely used for different purposes and cited for many publications for several decades but little consensus on what is leadership has been reached. Most of the definitions used are ambiguous, imprecise and some are even confused concepts such as management, supervision, administration, control, power and authority. Leadership is usually defined depending on researchers' perspective of what is most interesting to them. Bass (1990) documented that leadership has been defined as the focus of a group process, a function of personality, a function of achieving compliance, the exercise of influence, a particular behavior, a form of persuasion, a power relation, a means to achieve goals, an initiation of structure and many combinations of these concepts (p.12). Thousands of empirical investigations have been undertaken in the last 90 years and more than 350 definitions have been produced correspondingly. However, no conclusion has been drawn as what differentiates leaders from non-leaders and perhaps more important, what distinguishes effective leaders from ineffective ones (Bennis & Nanus, 1985).

Many views of leadership fail to recognize that it is relational and contextual and that it is not simply a matter of using power or occupying a certain position. These views often ill advise managers by giving them over-simplified recommendations (Bolman & Deal, 1991). Yukl (1998) has reviewed the definitions of leadership and concluded as follows:

Most definitions of leadership reflect the underlying assumption that it involves a social

influence process whereby intentional influence is exerted by one person over other people to guide, structure and facilitate activities and relationships in a group or organization. The numerous definitions of leadership have proposed appear to have little else in common (p.3).

2.2 Overview of Leadership Research

Leadership is a universal phenomenon. The study of leadership extends from antiquity to modern times. People believe that leadership plays a significant role in leading organizations to achieve different organizational goals through its direct influence on group process. Most leadership studies undertaken since the 1900s can be divided into distinct lines of research and can be classified according to whether the primary focus of the studies is on leader traits in the 1940s, leader behavior in the 1940s to late 1960s, or situational approach in the 1960s to 1980s. Concepts derived from these different lines of leadership research can be found in present-day theories of transformational leadership from the 1980s onwards which integrate many of the trait and processes studies in past decades. Theories of transformational leadership has included and built upon elements of earlier theories in the field of leadership (Bryman, 1992).

2.21 Trait Theory

The trait approach was one of the earliest approaches for studying leadership. This approach assumes that a leader possesses specific qualities that set him or her apart from

others. Early theories attributed leadership success to intelligence, fluency of speech, insight and other personal attributes. Hundreds of trait studies were conducted in the 1930s and 1940s, but not a discrete set of leader traits was identified to guarantee success. The researchers were interested in determining traits that distinguish leaders from other people and the extent of those differences (Bass, 1990). They did not address other variables that may contribute to a leader's success or look at the long-term organizational benefits that can be attributed to successful leaders. However, through improved methodologies, researchers have made progress in determining how leader attributes are correlated with leadership behavior and effectiveness (Yukl, 1998).

Early Trait Research. Early leadership research focused on the study of traits including physical characteristics (e.g., height, appearance), aspects of personality (e.g., self-esteem, dominance, emotional stability) and personal aptitude (e.g., general intelligence, verbal fluency, creativity). Studies on leadership traits were conducted during the first half of the twentieth century and most of them compared leaders to non-leaders (Yukl, 1998). Stogdill (1948) reviewed 124 trait studies conducted from 1904 to 1948 and found patterns of traits that supported overall leadership success. The traits with highest overall correlation with leadership were originality, popularity, sociability, aggressiveness, desire to excel, humor, cooperativeness, liveliness and athletic ability (Bass, 1990).

While some traits correlated with leadership, the relative importance of each trait depended on the situation. The studies of Stogdill did not identify any specific traits that were necessary or sufficient to ensure leadership success. Following Stogdill's (1948) review, researchers extended the list of traits to include administrative and technical skills and specific aspects of motivation. This led to more consistent results that were found in earlier trait studies (Lord, DeVader, & Alliger, 1986). In 1974, Stogdill reviewed an additional 163 trait studies conducted from 1949 to 1970. Many of the same traits were again found to be relevant to leadership effectiveness. Some additional traits were also found to be relevant, such as independence and objectivity. Possession of particular traits increases the likelihood of being an effective leader, but it does not guarantee effectiveness. Stogdill's main thesis was that both individual traits and situational context are important as well as the interaction between them (Bass, 1990).

Contemporary Trait Research: In recent years, trait research has been pursued in a number of different ways. Some studies looked for traits that predict organizational advancement for the leader during his or her career, while others focused on traits leading to effective job performance in the leader's present position.

In studying managerial motivation, McClelland (1985) developed a model that measured

the needs of leaders based on three underlying needs: achievement, affiliation and power. According to McClelland's model, a person with a great need for achievement receives satisfaction through success in accomplishing a difficult task, attainment of a standard of excellence or development of a better process. A person with a strong need for affiliation is concerned with being liked and accepted. A person with a pressing need for power finds satisfaction in influencing people. McClelland further concluded that effective leaders had a strong socialized power orientation – the combination of a great need for power and high activity inhibition. This type of person has strong self-control and is motivated to satisfy the need for power in socially acceptable ways, such as influencing others to accomplish a worthy cause or helping others to develop their skills (Yukl, 1998). Effective leaders also showed a relatively low need for affiliation (McClelland, 1985).

Boyatzis (1982) also found that effective managers had a strong socialized power orientation as well as strong efficiency orientation, strong self-confidence, a firm belief in self-efficacy and were oriented toward an internal locus of control. Some of the competencies that separated effective and ineffective managers involved interpersonal skills. Effective managers had strong oral presentation skills, could develop networks and coalition, gain cooperation from others, resolve conflicts in a constructive manner and had the ability to manage group processes and create effective team synergy. Effective

managers also had strong conceptual skills, including the ability to identify patterns or relationships. Boyatzis further concluded that different competencies are relevant at different organizational levels and the focus and orientation at each level are different and those that were useful at the lower level of an organization may actually hinder leadership performance at a higher level (Hunt, 1991). Miner (1978) also conducted more than 33 studies on the relationship between managerial motivation and advancement. Significant correlations were found between a leader's overall motivation and advancement to high levels of management. The motivation attributes that correlated most consistently with advancement included the desire to exercise power (similar to McClelland's need for achievement) and a positive attitude towards authority figures (Yukl, 1998).

2.22 Behavioral Theory

By the 1950s, many researchers concluded that the development of the trait approach had reached a point of diminishing returns. A new paradigm was dawned to study the behaviors rather than the traits of leaders (Bass, 1990). Behavior research generally falls into two categories: research on the nature of managerial work and research on managerial behaviors.

The Nature of Managerial Work. Research on the work of managers examines how

managers spend their time and describes their activities, roles, functions and responsibilities. A major objective of the descriptive research on managerial behaviors was to identify typical patterns of managerial activities and roles common to all types of managers. The model developed by Mintzberg (1973) is an example of this approach. Mintzberg (1973) developed a taxonomy of managerial roles to be used for classifying activities observed in a study of executives. He developed three categories to classify ten roles. They are interpersonal behavior (leader, liaison, figurehead), information processing (monitor, disseminator, spokesman) and decision-making (entrepreneur, disturbance handler, resource allocator, negotiator).

Managerial Behavior. Research on managerial behaviors compares the behavior of effective and ineffective leaders (Yukl, 1998). During the past forty years, this line of research has been dominated by research program at Ohio State University. The OSU researchers developed questionnaires for subordinates to describe the behavior of their leaders. As a result, a list of 150 items on good examples of important leadership functions was identified. These leadership items were widely used by military and civilian personnel to describe the behaviors of their supervisors. The questionnaire became known as the Leadership Behavior Description Questionnaire (LBDQ) and has been used widely in research for the next 25 years. Through factor analysis, two leadership factors emerged and

they were described as “consideration” and “initiating structure.” Consideration is the degree to which a leader acts in a friendly and supportive manner, showing concern for subordinates and looking out for their welfare. Leaders use consideration to enhance subordinates' effectiveness by showing trust and confidence in them, developing their skills and experiences to further their careers, keeping them informed and showing appreciation for their ideas and contributions. Initiating structure is the degree to which a leader defines the role of subordinates in order to achieve the objectives of the group. Effective managers who are high in initiating structure concentrate on task-oriented functions such as planning and scheduling, providing necessary resources and coordinating subordinates' activities.

Since the original OSU research and the subsequent studies utilizing the LBDQ, investigators have looked beyond consideration and initiating structure as the only criteria for differentiating managerial effectiveness. Likert (1961) added participative leadership as a third factor to be considered for effective leadership. He proposed that managers make extensive use of group supervision. Yukl (1998) added a fourth factor, viz. change-oriented behavior, which entails actions primarily concerned with improving strategic decision, adapting to change in the environment, making major changes in objectives, process, or products/services, and gaining commitment to the changes. These four factors are integral links to the transformational leadership construct.

2.23 Contingency Approach

The contingency approach to leadership research attempts to identify situational aspects that moderate the impact that leader traits and actions have on effectiveness. The assumption is that different behavior or trait patterns will be effective in different organizational situations and that the same pattern will not be effective in all situations (Yukl, 1998). The contingency approach examines how the concepts of leader traits, leader behaviors and situational characteristics are associated with leadership effectiveness. Two theories of contingency are path-goal theory and Fiedler's (1967) contingency model.

Fiedler's Contingency Model. Fiedler's (1967) contingency model has been the most widely used research model on leadership (Bass, 1990). In essence Fiedler's approach sought to determine which style was most effective in different organizational situations. His theory of specific contingency relationships in the study of leadership had some key assumptions. Firstly, leadership style is determined by the leader's motivations. Secondly, group dynamics, task structure and position power determine the effectiveness of the group. Fiedler's model viewed the situation as the mechanism for leaders to satisfy personal needs and to accomplish organizational goals.

To distinguish leadership behavior and leadership style, Fiedler (1967) developed a means

to assess leadership styles, which is called the least preferred co-worker (LPC) score. The LPC score is determined by asking a leader to select among all past and present co-workers the one with whom he or she had worked least well and rate this person on a dichotomous scale (e.g., friendly-unfriendly, cooperative-uncooperative, efficient-inefficient). The LPC score is the sum of the ratings on this scale. A leader who is generally critical in rating the least preferred co-worker will obtain a high LPC score. According to Rice (1978), low LPC leaders value task orientation, whereas high LPC leaders value interpersonal orientation.

Leadership effectiveness is determined in Fiedler's model by the extent to which the group accomplishes its tasks. Objective measures such as profit, cost reductions and sales are preferred. If reliable objective measures are not available, performance ratings from the leader's superior may be used as substitute. Although interests in the theory have dropped off, it was one of the first models that attempted to measure the impact of a leader's situational behavior on effectiveness (Hoy & Miskel, 1996).

Path-goal Theory. The path-goal theory (House, 1971) was developed in an attempt to explain how leadership behaviors in different situations influence the satisfaction and performance of subordinates. The essence of the theory states that an effective leader

provides followers with coaching, guidance and rewards necessary for satisfaction and success. The coaching and guidance were given on the basis of the followers' abilities to accomplish particular tasks and attain desired goals. The theory focuses on ways for the leader to influence subordinates' perceptions on the clarity of the paths to goals and the desirability of the goals themselves (House, 1971). According to the path-goal theory, the effect of the leaders' behaviors on the followers' satisfaction and performance is based on the situation, including the tasks and the followers' characteristics. Situational variables determine the potential for increased follower motivation and the actions required for the leader to improve motivation. The situation also influences the preferences of followers for a particular leadership behavior, which in turn impacts followers' satisfaction with the leader's actions (House, 1971).

The path-goal theory includes four broadly defined leadership behaviors: supportive leadership, directive leadership, participative leadership and achievement-oriented leadership (House, 1971). When the task is stressful, boring or tedious, supportive leadership leads to increased effort and satisfaction. When the task is unstructured and complex, directive leadership that provides structured guidance results in more efforts and higher satisfaction. Participative leadership and achievement-oriented leadership are both hypothesized to increase efforts and satisfaction for unstructured or complex tasks.

Participative leadership provides clarity of roles when a task is ambiguous whereas achievement-oriented leadership increases self-confidence and develops the expectation of successfully accomplishing a challenging goal (House, 1996).

Researches on the path-goal theory have been inconclusive. While support for directive and supportive behavior is found in the literature, the hypotheses of participative and achievement-oriented leadership have not been adequately tested (Yukl, 1998). Podsakoff, et al (1995) found little support for any of the situational assumptions of path-goal theory.

2.24 Charismatic Leadership

Max Weber (1947) introduced the concept of charisma as an element of leadership in the first half of the twentieth century. Since then, there has been much interest in charisma in a social, political and historical context. However, significant research on the topic did not begin until the 1970s. Two attributes are seen to be essential for charismatic leaders: (1) the leader must be a person of strong convictions, determined, self-confident and emotionally expressive, and (2) followers must want to identify with the leader as a person (Bass, 1990). Weber (1947) described charismatic leadership as in followers' perceptions, the leader possesses exceptional qualities. He believed that charisma occurred during crisis situation when a leader with exceptional personal qualities emerged with a radical vision to solve an

impossible problem, endearing followers perceiving him or her to be extraordinary. Researchers have been debating whether charisma is primarily the result of leader attributes, situational condition or an interactive process between the leader and followers. Recent research seems to suggest that charismatic leadership is an interactive process (Yukl, 1998). Many researchers now view charisma as the result of followers' perceptions influenced by actual leader traits and behaviors, the context of the leadership situation and the needs of the followers (Bass, 1985; Conger & Kanungo, 1987).

House's Theory of Charismatic Leadership. House (1977) opined that a charismatic leader induces a high degree of loyalty, commitment and devotion in followers who have an exceptionally high degree of trust in the leader. House asked eight historians to use his definition to classify ten charismatic and nine non-charismatic U.S Presidents and Canadian Prime Ministers. To measure the behaviors of the leaders, House quoted passages that indicated the leader's display of self-confidence, expectations of high performance, confidence in their followers' ability and performance, strong ideological goals and individualized consideration to followers.

House concluded that charismatic leaders are likely to have a great need for power, high self-confidence and a strong conviction in their own beliefs and ideals. They engage in

behaviors that build confidence among followers. Charismatic leaders seek to arouse and motivate the group by articulating ideological goals, relating the mission of the group to deep values, ideals and aspirations. According to House's theory, charismatic leaders set an example in their own behavior for followers to imitate. They communicate high expectation about followers' performance while simultaneously expressing confidence in followers.

Conger and Kanungo's Theory of Charisma. Conger and Kanungo (1987) and Conger (1989) developed a theory of charismatic leadership based on the assumption that charisma is a quality attributed to leaders by followers. Followers attribute charisma to leaders, his or her actions and the context of the situation. This theory held that in addition to the personal traits of charismatic leaders identified by House (1977), a strong desire by followers to identify with the leader must also be present. Although followers endow a leader with charismatic status to fulfill their situational needs, they do not endow just anybody (Bass, 1990). According to this theory, charismatic qualities are likely to be attributed to leaders who advocate a vision that differs from the status quo but is still within the latitude of acceptance by followers and to those who act in unconventional ways to achieve the vision, make self-sacrifices and take personal risks. Followers are more likely to attribute charisma to leaders who use visioning and persuasive appeals than to leaders who use authority or a

participative decision process. According to the attribution theory, a crisis situation is an important facilitating condition for charismatic leadership (Bass, 1998).

The concept of charismatic leadership is important in establishing a comprehensive leadership theory for the challenges faced by today's leaders. Theories on charisma go beyond previous theories of traits, behavior, power or contingency and provide an explanation of the profound influence some leaders have over followers (Yukl, 1998).

Researchers maintain that charisma is an important factor in the construct of transformational leadership (Bass, 1985; Bennis & Nanus, 1985; Tichy & Devanna, 1990).

Downton (1973), Burns (1978) and Bass (1985) incorporated the different theories of leadership along with research on charismatic leadership into a substantive body of knowledge and from this knowledge a new paradigm of the transformational and transactional leadership have emerged.

2.3 Full Leadership Development of Transformational Leadership

The concept of Full Range of Leadership (FRL) – transformational and transactional, focuses on the exchange process between leaders and followers, can be applied to specific areas of leadership, management and organizational development. Burns (1978) derived

his early theory of transformational leadership from Webers' model (1947) of charismatic leadership and from his own descriptive research on political leaders. Bass and Avolio (1994) proposed a model, which represents a refinement of Bass's model (1985) and is the foundation of extensive training of individuals from industrial, educational, military, religious and non-profit making sectors.

2.31 Background and Description of the Model Development

In the last 20 years, scholars and researchers have become increasingly interested in examining the approaches of successful leaders who have transformed organizations. These researches were based on the theoretical model of charismatic leadership developed by House (1977) and the definitions and comparisons of transformational and transactional leadership by Burn (1978).

House (1977) concluded that leaders who have charismatic effects on followers repeatedly demonstrate three personal characteristics: an extremely high level of self-confidence, dominance and a strong conviction in the moral righteousness of their beliefs. Charismatic leaders generate excitement and increase expectations of followers through their visions of the future (Avolio & Bass, 1988). For House, the charismatic leaders' emotionally appealing goals and behaviors elevate followers' needs for achievement and motivate them to

accomplish tasks. Such leaders also communicate high performance expectations and believe that their followers can meet them (Hunt, 1991).

In his study of political leaders, Burn (1978) contrasted the constructs of transactional and transformational leadership. The transactional leaders pursue a cost-benefit exchange, providing tangible rewards for the completion of tasks. These leaders define an agreement with their followers in which they clarify the followers' responsibilities, their own expectations, the tasks that must be completed, and the rewards that followers will receive for fulfilling the agreement (Bass & Avolio, 1990). But the relationship does not go further. The leader and followers have no ongoing purpose that holds them together. Although this is a form of leadership, it is not the kind that binds leaders and followers together in a mutual and continuing pursuit of a higher purpose (Burns, 1978). Bass and Avolio (1990) maintain that transactional leadership is an essential component for effectively leading organizations but it does not sufficiently explain the extra effort and performance that some leaders are able to create in their followers.

2.32 Differences between Transformational and Transactional Leadership

Firstly, the process through which transformational leaders influence their followers is different. Transformational leadership fundamentally changes the values, goals and

aspirations of followers, so that followers perform their work because it is consistent with their values, as opposed to the expectation that they will be rewarded for their efforts. Kuhnert and Lewis (1987) noted that transformational leadership is made possible when a leader's end values (internal standards) are adopted by followers, thereby producing changes in the attitudes, beliefs and goals of the followers. Similarly, Bryman (1992) noted that transformation leadership entails both leaders and followers raising each other's motivation and sense of purpose. This higher purpose is one in which the aims and aspirations of leaders and followers are changed in the pursuit of goals which can identify themselves. Thus, in contrast to transactional leadership, transformational leadership influences followers through a process of internalization and/or identification (Kelman 1958). Secondly, the behaviors through which transformational leaders influence their followers are different. A review of the leadership literature by Podsakoff, MaKenzie, Moorman and Fetter (1990) indicated that transformational leaders get followers to perform above and beyond expectations by articulating a vision, providing an appropriate role model, fostering the acceptance of group goals, providing individualized support and intellectual stimulation, and expressing high performance expectations. These behaviors are quite different and distinct from those of transactional leader. Although conceptually distinct, transactional and transformational leadership can be both displayed by the same individual leader in order to deal with different situations. Transactional leadership can be

viewed as the basis of effective leadership on which transformational leadership adds value for greater leadership effectiveness (Waldman, Bass, & Yammarion, 1990).

In other words, theories of transformational leadership posit that most leaders engage in transactional forms of leader behaviors by providing feedback contingent on performance but exceptional leaders will go beyond this and also engage in transformational forms of leader behaviors. Consequently, these transformational leader behaviors augment or enhance the effectiveness of the leader over and above what he or she could achieve through transactional leadership alone.

2.33 Components of Transformational Leadership

Bass (1985) built on the work of both House (1977) and Burns (1978) and developed a theory of transformational leadership that has been used widely by researchers. Bass expanded on House's model in terms of how charisma fits within the transformational leadership framework.

2.331 Idealized Attitudes (IA)

Charisma is an important component in the overall transformational process among the several components of the model. According to Bass's theory, transformational leaders also

need the ability to recognize the needs, aspirations and values of their followers and the skills to conceive and articulate strategies and goals that will motivate followers to exert their best efforts (Avolio & Bass, 1988).

Bass's model is based heavily on Burn's approach but it has an important difference. Unlike Burns, Bass allows transactional and transformational leadership qualities to exist in the same leader, a theory that has been tested empirically (Bass, & Avolio, 1990). Bass contends that, although transactional leadership can promote positive outcomes, without complementary transformational leadership actions it will be incomplete. Compared to transactional leaders, transformational leaders are more likely to be proactive than reactive in their thinking, more creative, novel and innovative in their ideas, and less inhibited in their search for solutions (Yukl, 1998). Transactional leaders may be equally capable but their focus is on how to best keep the system running for which they are responsible – reacting to problems generated by disturbances. They look to modify conditions as needed and are always aware of the organizational constraints within which they must operate (Tichy & Devanna, 1990). Transformational leaders, on the other hand, often force the organization to adapt to them instead of them having to adapt to the organization (Bennis & Townsend, 1995). To better understand Bass's model of transformational leadership, it is important to examine the components that comprise both the transformational and transactional

constructs.

Transformational leadership “occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher level of motivation and morality (Burns, 1978). Burns holds that in the transformational process, the power base of leaders and followers are linked in a common purpose, which transforms the attitude and actions of everyone in the organization – not just followers. He contends that transformational leadership

...ultimately becomes moral in that it raises the level of human conduct and ethical aspirations of both leaders and thus has a transforming effect on both. ... (It) is dynamic leadership in the sense that the leaders throw themselves into a relationship with followers who will feel “elevated” by it and often become more active themselves, thereby creating new cadres of leaders (p.20).

2.332 Idealized Behavior (IB)

Researchers on transformational leadership differ somewhat on specific behaviors they associate with the construct but all of them share the common perspective that effective leaders transform or change the basic values, beliefs and attitudes of followers so that they are willing to perform beyond typical expectations (Podsakoff, MacKenzie, Morman, & Fetter, 1990). Based on the literature, there are a number of key factors associated with transformational leaders, including charisma or idealized influence, inspirational motivation, intellectual stimulation, individualized consideration, identifying and articulating a vision,

providing an appropriate model, fostering the acceptance of group goals and putting forth high performance expectations. A brief summary of these factors follows.

Charismatic leadership as defined by Bass (1985) is an important component of the overall transformational leadership construct. Charisma allows leaders to be role models, setting an example for employees to follow that is consistent with the values the leader espouses (Podsakoff, MacKenzie, Morman, & Fetter, 1990). These leaders are admired, respected and trusted. They are seen to possess special capabilities, persistence and determination, are willing to take risks and are consistent in their actions. They demonstrate high standards of ethical and moral conduct. They instill pride, faith and respect, and have unique ability to see what is really important (Bass, 1998). Charismatic qualities enable leaders to transmit them with a sense of mission. They are able to identify new opportunities for their organizations, developing, articulating and inspiring others with the vision of the future. Bass (1985) also referred the charismatic component as idealized influence.

Charisma enables leaders to recognize the need for revitalization, according to Tichy and Devanna (1990). In their study of CEOs of large corporations, they found that successful leaders encounter and overcome challenges when they attempt to alert the organizations to growing threats from the environment. In the study conducted by Tichy and Devanna,

leaders saw themselves as visionary change agents who trusted their intuition and were able to articulate a set of core values that guide their behaviors. The core values are all charismatic traits. Those traits have made a charismatic leader standing out of the ordinary. Zelenik (1983) suggested that charisma is one of the factors to distinguish ordinary managers from true leaders in organizational settings.

Although charisma is a necessary component of transformational leadership, it is insufficient by itself to fully realize organizational transformation (Tichy & Devanna, 1990). There are discrete differences between House's (1977) charismatic model and Bass's (1985) transformational model. Transformational leaders seek to empower and elevate followers whereas many charismatic leaders seek to keep followers weak and dependent, seeking personal loyalty rather than commitment to an organizational mission. Transformational leaders can be found in any organization at any level whereas charismatic leaders are rare. Unlike charisma, transformational leadership is a leadership process that can be learnt and managed. It is a systemic process consisting of strategic and organized search for changes, rational analysis and the capacity to move resources from area of lesser to greater productivity to bring about a purposeful transformation of the organization (Tichy & Devanna, 1990).

2.333 Inspirational Motivation (IM)

Bass (1985) described inspirational motivation as a subset of charisma. However, he recognized the fact that leaders do not have to be charismatic to be inspirational. Transformational leaders motivate and inspire those around them by providing meaning and challenge to their followers' work, arousing team spirit, enthusiasm and optimism (Yukl, 1998). The ability to build confidence in followers in their ability to accomplish group goals is an important skill for inspirational leaders (Yukl & Van Fleet, 1982). Inspirational motivation is defined as motivating, stimulating and inspiring the followers by providing vision and emotional response to their work in order to increase awareness, importance and understanding of mutually desired goals (Bass, 1995; Avolio, 1999).

Inspirational leaders often motivate and inspire followers to exert extra effort beyond the followers' own expectation and self-interest by using the appeal of the symbols, images and vision of a better state of affairs along with their persuasive language. Thus, some ambiguous messages or unclear expectations of leaders can be more easily and accurately understood by the followers through the use of effective symbols (Bass, 1985; Avolio, 1999). Inspirational leaders also have the characteristic of stimulating enthusiasm among subordinates for the work group and building confidence in their ability to successfully achieve and attain the group objectives (Yukl & Van Fleet, 1982, p.90). Inspirational leaders

engage in behaviors that make followers feel self-confident, valued and assured that the leaders can help the group overcome obstacles as new challenges and opportunities arise (Bass, 1985).

Bennis and Nanus (1985) conducted interviews with 90 successful CEOs from both the private and public sectors. Their study focused on leaders who had "achieved fortunate mastery over present confusion" (p.21), that is, those individuals who were successfully proactive in addressing the challenges faced by their organizations in an environment of continuous and rapid changes. All 90 people had a focus on outcomes and their intensity of vision enabled them to capture the attention of their followers to concentrate on the vision. They found that successful leaders motivate their followers to achieve a vision through inspired communication. In order to implement the vision, the leader must be able to communicate the agenda and persuade followers that the outcomes are desirable. The ability to relate a compelling image of a future state that generates enthusiasm and commitment is a requirement for successful leaders. Bennis and Nanus held that "an essential factor in leadership is the capacity to influence and organize meaning for the members of the organization" (p.39). Leaders must interpret and define reality for their followers, just as they must define a vision for the future and inspire followers to pursue the vision enthusiastically. According to Senge (1990), this is the essence of inspirational

motivation.

If any one idea about leadership has inspired organizations for thousands of years, it's the capacity to hold a shared picture of the future we seek to create.... Where there is a genuine vision (as opposed to the all-too-familiar "vision statement"). People excel and learn not because they are told to but because they want to (p.9).

2.334 Intellectual Stimulation (IS)

Bass described intellectual stimulation as "the arousal and change in followers of problem awareness and problem solving of, thought and imagination, and beliefs and values rather than arousal and change of immediate action" (Bass, 1985, p.99). This means that by stimulating the intellect of followers, transformational leaders can cause a discrete jump in the ability of followers to understand the nature of the organization and the problems it faces. The followers are better able to comprehend the issues at hand and conceptualize potential solutions. The emphasis is more on creative to re-examine some of their assumptions about their work and rethink how it can be performed (Podsakoff, Mackenzie, Moorman, & Fetter, 1990). Intellectually stimulating leaders encourage followers to develop their own capabilities and to identify, understand and solve future problem. Through intellectual stimulation the status quo and new and creative approaches for organization development can be examined. Followers of intellectually stimulating leaders can operate without the leaders' direct involvement in the problem solving process. They can also become more effective problem solvers and more innovative in analyzing problems and the strategies

they use to resolve them (Al-Anazi, 1993).

The balance of risk and trust is a key element in intellectual stimulation. Tichy and Devanna (1990) held that transformational leaders are prudent risk takers and foster an environment in the organizations they lead that is flexible and open to learning from experience. Bennis and Nanus (1985) held that trust is critical to fostering an environment open to innovation. According to them, trust is granted to those whose positions are known; to those who are predictable, consistent and persistent. Innovation causes resistance and takes numerous attempts before being accepted. Trust enables the leaders to prepare the organizations to deal with the resulting confusion. Covey (1991) agreed that the key to an intellectually stimulating environment is trust. He maintained that if trust is present then clear communication, empathy, synergy and productive interdependency are likely to be present as well. Senge (1990) held that leaders are responsible for building organizations that enable people to grow. In a learning organization, leaders are designers and teachers. Leaders must design learning processes so that people throughout the organization can deal productively with the critical issues they face. According to Senge, leaders who are teachers help people throughout the organization to develop a systemic understanding of their organization and its environment, enabling them to focus on its large purpose rather than on day-to-day (transactional) events.

2.335 Individualized Consideration (IC)

Consideration is another important aspect of transformational leadership. It has been found that it contributes to positive leader-subordinate relations, particularly relating to subordinates' satisfaction with the leader and subordinate's productivity. Individualized consideration is characterized in leader-member exchange, a process in which a supervisor consults each of his or her subordinates individually. It is central to participative management to the extent that it focuses on the employees' needs for growth (Bass, 1985).

Bryman (1992) noted that individual consideration involves the leader's personal intention of treating subordinates on a one by one basis: trusting and respecting subordinates, providing extensive care to subordinates, having informal communication, keeping followers fully informed and helping subordinates to learn through the development of personal responsibility. Individual consideration can take many forms, ranging from an expression of appreciation for effective performance to pointing out the weaknesses of subordinates in a constructive manner. Moreover, they can assign special projects that will utilize subordinates' self-confidence and special talents as well as providing opportunities for learning.

Leaders can provide individualized consideration through different methods which

concentrate on knowing and diagnosing deeply the needs and capabilities of individuals. Once followers' needs have been identified, leaders giving individualized consideration will actively focus on developing a series of methods such as coaching, mentoring, teaching, constructive feedback giving and constant encouragement in order to encourage them to take up greater responsibilities and increase their loyalty toward organizations. In addition, leaders giving individualized consideration sometimes act as teachers or personal counselors for those followers who need assistance physically or emotionally to overcome problems or obstacles to grow and develop. They often delegate assignments or duties to followers by providing them with more on-the-job learning opportunities and stimulating their learning experience. Discussion has proven that "transformational leader...has a developmental orientation toward his subordinates" (Bass, 1985, p.85). Transformational leaders help subordinates to fulfill their potential both in terms of their present job as well as for future roles of increasing responsibility in the organization. Transformational leaders differ from transactional leaders in that they do not merely reorganize the needs of followers but also attempt to elevate those needs from lower to higher levels of development and maturity (Tichy & Devanna, 1990). Transformational leaders engage the "full" person with the purpose of developing followers into leaders (Bass, & Avolio, 1990).

2.34 Components of Transactional Leadership

Unlike Burns, Bass (1998) contended that every leader displays both transformational and transactional styles to some extent in what he called the "full range of leadership" (p.7). Covey (1991) described transactional leaders as those who focus on the efficient interaction with the changing daily realities faced by the organization.

Transactional leadership was defined by Burns (1978) as a process involving a leader's initiation of contact with subordinates for the purpose of an exchange relationship. Each party involved in the transactional exchange is aware of the power, attitude and resource of the party. Burns also suggested that the transactional exchange between leaders and subordinates could be economic, psychological, and/or political in nature. According to Bass (1985), transactional leaders focus on a cost effective and economic exchange to fulfill subordinates' needs physically and psychologically in return for contracted service rendered by subordinates. In the transactional process, both leaders and subordinates recognize the common economic purpose of the relationship. The relationship does not extend beyond this point. Burns suggested that most relationships between leaders and subordinates are transactional in nature and that these relationships are limited and temporary in scope.

In research, transactional leadership has been operationalized into the components of contingent reward and management-by-exception.

2.341 Contingent Reward (CR)

Contingent reward refers to a transaction and exchange that takes place among leaders, colleagues and followers. This exchange is based on the leaders' discussing with others what is required and specifying the conditions and rewards these others will receive if they fulfill those requirements (Bass and Avolio, 1994, p.3). It can be further elaborated that contingent reward is a reciprocal process relating to expectations and achievements between leaders and followers. The process involves recognizing the followers' needs and transforming their needs into achievement of agreed objectives. Once the agreed objectives are completed, the rewards are automatically given to the followers.

Contingent positive reward involves two forms. One is verbal reward, saying praising words like "well done", "excellent" and "best work". The other is tangible reward like promotion, pay increase, bonus and certificates (Bass, 1985). Contingent punishment may also take some forms of negative nature, which call for individuals' attention to their deviation from the standard of performance. It includes fines, suspension without pay, loss of leadership support, negative feedback or even dismissal. Past researches found that praise and

recognition as well as physical rewards have effectively and significantly elevated the motivation of followers toward better performance (Hunt & Schuler, 1976).

In a study conducted by Podsakoff and Schriesheim (cited in Bass, 1990), a correlation was obtained between the leader's use of contingent reward and subsequent subordinates' work or group performance. A correlation close to zero was observed between contingent punishment by the leader and subordinates' performance. Podsakoff, Todor and Skov (1982) found evidence that when negative contingent reinforcement was used, the success of the transactional leader plummeted.

Studies by other researchers examining transactional leadership (Sims & Szilagyi, 1975; Podsakoff, 1982; and O'Reilly & Weitz, 1980) demonstrated that high-performing leaders use both contingent reward and punishment, and use it quickly. O'Reilly and Puffer (1989) observed that subordinates' effort, satisfaction and feeling of equity were increased by positive recognition for good performance as well as by formal and informal punishment for poor performance.

Bass (1990) and Avolio (1999) stressed that contingent reward can fail to work if the leader does not have the necessary reputation and resources to deliver the reward desired by

subordinates. Those leaders who cannot deliver the desired rewards lose power in the eyes of subordinates and are no longer considered to be transactional leaders (Tsui, 1982). Also, unless there is close monitoring by the leader, subordinates may take shortcuts in their work to complete the transactional exchange of a reward for fulfilling task objectives (Bass, 1985).

2.342 Active Management-by-Exception (AMBE)

The other transactional dimension to emerge from Bass's theory was management-by-exception. Bass classified leaders who intervene only when failures, deviations and breakdowns occur as practicing management-by-exception. The factor of management-by-exception follows directly from the concept of manager as a controller. It is a component of transactional leadership in which the leader takes action when there is evidence of something not going according to plan (Bryman, 1992).

Bass proposed that management-by-exceptions can take two forms, either active or passive. Leaders who practise active management-by-exception set standards and continuously monitor subordinates' performance to see if the standards are being met (Bass, 1985 & Avolio, 1999). Active leaders look for deviation from the procedures and take action if and when these deviations occur (Bryman, 1992). Therefore, certain corrective actions

will be enforced in the process of rectifying the mistakes, which emerged. Leaders often use negative feedback or contingent aversive reinforcement if the followers do something wrong or far behind the standard agreed by both parties. Therefore, effective transactional leaders will actively take up a role to reduce the discrepancies between the standard and followers' work by frequently overseeing the work done by followers. It can minimize the wasteful effort spent on rectification.

2.343 Passive Management-by-Exception (PMBE)

Passive management-by-exception is recently added to be another dimension of transactional leadership. It is defined as a very obvious discrepancy far behind reaching the standard of followers' performance agreed by the leaders and followers and involves necessary action to correct what have been done. The main difference between active management-by-exception and passive management-by-exception is that in the former the leaders need to quest for the deviations whereas in the latter deviations and pitfalls must arise and the leader must be informed about them before he/she takes action.

2.4 Research on Transformational Leadership

As noted earlier, while Bass (1985) viewed transformational and transactional leadership as conceptually distinct, he held that both are likely to be displayed by the same individual in

different circumstances and in different levels of intensity. The major premise of Bass's theory is that followers' motivation and performance are enhanced more by transformational leadership than transactional leadership. However, as he noted in 1990, "most experimental research unfortunately, has focused on transactional leadership whereas the real movers and shakers of the world are transformational" (p.23). In recent years, Bass and his colleagues as well as numerous other investigators have built a body of research that supports Bass's claim of the effects of transformational leadership.

2.41 Empirical research

Most of the empirical researches on the theory have used the instrument developed by Bass (1985), which is called the "Multifactor Leadership Questionnaire" (MLQ) to measure various aspects of transformational and transactional leadership. Scales measuring separate transformational and transactional leadership are based on factor analysis of the initial questionnaire and subsequent versions of it.

The instrument has been utilized in a wide variety of organizational settings and organizational members: New Zealand government agency (Bass, Waldman, Avolio & Bebb, 1987). U.S. Navy officers (Bass & Yammarino, 1991; Waldman, Bass, & Yammarino, 1990), a management game stimulation with MBA students (Avolio, Waldman, & Einstein,

1988), hospital nurses (Bycio, Hackett, & Allen, 1995), a large manufacturing firm (Waldman, Bass, & Einstein, 1987), three industrial research and development organizations (Keller, 1992), an express delivery company (Hater & Bass, 1988) and a large Canadian financial institution (Howell & Avolio, 1993). Transformational leadership is found at all levels of organization with diverse background. Transformational leadership was being practised at the most senior level down to the first-level management, in industrial settings, among students, and from lieutenants to lieutenant colonels in the U.S Army (Bass, 1985).

In addition, transformational leadership is correlated with how effective the leader is as perceived by subordinates, how much effort subordinates will expend for the leader, how satisfied the subordinates are with the leader and how well subordinates performed as rated by the leader and by the mean of project quality, budget/schedule, performance and financial performance of a business unit (Hater & Bass, 1988; Keller, 1992; Howell & Avolio, 1993). In many of these studies, the transactional leadership factor of contingent reward was also positively correlated with these outcomes, but the relationship was considerably lower than that found in transformational leadership. These results support Bass's original claim that transformational leadership contributed to organizational and employees' performance beyond that of transactional leadership.

Empirical studies have examined the effects of various components of transformational leadership on subordinate' work attitudes and behaviors. Several studies (e.g., Avolio, Waldman, & Einstein, 1988; Bycio, Hackett & Allen, 1995) found that charisma, individualized consideration and intellectual stimulation correlated with organizational effectiveness, subordinates' extra effort and satisfaction with leader as well as his/her effectiveness. Contingent reward was also correlated positively to team performance but to a lesser degree. In most cases management-by-exception had a positive effect on worker's intention to leave the profession but had no relation to team effectiveness.

Others studies on transformational leadership have used a variety of objective performance measures to evaluate the leadership effectiveness (e.g., Waldman, Bass, & Einstein 1987 Hater & Bass, 1988 and Howell & Avolio, 1993). They all found that transformational leadership were more positively related to employees' performance appraisal provided by the companies, group performance rated by the leaders' superiors and financial performance of specific business units over a one-year period than transactional leadership.

2.5 Historical Underpinnings of Polychronicity

Different people have different time use orientation in approaching their daily activities.

Some individuals prefer to be systemic in accordance with their urgencies and importance whereas others like to do things in response to the situations in hand. In literature, one construct that describes how individuals approach time use and which has received considerable attention recently is polychronicity. The concept of polychronicity originated from the anthropologist Edward T. Hall, 1959. Hall discussed the use of time as a deeply embedded, culturally derived characteristic. He observed the differences in space utilization and the priorities given to human relationships over task accomplishments vary with monochronic and polychronic cultural orientations.

Polychronicity represents a continuum of social involvement that manifests as characteristic modes to view time. Socially involved individuals neither view time as a tangible quantity nor as inexhaustive resources. They typically engage in numerous activities simultaneously (i.e., polychronic behavior). Individuals who exhibit low social involvement view time as linear, tangible, divisible into blocks and a scarce resource to be managed carefully. These individuals engage in activities sequentially and are very concerned with planning, scheduling and deadlines adherence (i.e., monochronic behavior) (Hall, 1983).

2.6 Overview of Hall's Concept on Polychronicity

Hall (1976) used polychronic time use, or "P-time" or "polychronicity," to illustrate an individual's orientation for how he or she combines several activities into the same time block (Bluedorn, 1992; Hall, 1959; Kaufman, Lane, & Lindquist, 1991a). Individuals who have stronger polychronic tendencies can be called "polychrons." For example, a general manager may be talking to someone on the phone while doing other activities such as reading a document or replying an email to someone. In fact, all three activities could be done at the same time. Hall also used monochronic time use, or "M-time" or "monochronicity," to describe those who perform one activity at a time only. Individuals who have stronger monochronic tendencies can be called "monochrons" (Bluedorn, 1992; Hall, 1959; Kaufman, Lane & Lindquist, 1991a). When other activities are attempted at the same time by monochrons, the additional activities are typically considered as intrusions or interruptions rather than pleasant combinations.

Bluedorn (1992) and Kaufman, et al (1991a) explained the concept of polychronicity by emphasizing the characteristic on the intermediate time use orientation. They elaborated on these intermediate orientations by using an example. If two managers both plan to write a proposal in the morning, both begin writing and after 30 minutes, both managers receive a phone call. Manager A regards the phone call as an interruption and attempts to reschedule

the call for a time later in the day. Manager B waiting for the call completed the conversation with the caller and returns to work on the proposal after the call. Manager A is relatively monochronic because unplanned and unscheduled events are considered interruptions that should be minimized and not be allowed to interfere with scheduled activities. Manager B is relatively polychronic because the unscheduled events were handled by his or her intermediate preference as a normal part of life. Manager B is more likely to modify the items on his/her list (add, postpone, delete) as well as alter item priorities as the day proceeds. He or she places equal or greater importance of the unplanned activities than the planned activities (i.e. writing the proposal). This flexible behavior of manager B in one situation may lead to the exploitation of an unanticipated opportunity, but in other situations it may lead to unproductive dithering.

2.7 Characteristics of Polychronicity

Polychrons tend to change plans and schedules easily, borrow and lend things to others frequently, emphasize interpersonal relationships rather than tasks and privacy and build long-term relationships. In contrast, monochrons are task oriented, emphasize promptness and a concern for others' privacy, stick to their plans and schedules strongly, seldom borrow or lend private property to others, relegate interpersonal communication to a position of secondary importance and are accustomed to keep short-term relationships with other

people (Hall, 1953).

2.8 Research on polychronicity

2.81 Individual Time Management

It is expected that leaders use time effectively. Kaufman, Lane and Lindquist (1991b) suggested that polychronic individuals may use time by juggling the right mix of tasks simultaneously. Task juggling is essential to managers whose job is highly fragmented dotted by constant interruptions. Polychronic managers extend their time through combining more than one duty together within the same time block.

2.82 Supervision and Coordination

Irrespective of whether a front-line supervisor managing a small team or a CEO overseeing a multinational corporation, individual time use orientation directly influence the supervision and coordination. For a monochronic leader, he or she is insistent on a tightly planned schedule. Everything has its time and only one thing at a time is scheduled. He or she structures tasks to ensure his or her subordinates to work on one task at a time (Palmer 1997).

2.83 Cultural Diversity

Many organizations are continually expanding their businesses through the forms of merger, joint venture, acquisition and alliance in order to maximize their competitive advantages in the trend of global integration and international development. They are done across national borders and involve multitude of cultures. Therefore, synchronizing time in a cultural diverse organization is an important issue to management. The study conducted by Doktor (1989), which compared the time use orientation between Asian CEOs and their American counterparts revealed that there is a significant difference in time use between them. He found that a convergent phenomenon of time use among managers in what was labeled as "working alone" versus "interpersonal interaction at work". Specifically, he found that Asian managers (i.e., Hong Kong, Japan and south Korean) spent up to 80% time in interacting with others and the remaining time for work alone. This is consistent with Mintzberg's (1973) findings for American CEOs.

2.9 Outcome Variables

A key outcome variables examined in this study is subordinates' work stress, which describes the physiological strains in a broad spectrum ranging from minor somatic complaints (e.g., headaches, stomach upset or nervous) to more serious conditions such as coronary heart disease (Payne, Jabri, & Pearson, 1998). Kahn and Byosiere (1992)

highlighted that the assessment of physiological strain in work stress research is relatively rare. Researchers have recently started using the physiological response as a measure of employees' well-being in order to evaluate the influences of increased workload in the workplaces. Therefore there is a need and importance of exploring how leadership is associated with physiological response among subordinates in order to increase the generalizability across different measures of work stress. In terms of measurement, the common approach for collecting physiological data is to ask people about their health and health related behaviors that they perceive in their work life (Jex & Beehr, 1991).

Another key outcome variable included in this study is job performance, which refers to behaviors individuals engage at work and such behaviors must contribute to organizational goals (Campbell 1990). Individual theories involve some discussion of what makes individuals to have effective or ineffective job performance in relation to the ultimate organizational goals. Therefore, performance often becomes an outcome variable in individual researches. There is an increasing number of leadership researches using individual performance as a criterion to evaluate leaders' effectiveness in leading subordinates towards attaining organizational goals. In terms of measurement, researchers are seldom forced to choose between objective (company record, supervisory rating or peer rating) and subjective (self-rated) measures of performance. However, they often believe

that direct performance measures independent of individual perceptions are more objective and hence superior to self-reported measures, resulting in fewer confounding factors. Moreover, using objective measures are able to withstand the common method effects and also increase the generalizability of the results.

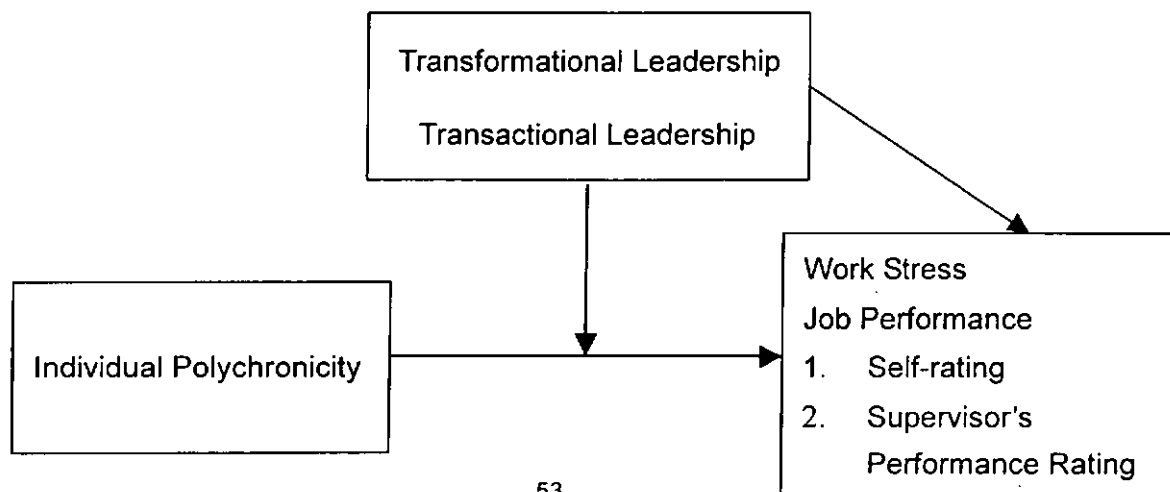
CHAPTER 3

RESEARCH FRAMEWORK & HYPOTHESES DEVELOPMENT

Introduction

This chapter aims to develop a research framework and formulate hypotheses based on the integration of literature review on leadership, time use orientation, work stress and job performance. The research framework begins with providing theoretical supports to conceptualize the effects of transformational and transactional leadership on subordinates' work stress and performance. It then identifies the relationship between polychronicity and the outcome variables. Finally, the research framework examines the interaction effects of transformational and transactional leadership styles on the relationship between polychronicity and the outcome variables. Several hypotheses will then be introduced to examine the validity of the proposed framework.

Figure 1.1 The Proposed Model for Individual Polychronicity, Work Stress and Job Performance Moderated by Leadership Styles:



3.1 Leadership Style and Subordinates' Well-being and Effectiveness

Bass (1985) highlighted the roles and importance of transformational and transactional leadership in determining subordinates' work attitudes and effectiveness. Empirical evidences have demonstrated that both forms of leadership were associated with subordinates' work attitudes of job satisfaction or commitment as well as effectiveness of organizational citizenship behaviors and task performance (Bass, Avolio, 1993, Howell & Frost, 1989, Bass, Avolio, & Goodheim, 1987). Given that the differential effects of transformational and transactional leadership remain important and had attracted researchers' interests to explore how they impacted subordinates' work attitudes and effectiveness, understanding the effects of leadership styles on the relationship between individuals' time use orientation, work attitudes and effectiveness can provide us with a preliminary evidence to explain which leadership styles would be effective in managing the stress and performance levels of subordinates who like to work simultaneously in organizations.

3.11 Leadership Style and Subordinates' Work Stress

As transformational leadership tends to form mutual stimulation relationships with subordinates, it explains why such a leadership style is conducive to alleviating the effects of negative consequences (Bass, 1998). Specifically, these relationships involve

the investment of transformational leaders' time to provide personal coaching to subordinates when they are negatively affected by either work-related or personal adverse situations. This leadership role would reflect an emotional attachment that stems from the constant care and concern that leaders exhibited to subordinates who have negative feelings. Subordinates are likely to believe that their leaders can be depended upon to provide support and do care about their psychological well-being. Therefore, subordinates would see transformational leadership as a kind of support and help in the relationships, which in turn would reduce their stress level. In contrast, transactional leadership underscores the importance of developing economic exchange relationship with subordinates. This kind of leadership tends to ignore subordinates' feelings when they are asked to deal with a challenging task and complicated problem. This appears to intensify subordinates' job-related stress (Bass, 1998). In addition, transactional leadership is not likely to develop subordinates' long-term positive effectiveness in coping with adverse work-related situation. Thus, subordinates are likely to perceive that transactional leaders do not care about their well-being by not providing support to their psychological needs (Avolio, 1999). Not surprisingly, transactional leadership would lead subordinates to experience work stress. Prior researches suggested that transformational leadership was effective in reducing subordinates' work stress and was negatively related to stress level, whereas

transactional leadership was ineffective in helping subordinates to cope with stressful condition and unlikely to promote stress reduction efforts among subordinates (e.g., Seltzer, Numerof, Bass & 1988; Sosik & Godshalk, 2000; Dubinsky, Yammarino, Jolson, & Spangler 1995; Bass, 1998). Thus, two hypotheses are proposed:

Hypothesis 1: Transformational leadership is negatively related to subordinates' work stress.

Hypothesis 2: Transactional leadership is positively related to subordinates' work stress.

3.12 Leadership Style and Subordinates' Performance

Bass (1985) argued that transformational leaders build more than just cost-benefit exchange relationships with their subordinates. Such leaders engage personal willingness and emotional involvement to develop followers to their full potentials and convert them into leaders. This can be achieved through building a higher-level identification, commitment and trust in the leader among subordinates. Shamir and his colleagues (1993) suggested that transformational leadership could enhance follower's motivation to perform more effectively than transactional leadership because

subordinates would feel respected, trusted and dignified in the process of working with the leaders. Transactional leadership identified specific expectations and provided rewards in exchange for followers' performance (Bass & Avolio, 1993). Ideally, transactional leaders and their subordinates agree on what subordinates need to do in order to get rewards or avoid punishment. There is no concerted effort to develop a deep sense of trust and commitment to the leader among subordinates and consequently they will not be motivated intrinsically (Bass, 1985). Past studies demonstrated that transformational leadership was more effective than transactional leadership in determining subordinates' work attitudes, effort and in-role performance. Bass (1985) cited a variety of field studies indicating that transformational leadership was more positively related to employee' self-reported effort and job performance than transactional leadership. Similar results were reported by Howell and Frost (1989). They manipulated the style of the leaders in a laboratory setting and found that transformational leadership could lead to better performance than transactional leadership. Other studies using the survey approach also indicated that transformational leadership actually had stronger direct relationships with self-rated sales performance (MacKenzie, Podsakoff & Rich, 2001), job performance (Bass, Avolio, & Goodbeim, 1987) and in-role behaviors (Pillia, 1995) than transactional leadership.

As mentioned in the preceding paragraph, prior researches have found a direct link between transformational leadership and subordinates' self-rated performance. However, as these results could be biased due to common method variance, it is important to examine whether transformational leadership is more positively related to supervisors' assessment of the subordinates' performance as well. Thus, supervisor-rated performance would be included as an objective measure of subordinates' performance for hypotheses 3, 5 and 6. Thus, the researcher hypothesized:

Hypothesis 3: Transformational leadership is more positively related to subordinates' self-rated and supervisor-rated performance than transactional leadership.

3.2 Polychronicity and Individuals' Work Stress and Performance

Time has a dramatic and subtle influence on individuals at work. Polychronicity is the preferred time use behavior in organizations, which is instrumental to growth and profitability of organizations (Slocombe & Bluedorn, 1999). Although polychronicity leads to better performance by employees, it may bring harmful effect to employees' psychological well-being. Understanding how polychronic individuals handle daily work-related activities and its effect on individuals' well-being appear to be particularly

relevant for maintaining individual effectiveness in the context of contemporary organizational performance.

3.21 Polychronicity and Individuals' Work Stress

To many, task juggling can be very trying and exhaustive. Juggling several tasks may lead to work overload, resulting in poor health. There were surprisingly few researches conducted to understand the relationship between polychronicity and work stress. Based on the limited findings, it was learnt that polychronicity is associated with Type A behavior, a personality construct consistently found to be related to stress and other health hazards (Price, 1982). Specifically, the components of Type A behavior, such as achievement orientation, impatient/irritability, competitiveness and task-related hurry were all positively related to polychronicity at the individual level (Conte, Rizzuto & Steiner, 1999; Ishizaka, Marshall & Conte, 2001), whereas time urgency also showed a positive correlation but both at the individual and the team level (Waller, Ciambatista, & Zellmer Bruhn, 1999). However, past research did not find such a link between polychronicity and work stress. One explanation provided by the researchers regarding the findings of polychronicity and work stress was that polychronicity may be characterized as an adaptive behavior of time use to accommodate to workplace environment. These empirical evidences show that Type A and polychronicity as

constructs have attributes in common. Hence it is logical to infer that polychronicity would relate to work stress. However, the explanation has no further empirical evidence as its support so far. As a result, the above findings on polychronicity and Type A Behavior allow one to conjecture that polychronicity and work stress would be related positively.

3.22 Polychronicity and Individual's Performance

At the individual level, productivity depends on how an individual perceives and uses his/her time in approaching their daily activities. Patterns of time utilization are important factors affecting individual performance in the workplace (Bluedorn, Kaufman, & Lane, 1992). Taylor, et al (1984) suggested that faculty members working on multiple projects simultaneously appear to render a higher job performance level than individuals who focus on completing a project at a time. Such a time use orientation would enhance individuals' flexibility by switching their efforts between projects on hand easily. The flexible use of time allows its efficient allocation and that would lead to better job performance (Bluedorn, 1988). Alternatively, polychronic time use orientation would strengthen individuals' creativity by facilitating cross-fertilization of ideas for qualitative performance. Polychronic individuals have the potentials to transfer specific job knowledge and skills from one project to another. They may find it easier or faster

integrating those transferred knowledge and skills for a new project or associating them with something different from what they are doing. Persing (1999) found polychronicity to be correlated with innovation and creativity, which are probable contributors to qualitative performance. While the relationship between polychronicity and job performance is rather consistent in a business setting, the relationship is less clear in an academic one.

Taylor, et al (1984) found that polychronicity is positively associated with effective performance in the academic work environment. Specifically, working on multiple projects has a significant relation to both the quantitative (i.e. number of publications) and qualitative (i.e. number of citations) productivity measures. However, polychronicity was found to be unrelated to performance (i.e. GPA) in a study on college students (Conte, Rizzuto, & Steiner, 1999). It is reasonable to believe that those researchers might have restricted the GPA measure of the mean of 3.32, which was fairly high. Such a range restriction might have reduced or suppressed the relationship between polychronicity and performance. Even if the relationship is positive, it might still appear to be less significant than the GPA mean of below 3.0. The evidences consistently indicated that polychronicity is associated with quantitative or qualitative performance in a business setting. Hence, they inferred that polychronicity may also be

associated with performance in a sales setting. However, no empirical evidence in the literature has been found in support of the relationship in such a setting. The results therefore lead to the conjecture that polychronicity and performance would be related positively. Taken together, the inconclusive findings and insufficient empirical evidences have resulted in the need for further examination on polychronicity and the outcome variables. Thus, the researcher hypothesized:

Hypothesis 4: Polychronicity is positively related to (a) individuals' work stress and (b) performance.

3.3 Transformational Leadership as a Moderator on the Relationship between Polychronicity and Subordinates' Work Stress

As discussed earlier, individuals engaging in several activities may lead to work stress. The potential adverse impacts can either be attenuated by managers who adopt appropriate leadership style or intensified by employing ineffective one. Appropriate leadership style can be reflected by the characteristics of transformational leadership.

Polychronic subordinates are more likely than monochronic counterparts to overstretch themselves by engaging in more than one activity. They tend not to follow any explicit schedules and work on what they like to juggle spontaneously (Kaufman & Lindquist,

1999). If they do not juggle the task well, they would often experience stress of work overload. Indeed, transformational managers can serve as a buffer to allay polychronic subordinates' stress by changing their orientation to accept task juggling as developmental opportunities. For example, transformational leaders can help polychronic subordinates to better manage task juggling through inspiring them to realize the needs and importance of setting priority with reference to its importance and urgency. They are likely to be instilled that priority setting for task juggling is meaningful challenges necessary for developing their personal skills to effectively reduce their stress level. Scandura and Schriesheim (1994) suggested that the developmental nature of transformational leadership facilitates the change of orientation associated with work stress among subordinates. As polychronic subordinates often have to face intense situations when juggling their task all by themselves, exercising priority setting would be important in clarifying their role. It appears that by so doing, subordinates' stress can be alleviated and their attention will focus on the collective objectives rather than on their negative feelings. Bennis (1985) and Burns (1978) noted that transformational leadership emphasizes motivating subordinates beyond the immediate concerns of their work-related problem associated with stress by molding them to focus on a bright future. Transformational leadership plays a major role in establishing the

core values for employees, which guide appropriate behaviors of the latter even when the leader is absent (Bryman 1992).

Alternatively, polychronic subordinates may always face heavy emotional demands originating from stressful situations in task juggling. By showing sincere concern and thoughtful considerations to polychronic subordinates' needs and struggles, providing emotional support to relieve subordinates' anxiety and frustration (House, 1981) as well as encouraging and enhancing subordinates' confidence to deal with the demands of task juggling, transformational leaders could attenuate the stress felt by polychronic subordinates.

3.4 Transformational Leadership as a Moderator of the Relationship between Polychronicity and Subordinates' Performance

Transformational leaders are likely to be polychronic themselves. They often manage several supervisory duties simultaneously. To meet the diversified needs from subordinates effectively, transformational managers need to be flexible and proactive by changing their schedule to satisfy subordinates' requests and struggles readily. From a person-environment congruence perspective, personality or behavior similarity between leaders and subordinates is important to work performance. Compared with others, subordinates whose behaviors are congruent with their leaders are happier and

more committed (Meglino, Ravlin & Adkins 1989). In terms of similarity in time use orientation, polychronic leaders would have greater success in facilitating polychronic subordinates to juggle tasks and elevating them to deliver better job performance. For example, Slocombe and Bluedorn (1999) found that congruency between an individual and a supervisor/coworkers' perceived time use pattern would result in higher organizational commitment and perceived fairness in performance evaluation. Notably, transformational leaders serve as a role model and become an icon that help subordinates to perceive polychronic time use orientation as effective and legitimate in association with effective job performance. For example, transformational leaders, who, by demonstrating the effectiveness of polychronic time use behaviors, showing perseverance and willingness to sacrifice in striving to achieve the organization's goals, are able to attract their polychronic subordinates to admire and respect them. As perceived role models, managers who exhibited transformational leadership would enhance subordinates' ability to increase their performance level (Sosik & Godshalk, 2000).

On the other hand, transformational leaders play an effective role in reinforcing the values and meanings essential to the collective vision that empowers subordinates to transcend their personal values of polychronicity in support of the vision of the

organization. It can be achieved by evoking high-order needs among polychronic subordinates in juggling task with a stronger sense in meeting deadline. Polychronicity is viewed as the basis of individual effectiveness and a stronger sense in meeting deadline is viewed as a value-added to that base for greater individual effectiveness. As an orientation-shaping agent for polychronic subordinates within and across work groups, transformational leaders inspire subordinates to accept and internalize the vision as their goal and consequently reflect it as positive work attitudes in their work life (Avolio, 1999). Therefore, polychronic subordinates are expected to perceive meeting deadline as a crucial factor for success and would likely commit to work simultaneously. Consequently, transformational leaders are expected to increase polychronic subordinates' intrinsic motivation to render better performance by cultivating a stronger commitment to meet deadline. The above reasoning lead to the following hypothesis:

Hypothesis 5: The effects of polychronicity on (a) employees' self-rated performance (b) supervisors' rated performance will be higher when working with a high-level and a low-level transformational leader.

Hypothesis 6: The effects of polychronicity on employees' stress will be lower when working with a high-level and a low-level transformational leader.

3.5 Transactional Leadership as a Moderator of the Relationship between Polychronicity and Subordinates' Work Stress

To what extent is transactional leadership likely to result in polychronic subordinates' work stress? Since polychronic subordinates tend to overstretch themselves, they would frequently switch their mental gears and that may lead to work stress.

Transactional leaders are ineffective in attenuating polychronic subordinates' stress because they emphasize task completion and pay little attention to other important aspects of human resources needs (Bass, 1985). In other words, transactional leaders have no interest to understand how much stress and struggles polychronic subordinates have to face in order to complete a particular task. They are not concerned with helping polychronic subordinates to realize the need of priority setting and the importance of better management in task juggling, which are conducive to stress reduction. Without setting priority, polychronic subordinates would easily overstretch themselves and lead to work overload stress and decreased job satisfaction.

Apart from that, polychronic subordinates often undergo severe emotional drain due to heavy demands from task juggling. They realize psychological support from their leaders as more valuable than commissions and bonuses. In other words, the work stress level of polychronic subordinates is somewhat contingent on the degree of individualized considerations from their leaders. However, transactional leaders attend less to the relational aspects of interaction and more to defining the task and level of expected performance. Given the importance of the relational aspects in manager-subordinates relationship (Kram & Bragar, 1992), polychronic subordinates could only rely primarily on extrinsic reward as the incentive to sustain their positive feelings. Hence, their motivation level will not be enhanced over time. By overemphasizing the use of extrinsic reward, transactional leaders would imbue subordinates with a decreased feeling of security and belongingness to the organization (Bass, 1998). In this way, polychronic subordinates are made to feel as if they are "pawns or machines" which have to work as much as they could simultaneously to fulfill their leader's expectations, even though they may support the outcome being pursued. Polychronic subordinates should instead be made to perceive that a future-oriented sense of "give and take" relationship between them and their transactional leaders exists. Lack of identification with their leaders' orientation towards

the organization's goal and the reception of little affection from their leaders, polychronic subordinates are expected to experience work stress.

3.6 Transactional Leadership as a Moderator of the Relationship between Polychronicity and Subordinates' Performance

Unlike transformational leadership, transactional leadership is associated with negative performance of polychronic subordinates. Ideally, polychronic subordinates with a stronger sense in meeting deadline would produce better performance. It, however, depends on the assumption that the importance of deadline has either been internalized or perceived by polychronic subordinates as a critical factor for the fulfillment of the collective vision articulated by their leaders. Lacking such an assumption, the orientation of deadline as emphasized by transactional leaders would become an additional pressure to polychronic subordinates on top of task juggling and would likely result in negative performance. The experience of the subordinates may be dissatisfying and the transactional leaders who behave in this manner continually are less predictable and acceptable. The more frequent the transactional leaders focus on tight deadline as performance requirements, the higher the likelihood the polychronic subordinates will have adverse performance. If polychronic subordinates' performance differs from their leader's expectations seriously, transactional leaders would impose strong and negative criticisms as well as punishments on their subordinates. This kind

of leadership role would probably lead polychronic subordinates to perform negatively and discourage them to work simultaneously. Consequently, mistakes would appear more often than before and work efficiency would decrease correspondingly, reflecting also in supervisor-rated performance. In sum, transactional leaders would decrease polychronic subordinates' job performance. The above reasoning lead to the following hypothesis:

Hypothesis 7: The effects of polychronicity on (a) employees' self-rated performance (b) supervisors' rated performance will be lower when working with a high-level and a low-level transactional leader.

Hypothesis 8: The effects of polychronicity on employees' stress will be higher when working with a high-level and a low-level transactional leader.

CHAPTER 4

RESEARCH METHOD

Introduction

This chapter presents a research method delineating how the study was actually conducted. The research method includes the description of the sample characteristics, data collection procedures, measurement scales of the related variables and the types of data analysis.

4.1 Sample

This study uses a convenience sample of life insurance sales managers and their subordinates to examine how leadership styles affect the relationship between individuals' time use orientation, work stress and job performance in their companies. The participants were drawn from seven multinational life insurance companies in Hong Kong. They were sales staff working at two managerial levels, namely sales managers who were the immediate supervisors of the sales agents and the sales agents themselves in the agency departments. The sales agents in this sample sold a variety of life insurance and financial products (e.g., trust fund, insurance scheme and saving plan etc.) and were paid a basic salary plus a commission. Although the participants were full-time employees, they might

or might not usually be in their offices during normal office hours from 9:00a.m. to 6:00p.m. because their job nature requires them to conduct their business outside the office environment.

4.11 Participants

Difficulties were experienced in securing a desirable response rate by means of a mail survey involving both the managers and subordinates to participate in a leadership study in Hong Kong. To overcome these difficulties, participants of this study were selected from a pool of personal contacts of the researcher. The sales managers being selected supervise several subordinates and were required to choose two to three subordinates on the basis of their length of service (i.e. longest, relatively long and shortest) to the manager. Two to three subordinates of each manager from each insurance company served as the source of data. They were asked to rate the leadership style of their managers on one hand and to describe their own time use orientation, work stress and performance levels on the other. The manager's rating on subordinates' performance was also included as an objective measure in order to overcome the common method variance.

4.12 Power Analysis

To determine a minimally appropriate sample size, a power analysis was essential. Any statistical test is a complex relationship between the power of the test, the region of rejection (α level), the sample size and the magnitude of the effect in the population (Cohen and Cohen, 1983).

Cohen and Cohen stated that the effect size of an independent variable on a dependent variable found in similar studies could be used as a guideline to direct subsequent research. Two studies using Multiple Leadership Questionnaire (MLQ) to measure leadership effectiveness provided guidance with respect to effect size. Howell and Merenda (1999) reported an R^2 of .24 in their study on transformational leadership and individual performance. Jung and Avolio (1999) reported an R^2 of .15 in evaluating the association between transformational leadership and students' performance quality in their study.

Cohen (1977), Welkowitz, Ewen and Cohen (1982, p.223) suggested a value for statistical power of .80, which yields a probability of .20 of a Type II error when the Type I error is controlled at .50. Cohen and Cohen (1983) also advised that an effect size of .10 would be considered small, .30 medium and .50 a large effect. With reference to the range of

estimates for the proportion of variance as explained in individual performance by transformational leadership from the previous studies and basing on Cohen and Cohen's guideline, the effect size for analysis in this study was .40.

Using an effect size of .40, a α value of .05 and a statistical power of .80, a sample size of forty-six was suggested in Cohen and Cohen (1983). Taking into consideration these suggestions, a minimum of seven life insurance companies were sought as the sample for the present study. With data collected from at least thirty-seven people at each company, a minimum of two hundreds and fifty-nine participants was targeted to provide data.

4.2 Data Collection Procedures

In order to ensure the effective implementation of the data collection process, personal network was vital for this study. Personal network of the researcher was used to identify a large group of insurance professionals from different companies who would be interested to take part in this study. The data collection procedure was initiated by the introduction of the researcher to the agency heads of the insurance companies by the researcher's friends. The researcher then sent two invitation letters to the agency head of each intended company. The first letter (see Appendix A), drafted by the researcher, introduced himself and the purpose of his study. The second letter (see Appendix B), written by the

researcher's dissertation supervisor, appealed for their kind assistance by allowing their subordinates to take part in the present study. A telephone follow-up with each agency head ensued in order to discuss the details of the sample characteristics, sample selection procedures, form of cooperation for protecting participants' confidentiality and potential incentives for participants so as to ensure their contribution. According to the responses received by the deadline (11th June, 2001 of research coordination) from the agency head of each company, seven multinational life insurance companies in Hong Kong were willing to participate in this research.

4.21 Institutional Liaison

Once an agency head agreed to participate, an institutional liaison was established in each company. This individual or a delegated staff member served as the point of contact for soliciting participation from their colleagues and distributing materials in each company. The materials, which were personally delivered by the researcher to the liaison at each company, included packets of survey for managers (see Appendix C) and their subordinates (see Appendix D). The packet of survey contained a cover letter thanking participants for their contribution and introducing details of the purpose of the study, instructions on answering the survey, survey return procedures and instructions on how to apply for a lucky draw. For the manager's survey, it contained the specific instructions on

the criteria for selecting subordinates and the measure for collecting ratings on subordinates' performance as well as their demographic characteristics. For the subordinate' survey, it contained instructions and the measures for collecting ratings on leadership, polychronicity, work stress, performance and demographic characteristics. The original questions of both surveys were translated from English into Chinese by a friend of the researcher, who has extensive translation experience and works as a professional translator for the HKSAR Government. The translation was crosschecked by the researcher and reviewed by five research students to ensure its quality before printing. The bilingual questionnaire allowed the respondents to have a better understanding of the questions. In order to boost the response rate, discount dinner buffet coupons were used as incentives. The envelopes by which these coupons were supposed to be returned were also included in these packets. By returning the completed survey to the liaison, the participants was given a chance to win a lucky draw for free buffet for two at one of the four star hotels in Hong Kong.

The institutional liaisons were instructed to distribute the survey packets to each manager.

The manager followed the subordinate selection criteria in the survey by selecting two to three subordinates as the raters describing his/her own leadership style. Each selected subordinate then received a questionnaire in different colors from the corresponding

manager according to the length of working relationship between them. The following color codes were used: (a) red represented the longest working relationship with the manager, (b) blue a relatively long relationship with the manager and (c) green the shortest working relationship with the manager. Once the questionnaire was completed, each participant was to return the survey to the liaison through the internal mail system of each company. The researcher was then to be contacted to collect the surveys personally according to the completion order of the companies.

4.22 Anonymity of Raters

Anonymity of raters was ensured and protected. The data collection process was designed in such a way that no one involved in the process could know the identity of the participants. The participants were asked not to write any remarks or names that would be likely to reveal their identities. All packets and surveys were coded sequentially. The packets distributed by the liaison to the managers and their subordinates respectively were marked with the same code so that the researcher was able to align the responses of the nominated subordinates with those of the corresponding manager by the code number for data analysis purposes. The code number system also helped the researcher to satisfy those who wanted to review their responses in the survey. The raters were also urged to return the lucky draw slip in a separate envelope to the liaison instead of passing

it to the manager after they completed the questionnaire. This design had the advantage of retaining the confidentiality of the participants.

4.3 Instrumentations

The instruments adopted in the present study were revised versions of the instruments developed by Bass (1997) for leadership scales, Bluderon (1999) for polychronicity, Steffy and Jones (1988) for stress and Farh and Cheung (1997) for job performance. The moderating variable – leadership style was measured by the Multifactor Leadership Questionnaire (Bass, 1985; Bass & Avolio, 1997). The independent variable - polychronicity - was measured by Inventory of Polychronicity (Bluedorn, 1999), the first dependent variables – stress - was measured by stress scale (Steffy & Jones 1988), the second dependent variable – job performance - was measured by performance scale (Farh & Cheung, 1997) and the third dependent variable – supervisor-rated performance - was measured by the same performance scale with a change from the second person (He/she) to the first person (I) as the subject of each item (Farh & Cheung, 1997).

4.4 Description of Variables and Instruments

4.41 Leadership Style

Leadership styles were measured by using the Multifactor Leadership Questionnaire

(MLQ-5X Bass & Avolio 1997). The MLQ (5X) (Revised) was developed to address the criticisms of earlier versions of the instruments developed by Bass (1985). Specifically, the MLQ had been criticized for failing to distinguish between charismatic leadership that was behaviorally based and charismatic leadership that was attributed by followers. Therefore, the latest version includes four items that are able to distinguish between the two (Bass, & Avolio, 1997). Though the four items that assess the nine leadership scales as well as the three outcome scales were included in this study, only items that could address transformational and transactional leadership were included. Outcome data were collected by different instruments in order to address the problem of common method variance. Subordinates were also asked to rate how frequently their respective managers engaged in specific behaviors. Each item has been measured on a five-point frequency scale ranging from 0 = 'not at all' to 4 'frequently if not always'.

4.411 Transformational Leadership

Transformational leadership motivates subordinates to perform beyond the initial expectations (Bass, 1985). It consists of four sub-constructs. The description of each dimension, the number of items and the example of the actual items on the subordinate's survey are presented below.

Idealized Attributes (4 items)

Leaders display conviction; emphasize trust; take stands on difficult issue and present their most important values. Such leaders are admired as role models; they generate pride, loyalty, confidence and alignment around a shared purpose (Bass, 1985). A sample item is: 'His/her actions build my respect for him/her.'

Idealized Behaviors (4 items)

Leaders emphasize the importance of purpose, commitment and the ethical consequences of decision. Such leaders also promote dependability among subordinates in order to make sure that they will take responsibilities for actions (Bass, 1985). A sample item is: 'He/she considers the moral and ethical consequences of decisions.'

Inspirational Motivation (4 items)

Leaders articulate an appealing vision of the future, challenge followers with high standards, talk optimistically and with enthusiasm, provide encouragement and meaning for what needs to be done (Bass, 1985). A sample item is: 'He/she talks optimistically about the future.'

Intellectual Stimulation (4 items)

Leaders question old assumptions, traditions and beliefs; stimulate in others new perspectives and ways of doing things; and encourage the expression of ideas and reasons (Bass, 1985). A sample item is: 'He/she re-examines critical assumptions to question whether they are appropriate.'

Individual Consideration (4 items)

Leaders deal with others as individuals; consider their individual needs, abilities and aspirations; listen attentively; further their development; advise, teach and coach (Bass, 1985). A sample item is: 'He/she spends time teaching and coaching.'

4.412 Transactional Leadership

Transactional leadership motivates subordinates for better performance through a cost-benefit and economic exchange process (Bass, 1985). It also includes questions, which measure the three sub-constructs like contingent reward as well as active and passive management by exception.

Contingent Reward (4 items)

Leaders engage in a constructive transaction of reward for performance. They clarify

expectations, exchange promises and resources, arrange mutually satisfactory agreements, negotiate for resources, exchange assistance for effort and provide commendations for successful follower performance (Bass, 1985). A sample item is: 'He/she discusses in specific terms who is responsible for achieving performance targets.'

Active Management-by-Exception (4 items)

Active-leaders monitor followers' performance and take corrective action if deviation from standards occurs. They enforce rules to avoid mistakes. A sample item is: 'He/she keeps track of my mistakes.'

Passive Management by Exception (4 items)

Passive-leaders fail to intervene until problems become serious. They wait to take action until mistakes are brought to their attention. A sample item is: 'He/she fails to intervene until problems become serious.'

4.42 Individual Time Use Orientation

Polychronicity (10 items)

Polychronicity has been assessed with a ten-item Likert scale adopted from Bluedorn, Kalliath, Strube and Martin (1999), who also described polychronicity as an individual's

preference for either engaging in one activity at a time or in several activities simultaneously (Bluedorn et al, 1992). Each item is rated on the level of agreement ranging from 1= 'strongly disagree' to 7= 'strongly agree' in each statement on the basis of their orientation. A sample item is: 'I like to juggle several activities at the same time.'

4.43 Outcome Variables

Work Stress (9 items)

Psychosomatic complaints have been measured with a nine-item Likert scale derived from Steffy and Jones (1988). The questionnaire is designed to measure psychosomatic distress by asking respondents how often they experienced headaches, muscles fatigue, backaches, chest pains, sleeping problems and so on. Each item is rated on the level of agreement ranging from 1 = 'strongly disagree' to 7 = 'strongly agree' in each statement on the basis of their orientation. A sample item is: 'I often feel nervous and jumpy.'

Job Performance (4 items)

Both self-evaluations and supervisor-evaluations on subordinates' job performance were obtained. Each party responded to the same four-item Likert scale adopted from Farh and Cheng (1997). This scale is designed to measure respondents' performance efficiency. Participants need to indicate their level of agreement on a seven-point scale ranging from

1 = 'strongly disagree' to 7 = 'strongly agree' in each statement on the basis of their own orientations. A sample item is: 'I contribute greatly to the overall performance of my organization.'

The constructs and the corresponding questions summarized from the subordinate's survey are presented in Table 4.1.

Table 4.1 Summary of The Items in The Subordinate Questionnaire

Constructs	Corresponding Survey Questions
Transformational Leadership	
Idealized Attributes	1,10,17,27
Idealized Behaviors	3,13,19,25
Inspirational Motivation	2,9,18,31
Individualized Consideration	5,11,15,23
Intellectual Stimulation	8,20,24,29
Transactional Leadership	
Contingent Reward	6,16,21,26
Management-by-exception (Active)	7,12,22,30
Management-by-exception (Passive)	4,14,28,32
Polychronicity	36,37,40,43,45,47,50,51,53
Work Stress	34,35,39,41,42,44,48,52,54
Self-rated Performance	33,38,46,49
Supervisor-rated Performance	Items only appeared on leader surveys

4.44 Control Variables

To further examine the effect of leadership on the relationship between individual polychronicity and the outcome measures, it was important to consider other factors that

may influence the predictive power of different leadership models. Gender of the sales managers, past managerial experience and managerial-subordinate relationships are the three factors that might strengthen the predictors. The role gender plays in leadership effectiveness has been a topic of great interest in recent years. Sex discrimination and prejudicial stereotypes have favored men in the leadership roles for many years. However, these stereotypes are disappearing in some sectors of the society as an increasing number of women have risen to leadership positions. In fact, some researchers in recent years have proposed that women, instead of men, are more qualified and appropriate to lead an organization (Yukl, 1998).

Managerial experience is another factor for understanding leadership effectiveness of sales managers in the life insurance industry. Extensive managerial experience could help leaders to have a greater ability to manage subordinates' needs and handle work-related situations. Managerial experience has been widely considered as a control variable in leadership studies.

The managerial-subordinate relationship is also a control variable included in this study. The length of the relationship between sales managers and their subordinates would affect how subordinates perceive the leadership style exhibited by their managers and

how managers rate the performance level for their subordinates.

Consequently, it was important to control the factor of gender, managerial experience of sales managers and managerial-subordinate relationships in this analysis in order to determine their influences on the outcome variables, if any. The control variables were considered to have significant potentials for discussion for future researches.

4.5 Types of Data Analysis

4.51 Confirmatory Factor Analysis

In order to test the factor structure of the instruments against the data in this sample, confirmatory factor analysis was conducted. Confirmatory factor analysis (CFA) is a widely used technique for testing the psychometric properties of measurement instrument because it tests a pre-specified factor structure and provides goodness of fit indices for the resulting solution (Bass & Avolio, 1997). Bagozzi (1978) summarized the superiority of CFA to other methods such as traditional factor analysis and Campbell and Fiske's (1959) MTMM for testing the construct validity of instruments. For example, they argued that CFA allows methods to affect measures of constructs to a different degree and to correlate feely among themselves, thus providing more useful information on the psychometric properties of instruments. Moreover, utilization of chi-square difference tests and the size

of factor loadings allow researchers to estimate convergent and discriminate the validity of the tests or surveys more accurately. In confirmatory factor analysis, the researcher has a specific prior hypothesis on the number and nature of the factors. This hypothesis is also incorporated explicitly into the model specification and estimation. Consequently, CFA was appropriate for this study because the instruments used to measure the variables have already been used in research before, making the required factor structure readily available.

Test of Hypotheses 1 to 4

Hypothesis 1: Transformational leadership is negatively related to subordinates' work stress.

Hypothesis 2: Transactional leadership is positively related to subordinates' work stress.

Hypothesis 3: Transformational leadership is more positively related to self-rated and supervisor-rated performance than transactional leadership.

Hypothesis 4: Polychronicity is positively related to (a) individuals' work stress and (b) performance.

Hypothesis 5: The effects of polychronicity on (a) employees' self-rated performance (b) supervisors' rated performance will be higher when working with a high-level and a low-level transformational leader.

Hypothesis 6: The effects of polychronicity on employees' stress will be lower when working with a high-level and a low-level transformational leader.

Hypothesis 7: The effects of polychronicity on (a) employees' self-rated performance (b) supervisors' rated performance will be lower when working with a high-level and a low-level transactional leader.

Hypothesis 8: The effects of polychronicity on employees' stress will be higher when working with a high-level and a low-level transactional leader.

4.52 Multiple Regression

Multiple regression analysis is utilized in testing the hypotheses in order to determine the effects and magnitude of the relationship between polychronicity and subordinates' work stress, self-rated and supervisor-rated performance. It also provides the function to determine the interacting effect of transformational and transactional leadership on the

relationship between polychronicity, subordinates' work stress, self-rated and supervisor-rated performance. By using the principle of correlation, multiple regression analysis facilitates the predication of the dependent variable from the knowledge of two or more independent variables. The overall effect of the independent variables on the dependent variable is expressed by the square of a correlation coefficient called the coefficient of multiple correlation, or R^2 . It is the proportion of variance of the dependent variable accounted by the independent variables (Kerlinger, 1986).

Factors are confirmed from the factor analysis process and are used as the variance in multiple regression. Subordinates' work stress, self-rated and supervisor-rated performance were regressed on individual polychronicity times each form of leadership styles for the hypotheses. A F-test was utilized to determine if each subsequent leadership scale adds significantly to the prediction of the outcome variables. By this test, the variance due to regression of the outcome variables on individual polychronicity as well as transformational and transactional leadership styles were evaluated against the variances presumably due to error or chance (Kerlinger, 1986).

The statistical package of AMOS for Windows, version 4 was adopted for confirmatory factor analysis and SPSS for Windows, version 10, was used for the descriptive statistics,

reliability test, correlations and regression analyses. The overall results of this study will be presented in chapter 5.

CHAPTER 5

RESULTS

Introduction

This chapter reports the results of the present study, which examined the effects of leadership styles on the relationship between polychronicity, subordinates' work stress and performance. The demographic characteristics regarding the sales managers and their subordinates were presented. The factor analysis procedure was used to determine the validity of various scales in measuring the independent, moderating and dependent variables. Reliability coefficients of these variables were also reported and the confirmed factor structures were subsequently used as inputs for the correlation and multiple regression analysis in order to identify if the hypothesized model fits the data.

5.1 Sample Response

Sales agents and their supervisors working for seven multinational life insurance companies in Hong Kong participated in this study. All of these companies are members of the Hong Kong Insurance Federation. A sample of 293 sales managers and their 879 subordinates provided data in the form of survey responses. To boost the response rate, personal network of the researcher and free/discounted dinner buffet coupons were used as incentives. The response rate, however, failed to meet the researcher's expectation

since most of the insurance professionals had to sit a public insurance examination during the survey period. Therefore, only 130 of the sales managers and 295 subordinates returned their surveys, which accounted for a response rate of 44% and 34% respectively. After aligning the responses of the subordinates with that of the corresponding managers by using the code printed on the back of each survey, the data of 95 managers and 260 subordinates were finally considered as valid data for statistical analysis.

5.2 Demographic Characteristics of Sales Managers and Subordinates

Descriptive information on the sample is shown in the following tables, including the gender distribution, average age, level of education, average years of working experience in the insurance industry and average years of working experience in the current company for both the managerial and subordinate participants. Additionally, information on the most recent training programs attended by the managers and the average years of experience working with the corresponding manager of the subordinates were also included.

Table 5.1 Sales Managers by Gender (n=93)

Gender	No. of Managers	%
Male	67	72.0
Female	26	28.0
Total	93	100.0

The sales manager survey asked participants to indicate their gender. Ninety-three managers responded. Among them, 72% were male and the remaining 28% were female.

Table 5.2 Sales Managers by Age (n=94)

Age	No. of Managers	%
Below 31	13	13.8
31-35	19	20.2
36-40	32	34.0
41-45	17	18.1
Over 50	13	13.8
Total	94	100.0

Table 5.2 indicates that the age of the 94 managers ranged from below 30 to over 50. It also shows that 34% of the managers fell into the third age group, i.e. between 36 and 40 and almost 70% of them were above the age of 36. The results show that only 14% of the managers were below the age of 31.

Table 5.3 Sales Managers by Marital Status (n=93)

Marital Status	No. of Managers	%
Single	21	22.6
Married	68	73.1
Others	4	4.3
Total	93	100.0

Table 5.3 indicates that more than half of the managers (73.1%) were married, whereas 22.6 % were single. Additionally, 4.3% of the managers indicated they have other status (e.g., widow, divorced or separated).

Table 5.4 Highest Level of Education Attained by Sales Managers (n=94)

Educational Level	No. of Managers	%
Secondary	35	37.2
Matriculation	16	17.0
Diploma/Higher diploma	18	19.1
Bachelor's Degree	18	19.1
Master's Degree	3	3.2
Others	4	4.3
Total	94	100.0

Ninety-four managers indicated their educational background in the survey. 37.2% and 17% of the managers had completed a secondary HKCEE and a matriculation HKAL respectively. For diploma/higher diploma and bachelor's degree, 19% of the respondents

were in both categories. Besides, 3.2% of them had completed a master's degree.

Table 5.5 The Most Recent Training Programs Participated by Sales Managers (n=87)

Recent Training Program	No. of Managers	%
Leadership Development	29	33.3
Financial Management	18	20.7
Time Management	11	12.6
All of the above	12	13.8
Others	17	19.5
Total	87	100.0

Table 5.5 shows that a majority of the managers (33.3%) participated in the leadership development program. 20% and 13% of the managers participated in financial management and time management programs respectively. The results also reveal that 14% of them participated in all the training programs recently.

Table 5.6 Years of Industry Experience Gained by Sales Managers (n=94)

Years of Industry Experience	No. of Managers	%
1 to 3 years	9	9.6
4 to 6 years	17	18.1
7 to 9 years	23	24.5
10 to 12 years	25	26.6
13 to 15 years	7	7.4
15 to 18 years	4	4.3
19 years or more	9	9.6
Total	94	100.0

Table 5.6 shows that over half of the managers had worked in the insurance industry for 7 to 12 years (51%). 24.5% of the managers had 7 to 9 years' industry experience and 26.5% of them had 10 to 12 years' experience. In sum, 90% of the managers had 4 or more years of experience working in the insurance industry.

Table 5.7 Sales Managers' Working Experience in Their Current Organizations (n=94)

Years of Experience in their Current Organizations	No. of Managers	%
Less than a year	2	2.1
1 to 3 years	28	29.8
4 to 6 years	25	26.6

7 to 9 years	18	19.1
10 to 12 years	14	14.9
13 to 15 years	3	3.2
15 to 18 years	3	3.2
19 years or more	1	1.1
Total	94	100.0

Ninety-four managers answered this question. 29.8% of the respondents had 1 to 3 years' working experience, 26.6% had 4 to 6 years' experience and over 30% of them reported they had 7 or more years' experience working in their current organization.

Table 5.8 Years of Managerial Experience Obtained by Sales Manager (n=93)

Years of Managerial Experience	No of Managers	%
Less than a year	32	34.4
1 to 3 years	22	23.7
4 to 6 years	13	14.0
7 to 9 years	12	12.9
10 to 12 years	10	10.8
13 to 15 years	2	2.2
15 to 18 years	1	1.1
19 years or more	1	1.1
Total	93	100.0

Table 5.8 presents the distribution of the managers by years of managerial experience. It reveals that more than half of the sample managers had less than 3 years' managerial experience. Specifically, 34.4% of them had less than a year's managerial experience and 23.7% of them had 1 to 3 years' experience. Only 41.9% of them had more than 4 years' managerial experience.

Table 5.9 Years of Experience Working in the Current Position of Sales Managers (n=92)

Years of Experiences in Current Position	No. of Managers	%
Less than a year	6	6.5
1 to 3 years	52	56.5
4 to 6 years	22	23.9
7 to 9 years	7	7.6
10 to 12 years	3	3.3
13 to 15 years	1	1.1
15 to 18 years	1	1.1
Total	92	100.0

Table 5.9 indicates that 56.5% of the sample had 1 to 3 years' experience and 23.9% of them had 4 to 6 years' experience working in their current position. The results show that 13.1% of the sample managers had 7 or more years of experience working in their current position.

Table 5.10 Subordinates by Gender (n =257)

Gender	No. of Subordinates	%
Male	120	46.7
Female	137	53.3
Total	257	100.0

Table 5.10 shows the sample subordinates' gender distribution and among them, 46.7% were male and 53.3% were female. It reflects that the gender distribution of insurance sales representatives and first-line supervisors were quite balanced.

Table 5.11 Subordinates by Age (n =255)

Age	No. of Subordinates	%
Below31	103	40.4
31-35	55	21.6
36-40	54	21.2
41-45	31	12.2
Over 45	12	4.7
Total	255	100.0

Table 5.11 reveals that 103 (40.4%) of these subordinates were below 31. Another 45% of them aged between 31 to 40. Less than 5% of them were over 45 years old.

Table 5.12 Subordinates by Marital Status (n =255)

Marital Status	No. of Subordinates	%
Single	129	50.6
Married	119	46.7
Others	7	2.7
Total	255	100.0

Table 5.12 reflects that 50.6% of the respondents were single, whereas 46.7% of them were married. It is another demographic area in which the distribution was almost equal.

Table 5.13 Highest Education Level Attained by Subordinates (n =257)

Education Level	No of Subordinates	%
Secondary	132	51.4
Matriculation	25	9.7
Diploma/Higher Diploma	35	13.6
Bachelor's Degree	58	22.6
Master's Degree	5	1.9
Doctoral Degree	1	.4
Others	1	.4
Total	257	100.0

The results show that 51.4% of the respondents had secondary HKCEE qualification and 22.6% of them had bachelor's degree. Seven subordinates had a post-graduate degree and among them one had a doctoral degree.

Table 5.14 Years of Industry Experience Gained by Subordinates (n =260)

Years of Industry Experience	No. of Subordinates	%
Less than a year	15	5.8
1 to 3 years	155	59.6
4 to 6 years	37	14.2
7 to 9 years	18	6.9
10 to 12 years	23	8.8
13 to 15 years	6	2.3
15 to 18 years	6	2.3
Total	260	100.0

Table 5.14. shows that more than half of the subordinates had 1 to 3 years' experience and 13.4% had 10 to 18 years' experience.

Table 5.15 Subordinates' Working Experience in Their Current Organization (n =260)

Years of Experience in Current Organization	No. of Subordinates	%
Less than a year	24	9.2
1 to 3 years	172	66.2
4 to 6 years	36	13.8
7 to 9 years	11	4.2
10 to 12 years	12	4.6
13 to 15 years	3	1.2
15 to 18 years	2	.8
Total	260	100.0

Table 5.15 reveals that a majority of the subordinates had 1 to 3 years' experience and 13.6 % of them had 10 to 18 years' experience working in their current organizations.

However, about 9.2% of them had less than a year's experience working in their current organizations.

Table 5.16 Subordinates' Working Experience in Their Current Position (n =260)

Years of Experience in Current Position	No. of Subordinates	%
Less than a year	33	12.7
1 to 3 years	182	70.0
4 to 6 years	28	10.8
7 to 9 years	7	2.7
10 to 12 years	8	3.1
13 to 15 years	1	.4
15 to 18 years	1	.4
Total	260	100.0

All of the subordinates indicated their years of experience working in their current positions.

The results show that 70% of the subordinates had 1 to 3 years' experience, 10.8% of them had 4 to 6 years' experience and 12.7% of them had less than a year's experience working in their current positions. It was interesting to note that only two subordinates had 10 to 18 years' experience working in their current organizations.

Table 5.17 Subordinates' Experience Working with Their Supervisors (n =259)

Years of Experience working with Supervisors	No. of Subordinates	%
Less than a year	21	8.1
1 to 3 years	185	71.4
4 to 6 years	32	12.4
7 to 9 years	7	2.7
10 to 12 years	11	4.2
13 to 15 years	2	.8
15 to 18 years	1	.4
Total	259	100.0

Table 5.17 shows that 70%, 12.4 % and 8% of the subordinates had 1 to 3, 4 to 6 and less than a year's experience working with their supervisors respectively.

5.3 Measurement Analysis

Confirmatory factor analyses were conducted for leadership styles of Multifactor Leadership Questionnaire (MLQ), polychronicity, work stress and the two forms of job performance measures (self-rating and supervisory rating) because the scales used to measure these variables have been widely used in past studies. Thus, the aim of these analyses was to evaluate the factor structure of these scales as predicated by the previous researchers. In confirmatory factor analysis, prior hypotheses concerning the number of factors are required. After comparing the inherent factor structure of the data to the prior hypotheses, multiple regression analyses were employed to determine whether polychronicity has relationship with the outcome variables and to examine the potential interaction effect of transformational and transactional leadership in the process.

5.31 Confirmatory Factor Analysis (CFA)

To determine if the data fit the model of factor structure in the present study, several fit indices, namely, Goodness-of-fit index (GFI), Comparative-fit index (CFI), and Root-mean-square-error of approximation (RMSEA) which have been widely used and recommended by the researchers (e.g., Joreskog and Sorbom, 1993) as the first class absolute fit indices of model fit were employed as the prime indices of model fit throughout this study. All these indices have a value from 0 to 1. A value of closer to 1 for the GFI, CFI

and a value of closer to 0 for the RMSEA indicate a better fit. However, a rule of thumb often suggests that models with a GFI and CFI of less than .90 should be reasonably suspected. For RMSEA, Browne and Cudeck (1993) suggested that the value .08 implies an adequate model fit.

5.311 Leadership Style - Multifactor Leadership Questionnaire (MLQ)

Confirmatory factor analysis of MLQ (transformational and transactional leadership) originally expected that all of the items used to assess the eight-factor model suggested by Bass and Avolio (1997). The data of the present study produced .813, .875 and .063 for GFI, CFI and RMSEA, which resulted in unacceptable fit of the model. Thus, a factor structure other than eight-factor model was implied for better measure.

Next, one-factor, two-factor, three-factor and four-factor models were tested for the dataset of this study. Each of these models has conceptual basis in the literature. The two-factor model was expected to yield a transformational and a transactional leadership factor. This is similar to the factor structure of Bass's early work. The three-factor model was expected to result in two transformational and one transactional leadership factor, with one of the transformational leadership factors representing idealized attributes and behaviors. The four-factor model was expected to add a transactional leadership factor, possibly

distinguishing the constructs between contingent reward and management-by-exception.

Therefore, CFA procedures were repeated for the four vital factor models to determine the relative fit of each model and the results were presented in Table 5.18.

Table 5.18 Absolute Fit Indices for the Measurement Models of MLQ

Factor model	Chi-square/DF	P Value	GFI	CFI	RMSEA
1. Eight-factor model	883.049/436	P<.001	.813	.875	.063
2. Four-factor model	1043.925/458	P<.001	.779	.837	.070
3. Three-factor model	1262.462/461	P<.001	.713	.777	.082
4. Two-factor model	1264.556/463	P<.001	.713	.777	.082
5. One-factor model	1320.981/464	P<.001	.704	.761	.084

The results indicated that all tested factor models failed to support the hypothesized factor structures. None of the models did meet the conventional standard of all absolute fit indices. The only factor model that relatively better met the fit indices was the eight-factor model, containing five subscales of transformational leadership and three subscales of transactional leadership. These results suggested that a second-order confirmatory factor analysis would be needed to validate the high-order factor structure of MLQ. Specifically, some researchers have found support for the second-order hypothesized factor model of MLQ. Howell and Avolio (1993) was successfully employed latent variable partial least squares analysis to examine the relationship of transformational and transactional leadership to organizational outcomes. In a multi-samples study, Tejeda, Scabdura and Pillai (2001) provided additional evidences to support the validity of second-order factor model among the subscales of transformational and transactional leadership. Bycio, Hackett and Allen (1995) also concluded that there is cautions support for second-order

factor model of MLQ. Given the research findings regarding the second-order factor model, second-order confirmatory factor procedures were employed to determine the fit level of the factor model.

Table 5.19 Absolute Fit Indices for the Second-order Measurement Models of MLQ

Factor model	Chi-square/DF	P Value	GFI	CFI	RMSEA
1.Second-order model 1	1027.102/455	P<.001	.787	.841	.070
2.Second-order model 2	741.576/342	P<.001	.817	.870	.063

The results of Table 5.19 indicated that the second-order model 1 was not well-fitted, which is presented in Figure 5.1 (see Appendix E). Most values of fit indices were below the conventional standard, except the value of RMSEA. The regression weights estimate indicated that Contingent Reward was *negatively loaded* on transactional leadership (-.573, $P < .001$). This demonstrates that the use of Contingent Reward as a transactional factor does not align with an acceptable conceptual model and yields no theoretical grounds for justification. The contingent reward of transactional leadership was therefore dropped from the subsequent analyses to avoid producing invalid findings. As a result, it was appropriate to estimate the second-order model 1 again by excluding the subscale of Contingent Reward. After reviewing the various values of the fit indices of second-order model 2 in Table 5.19, which is displayed in Figure 5.2 (see Appendix, F). There were evidences of improvement for the model fit. For example, GFI= .817, CFI= .870 and RMSEA= .063 were relatively higher than the second order model 1. In addition, all subscales of the second order model 2 were positively loaded on the expected constructs without dispersing to

others. Given the small sample size and the model complexity of this study, the model need to be treated with caution. However, the additional confidence and the second-order factor model is flawed by the fact that there is also support for this model in the prior literature (Howell & Avolio, 1993; Tejeda, Scab dura, & Pillai, 2001).

On the basis of the above results and discussion, the second-order factor model was chosen. Conceptually, the model is similar to Bass's early work, which dates back to early research at Ohio State University based on the Leadership Behavior Description (LBDQ). The LBDQ measures the factors of consideration and initiating structure, which have been compared to both transformational and transactional leadership. Additionally, the use of two predictors of leadership in the present study has added benefit of simplifying the subsequent analyses and interpretation of data, and reducing the possibility of multi-collinearity.

The second-order factor model with a transformational and a transactional factor was expected to be the precise measure for this study. Consequently, by a subsequent regression analysis, transformational leadership was represented by five first-order transformational leadership constructs -- idealized attribute, idealized behavior, individualized consideration, inspirational motivation and intellectual stimulation.



Transactional leadership was only represented by two transactional leadership constructs -- management-by-exception (active and passive), by excluding contingent reward.

As suggested by Byrne (2001), the general procedures for interpreting the results of CFA in AMOS is firstly to examine the indices of fit for the model as a whole and then to review the modification indices with a view to pinpointing areas of model misspecification (p.102). Thus, the procedures would be used to interpret the results of CFA in the present study.

5.312 Polychronicity

As shown in Table 5.20, the overall fit of the one-factor model to the data as hypothesized by Bluedorn (1999) was not accepted because the value of GFI, = .834, CFI = .681 and RMSEA = .139 were below the recommended standard of absolute fit indices. These values indicated a poor model fit of the "Polychronicity Model 1", which is displayed in Figure 5.3 (see Appendix G). Both values of covariance estimate and factor loading identified the need for model re-estimation. The highest value (MI 45.718) represented the cross-loading of items 6 and 10, which stood apart from the rest of accounts for substantial misspecification. Also, the MI values revealed the predication of an improved model fit if the model was to be estimated again with the parameter by dropping items 6 and 10. The overall chi-square value would drop by at least 45.718 and the value of the estimate itself

would be approximately .515. Thus, it was appropriate to estimate the model again without including items 6 and 10. The new model was labeled "Polychronicity Model 2" and presented in Figure 5.4 (see Appendix H). After reviewing the various fit indices of Table 5:20, there were still some evidences of misfit in the model 2. For example, the GFI, CFI and RMSEA values of .923, .808 and .113 respectively were inadequate. The MI indicated that the highest error covariance was between items 1 and 7 (MI 16.854) in the error covariance matrix. Compared with the MI values for other covariance parameters, the one bearing on the association between items 1 and 7 was relatively high and thus, it was clearly in need of re-specification. Consequently, it was important to assess the model again by dropping items 1 and 7. The new model was labeled "Polychronicity Model 3" in Figure 5.5 (see Appendix I). By reviewing the results, the GFI, CFI and RMSEA values of .971, .952 and .076 are all statistically significant, meeting the standard of the fit indices. It was no significant indication for further analysis.

5.313 Work Stress

As presented in Table 5.20, the overall fit of the one-factor model to the data as hypothesized by Steffy and Jones (1988) was good, with values of the GFI, CFI and RESMA to be .920, .895 and .108 respectively. However, both the CFI and RMSEA values performed not very well in the model for work stress. To improve the model fit and reduce

the model misspecification, the MI values for both the covariance matrix and factor loadings were looked into in order to determine which item should be ruled out from the item content of "Work Stress Model 1" displayed in Figure 5.6 (see Appendix J). Table 5.20 shows that both MI values of the covariance matrix and regression weights consistently identified items 5 and 8 to have the largest correlation error (25.120 and 21.145) in the model. Consequently, it was essential to estimate the model again by dropping the items 5 and 8. The new model was labeled "Work Stress Model 2" and presented in Figure 5.7 (see Appendix, K). After reviewing the results, the GFI, CFI and RMSEA values of .956, .955 and .089 are all statistically higher than the values in Model 1. This is indicative of a fairly good model for fitting work stress.

5.314 Self-rated Performance

Table 5.20 displays the results of the confirmatory factor analysis for self-rated Performance of employees. The overall pattern of the results clearly indicated that all of the items loaded on the intended construct and it is unidimensional in nature. The "Self-rated performance model" is presented in Figure 5.8 (see Appendix, L) and fits the data very well in an absolute sense (GFI = .993, CFI = .994 and RMSEA = .059).

5.315 Supervisor-rated Performance

The result of the confirmatory factor analysis for supervisor-rated performance is presented in Table 5.20. The overall pattern of the results clearly shows that all of the items loaded on the intended construct and it was unidimensional in nature. The “Self-rated Performance Model” is presented in Figure 5.9 (see Appendix, M) and it fits the data very well. The only exception is that the value of RMSEA was greater than .10 (GFI = .939, CFI = .961 and RMSEA = .241).

Table 5.20 Chi-square and Fit Indices for the Measurement Models

Constructs	Chi-square /df	MI values	EPC Statistic	GFI	CFI	RMSEA
Polychronicity						
Model 1	210.271/35	18.748	.42	.834	.681	.139
Model 2	85.656/20	16.854	.43	.923	.808	.113
Model 3	22.535/9	0	0	.971	.952	.076
Work Stress						
Model 1	108.292/27	25.120	.79	.920	.895	.108
Model 2	42.734/14	12.522	.32	.956	.955	.089
Self-rated performance						
Model 1	3.782/2	0	0	.993	.994	.059
Supervisor-rated performance						
Model 1	33.631/2	24.433	.22	.939	.961	.247

After reviewing the fit indices as presented in Table 5.20, the factor structure of the relevant constructs (such as, one-factor model of polychronicity, work stress, self-rated performance and supervisor-rated performance) used in this study were similarly replicated to the factor structures as reported in the past studies.

5.4 Reliability Analysis of the Measurement Scales

Cronbach alpha was employed to test the reliability of the remaining items of each latent construct after completing the item elimination process based on the findings of the confirmatory factor analysis (CFA) in this study. The number of items for each original scale has been reduced (e.g., 6 out of the 10 items for polychronicity, 7 out of the 9 items for work stress but all 4 items for self-rated and supervisor-rated job performance remained). Besides, each scale becomes a one-factor model. Fornell and Larcker (1981) recommended a criterion cut-off index of .70 or more to indicate an acceptable level of scale reliability. The Cronbach alphas of each scale are presented in Table 5.21.

5.5 Correlation Analysis

Table 5.21 shows the cronbach alpha for the two factors of MLQ, which range from .75 in transactional to .92 in transformational leadership. The results of the two-factor structure of transformational and transactional leadership were just marginally lower than the results in the reliability estimates of the past leadership study conducted by Bycrion, 1995, Goodwin et al, (2001) and Harrison (2000). The difference might be a result of the cultural differences between individualist and collectivist contexts in which the researches were conducted. The scales used for the assessment of the three outcome variables were most internally consistent, that is, .82 for work stress, .78 for self-rated job performance and .92 for

supervisor-rated job performance. In general, the scales used in this study were reliable except the alpha coefficient of the independent variable - polychronicity .66 was slightly below the recommended criterion cut-off index of .70.

Table 5.21 Means, Standard Deviations, Correlations^a and Reliabilities

	Mean	S.d.	1	2	3	4	5	6	7	8	9
1. MALE ^b	.72	.45	1.00								
2. MEXPERIENCE ^b	2.53	1.62	1.10	1.00							
3. MSRELATION ^b	31.64	32.30	1.35*	-.07	1.00						
4. POLY	3.71	.86	-.08	-.02	-.03	(.66)					
5. TRANSFOR	2.69	.64	-.00	.11	.09	.01	(.93)				
6. TRANSACT	1.63	.62	.10	.07	.10	-.06	-.30**	(.75)			
7. STRESS	3.41	1.20	-.05	.10	-.08	-.20**	-.11	.18**	(.85)		
8. SRPERFORM1	4.20	1.00	.12	.11	.19**	-.04	.15*	.28**	.04	(.78)	
9. SRPERFORM2	4.36	1.23	-.01	.10	.10	.02	.05	.06	.04	.30**	(.92)

^a: N = 260, ^b: Variables 1-3 are control and dichotomous variables.

MALE = Male Gender, MEXPERIENCE = Managerial Experience, MSRELATION = Managerial-subordinate Relationship TRANSFOR = Transformational Leadership, TRANSACT = Transactional Leadership, POLY = Polychronicity, STRESS = Work Stress, SRPERFORM1 = Self-rated Performance, SRPERFORM2 = Supervisor-rated Performance.

Off-diagonal elements are the correlation between constructs.

** Significant correlations ($p < .01$).

*Significant correlations ($p < .05$).

Table 5.21 shows that the correlations found among the constructs ranged from -.30 to .30, of which 70% are within the $\pm .20$'s range. None of the demographic variables included for control was significantly related to the dependent variables, except the positive relationship between managerial-subordinate relationship and employees' self-rated performance. The correlations among the independent variables and the moderating variable were found to be low. In other words, transformational and transactional leadership had no systematic relationship to polychronicity. The overall pattern of the correlation results can be perceived as evidence for adequate discriminant validity among variables. Thus, the insignificant

correlation between polychronicity as well as transformational and transactional leadership is not likely to induce potential serious problems of multi-collinearity when using them as independent and moderating variables together for hypothesis testing.

From the above, some findings supported the correlation results of the previous studies, whereas some did not. For example, both transformational and transactional leadership were found to correlate positively with self-rated job performance, transactional leadership and work stress. However, the results indicate that both forms of leadership were not related to supervisor-rated job performance and there was no relationship between transformational leadership and work stress. In addition, polychronicity was negatively correlated with work stress and were not correlated with the two performance measures as predicted.

5.6 Hypotheses Testing

The hypotheses presented in Chapter 3 are restated below:

Hypothesis 1: Transformational leadership is negatively related to subordinates' work stress.

Hypothesis 2: Transactional leadership is positively related to subordinates' work stress.

Hypothesis 3: Transformational leadership is more positively related to self-rated and supervisor-rated performance than transactional leadership.

Hypothesis 4: Polychronicity is positively related to (a) individuals' work stress and (b) performance.

Hypothesis 5: The effects of polychronicity on (a) employees' self-rated performance (b) supervisors' rated performance will be higher when working with a high-level and a low-level transformational leader.

Hypothesis 6: The effects of polychronicity on employees' stress will be lower when working with a high-level and a low-level transformational leader.

Hypothesis 7: The effects of polychronicity on (a) employees' self-rated performance (b) supervisors' rated performance will be lower when working with a high-level and a low-level transactional leader.

Hypothesis 8: The effects of polychronicity on employees' stress will be higher when working with a high-level and a low-level transactional leader.

Hierarchical multiple regression was used to test the hypotheses. The main effects and second-order interaction terms were entered as the predictors in three steps. The control variables, which included male gender, managerial experience of the sales managers and managerial-subordinate relationships, were entered in step 1. It was followed by the predictor variables - polychronicity, transformational and transactional leadership in step 2 and two-way interaction terms representing polychronicity X transformational and transactional leadership respectively were included in step 3 to predict the sales agents' work stress, self-rated and supervisor-rated performance.

As described by Cohen and Cohen (1983), hierarchical regression is useful when there is a prior theoretical basis for describing the sequence of variables to be added in the regression equation. The primary test is for the additional variance of the outcome variables that is accounted for with each additional predictor. For the purpose of this study, a significant change in R^2 from step 2 to step 3 is important to determine whether the interaction is significant between polychronicity and both forms of leadership styles on subordinates' work attitudes and effectiveness.

Table 5.22 depicts the results of the predictors (interaction) on subordinates' work stress, self-rated and supervisor-rated performance. The results of the demographic variables on

the outcome variables were reported first and followed by the results on the main effects of polychronicity, transformational and transactional leadership on the outcome variables. Finally, the interaction effects of the transformational and transactional leadership as well as polychronicity on the outcome variables were included.

5.61 Effects of Control Variables

The results indicate that the demographic variables have, in general, little effects on work stress and supervisor-rated performance but yielded a moderate effect on self-rated performance. The model predicted the R^2 0.4 % of the variance for work stress, 6.9% of the variance for job performance of self rating and 2.4 % of supervisor-rated performance. More specifically, as managerial-subordinates relationship had a positive effect on self-rated performance, it has been confirmed that it might be an influential predictor in this study ($\beta = .200$, $p < .001$). Other control variables, that are, male gender and managerial experience of sales managers, also appeared to be marginally associated with self-rated performance ($\beta = .114$, $p < .10$) and ($\beta = .107$, $p < .10$) respectively. In addition, Managerial experience of sales managers and managerial-subordinate relationship had marginal positive relationships with supervisor-rated performance.

Table 5.22 Results of Hierarchical Multiple Regression Analyses for Work Stress and Job performance (Self-rating and Supervisory Rating)^a

Steps	Predictors	Work Stress					Job Performance (Self-Rating)					Job Performance (Supervisory Rating)					
		β^b	F	ΔR^2	R ²	β^b	F	ΔR^2	R ²	β^b	F	ΔR^2	R ²	β^b	F	ΔR^2	R ²
1	<u>Control Variables</u>		3.57		.004		6.22***		.069***		2.07		.024				
	Male gender of sales managers	-.009				.114 [†]											
	Managerial Experience	.007				.107 [†]											
	Managerial-Subordinates Relationship	-.063				.200***											
2	<u>Independent Variables</u>		3.33**	.071***	.075***		8.74***	.106***	.175***		1.31	.007	.031				
	Individual Polychronicity	-.198**				.002											
	Transformational Leadership	-.091				.245***											
	Transactional Leadership	.130*				.306***											
3	<u>Interactions</u>		2.56	.002	.077		7.50***	.021*	.196*		1.32	.010	.041				
	Individual Polychronicity x Transformational Leadership	-.011				-.032											
	Individual Polychronicity x Transactional Leadership	.045				-.155**											

a: N = 260. Standard errors are in parentheses

b: The β s shown here are standardized regression coefficients at the final step of the analysis.

†: $p < .10$, *: $p < .05$, **: $p < .01$, ***: $p < .001$.

5.62 Results of the Hypotheses Testing (Main Effects)

As shown in the upper part of Table 5.22, the overall F-test is significant for two out of the three regression models. It indicates a significant improvement in enhancing the prediction on the outcome variables by adding polychronicity, transformational and transactional leadership as the independent variables into the regression equation. The independent variables increase the predicted variance to 7.1% of the variance for work stress, 10.6% of the variance for self-rated job performance and 0.7% of supervisor-rated performance. Specifically, polychronicity was found to relate negatively with work stress ($\beta = -.198$, $p < .01$) and unrelated to self-rated and supervisor-rated performance. Thus, hypothesis 4 was not supported.

The middle part of Table 5.22 also shows that transformational and transactional leadership explain a medium proportion of the variance of work stress and self-rated and supervisor-rated performance. Specifically, transactional leadership was found to relate positively to subordinates' work stress and self-rated performance ($\beta = .130$, $p < .05$) and ($\beta = .306$, $p < .001$) respectively. Transformational leadership was associated with self-rated job performance positively ($\beta = .245$, $p < .001$) but unrelated to work stress. No significant relationship was found between both forms of leadership and supervisor-rated performance. Thus, hypothesis 1 and 3 were not supported. Only hypothesis 2 was

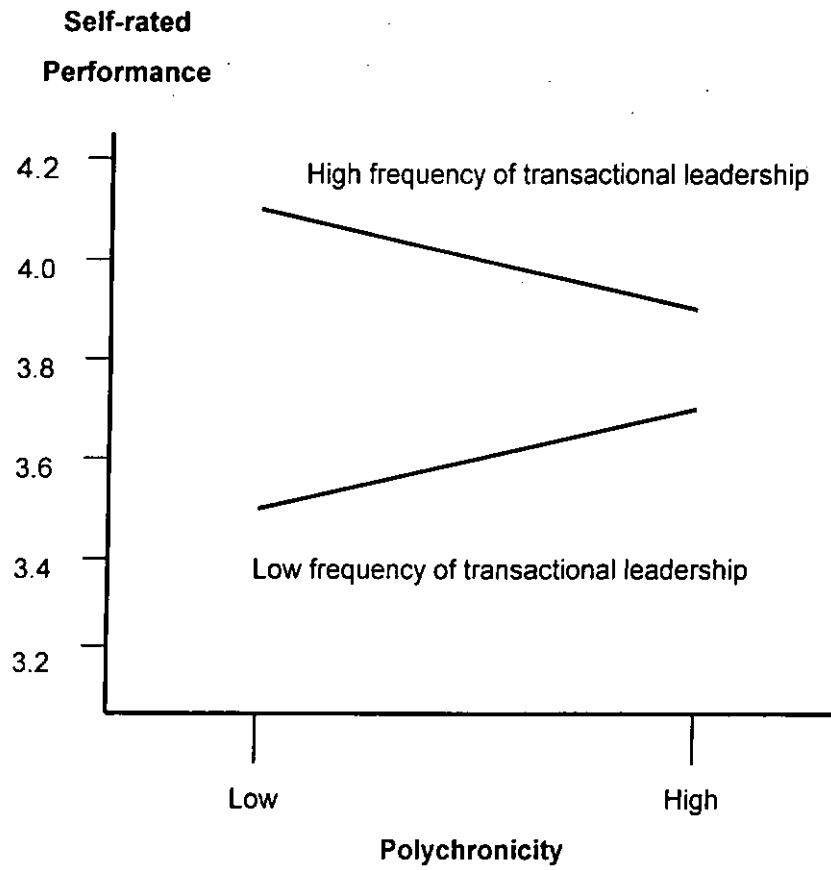
supported.

5.63 Results of Hypotheses Testing (Interaction Effects)

The lower part of Table 5.22 reveals that polychronicity interacted as predicted with leadership for subordinates' well-being and effectiveness. The only significant interaction effect was found between polychronicity and transactional leadership on self-rated performance ($\beta = -.155$, $p < .01$). The relationship between polychronicity and subordinates' job performance is contingent on how frequently the sales managers exhibit transactional leadership at work. The negative sign somewhat reflects that the managers who tend to exhibit transactional leadership frequently would decrease the performance level of polychronic subordinates significantly. In order to understand the nature of the significant interaction, the procedure developed by Cohen and Cohen (1983) was employed. The high and low values of the independent variables were substituted in the regression equation and the interaction effect was plotted on the graph in Figure 5.10. In the graph, polychronicity and self-rated performance formed the X-axis and the Y-axis respectively. By using one standard deviation above and below the mean, the high and low frequency of transactional leadership was captured (Cohen & Cohen 1983). After the interaction graph was plotted, the researcher used the procedures developed by Aiken and West (1991) to examine the effectiveness of the slope. The results revealed that both

simple slopes of the interaction were significantly different from zero. These suggested that subordinates with a lower polychronic orientation reported a high level of self-rated performance when the frequency of managers exhibiting transactional leadership was high. Conversely, subordinates with a lower polychronic orientation reported a low level of self-rated performance when the frequency of managers exhibiting transactional leadership was low. Finally, subordinates with a higher polychronic orientation reported a similar level of self-rated performance, no matter the frequency of managers exhibiting transactional leadership was either high or low. Surprisingly, the interaction of polychronicity and transformational leadership did not have a significant effect on the outcome variables. It indicated that the effects of polychronicity on work stress and self-rated and supervisor-rated performance were not contingent upon the frequency of transformational leadership exhibited by managers. Thus, only hypothesis 6 was partially supported.

Figure 5.10 Interaction between Transactional Leadership style and Polychronicity for self-rated performance



CHAPTER 6

DISCUSSION AND CONCLUSIONS

Introduction

This chapter provides a summary on the interpretation of the findings and contributions of this study – for example, provision of additional empirical evidences confirming the validity of polychronicity theory in a sales context and the conceptualization of leadership as a moderator for investigation. The limitations of this study with respect to the factor structures of full leadership measure, the use of convenience sample and common method variance are also discussed. This study finally points to the potential directions for future research, including leadership style as a moderator in different jobs and organizational settings, effects of leadership on work attitudes and behaviors at both the individual and group levels and the development of a taxonomy for classifying which jobs are associated with polychronicity.

6.1 Summary of the Findings

This study aims to examine how transformational and transactional leadership style would impact on the relationship between polychronicity, subordinates' work stress and job performance.

6.11 Leadership Styles and Subordinates' Work Stress

The present findings support that transactional leadership was positively related to subordinates' work stress and confirm Hypothesis 2. Transactional managers always emphasize getting good results from subordinates by satisfying their material needs and monitoring the standard of their performance. They seldom pay attention to other important aspects of subordinates' needs. Unfortunately, it can be very stressful and emotionally exhausting for insurance sales agents to meet customers' demands (Comer & Dubinsky, 1985). Hard pressed by work, subordinates vent their grievances and dissatisfactions to their managers, for instance, they may complain of unreasonable and appalling demands from customers. When such situations arise, transactional managers may choose to ignore or disregard subordinates' feelings and simply reiterate the performance standards on service quality. By reinforcing the standard and convincing subordinates to meet targets through increasing the direct reward, this task-focused role would be perceived as insensitive to subordinates' hardships and would lead to negative well-being. Not surprisingly, subordinates working with a transactional manager reported a high level of stress. This is consistent with Bass's (1998) findings that transactional leadership is unlikely to facilitate the stress reduction efforts among subordinates.

On the other hand, no significant negative relationship was found between transformational leadership and subordinates' work stress. Thus, Hypothesis 1 was not supported. Findings are contrary to previous results which identified that articulated vision and individualized support of the transformational leadership constructs are effective for reducing subordinates' stress level (Selzter, Numerof, & Bass 1988) and mentoring transformational leadership was negatively related to protégés' job-related stress (Sosik & Godshalk, 2000). However, such a relationship was not found in the present study. This suggests that subordinates did not view transformational managers as conducive to reducing their work stress.

6.12 Leadership Styles and Subordinates' Performance

There is partial support for Hypothesis 3. Transformational and transactional leadership styles have potential effects on subordinates' self-rated performance but not on the supervisory one¹. In fact, the relationship between leadership style and subordinates' self-rated performance may not be as consistent as some researchers has found in their studies (Bass, 1990; Bass & Avolio, 1994). The present findings demonstrate that transactional leadership has a stronger direct relationship with subordinates' self-rated performance than transformational leadership. It invalidates the basic notion that

¹ Results of Anova test found no inter-firm variations in supervisors' rated performance ($F = 0.18$, n.s). The non-significant relationship between both forms of leadership and supervisors' rated performance cannot attribute to any systematic variations among the 7 insurance companies.

transformational leadership can influence subordinates to meet the minimum expectation than transactional leadership (Bass, 1985). These counter intuitive findings may be explained by the use of commission or bonuses by insurance companies in Hong Kong to motivate their employees for achieving sales quotas. This might accentuate the role of transactional managers and they appear to be more appealing and effective in enhancing subordinates' performance than transformational managers in terms of motivation. More importantly, sales agents in their early career are likely to be motivated by monetary reward and tend to perceive the fairness of the received reward as a motivation sustaining their performance level (Flaherty & Pappas, 2000). More than sixty-five percent of the sales agents participating in this study could be regarded as "green" in their career stage by having 1 to 3 years' experience. As a result, they would probably view monetary reward as an important association to their performance level. Additionally, Goodwin, Wofford and Whittington (2001) suggested that transformational leaders should not only recognize subordinates' performance on a leader-follower relationship basis but should also consider the value of fairness in rewarding good subordinates with money. Hence, subordinates may perceive monetary reward used by sales managers as an effective means for maintaining their psychological contract and may consequently benefit their performance. In order to appraise these explanations, the researcher conducted a post hoc analysis to examine whether the coefficients of transformational leadership ($\beta = .245$)

and transactional leadership ($\beta = .306$) were significantly different from each other in explaining the variance of subordinates' self-rated performance. The analysis was conducted based on the procedure recommended by Cohen & Cohen (1984). The results indicated that no significant difference was found in favor of transactional leadership to explain the variance more effectively than transformational leadership ($t = -.084$, n.s). Thus, it appears that the explanations for the effects of transactional leadership may become less important in the sales context. Here, the interpretations of post hoc analysis should always be made with caution.

6.13 Polychronicity and Individuals' Work Stress and Performance

Although polychronicity was significantly related to subordinates' work stress, the relationship was found to be negative instead of positive. It was inconsistent with Hypothesis 4a. Therefore, this hypothesis was not supported. The regression analysis revealed something interesting on the relationship -- juggling several tasks might help an individual to reduce stress. These counter intuitive findings may be explained by the sales job nature, which entails lots of non-routine tasks (e.g., complex and unexpected activities) and the dynamic sales situation requires them to have extensive knowledge and skills (Yammarino & Dubinsky, 1992). They often face, from customers and the management levels, unexpected requests, which they have no control over their nature and the exact

time required to complete a transaction between those requests. As sales agents need to be flexible and attentive in order to satisfy the diversified needs and expectations of several customers, task juggling would help offset the emotional fluctuations and reduce their negative feelings. Conversely, if sales agents were forced to adopt polychronicity, they would feel a high level of stress when dealing with non-routine tasks. Kaufman, Lane, and Lindquist (1991b) suggested that polychronicity may be characterized as an adaptive behavior on time use by helping individuals to accommodate the demands of different job natures and the workplace environments. The present study suggests that this kind of behavior may pertain to emotional stability and adaptation enhancement in reducing an individual's stress level.

Although Taylor et al, (1984) found that polychronicity was related to faculty productivity, it was unrelated to self-rated performance in the present study as predicted in Hypothesis 4b. It therefore, was not supported. The present findings appeared to be consistent with the suggestion of a study conducted by Bluedorn and Denhardt (1988) that polychronicity may be associated with performance only in some particular settings. This is because an individual's time use orientation may be manifested by the job nature and the working environment that he/she is working in. However, it is somewhat unclear about which job natures as well as work settings would be associated with polychronicity. Consequently,

the perceived effectiveness of polychronicity and its importance as associated with job performance becomes less salient or even insignificant among individuals in a sales setting.

6.14 Transformational Leadership as a Moderator on the Relationship between Polychronicity Subordinates' Work Stress and Performance

As the effects of leadership and polychronicity can be additive, the researcher had predicted significant interaction effects between leadership style and polychronicity on subordinates' well-being and effectiveness. As stated in Hypothesis 5: The effects of polychronicity on (a) employees' self-rated performance (b) supervisors' rated performance will be higher when working with a high-level and a low-level transformational leader, and in Hypothesis 6: The effects of polychronicity on employees' stress will be lower when working with a high-level and a low-level transformational leader.

With respect to Hypothesis 5 and 6, the predicted interaction effects between transformational leadership and polychronicity on subordinates' work stress and job performance could not be found. This prediction has not been made in the previous works on transformational leadership theory. The present findings show that transformational

managers were not perceived to be a buffer in helping polychronic subordinates to reduce stress level and enhance performance level. One possible explanation for these findings may lie in the nature of the sales positions. Sales agents are in a boundary role (Walker, Churchill, & Ford, 1979) -- they may interact less frequently with their managers and are responsible for generating sales and profits for their companies by spending most of their time outside their organizations to meet customers. Belasco (1966) also stated that sales agents often work alone and so are physically, socially and emotionally separated from their managers. This separation may not be conducive to fostering a strong relationship between managers and subordinates, particularly for polychronic subordinates who often need extra help and support from their managers. It may mitigate the impact and marginalize the role of transformational leaders in subordinates' eyes. As a result, in comparison to transactional managers, transformational managers become less effective in displaying leadership behaviors (e.g., articulating the collective vision), leading subordinates difficult to understand and internalize these behaviors as they require a relatively longer time to build up through frequent face-to-face interaction and quality communication with subordinates. In order words, the perceived effectiveness of transformational leadership is dependent on the amount of time to which managers are able to interact with subordinates. Several researchers have suggested that physical distance decreases the opportunities for direct influence and the effectiveness in

strengthening the working relationship between leader and follower (Bass, 1990; Liden, Sparrow, & Wayne 1997; Napier & Ferris, 1993). Conversely, close physical proximity between leaders and subordinates facilitates the communication process and the quality of the exchange between leaders and subordinates (Bass, 1990, Howell & Hall-Merenda 1999). Sparrowe and Liden (1997) also suggested that high-quality relationships can be depicted in terms of social exchanges that are easily fostered when close physical proximity and face-to-face interactions are possible. Shamir (1995) advanced similar arguments in his discussion on the influence processes used by transformational leaders who are socially close versus those who are socially distant from their subordinates. He contended that in a close relationship, leaders have a greater opportunity to show personal coaching, sensitivity to and interest in subordinates' needs and support towards subordinates.

An alternative explanation may pertain to the nature of the sample used in this study. As noted earlier, the sales agents have been working with their current supervisors for a short period of time (i.e. 1 to 3 years) only. This suggests that most sales agents were quite "junior" in their positions and perhaps no intimate relationships between transformational managers and sales agents could be developed within this limited time period (Dubinsky, Yammarino, Jolson, & Spangler, 1995). This situation may have minimized the effect of

the perceived effectiveness of transformational leadership among polychronic subordinates. Transformational leadership emphasizes the satisfaction of subordinates' higher-order needs on the basis of strong leader-subordinate relationships which may be reflected by the length of their working relationship. It plays an important role in accounting for the results of the leadership effectiveness and outcome variables (Vecchio & Bullis, 2001). For example, as subordinates have little information to evaluate their supervisors with reference to their perceived leadership style, they are more likely to rely on "impression assessment" during the early period of the relationship. Jones, Katak, Futrell and Johnston (1996) suggested that effective sales managers should help new sales agents to clarify what may be perceived as nebulous by investing personal time in their socialization process in order to reduce their role ambiguity in the starting time of the sales career.

6.15 Transactional Leadership as a Moderator on the Relationship between Polychronicity Subordinates' Work Stress and Performance

Apart from Hypothesis 5 and 6, the present study also tested the interaction effects between transactional leadership and polychronicity on subordinates' work stress and performance. As stated in Hypothesis 7: The effects of polychronicity on (a) employees' self-rated performance (b) supervisors' rated performance will be lower when working with

a high-level and a low-level transactional leader, and in Hypothesis 8: The effects of polychronicity on employees' stress will be higher when working with a high-level and a low-level transactional leader. The present findings also demonstrate a partial support for Hypothesis 7, that is, the prediction of the interaction effects of transactional and polychronicity on subordinates' work stress and performance. Specifically, a significant interaction between transactional leadership and polychronicity on subordinates' self-rated job performance was found, but it does not apply to the case of other outcome variables. Nevertheless, the following discussion will focus on how transactional leadership and polychronicity will impact on subordinates' self-rated performance with reference to Figure 1 as depicted in chapter 5.

Figure 5.10 in Chapter 5 shows that subordinates with a lower polychronic time use orientation reported a high level of self-rated performance when the frequency of managers exhibiting transactional leadership was high. It appears the transactional manager's emphasis on goals and expectations had a stronger impact on subordinates' self-rated performance when subordinates tended to have a lower polychronic time use orientation. Conversely, subordinates with a lower polychronic time use orientation reported a low level of self-rated performance when the frequency of managers exhibiting transactional leadership was low. This means that transactional managers would

decrease subordinates' self-rated performance if they could not provide specific goals and promised rewards in exchange for their effort. Finally, subordinates with a stronger polychronic time use orientation reported almost the same level of self-rated performance, when the managers exhibiting the frequency of transactional leadership was either high or low. It reflects that transactional leadership is more likely to enhance better performance among subordinates with a stronger polychronic time use orientation but its effects were not as strong as that on those with a weaker polychronic time use orientation.

In sum, transactional managers in insurance organizations were more effective in empowering and motivating subordinates with a lower polychronic time use orientation than those with a higher polychronic time use orientation for better performance, implying that transactional leadership and subordinates with a higher polychronic time use orientation may have some attributes in common. One possible explanation is that transactional leadership relies on the clarification of performance expectations and the use of direct rewards as a means to get expected results. This leadership style would be perceived by subordinates with a lower polychronic time use orientation as an effective way through which they could feel a greater sense of control over the tasks ahead and can calculate their efforts in exchange for reward. In this regard, Byman (1992) suggested that transactional leadership plays a major role in providing clear performance goal, which

guide the behavior of subordinates to keep on track.

6.2 Implication for Theory

The present study illustrates that the effectiveness of transformational leaders has been overemphasized and overly elevated in the Western literature because leadership is highly cultural specific. Findings suggest that insurance sales managers who exhibit the transactional leadership style can be perceived differently by subordinates and may have different effects on their job performance in the Asian context. Specifically, a transactional leader's emphasis on getting good results and satisfying the immediate material needs of subordinates were viewed as less positive than transformational leadership among Western subordinates, whereas they might be seen as more positive than the latter among their Asian counterparts. Jung and Avolio (1999) also suggested that researchers studying cross-cultural leadership need to be cautious about assuming that the same leadership style will be interpreted in the same way by subordinates with different cultural orientations. Similarly, Smith, Misumi, Tayeb, Peterson and Bond (1989) found that leaders' consideration and initiation has emerged as the universally relevant dimensions across cultures but how subordinates evaluated the actual behaviors of their leader would be somewhat different. For example, a leader who discussed his/her followers' personal problems with others in their absence was perceived as considerate in Japan but it would

be an invasion of the followers' privacy in the United States. In sum, sales managers in Asia can be viewed as more effective in motivating the performance of subordinates by improving their practices as a transactional leader.

The present study also suggests that polychronicity may be a variable specific to job nature. Although only one job nature has been included in this study, it provides something important when studying polychronicity. For example, findings illustrate that insurance sales agents are more likely to have polychronic time use orientation, which is linked with stress but ineffective performance level. Whether the relationship between polychronicity and the work-related variables is valid or not depends on which job sample has been taken for investigation. Different jobs require different time use orientations among individuals. In fact, job nature has the potential to account for how individuals use their time in approaching their daily activities. For example, while some jobs require strict adherence to time constraints (e.g. transportation-related jobs where departure and arrival are expected to occur on time), others require rapid adaptation to changing demands (e.g., health-care personnel in emergency services and firemen) (Conte, Rizzuto, & Steiner 1999).

Finally, the present study pioneers a model using leadership as a moderator to study the

interaction effects of transformational and transactional leadership and individual's time use orientation on subordinates' work attitudes and effectiveness. It is an innovative conceptual development to increase our understanding on leadership effectiveness beyond the traditional development of leadership as a predictor for the outcome variables. Prior studies have mainly focused on the examination of the direct effects of both forms of leaderships on subordinates' work attitudes and effectiveness by using a variety of sample at different levels of analysis. These studies have generally neglected the potential moderating effects of both forms of leaderships for investigation. As this preliminary evidence was found to support the interaction effects of transactional leadership and polychronicity on subordinates' self-rated performance, future research should look at the interaction effect of leadership on work attitudes and effectiveness in different organizational settings.

6.3 Implication for Practice

This study may also have a practical implication for training employees and managers. Employees are expected to be flexible in order to work simultaneously. The fact that polychronicity can decrease an individual's stress and perhaps enhance job performance suggests that organizations should provide appropriate training on polychronicity. Organizations will greatly benefit from such kind of training if the managers and

subordinates are trained to have similar time use orientation. With similar orientation, the managers would be more effective in encouraging polychronic subordinates' to juggle task and motivating them for better performance. For example, Slocombe and Bluedorn (1999) found that congruency between individual and perceived supervisor/coworkers time use patterns would result in a higher organizational commitment and perceived fairness of performance evaluation.

Training supervisors on effective transactional leadership style is also important in enhancing employees' effectiveness (Avolio, Waldman, & Yammarino, 1991). Organizations could benefit from supervisors who vary their leadership style to meet different subordinates' expectations. Specifically, supervisors are trained to think carefully about how they provide clear performance requirements, positive and negative feedback on subordinates' job performance and to specify exactly how they should exhibit these style at an appropriate time for work-related situations. For example, supervisors should not reinforce the performance expectation when subordinates are emotionally or physically exhausted after meeting customers outside all day.

6.4 Limitations

6.41 Factor Structure

The factor analysis procedure failed to confirm the eight-factor leadership model developed by Bass due to the high correlations among the constructs of transformational and transactional leadership. The present findings suggest that the transactional leadership construct confounded with the measures that belong to the transformational one. Our participants did not identify the underlying constructs of both forms of leadership styles clearly. To them, a transformational leader should possess six instead of five attributes -- idealized attributes, idealized behavior, individualized considerate, inspirational motivation, intellectual stimulation and contingent reward, whereas a transactional leader should possess two instead of three attributes -- active and passive management-by-exception. Without differentiating the unique attributes on both forms of leadership styles by subordinates, it reflects how insurance sales agents in Hong Kong perceived their managers' leadership style. As it did not allow me to make fine predictions on leadership as a moderator, a two-factor model was eventually used. While this limitation did not undermine the main conclusion that the two-factor has been widely used to study employees' perception of transformational and transactional leadership. It has also produced theoretical and practical implications in relation to effectively motivating and leading subordinates across cultures.

6.42 Contextualize Leadership in China

Paternalistic leadership has recently attracted considerable attention in the literature and has been recognized as essential to the understanding of leadership behaviors in the Chinese context. The leadership model encompasses of strong discipline and authority with fatherly benevolence and moral integrity and these attributes evolved from the cultural roots of "Confucianism" and "Legalism" (i.e., the guiding principles of China's long tradition of imperial rule). Specifically, the rule of man and norm of reciprocity as advocated by these principles, which shaped the way how employees perceive their leaders. Farh and Cheng (1999) suggested that paternalistic leadership would be the important research direction for future studies on leadership in organizational psychology. Although the previous researchers have highlighted the importance to study paternalistic leadership in the literature, the present study did not discuss it in details, which may affect employees' interpretation of the effectiveness of transformational and transactional leadership. This limitation would undermine the significance of this study in contributing to the theory of leadership in contemporary Chinese societies.

6.43 Convenience Sample and Limited Generalizability

The use of a convenience sample in this study limits its ability to extend its findings to other populations. Specifically, a sample of 94 managers and 260 subordinates providing

data to this study came from just a few life insurance companies in Hong Kong. Compared to the total number of forty-nine life insurance companies in the Hong Kong Life Insurance Federation list, a sample of seven companies might not make a good representation of the overall life insurance industry (<http://www.hkfi.org>). In addition, there is no control over which subordinates the managers would give the survey to. It was possible that the managers would pick those who give the most favorable ratings on leadership measures. To minimize the possibility of this situation, the managers had been clearly instructed on how should they distribute the survey, that is, on the basis of the length of working relationships between them and the subordinates. A red survey was for those with the longest working relationship with the manager; blue for those who have a relatively long working relationship and green for those with the shortest working relationship. It is also possible that the voluntary nature of the survey led some leaders to choose not to participate.

6.44 Common Method Variance

The final limitation of this study is that the hypotheses tended to support the self-rated measures rather than the objective one. Specifically, the ratings of all the related constructs in this study were obtained from the same raters at the same time. Common method variance may inflate relationships between self-rated predictors and the outcome

variables, which manifest on the results of bivariate correlations. Unfortunately, the problem of common method variance could not be completely ruled out in the present data because the objective measure "supervisor-rated job performance" was not predicted by either polychronicity or both forms of leaderships. However, this problem is somewhat mitigated by one important consideration, i.e. the correlations obtained vary widely in their size and pattern. For instance, both forms of leaderships or polychronicity explained more the variance of subordinates' self-rated performance than work stress. If common method variance was the only thing affecting, one would expect similar, small to moderate correlations across all of the dependent variables. However, this is not what was found in the present study. Instead, there were differential relationships and some of these differences were of a substantial magnitude. Prior research in transformational leadership has found that common method variance may not be as serious a problem as might have been expected (Podsakoff, 1990). Further validation of the findings should be affirmed by data from other objective measures.

6.5 Suggestions for Future Research

6.51 Study The Relationship between Chinese Leadership and Transformational Leadership Styles

Future studies should look at how Chinese paternalistic leadership relates to the effectiveness of transformational and transactional leadership. Chen and Farh (2001) suggested that attributes of paternalistic leadership and transformational as well as transactional leadership have something in common, which may affect employees to evaluate their leaders. For example, the individualized consideration of transformational leadership may be related to the benevolence attribute of paternalistic leadership, a concept essential to understanding of effective leadership behaviors in Chinese organizations. Because both attributes emphasize on personalized, holistic concerns and cares for subordinates' psychological well-being. This appears that effective leadership behaviors in Chinese context have yet been identified and clearly spelled out in the literature. Thus, studying the relationship between paternalistic and transformational leadership is important to understand what leadership behaviors each leader should exhibited in order to motivate and inspire subordinates for better performance in Chinese organizations. By doing so, the study would better capture the full range and dynamics of the transformational and transactional leadership theory and provides findings that are more generalizable in the Chinese context.

6.52 Develop Indigenous Measurements of Transformational and Transactional leaderships in the Chinese Context

Apart from understanding how employees' cultural values influence the relationship between value system and leader behavior effectiveness, future research should focus on the development of indigenous scales of transformational and transactional leadership behaviors specific to the Chinese context, instead of using a modified version of the scales developed in the West to study employees' perception towards both forms of leadership in Hong Kong. The indigenous measures can reflect Chinese employees' view of transformational and transactional leadership in relation to their cultural roots and other values (e.g., group orientation, respect for age and hierarchical position, the importance of face and the importance of relationship) (Lockett, 1998).

6.53 Different Populations and Organizational Settings

Using sample working for more organizations in different industries would help extend the findings to other populations. In addition, comparisons between different industries are conducive to understanding the needs of different time use orientation among individuals and how both forms of leaderships of managers vary across different industries. More research on training can be identified with reference to the uniqueness of each industry. For instance, samples working in Information Technology (I.T.) and finance organizations

can be chosen for future research as both industries have been perceived as fast-paced and change-driven, which may lead to different time use orientation among employees. As these industries have not yet been used for empirical investigation in the polychronicity or leadership literature, it is expected that applying the present theoretical model to organizations in these two industries may result in more supportive findings.

6.54 Multitrait-Multimethod Analysis

In order to avoid inflated common method effects on positive or negative relationships as predicted, multitrait-multimethod is included for measuring both polychronicity and leadership style in future research. Multitrait-multimethod analysis indicates that different raters were able to agree on an individual's polychronicity and leadership style, which provides convergent validity evidence. In developing or testing a relatively new construct such as polychronicity, convergent validity evidence is important because it reduces common method variance concerns (Schmitt, 1994) by offering evidence that different raters can agree on the level of polychronicity and leadership styles a person frequently exhibited to his/her employees and subordinates. Future research can use actual sales performance record and peer ratings as the objective performance measures for the outcome variables so that common method variance can be minimized.

6.55 Multiple Level Analyses Approach of Leadership

Recent leadership studies highlight the need and importance of considering levels of analysis (Bass, 1990; Glick & Roberts, 1984; Pedhazur, 1982; Roberts, Hulin, & Rousseau, 1978). Effective leaders can be demonstrated through either developing intimate relationships with individual subordinates or exhibiting appropriate behaviors to an entire group of subordinates. The former leadership approach involves orientation among subordinates on the basis of a subjective manager-subordinate relationship at the individual level, whereas the latter leadership approach involves orientation among a group of subordinates on the basis of an objective leadership behaviors at the team level. Perceived leadership effectiveness will differ depending on the level of analysis at which researchers would be interested to investigate. In a multilevel leadership study, Chiu, Hui, Yeung, Cheung & Tse (working paper) found that the interaction effects between supervisor leadership behavior and service climate could enhance the service quality among employees at the team level. It appears that future research examining the effect of leadership at different levels is particularly relevant and important in enhancing individual and group level performance.

6.56 Job Taxonomy for Polychronicity

As discussed earlier, an individual's time use orientation may be somewhat reflected by the job nature and the working environment he/she is working in. Conte, Rizzuto and Steiner (1999) suggested that polychronic individuals may be more suitable for jobs that require adaptation to frequently changing demands. Consequently, future research should consider developing a taxonomy to classify which job categories are associated with monochronic or polychronic time use orientation. When the taxonomy is developed, it will be interesting to investigate how individuals differ in their time use orientations due to the variations in their job nature and how these effects impact on the individuals' well-being and effectiveness. In addition, by classifying jobs into different categories, it is possible to provide us with some insights into polychronicity regarding the extent to which the findings can be extended to other sample and work settings.

6.6 Conclusions

The present study provides a preliminary step towards addressing the gap between conceptual development and empirical support on the effects of transformational and transactional leadership styles on the relationship between individuals' time use orientation, subordinates' work attitudes and effectiveness. Although this study was unable to confirm one of our primary hypotheses, the results revealed some otherwise

interesting findings. For example, sales managers exhibiting transactional leadership will be more effective in enhancing the performance level of monochronic subordinates than polychronic subordinates. This suggests that future research is needed to confirm the hypothesis of examining the effects of transformational leadership on the performance of polychronic subordinates. By doing this, we will have a better understanding on which leadership style is more appropriate in enhancing performance and decreasing stress level of subordinates with different time use orientations in today's organizations.

Appendix A

The Invitation Letter Drafted by The Researcher

Mr. Chan Tai Man
Agency Manager
ABC insurance (International) Limited
50 Harbor Road
Causeway Bay
Hong Kong

Dear Mr. Chan

I am a M.Phil "master of philosophy" research student of Department of Management at The Hong Kong Polytechnic University and currently conducting a research on leadership under the supervision of Dr. Warren C.K.Chiu. I am interested in measuring the effect of leadership and how it relates to well-being and effectiveness among middle-level managers and first-line supervisors within the insurance industry.

I am writing to request your permission to conduct a leadership research at ABC insurance (International) Limited. I would like to take a sample of approximately 40-50 agency managers (i.e. who are the immediate superiors of first-line supervisors) and approximately 2-3 first-line supervisors (i.e. who are also the immediate subordinates of each agency manager) from agency department respectively.

In order to gather the data for this research, employees who agree to participate in this research will be required to complete a questionnaire. The first questionnaire will ask the agency managers to evaluate their subordinates' performance. The second questionnaire will ask the first-line supervisors to describe the leadership style of their immediate superiors and their own well-being and effectiveness. The time needed to complete each survey is approximately 15 minutes.

To improve the response rate of this research, it would be helpful if employees could complete the surveys at work and return them to the liaison staff of your organization in sealed envelopes, which I will provide to them. I will come to collect them after the completion of questionnaires. The responses of the employees who participate in this research will be anonymous and confidential at all time in this research.

A lucky draw will be offered as an incentive for those who participate in this research after the completion of questionnaire collection. In addition, I will also provide the results of this research to your company. I hope to be completed this stage of research by June and I could send you the results in September 2001. You can use it to benchmark the leadership performance of your agency staff against the industry.

I appreciate your time and consideration in this matter and hope the findings will serve to contribute to the effective leadership development of ABC insurance (International) Limited. I look forward to hearing a reply from you soon.

Yours sincerely,

Herman H.M. Tse
Research Student
Department of Management
The Hong Kong Polytechnic University
Hung Hum, Kowloon, Hong Kong
Email:herman.tse@
Office Phone No: 2766-7362
Office Fax No:2365-7024

Appendix B
The Invitation Letter to Drafted by The Researcher's Supervisor

Mr. Chan Tai Man
Agency Manager
ABC insurance (International) Limited
50 Harbor Road
Causeway Bay
Hong Kong

Dear Mr. Chan Tai Man

I am writing to seek your kind support to Mr. Herman Tse, a M.Phil research student under my supervision, who is interested in studying the relationship between leadership and employees' work attitudes in Hong Kong.

Mr. Tse has been working diligently on this research study for over a year and I am very satisfied with the things he has put together. I believe that the findings of this study would help us understand more about our managers in carrying out their duties and recommend ways to improve their effectiveness. However, it is important that Mr. Tse is allowed to have access to data essential for his analyses.

I am glad that your company would consider granting him the opportunity to do research among your staff. We will make sure that all the research activities will be conducted in a professional manner and we are happy to share the findings with you at the end of this project.

Please let me know if you need further information regarding this request. With regards!

Yours sincerely

Warren C.K. Chiu (Dr.)
Associate Professor
Department of Management
The Hong Kong Polytechnic University
Hung Hum, Kowloon, Hong Kong
Email: mschiuw@
Office Phone No: 2766-7363
Office Fax No: 2774-3679

Appendix C

The Copy of The Leader Questionnaire



Department of Management
The Hong Kong Polytechnic University
香港理工大學管理學系

**Leadership Research Among Middle Managerial
Staff of the Hong Kong Insurance Industry**
“Questionnaire Investigation”

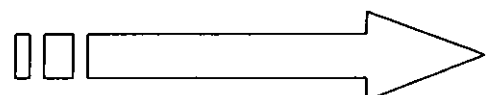
香港保險業中層管理人員的領導方式研究
“問卷調查”

Leader Questionnaire
上司調查問卷



By completing the questionnaire and returning it back to me, you will automatically be given a chance to win a lucky draw for fantastic prize. Details are presented in next page.

閣下若填回問卷，即可參加幸運大抽獎，詳情請看內頁：



Dear Participant/親愛的參加者

We are conducting an independent research on leadership style among middle managerial staff of the Hong Kong insurance industry. Through the arrangement of your company, you and your immediate subordinates are cordially invited to participate in a leadership research organized by Mr. Herman Tse, a Project Researcher of Department of Management at The Hong Kong Polytechnic University. The content of this questionnaire includes four main sections: 1) Evaluation of your subordinates' performance and 2) Your personal information. Each leader should receive a pack of questionnaires which includes a leader questionnaire (in yellow) for you and three team members questionnaires for your 2-3 immediate subordinates in red, blue and green respectively. In order to enhance data accuracy, you are reminded to be aware of filling section 1: **Evaluation of your subordinates' performance in this questionnaire. Please make sure that each subordinate will be given a questionnaire in correct color based on the length who has been working with you.** This questionnaire only takes you about 15 minutes to complete. All responses of you are invaluable to our research, and will be kept completely confidential and anonymous. Please put the completed questionnaire in the envelope **within a week** and return it back to the staff who is responsible for this matter in your company. I will collect them later. If you have any queries regarding the research or the questionnaire, please do not hesitate to contact me.

Thanks The Kimberley Hotel for the generous sponsorship offering to this research. By completing the questionnaire, filling your name and corresponding address in the space provided in the last page of this questionnaire and returning it back to the staff who is responsible for this matter in your company. You will automatically be given a chance to win a lucky draw for fantastic prize which includes: 1) 15% discount coupons for dinner buffet, 2) 20% discount coupons for Chinese dinner, 3) free dinner buffets for 2 at the coffee shop and Kimberley Chinese Restaurant respectively and 4) other fantastic prizes.

我們正進行一項問卷調查，旨在研究香港保險業中層管理人員的領導方式。在貴公司安排之下，閣下和閣下的下屬都被邀請，參加由香港理工大學管理學系項目研究員謝浩文先生所舉辦的領導方式研究。問卷內容分為四部分，包括：1)閣下對下屬的工作表現評估，及2)閣下的個人資料。閣下應收到一份(黃色)的上司問卷，及紅色、藍色、綠色的下屬問卷各一份。**為免資料錯誤，閣下在填寫第一部分：評估下屬工作表現時，請根據下屬與你工作的年期給予每位下屬正確顏色的問卷。**填寫此問卷只需要你十五分鐘，閣下所提供的意見將對我們的研究非常有價值，而且將獲保密處理，並且不會具名。當問卷填妥後，請閣下用所提供的信封於**一星期內**交回貴公司的負責同事。本人稍後會到貴公司收回所有問卷，如閣下對這項研究或調查問卷有任何疑問，請與本人聯絡。

本問卷調查承蒙君怡酒店贊助，謹此致謝。只要閣下填妥問卷，及在問卷最後一頁的空格中填上姓名和通訊地址，交回貴公司的負責同事，便可參加幸運大抽獎。獎品包括：1)君怡酒店咖啡閣自助晚餐八五折優惠券、2)中菜閣晚餐八折優惠券、3)免費享用君怡酒店咖啡閣雙人自助餐，或4)其它精美禮品。

Thank you very much for your kind assistance!

Mr. Herman H.M Tse
Project Researcher
Department of Management
The Hong Kong Polytechnic University
Office Phone No: 2766-7354
Office Fax No: 2365-7024
Email: herman.tse@

Leader Opinion Survey

上司意見調查

Section 1: Subordinates' Performance

第一部分：下屬的工作表現

Instructions:

說明：

All the questions in this section are about your **two to three immediate subordinates** who have received these questionnaires from you. The statements below describe different aspects of their job performance. Please circle the most appropriate numbers indicating the extent to which you agree each statement describing them in general, (not what you wish them to be in the future). Please read each statement carefully and answer all the questions openly and honestly. Your responses will be kept completely confidential and anonymous.

本部分的問題全部有關從你那裡得到這份問卷的二至三位下屬。下列句子描述他們在各方面的工作表現。請你按一般情況(並非你希望將來會發生的情況)，就你是否同意下列句子對他們工作表現的描述，選出最適當的數字作為答案。請細閱下列句子，並以公正誠實的態度回答各問題。你的回覆將獲保密處理，並且不會具名。

The statements **1-4** are used to rate the subordinate with **red questionnaire** and he/she has been working longest with you.

第**1至4**的句子是用作評核這位與你工作最長及使用紅色問卷的下屬。

Statements 句子	Strongly Disagree 非常不同意	Disagree 不同意	Somewhat Disagree 頗為不同意	Neutral 中立	Somewhat Agree 頗為同意	Agree 同意	Strongly Agree 非常同意
1. He/she contributes greatly to the overall performance of your organization. 他/她對工作機構的整體工作表現作出很大貢獻	1	2	3	4	5	6	7
2. His/her work performance is among the best in your organization. 他/她在工作機構中的表現是最出色的其中一個	1	2	3	4	5	6	7
3. He/she always completes the tasks assigned by you on schedule. 他/她經常按所定的工作進度完成你所分派的工作	1	2	3	4	5	6	7
4. His/her work performance measures up to your expectation. 他/她的工作表現能夠達到你的期望	1	2	3	4	5	6	7

The statements **5-8** are used to rate the subordinate with **blue questionnaire** and he/she has been working relatively long with you.

第**5至8**的句子是用作評核這位與你工作較長及使用藍色問卷的下屬。

Statements 句子	Strongly Disagree 非常不同意	Disagree 不同意	Somewhat Disagree 頗為不同意	Neutral 中立	Somewhat Agree 頗為同意	Agree 同意	Strongly Agree 非常同意
5. He/she contributes greatly to the overall performance of your organization. 他/她對工作機構的整體工作表現作出很大貢獻	1	2	3	4	5	6	7
6. His/her work performance is among the best in your organization. 他/她在工作機構中的表現是最出色的其中一個	1	2	3	4	5	6	7
7. He/she always completes the tasks assigned by you on schedule. 他/她在工作機構中的表現是最出色的其中一個	1	2	3	4	5	6	7
8. His/her work performance measures up to your expectation. 他/她的工作表現能夠達到你的期望	1	2	3	4	5	6	7

The statements 9-12 are used to rate the subordinate with green questionnaire and he/she has been working shortest with you.
 第9至12的句子是用作評核這位與你工作最短及使用綠色問卷的下屬。

Statements 句子	Strongly Disagree 非常不同意	Disagree 不同意	Somewhat Disagree 頗為不同意	Neutral 中立	Somewhat Agree 頗為同意	Agree 同意	Strongly Agree 非常同意
9. He/she contributes greatly to the overall performance of your organization. 他/她對工作機構的整體工作表現作出很大貢獻	1	2	3	4	5	6	7
10. His/her work performance is among the best in your organization. 他/她在工作機構中的表現是最出色的其中一個	1	2	3	4	5	6	7
11. He/she always completes the tasks assigned by you on schedule. 他/她經常按所定的工作進度完成你所分派的工作	1	2	3	4	5	6	7
12. His/her work performance measures up to your expectation. 他/她的工作表現能夠達到你的期望	1	2	3	4	5	6	7

Section 2: Participant's Information

第二部分：參加者的個人資料

Instructions

說明：

Please tick the box and fill in your answers in the space provided that reflects your personal information. All data collected will be kept in absolute confidence!

請以的符號來表示及用文字來填寫你的個人資料在所提供的空位內，你的回覆將獲保密處理！

- Gender/性別: 1 Male/男 2 Female/女
- Age/年齡: 1 Below 31 2 31-35 3 36-40 4 41-45 5 Over 45
- Marital Status/婚姻狀況: 1 Single/單身 2 Married/已婚 3 Others/其它
- Highest Level of Education Attained/最高的教育程度:
 - 1 Secondary/中學 2 Matriculation/預料 3 Diploma/High Diploma/文憑
 - 4 Bachelor's Degree/學士 5 Master's Degree/碩士 6 Doctoral Degree/博士
 - 7 Others Please specify/其它請說明 _____
- The Most Recent Participation in Training Programs/最近參與的訓練課程:
 - 1 Leadership Development/領導發展 2 Management Development/管理發展
 - 3 Time Management/時間管理 4 All of The Above/以上所有
 - 5 Others Please specify/其它請說明 _____

6. How long have you been working in the insurance industry?
你在保險業工作有多久?

Month(s)/月 _____ or 或 Year(s)/年 _____

7. How long have you been working in the current organization?
你在現今公司工作有多久?

Month(s)/月 _____ or 或 Year(s)/年 _____

8. How long did you work for managerial position(s) before taking up the current position?
在未擔任現今職位之前你在過往從事管理工作有多久?

Month(s)/月 _____ or 或 Year(s)/年 _____

9. How long have you been working in the current position?
你在現今職位工作有多久?

Month(s)/月 _____ or 或 Year(s)/年 _____

10. How many subordinates are you currently supervising?

你現在管理多少個下屬? _____

11. How many hours do you work in a normal workweek?

你在一個星期中正常工作多少個小時? _____

If you want to make extra comments other than the questions that we ask above, please write in the space below.
如果閣下在上述問題以外還有其它意見想表達，請用以下的空位來填寫。

*****End of Questionnaire*****

問卷完畢

Thank you very much for your kind assistance!

謝謝閣下協助填寫這份問卷!

Kindly check whether all the above questions have been answered.

請您仔細查閱上述所有的問題是否已經填妥。



If you want to get a try of the luck draw, please fill your name and corresponding address in the space provided below and return it back to the staff who is responsible for this matter in your company. I will collect them all later.

如果閣下有意參加幸運大抽獎，請填上你的姓名和通訊地址在以下的空位內，交回貴公司的負責同事，本人稍後會到貴公司收回。

Name/姓名: _____

Corresponding Address/通訊地址: _____

主辦



Department of Management
The Hong Kong Polytechnic University
香港理工大學管理學系

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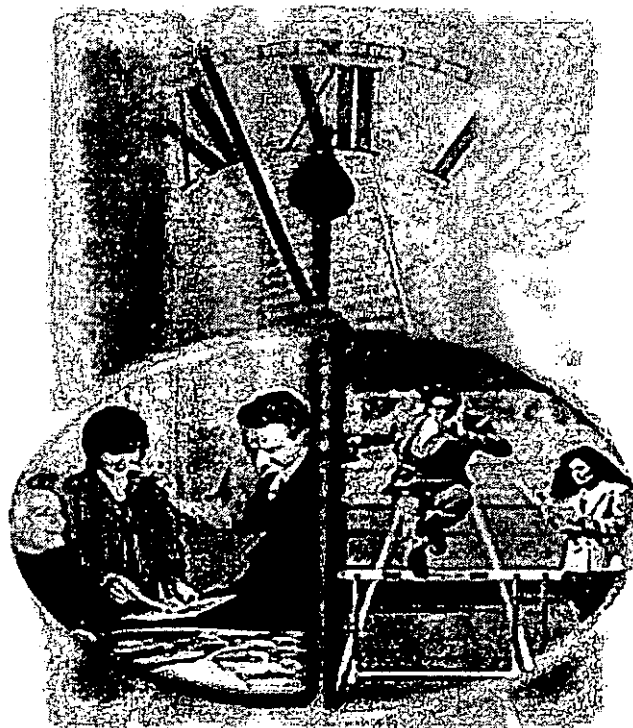


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Leadership Research Among Middle Managerial
Staff of The Hong Kong Insurance Industry
“Questionnaire Investigation”

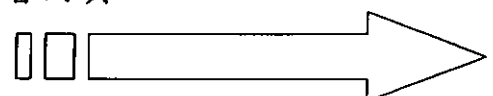
香港保險業中層管理人員的領導方式研究
“問卷調查”

Team Members Questionnaire
組員調查問卷



By completing the questionnaire and returning it back to me, you will automatically be given a chance to win a lucky draw for fantastic prize. Details are presented in next page.

閣下若填回問卷，即可參加幸運大抽獎，詳情請看內頁：



Team Member Opinion Survey

組員意見調查

Section 1: Leadership Style of Your Immediate Superior

第一部分：直屬上司的領導方式

Instructions:

說明：

All the questions in this section are about your immediate superior who has given you this questionnaire. The statements below describe various aspects of his/her leadership style. Please circle the most appropriate numbers indicating how frequently each statement describes his/her leadership style, as you perceive in general. Please read each of the following statement carefully and answer all the questions openly and honestly. Your responses will be kept completely confidential and anonymous.

本部分的問題全部有關給你這份問卷的直屬上司。下列句子描述他/她在各方面的領導方式。請你按一般情況，就下列句子是否能夠經常適用於描述他/她的領導方式，選出最適當的數字作為答案。請細閱下列句子，並以公正誠實的態度回答各問題。你的回覆將獲保密處理，並且不會具名。

Statements 句子	Not at all 完全沒有	Once in a while 很久一次	Sometimes 間中	Fairly Often 頗為頻密	Frequently, if not always 經常
1. He/she goes beyond her/his own self-interest for the good of our group. 他/她不會只顧自己的利益，也會為全組人謀福利	0	1	2	3	4
2. He/she talks enthusiastically about what needs to be accomplished. 他/她熱心地談及需要完成的事	0	1	2	3	4
3. He/she considers the moral and ethical consequences of decisions. 他/她會考慮某個決定所帶來的道德後果	0	1	2	3	4
4. He/she fails to intervene until problems become serious. 他/她在問題變得嚴重前未能及時插手阻止	0	1	2	3	4
5. He/she helps me to develop my strengths. 他/她幫助我發展自己的專長	0	1	2	3	4
6. He/she provides me assistance in exchange for my efforts. 他/她幫助我以換取我的勞力	0	1	2	3	4
7. He/she directs his/her attention toward failures to meet standards. 他/她只著眼於未能達到標準的事	0	1	2	3	4
8. He/she suggests new ways of looking at how we complete our assignments. 他/她會就如何完成工作提出新的看法	0	1	2	3	4
9. He/she expresses confidence that goals will be achieved. 他/她對達成目標表示有信心	0	1	2	3	4
10. His/her actions build my respect for him/her. 他/她的行為令我尊重他/她	0	1	2	3	4
11. He/she considers me as having different needs, abilities and aspirations from others. 他/她認為我有與人不同的需要、能力和抱負	0	1	2	3	4
12. He/she keeps track of my mistakes. 他/她記著我的錯處	0	1	2	3	4
13. He/she specifies the importance of having a strong sense of purpose. 他/她具體指出抱持強烈目標感的重要性	0	1	2	3	4
14. He/she waits for things to go wrong before taking action. 他/她等到事情出錯後才採取行動	0	1	2	3	4

Statements 句子	Not at all 完全沒有	Once in a while 很久一次	Sometimes 間中	Fairly Often 頗為頻密	Frequently, if not always 經常
15. He/she treats me as an individual rather than just a member of a group. 他/她看待我如一個個體，而不只是組內一名成員	0	1	2	3	4
16. He/she discusses in specific terms who is responsible for achieving performance targets. 他/她明確指出誰要負責達到工作表現指標	0	1	2	3	4
17. He/she displays a sense of power and confidence. 他/她表現出能力和信心	0	1	2	3	4
18. He/she articulates a compelling vision of the future. 他/她闡明未來的景象時令人信服	0	1	2	3	4
19. He/she talks to us about his/her most important values and beliefs. 他/她告訴我們自己最重要的價值觀和信念	0	1	2	3	4
20. He/she re-examines critical assumptions to question whether they are appropriate. 他/她重新審核具關鍵性的假設是否仍然適用	0	1	2	3	4
21. He/she expresses satisfaction when I meet his/her expectations. 當我達到他/她的期望時，他/她會表示滿意	0	1	2	3	4
22. He/she focuses attention on irregularities, mistakes, exceptions and deviations from standards. 他/她只著眼於不正常的地方、錯處、例外之處和不符合標準的地方	0	1	2	3	4
23. He/she spends time teaching and coaching. 他/她付出時間教導和訓練我	0	1	2	3	4
24. He/she seeks differing perspectives when solving problems. 他/她在解決問題時會徵詢不同的意見	0	1	2	3	4
25. He/she emphasizes the importance of having a collective sense of mission. 他/她很看重集體使命感的重要性	0	1	2	3	4
26. He/she makes clear what I can expect to receive when performance goals are achieved. 他/她令我清楚知道在達到工作表現指標時可以期望得到甚麼	0	1	2	3	4
27. He/she instills pride in me for being associated with him/her. 與他/她一起工作令我自豪	0	1	2	3	4
28. He/she demonstrates that problems must become chronic before taking action. 他/她示範了必須待問題變成慢性問題後才採取行動	0	1	2	3	4
29. He/she gets me to look at problems from many different angles. 他/她令我從多個不同的角度看問題	0	1	2	3	4
30. He/she concentrates his/her full attention on dealing with mistakes, complaints and failures. 他/她花上全副精神處理錯誤、投訴和未達標準的事	0	1	2	3	4
31. He/she talks optimistically about the future. 他/她談起未來時很樂觀	0	1	2	3	4
32. He/she shows that he/she is a firm believer in "if it ain't broke, don't fix it" 他/她的表現顯示他/她是「事情尚未變糟，不要碰它」的忠實信徒	0	1	2	3	4

Section 2: Perception on your own job attitudes, time management

第二部分：你對自己的工作態度及對時間管理的看法

Instructions:

說明：

Please circle the most appropriate numbers indicating the extent to which you agree each statement describing yourself and your organizational culture in general, (not what you wish yourself and wish it to be in the future). Please read each statement carefully and answer all the questions openly and honestly. Your responses will be kept completely confidential and anonymous.

請你就是否同意下列句子對你自己和你工作機構文化的一般描述(並非你希望將來會發生的情況)，選出最適當的數字作為答案。請細閱下列句子，並以公正誠實的態度回答各問題。你的回覆將獲保密處理，並且不會具名。

Statements 句子	Strongly Disagree 非常不同意	Disagree 不同意	Somewhat Disagree 頗為不同意	Neutral 中立	Somewhat Agree 頗為同意	Agree 同意	Strongly Agree 非常同意
33. I always complete the tasks assigned by my supervisor on schedule. 我經常按所定的工作進度完成上司分派的工作	1	2	3	4	5	6	7
34. I often worry about my job to the point that I cannot sleep well. 我經常擔心自己的工作，令我未能安睡	1	2	3	4	5	6	7
35. I often experience headaches on the job. 我在工作時經常感到頭痛	1	2	3	4	5	6	7
36. I believe it is best for people to be given several tasks and assignments to perform at the same time. 我相信人同時獲分派多項工作是最好的	1	2	3	4	5	6	7
37. I believe it is best to complete one task before beginning another. 我相信在完成一項工作後才開始另一項是最好的	1	2	3	4	5	6	7
38. I contribute greatly to the overall performance of my organization. 我對工作機構的整體工作表現作出很大貢獻	1	2	3	4	5	6	7
39. I often experience stomach upset and indigestion. 我經常感到胃痛和消化不良	1	2	3	4	5	6	7
40. I seldom like to work on more than a single task or assignment at the same time. 我通常不喜歡同時處理多於一項工作	1	2	3	4	5	6	7
41. I often feel nervous and jumpy. 我經常感到緊張和有點神經質	1	2	3	4	5	6	7
42. I often miss work due to cold, fever and other illnesses. 我經常因感冒、發燒和其他病症不能上班	1	2	3	4	5	6	7
43. I would rather complete all procedures everyday than complete parts of several procedures. 我寧可每日完成所有程序，而不是數項程序的部分	1	2	3	4	5	6	7
44. I often experience lower backache and pain 我經常感到下背疼痛	1	2	3	4	5	6	7
45. I prefer to do one thing at a time. 我較喜歡同時只做一項工作	1	2	3	4	5	6	7

46.	My work performance is among the best in my organization. 我在工作機構中的表現是最出色的其中一個	1	2	3	4	5	6	7
47.	I like to juggle several activities at the same time. 我喜歡同時做數項工作	1	2	3	4	5	6	7
48.	I often experience chest pains. 我經常感到胸口疼痛	1	2	3	4	5	6	7
49.	My work performance measures up to my supervisor's expectation. 我的工作表現能夠達到上司的期望	1	2	3	4	5	6	7
50.	I believe people do their best work when they have many tasks to do. 我相信人在有多項工作要做時，才會把工作做到最好	1	2	3	4	5	6	7
51.	I would rather complete parts of several tasks everyday than complete an entire task. 我寧可每天完成多項工作的部分，而不是完成整項工作	1	2	3	4	5	6	7
52.	I often have difficulty to get up in the mornings. 我在早上常常有起床的困難	1	2	3	4	5	6	7
53.	When I work by myself, I usually work on one task at a time. 當我獨自一人工作時，我通常只會做一項工作	1	2	3	4	5	6	7
54.	I often feel fatigued. 我經常感到疲倦	1	2	3	4	5	6	7
55.	I believe people should try to do many things at once. 我相信人應該嘗試同一時間做多項工作	1	2	3	4	5	6	7

Section 3: Participant's Information

第三部分：參加者的個人資料

Instructions:

說明：

Please tick the box and fill your answers in the space provided that reflects your personal information. All data collected will be kept in absolute confidence!

請以 的符號來表示及用文字來填寫你的個人資料在所提供的空位內，你的回覆將獲保密處理！

1. Gender/性別: 1 Male/男 2 Female/女

2. Age/年齡: 1 Below 31 2 31-35 3 36-40 4 41-45 5 Over 45

3. Marital Status/婚姻狀況: 1 Single/單身 2 Married/已婚 3 Others/其它

4. Highest Level of Education Attained/最高的教育程度:

1 Secondary/中學

2 Matriculation/預料

3 Diploma/High Diploma/文憑

4 Bachelor's Degree/學士

5 Master's Degree/碩士

6 Doctoral Degree/博士

7 Others Please specify/其它請說明 _____

5. How long have you been working in the insurance industry?
你在保險業工作有多久?

Month(s)/月 _____ or 或 Year(s)/年 _____

6. How long have you been working in the current organization?
你在現今公司工作有多久?

Month(s)/月 _____ or 或 Year(s)/年 _____

7. How long have you been working in the current position?
你在現今職位工作有多久?

Month(s)/月 _____ or 或 Year(s)/年 _____

8. How long have you been working with your immediate superior?
你與你的直屬上司一同工作有多久?

Month(s)/月 _____ or 或 Year(s)/年 _____

9. How many hours do you work in a normal workweek?

你在一個星期中正常工作多少個小時? _____

If you want to make extra comments other than the above questions, please write in the space below.
如果閣下在上述問題以外還有其它意見想表達，請用以下的空位來填寫。

***** End of Questionnaire *****

問卷完畢

Thank you very much for your kind assistance!

謝謝閣下協助填寫這份問卷!

Kindly check whether all the above questions have been answered.

請您仔細查閱上述所有的問題是否已經填妥



If you want to get a try of the luck draw, please fill your name and corresponding address in the space provided below and return it back to the staff who is responsible for this matter in your company. I will collect them all later.

如果閣下有意參加幸運大抽獎，請填上你的姓名和通訊地址在以下的空位內，交回貴公司的負責同事，本人稍後會到貴公司收回。

Name/姓名: _____

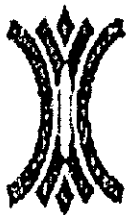
Corresponding Address/通訊地址: _____

主辦



Department of Management
The Hong Kong Polytechnic University
香港理工大學管理學系

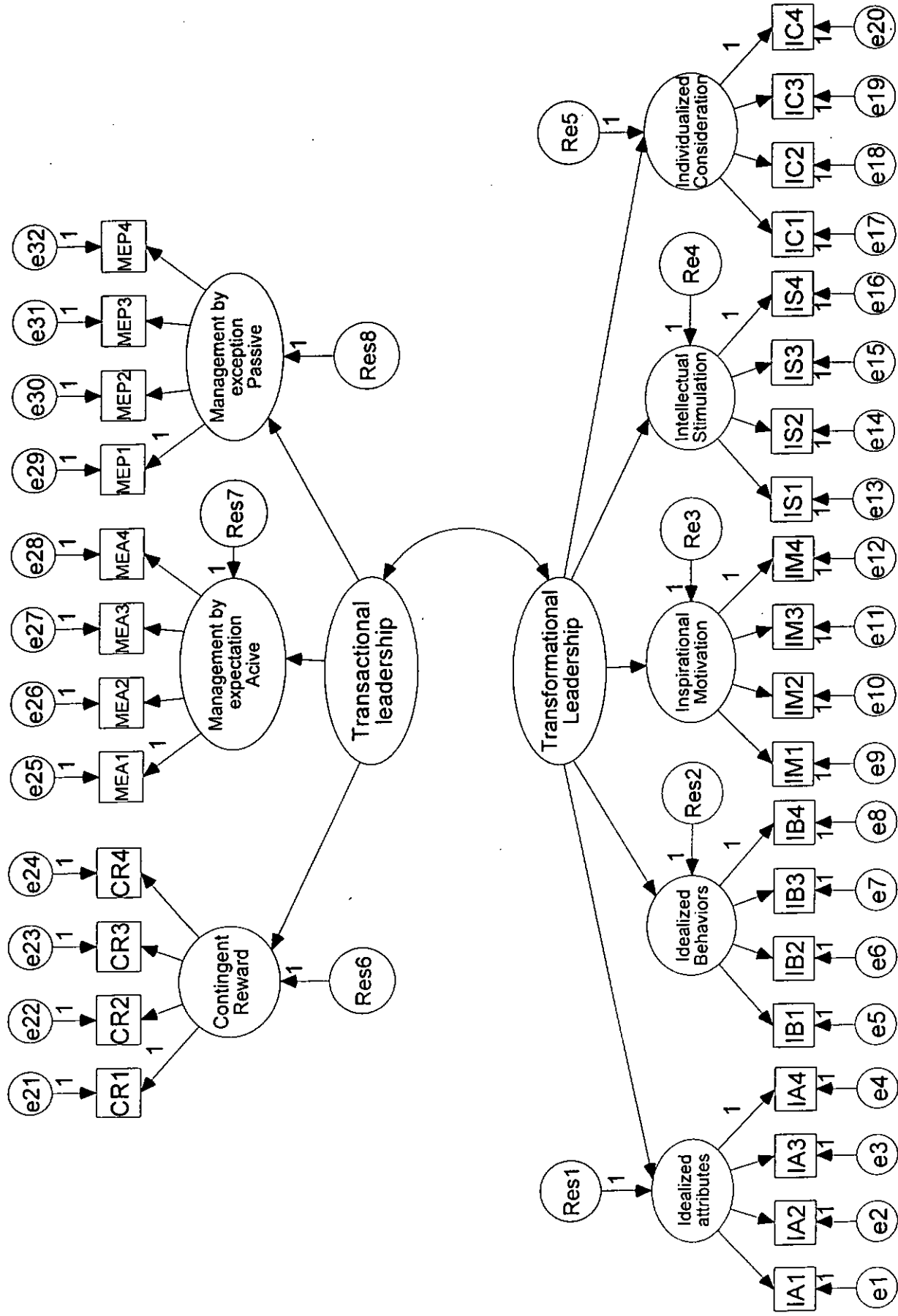
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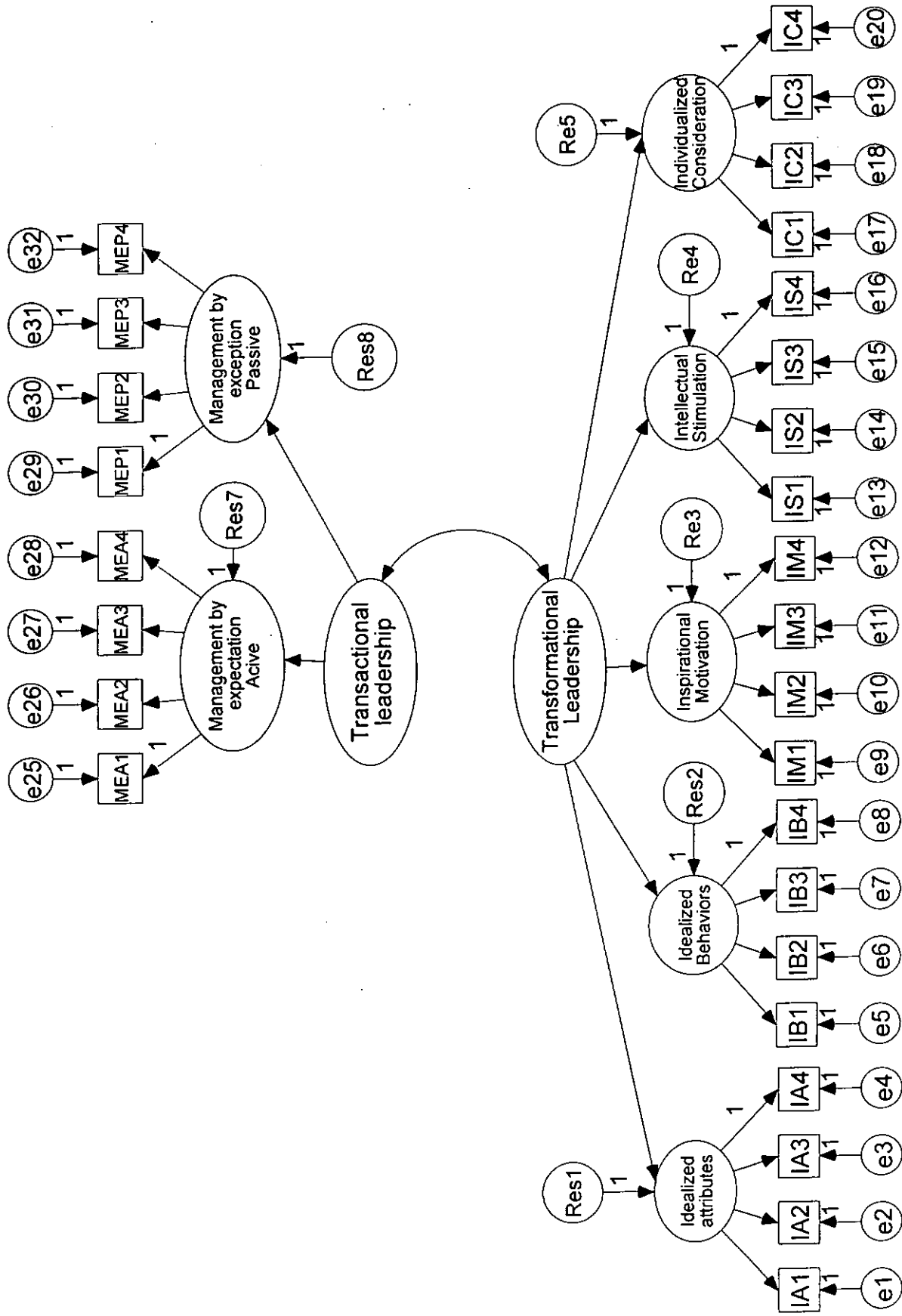
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Figure 5.1: CFA Second-order Factor Model 1 of MLQ



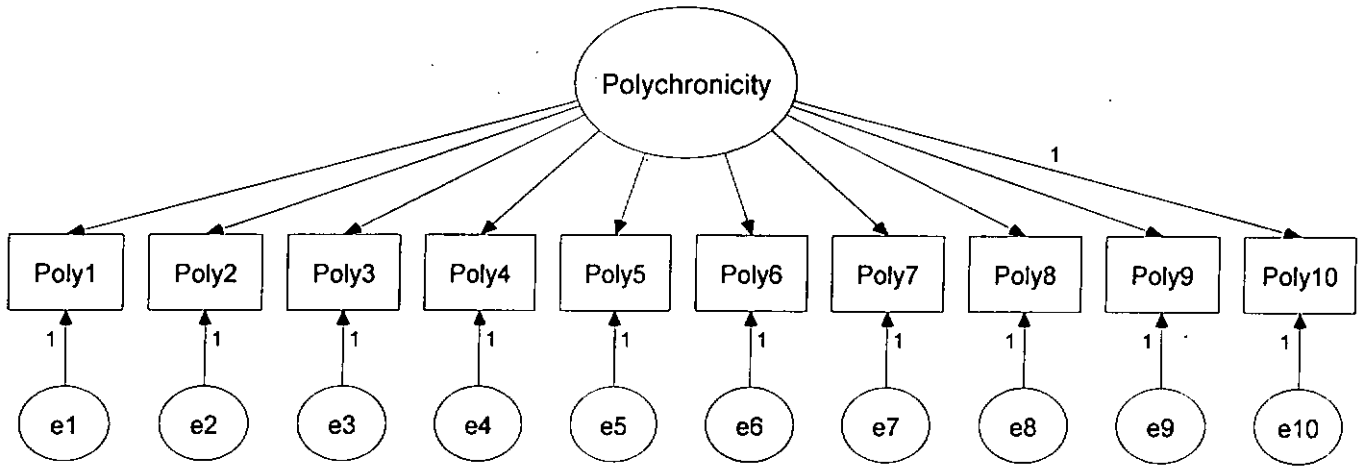
Appendix F

Figure 5.2: CFA Second-order Factor Model 2 of MLQ



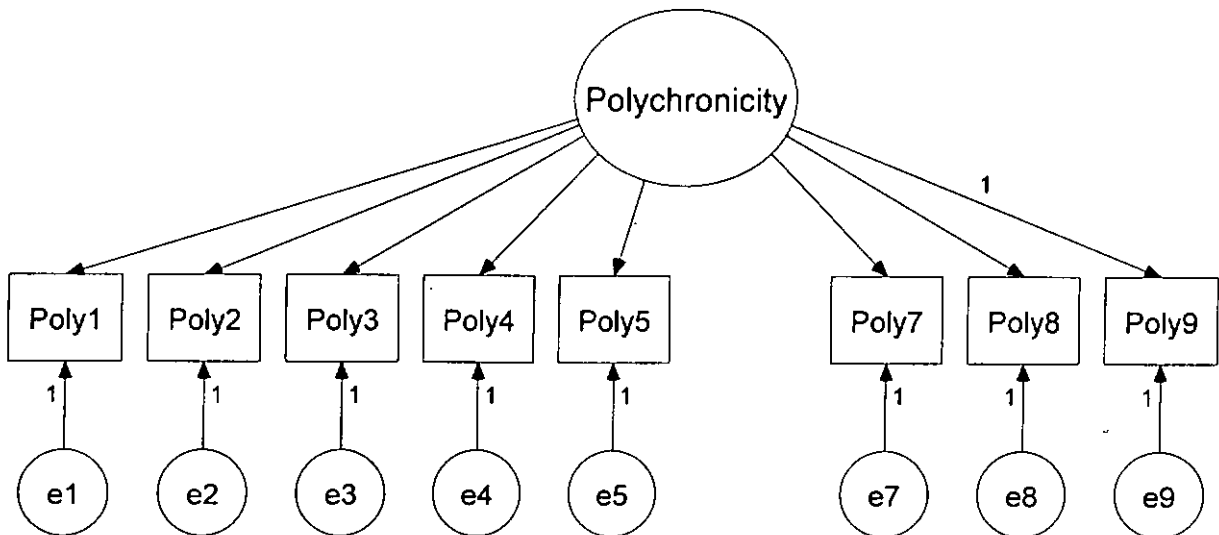
Appendix G

Figure 5.3: CFA of Polychronicity Model 1



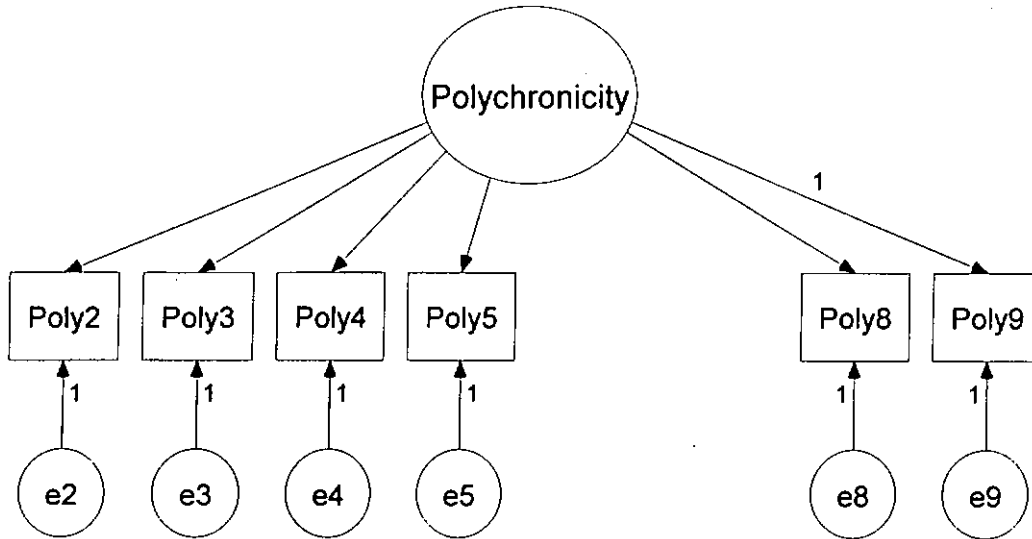
Appendix H

Figure 5.4: CFA of Polychronicity Model 2



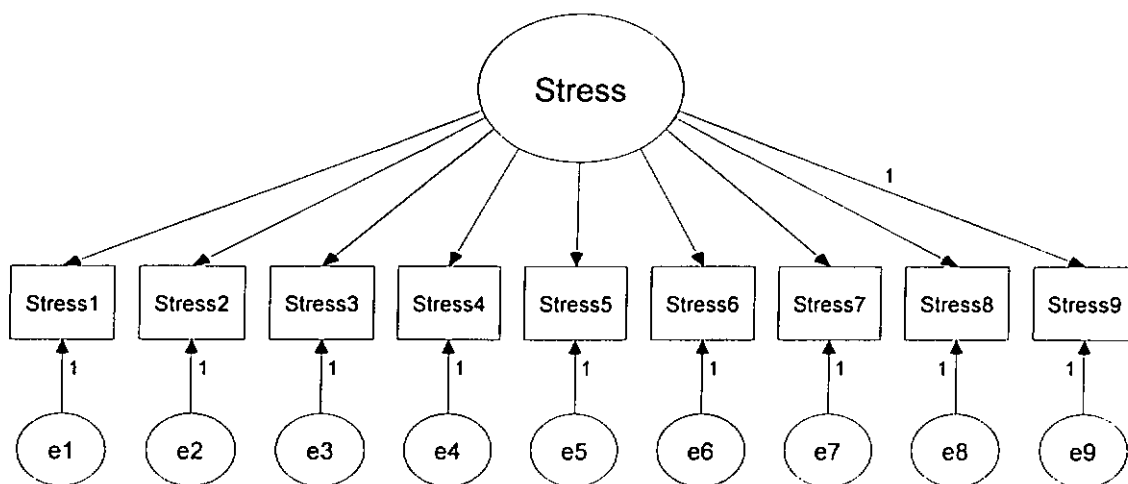
Appendix I

Figure 5.5: CFA of Polychronicity Model 3



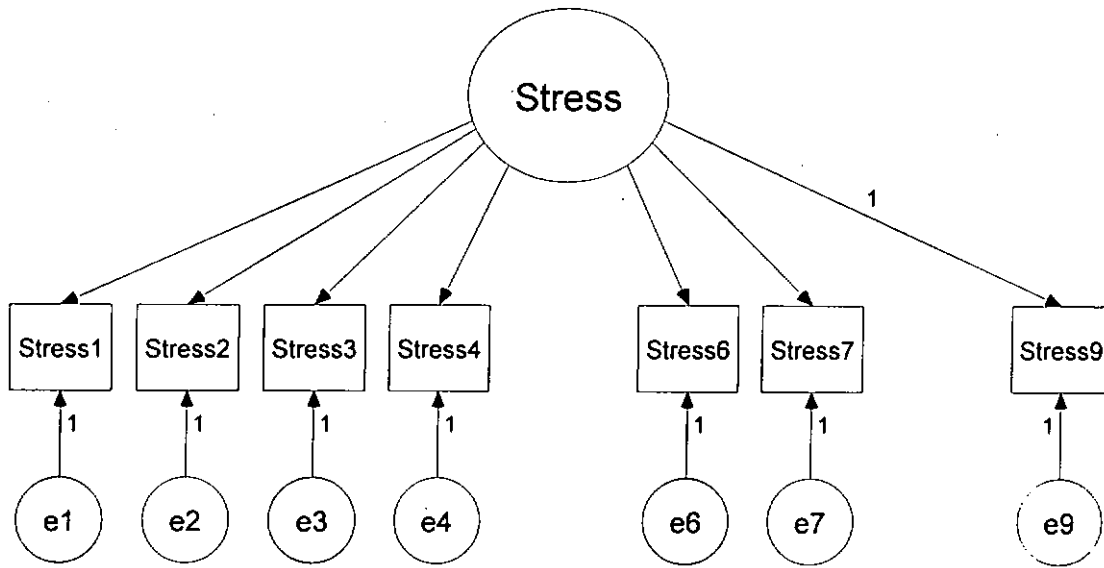
Appendix J

Figure 5.6: CFA of Work Stress Model 1



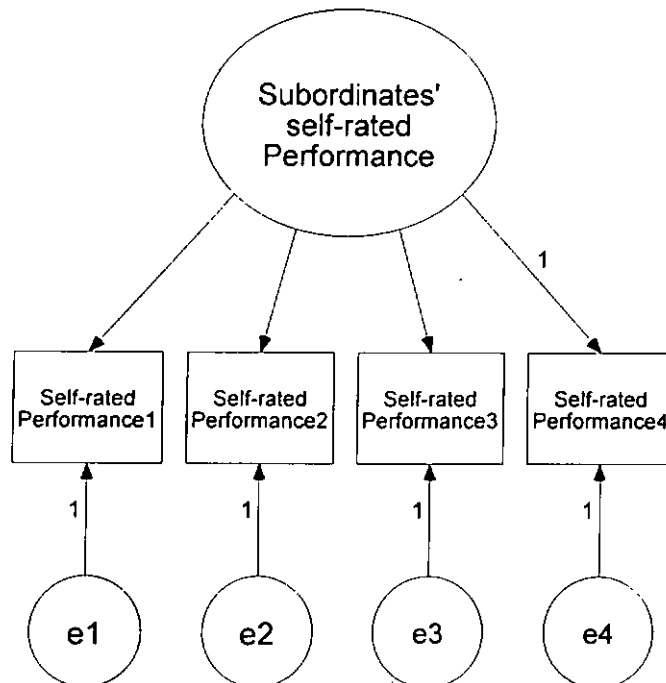
Appendix K

Figure 5.7: CFA of Work Stress Model 2



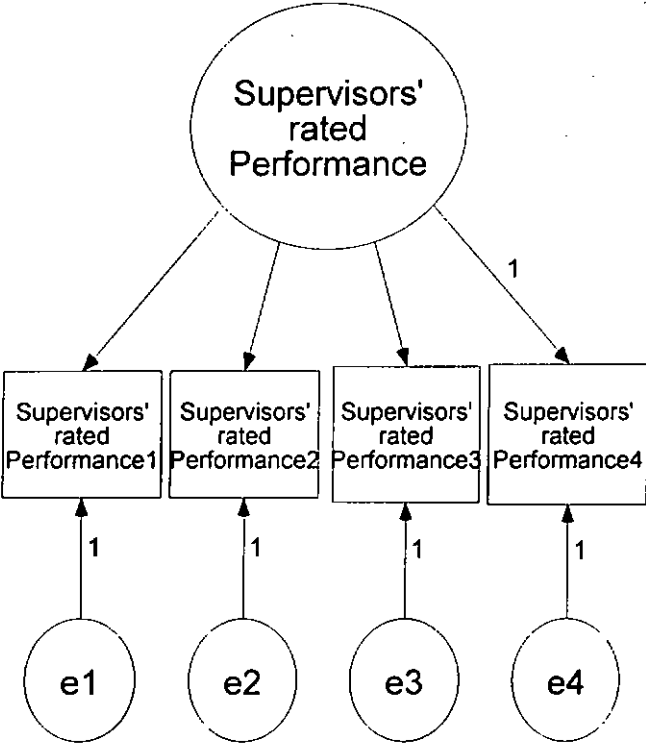
Appendix L

Figure 5.8: CFA of Self-rated Performance Model 1



Appendix M

Figure 5.9: CFA of Supervisor-rated Performance Model 1



REFERENCES

1. Al-Anazi, F, B. (1993). *The relationship between new leadership styles and organization: An empirical investigation of transformational and transactional leadership*. Doctoral dissertation. The University of Liverpool, Liverpool.
2. Aiken, L.S., & West, S.G. (1991) *Multiple Regression: Testing and interpreting interactions*. Sage Hillsdale, NJ.
3. Avolio, B.J. (1999) *Full Leadership Development: Building the Vital Forces in Organizations*. Advanced Topics in Organizational Behavior. Sage Publications, SInternational Educational and Professional Publisher Thousand Oaks.
4. Avolio, B.J., Bass, B.M. (1988). Transformational leadership, charisma, and beyond. In Hunt, J.G., Baliga, B.R., Dachler, H.P., Schriesheim, C.A. (Ed.), *Emerging leadership vistas* (pp.29-50). Lexington, MA: Lexington Books.
5. Avolio, B.J., Waldman, D.A., & Einstein, W.O. (1988). Transformational leadership in management game simulation. *Group & Organization Studies*, 13, 59-80.
6. Avolio, B.J., Waldman, D.A., & Yammarino, F.J. (1991). Identifying common methods variance with data collected from a single source: An unresolved sticky issue. *Journal of Management*, 17, 571-587.

7. Bagozzi, R.P. (1978). The construct validity of the affective, behavioral, and cognitive components of attitudes by analysis of covariance structure. *Multivariate Behavioral Research*, 13, 9-31.
8. Balasco, J.A. (1966). The Salesman's Role Revisited, *Journal of Marketing*, 30, 6-9.
9. Bass, B.M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.
10. Bass, B.M (1990). *Bass & Stogdill's handbook of leadership: Theory, research, & managerial applications*. New York: The Free Press.
11. Bass, B.M (1998). *Transformational leadership: Industrial, military, and educational impact*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
12. Bass, B.M & Avolio, B.J. (1990). The implications of transformational & transactional leadership for individual, team, and organizational development. In Richard, W.W., & William, A.P. (Eds.), *Research in Organizational Changes and Development*, 4, 231-272. Greenwich, Conn: JAL Press, Inc.
13. Bass, B.M., & Avolio, B.J. (1993). Transformational leadership: A response to critiques. In Chemers, M.M., & Ayman, P. (Eds), *Leadership Theory and Research: Perspectives and Directions* (p.p. 49-80). New York: Academic Press.

14. Bass, B.M., & Avolio, B.J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.
15. Bass, B.M., & Avolio, B.J. (1997). *Full range leadership development: Manual for the multifactor leadership questionnaire*. Palo Alto, CA: Mind Garden.
16. Bass, B.M., Avolio, B.J., & Goodheim, L. (1987). Biography and the assessment of transformational leadership at the world class level. *Journal of Management*, 13, 7-19.
17. Bass, B.M., Waldman, D.A., Avolio, B.J., & Bebb, M. (1987). Transformational leadership and the falling dominoes effect. *Group and Organization Studies*, 12, 73-87.
18. Bass, B.M., Yammarino, F.J. (1991). Congruence of self and others' leadership ratings of naval officers for understanding successful performance. *Applied Psychology: An International Review*, 40, 437-454.
19. Bennis, W., & Nanus, B. (1985). *Leader: The strategies for taking charge*. New York: Harper & Row.
20. Bennis, W., & Townsend, R. (1995). *Reinventing leadership: Strategies to empower the organization*. New York: William Morrow and Company.
21. Bluedorn, A.C., (1998). An interview with anthropologist Edward T. Hall. *Journal of Management Inquiry*, 7, 109-115.

22. Bluedorn, A.C., & Denhardt, R.B. (1988). Time and Organizations. *Journal of Management*, 14, 299-319.
23. Bluedorn, A.C., Kalliath, T.J., Strube, M.J., & Martin, G. (1995). Polychronicity: a fundamental dimension of organizational culture. Paper presented at the Academy of Management, Vancouver, British Columbia, August.
24. Bludeon, A.C., Kalliath, T.J., Strube, M.J., & Martin, G.D. (1999). Polychronicity: a fundamental dimension of organizational culture. *Journal of Managerial Psychology*, 14, 205-230.
25. Bludeon, A.C., Kaufman, C.F., & Lane, P.M. (1992). How many things do you like to do at once? An introduction to monochronic and polychronic time. *Academy of Management Executive*, 6, 17-26.
26. Boal, K.B., & Bryson, J.M. (1988). Charismatic leadership: A phenomenological and structural approach. In J.G. Hunt, B.R. Baliga, H.P. Dachler, & C.A. Sriesheim (Eds), *Emerging Leadership Vistas* (pp.5-28). Lexington, M.A: Lexington Books.
27. Bolman, L.G. & Deal, T.E. (1991). *Reframing organizations: Artistry, choice, and leadership*. San Francisco: Jossey-Bass.
28. Bommer, W.H., Johnson, L.J., Rich, G.A., Padsakoff, P.M., & MacKenzie, S.B. (1995). On the interchangeability of objective and subjective measures of employee performance: A meta-analysis. *Personnel Psychology*, 48, 587-605.

29. Boyatzis, R.E. (1982). *The competent manager*. New York: John Wiley.
30. Browne, M.W., & Cudeck, R. (1993). Alternative ways of assessing model fit. *In testing structural equation models* (pp. 136-162), Bollen, K.A & Long, J.S (eds). Sage: Newbury Park, CA.
31. Bryman R. (1992). *Charisma and Leadership in organizations*. London: Sage.
32. Burn, J.M. (1978). *Leadership*. New York, NY: Harper & Row.
33. Bycio, P. Hackett, R.D., & Allen, J.S. (1995). Further assessment of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, 80, 468-478.
34. Byrne, B.M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications and programming*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
35. Campbell, D. J., & Fiske, D.W. (1959). Convergent and discriminate validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81-105.
36. Campbell, J.P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M.D. Dunnette & L.M. Harris (Eds). *Handbook of industrial and organizational psychology* (2nd ed., Vol 1, pp.687-732). Palo Alto, CA: Consulting Psychologist Press.

37. Chiu, C.K., Hui, C.C., Yeung, H.L., Cheung, Y.Y., & Tse, H.M. (working paper) The Effects of Service Climate and Supervisor's Leadership Behavior on Frontline Employees' Service Quality: A Multi-Level Analysis. Submitted to *Academy of Management Journal*.
38. Cohen, J. (1977). *Statistical Power Analysis for the Behavioral Science* (Rev Ed). New York: Academic Press.
39. Cohen, J., & Cohen, P. (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Science* (2nd Edition). Hillsdale, N.J: Lawrence Erlbaum, Associates.
40. Comer, J.M., & Dubinsky, S.J. (1995). *Managing the successful sales forces*. Lexington, MA: Lexington Books.
41. Conger, J.A., & Kanungo, R.N. (1987). Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review*, 12, 637-647.
42. Conger, J.A. (1989). *The charismatic leader: Behind the mystique of exceptional leadership*. San Francisco, CA: Jossey-Bass.
43. Conte, J.M., Rizzuto, T.E., & Steiner, D.D. (1999). A construct-oriented analysis of individual-level polychronicity. *Journal of Managerial Psychology*, 14, 269-287.

44. Cote, J., & Buckey, R.B. (1987). Estimating trait, method and error variance: generalizing across 70 constructs validation studies. *Journal of Marketing Research*, 24, 315-318.
45. Covey, S.R. (1991). *Principle-centered leadership*. New York: Fireside.
46. Doktor, (1989). A cross-cultural study of time-use behavior of chief executive officers. *International Journal of Management*, 6, 318-324.
47. Downton, J.V. (1973) *Rebel leadership: Commitment and charisma in the revolutionary process*. New York: Free Press.
48. Dubinsky, A.J., Yammarino, F.J., Jolson, M.A., & Spangler, W.D. (1995). Transformational Leadership: An initial investigation in sales context. *The Journal of Personal Selling and Sales Management*; New York, Spring.
49. Dubinsky, A.J., Yammarino, F.J., Jolson, M.A. (1995). An examination of linkages between personality characteristics and dimensions of transformational leadership. *Journal of Business and Psychology*, 9, 315-335.
50. Farh, J.L. & Cheng, B.S. (1997). Modesty bias in self-ratings in Taiwan: Impact of item wording, modesty value, and self-esteem. *Chinese Journal of Psychology*, 39, 103-118.

51. Farh, J. L. & Cheng, B. S. (1999). A cultural analysis of paternalistic leadership in Chinese organizations. In J. T. Li, A. S. Tsui, & E. Weldon (Eds.), *Management and Organizations in the Chinese Context* (pp.84-127). London: MacMillan
52. Chen, X. P., & Farh, J. L. (2001). Transformational and transactional leader behaviors in Chinese organizations: Differential effects in People's Republic of China and Taiwan. In W. H. Mobley & M. McCall (Eds.). *Advances in Global Leadership*, (Vol 2, pp. 101-126). Stamford, Connecticut: JAI Press, Inc.
53. Fiedler, F.E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill.
54. Flaherty, K.E., Pappas, J.M. (2000). The role of trust in salesperson-sales manager relationships. *The Journal of Personal Selling and Sales Management*, New York, Fall.
55. Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing research*, 19, 39-50.
56. Galbraith, J.R & Daniel, A.N (1978). *Strategy implementation: The role of structure and process*. New York: West Publishing Company.
57. Gardner, W.L., & Avolio, B.J. (1998). The charismatic relationship: A dramaturgical perspective. *Academy of Management Review*, 23, 23-58.

58. Glick, W.H., & Roberts, K.H. (1984). Hypothesized interdependence, assumed independent. *Academy of Management Review*, 9, 722-735.
59. Goodwin, V.L., Wofford, J.C., & Boyd, N. (2000). A laboratory study of the antecedent of leader cognitions. *Journal of Organizational Behavior*, 21, 769-788.
60. Goodwin, V.L., Wofford, J.C & Whittington, J.L. (2001). A theoretical and empirical extension to the transformational leadership construct. *Journal of Organizational Behavior*, 22, 759-774.
61. Hall, E.T. (1959). *The silent Language*. New York, NY: Anchor Books.
62. Hall, E.T. (1976). *Beyond Culture*, Anchor Books, New York, NY.
63. Hall, E.T. (1983). *The Dance of Life: The Other Dimensions of Time*, Anchor Free, New York, NY.
64. Hall, E.T. & Hall, M.R (1990). *Understanding cultural differences*. Yamouth, ME: Intercultural Press.
65. Harrison, D.T (2000). *Transformational leadership and community college effectiveness*. Unpublished doctoral dissertation, The Ohio State University.

66. Hater, J.J., & Bass, B.M. (1988). Superiors' evaluation and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology, 73*, 695-702.
67. House, R.J. (1971). A path goal theory of leadership effectiveness. *Administrative Science Quarterly, 16*, 321-338.
68. House, R.J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *Leadership Quarterly, 7*, 323-352.
69. House, R.J. (1977). A 1976 theory of charismatic leadership. In Hunt, J.G., Larson, H.H. (Eds). *Leadership: The cutting edge* (pp.189-207). Carbondale: Southern Illinois University Press.
70. Howell, J.M., & Avolio, B.J. (1993). Transformational leadership, transactional leadership, locus of control and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology, 78*, 891-902.
71. Howell, J.M., & Frost, P.J. (1989). A laboratory study of charismatic leadership. *Organizational Behavior and Human Decision Processes, 43*, 243-269.
72. Howell, J.M., & Hall-Merenda, K.E. (1999). The ties that bind: The impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology, 84*, 680-694.

73. Hoy, W.K., & Miskel, C.G. (1996). *Educational administration: Theory, research, and practices*. New York: McGraw-Hill.
74. Hunt, J.G. (1991). *Leadership: A new synthesis*. Newbury Park: Sage.
75. Hunt, J.G., & Schuler, R.S. (1976). Leader reward and sanctions: behaviors relations criteria in a large public utility. Carbondale: Southern Illinois University. Department of Administrative Science.
76. Ishizaka, K., Marshall, S.P., & Conte, J.M. (2001). Individual Differences in Attentional Strategies in Multitasking Situations. *Human Performance*, 14, 339-358.
77. Jex, S.M., & Beehr, T.A. (1991). Emerging theoretical and methodological issues in the study of work-related stress. In G.R. Ferris & K.M. Rowland (Eds), *Research in personnel and human resources management* (Vol.9, pp311-364). Greenwich, CT: JAL.
78. Jones, E., Katak D.M., Futrell, C.M., & Johnston, M.W. (1996). Leader behavior, work attitudes and turnover of salespeople: An integrative study. *The Journal of Personal Selling and Sales Management*, New York, Spring.
79. Joreskog, K., & Sorbom, D. (1993). *LISREL 8 User's Reference Guide*. Chicago, IL Scientific Software International Co.

80. Jung, D.I., & Avolio, B.J (1999). Effects of leadership style and followers' cultural orientation on performance in group and individual task conditions, *Academy of Management Journal*, 42, 208-218.
81. Kahn, R.L. & Byosiere, P. (1992). Stress in organizations. In M.D. Dunnette & L. M. Houg (Eds.), *Handbook of industrial and organizational psychology*, vol. 3 (pp. 571-650). PaloAlto CA: Consulting Psychologists Press.
82. Kaufman, C.F., Lane, P.M., & Lindquist, J.D. (1991a). Exploring more than 24 hours a day: A preliminary investigation of polychronic time use. *Journal of Consumer Research*, 18, 392-401.
83. Kaufman, C.F., Lane, P.M., & Lindquist, J.D. (1991b). Time congruity in the organization: A proposed quality-of-life framework. *Journal of Business and Psychology*, 6, 79-106.
84. Keller, R.T. (1992). Transformational leader and performance of research and design project groups. *Journal of Management*, 18, 489-501.
85. Kelman, H.C. (1958). Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution*, 2, 51-60
86. Kerlinger, F.N. (1986). *Foundations of Behavioral Research* (3rd Edition). New York: Holt, Rinehart and Winston.

87. Klein, K., & House, R. (1995). On fire: Charismatic leadership and levels of analysis. *Leadership Quarterly*, 6: 183-198.
88. Kram, K.E & Bragar, M.C. (1992). Development through mentoring; A strategic approach. In D. Montross and C. Shinkman (Eds). *Career Development: Theory and Practices*, Chicago: Thomas Press, pp.221-254.
89. Kuhnert, K.W., & Lewis, P. (1987). Transactional and transformational leadership: a constructive/developmental analysis. *Academy of Management Review*, 12, 648-657.
90. Liden, R.C., Sapprow, R.T., & Wayne, S.J. (1997). Leader-member exchange theory: The past and potential for the future. *Research in Personnel and Human Resources Management*, 15, 47-119.
91. Likert, R. (1961). *New pattern of management*. New York: McGraw-Hill.
92. Lord, R.G., DeVader, C.L, & Alliger, G.M. (1986). A meta-analysis of the relation between personality traits and leadership: An application of validity generalization procedures. *Journal of Applied Psychology*, 71, 402-410.
93. MacKenzie, S.B., Padsakoff, P.M., & Rich, G.A. (2001). Transformational and transactional leadership and salesperson performance. *Journal of Marketing Science*, 29, 115-134.
94. McClelland, D.C. (1985). *Human motivation*. Glenview, IL: Scott Foresman.

95. Meglino, B.M., Ravlin, E.C., & Adkins, C.L. (1989). A work value approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology, 72*, 424-434.
96. Miner, J.B. (1978). Twenty years of research on role motivation theory of managerial effectiveness. *Personnel Psychology, 31*, 739-760.
97. Mintzberg, H. (1973). *The nature of managerial work*. New York: Harper & Row.
98. Napier, B.J., & Ferris, G.R. (1993). Distance in organizations. *Human Resource Management Review, 3*, 321-357.
99. O'Reilly, C.A., III and B. Weitz. (1980). Managing Marginal Employees: The Use of Warnings and Dismissals. *Administrative Science Quarterly, 25*, 467-484.
100. O'Reilly III, C.A., & Puffer, S.M. (1989). The impact of rewards and punishments in a social context: A laboratory and field experiment. *Journal of Occupational Psychology, 62*, 41-53.
101. Palmer, D.K. (1997). *Harmonic Temporality: An investigation of the dimensionality of polychronicity and its implications for individuals and organizations*. Unpublished doctoral dissertation, Purdue University, West Lafayette, Indiana.

102. Payne, R.L., Jabri, M.M., & Pearson, A.W. (1998) On the importance of knowing the affective meaning of job demands. *Journal of Organizational Behavior*, 9, 149-158.
103. Pedhazur, E.J. (1982). *Multiple regression in behavioral research*. New York: Holt, Rinehart, & Winston.
104. Persing, D.L. (1998). Managing in polychronic times: Exploring individual creativity and performance in intellectually intense venues. *Journal of Managerial Psychology*, 14, 358-373.
105. Pillai, R. (1995). Context and charisma: The relationship of organic structure, collectivism and crisis to charismatic leadership. Best Paper Proceedings, Academy of Management Meeting, Vancouver, BC: 332-336.
106. Podsakoff, P.M., Mackenzie, S.B., Moorman, R.H., & Fetter, R. (1990). Transformational leader behavior and their effects on followers' trust in leader, satisfaction and organizational citizenship behaviors. *Leadership Quarterly*, 1, 107-142.
107. Podsakoff, P.M., & Organ, D.M. (1986). Self-reports in organizational research: Problems and prospectus. *Journal of Management*, 13, 419-441.
108. Podsakoff, P.M., Todor, W.D., & Skov, R (1982). Effects of leader contingent and noncontingent reward and punishment behaviors on subordinate performance and satisfaction. *Academy of Management Journal*, 25, 810-821.

109. Price, V.A. (1982). *Type A Behavior Pattern: A model for research and practices*, Academic Press, New York, NY.
110. Rice, R.W. (1978). Construct validity of the least preferred coworker score. *Psychological Bulletin*, 85, 1199-1237.
111. Roberts, K.H., Hulin, C.L., & Rousseau, D.M. (1978). *Developing an Interdisciplinary Science of Organizations*. San Francisco: Jossey-Bass.
112. Scandura, T.A., & Schriesheim, C.A. (1994). Leader-member exchange and supervisor career mentoring as complementary constructs in leadership research. *Academy of Management Journal*, 37, 1588-1602.
113. Schmitt, N. (1994). Method bias: The importance of theory and measurement. *Journal of Organizational Behaviors*, 15, 383-395.
114. Seltzer, J., Numerof, R.E., & Bass, B.M (1988). Transformational leadership: is it a source of more burnout and stress? *Journal of Health and Human Resources Administration*, 12, 174-185.
115. Senge, P.M. (1990). *The fifth discipline: The art and practices of the learning organization*. New York: Doubleday.
116. Shamir, B. (1995). Social distance and charisma: Theoretical notes and an exploratory study. *Leadership Quarterly*, 6, 19-47.

117. Shamir, B., House, R.J., & Arthur, M.B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organizational Science*, 4, 577-594.
118. Sims, H.P., & Szilagyi, A.D. (1975). Leader reward behavior and subordinate satisfaction and performance. *Organizational Behavior and Human Performance*, 14, 426-438.
119. Slocombe, T.E., & Bluedorn, A.C. (1999). Organizational behavior implications of the congruence between preferred polychronicity and experienced work-unit polychronicity. *Journal of Organizational Behavior*, 20, 75-99.
120. Smith, P.B., Misumi, J., Tayeb, M., Peterson, M.F., & Bond, M. (1989). On the generality of leadership style measures across cultures. *Journal of Occupational Psychology*, 62, 97-109.
121. Sosik, J.J., & Godshalk, V.M. (2000). Leadership styles, mentoring functions received, and job-related stress: a conceptual model and preliminary study. *Journal of Organizational Behavior*, 21, 365-390.
122. Sparrowe, R.T., & Liden, R.C. (1997). Process and structure in leader-member exchange. *Academy of Management Review*, 22, 522-552.
123. Steffy, B., & Jones, J. (1988). Workplace stress and indicators of coronary-disease risk. *Academy of Management Journal*, 31, 686-698.

124. Stogdill, R.M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, 25,35-71.
125. Taylor, M.S., Locke, E.A., Lee, C., & Gist, M.E. (1984). Type A behavior and faculty research productivity: what are the mechanisms? *Organizational Behavior and Human Performance*, 34, 402-418.
126. Tejada, M.J., Scandura, T.A & Pillai Rajinandini (2001). The MLQ revisited Psychometric properties and recommendations. *The Leadership Quarterly*, 12, 31-52.
127. Tichy, N.M., & Devanna, M.A. (1990). *The transformational leader: The key to global competitiveness*. New York: Wiley.
128. Tsui, A.S. (1982). A role set analysis of managerial reputation. Paper, Academy of Management, New York.
129. Vecchio, R.P., & Bullis, R.C. (2001). Moderators of the influence of supervisor-subordinates similarity on subordinate outcomes. *Journal of Applied Psychology*, 86, 884-896.
130. Waldman, D.A., Bass, B.M., Einstein, W.O. (1987). Leadership and outcomes of performance appraisal processes. *Journal of Occupational Psychology*, 60, 177-186.

131. Waldman, D.A., Bass, B.M., & Yammarino, F.J. (1990). Adding contingent-reward behavior: The augmenting effect of charismatic leadership. *Group & Organization Studies*, 15, 381-394.
132. Walker, O.C., Ford, G.A & Ford, N.M. (1979). Where Do We Go from Here? Selected conceptual and empirical issues concerning the motivation and performance of the industrial sales force. *In critical issues in sales management: State-of-the-Art and future research needs*, Albaum, G & Churchill, G.A. Churchill (Eds). Eugene, OR: University of Oregon Press, 10-75.
133. Waller, M.J., Giambatista, R.C., & Zellmer-Bruhn, M.E. (1999). The effects of Individual time urgency on group polychronicity. *Journal of Managerial Psychology*, 14, 244-255.
134. Weber, M.J. (1947). *The theory of social and economic organizations*, translated by Parsons, New York: Free Press.
135. Welkowitz, J., Ewen, R.B.; & Cohen, J. (1982). *Introductory Statistics for the Behavioral Science*. Orlando, FL: Harcourt Brace Jovanovich.
136. Wofford, D.A., Goodwin, V.L., & Whittington, J.L. (1998). A field study of a cognitive approach to understanding transformational and transactional leadership. *Leadership Quarterly*, 9, 55-84.
137. Yammarion, F. J., & Dubinsky, A.J. (1992). Superior-subordinate relationships: A multiple levels of analysis approach. *Human Relation*, 45, 575-599.

138. Yukl, G.A. (1998). *Leadership in Organization*. (4th Edition). Upper Saddle River, N.J: Prentice Hall.
139. Yukl, G.A., & Van Fleet, D.D. (1982). Cross-situational, multimethod research on military leader effectiveness. *Organizational Behavior and Human Performance*, 30, 87-108.
140. Zalenik, A. (1983). The leadership gap. *Washington Quarterly*, 6. 32-39.