AN EMPIRICAL STUDY ON THE MODERATING EFFECT OF
JOB-RELATED KNOWLEDGE ON CHARISMATIC AND
TRANSACTIONAL LEADERSHIP EFFECTIVENESS

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DECLARATION

I hereby certify that the work embodied in this dissertation project is the result of original research and has not been submitted for a higher degree to any other University or Institution.

(Signed) ___________________________

Kwa Wee Keng
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SYNOPSIS

Bass (1985) posited a range of leadership models that includes transformational and transactional leadership, and the non-leadership style of *laissez-faire*, indicating absence of leadership or avoidance of intervention or both. He found transformational leadership more effective than transactional leadership, and charismatic leadership the most effective form of transformational leadership. Further, Bass (1997) opined that charismatic leadership is universal and effective in most situations. However, he suggested situations may enhance the strength of correlation between charismatic leadership and leadership effectiveness.

Early studies did not identify traits essential for leadership effectiveness in all situations but found that effective leaders are task- and relations-oriented. Proceeding studies (Fiedler 1967a; Hersey and Blanchard 1977) indicated that each of the two leadership behaviours is effective only in some situations. Contingency leadership theories are developed to explain how situations influence the relationship between leadership behaviour and leadership effectiveness. Prior studies indicated that a key aspect of situations is subordinates’ job-related knowledge. By assuming that charismatic leadership is relations-oriented and transactional leadership is task-oriented, this study applies contingency leadership theories in the contexts of both leadership concepts.

This study surveys employees working from one multinational company in two locations, Singapore and China, with intent to investigate effectiveness of leadership behaviours. Further, this study analyses the moderating role of subordinates’ job-related knowledge on the relationships between charismatic leadership and transactional leadership with leadership effectiveness, respectively.

The results indicate that charismatic leadership is effective on subordinates who possess high and low levels of job-related knowledge, in Singapore and China. Additionally, the results showed transactional leadership is generally ineffective but exceptions are found specifically on Singaporean subordinates who possess low levels of job-related knowledge. Therefore, contingency leadership theories in the context of transactional leadership are supported in relation to the situation of subordinates’ job-related knowledge in Singapore.
CHAPTER ONE - INTRODUCTION

1.1 THEORETICAL BACKGROUND TO THIS RESEARCH

Leaders affect the survival and performance of organisations (Yukl 2002). Thus, prior leadership studies attempted identifying the factors of leadership effectiveness (Yukl 2002), most of which relate to aspects of leaders, such as traits and behaviours of leaders and situations, such as the tasks, relationships between leaders and followers and the maturity of followers. In the early 1900s, leadership studies aimed to identify traits of leaders essential for leadership effectiveness. As these early studies did not find traits essential for leadership effectiveness in all situations, researchers diverted focus to identification of effective leadership behaviours in the late 1950s.

The behavioural approach found relations- and task-oriented leadership to be effective (Blake and Mouton 1964). Nevertheless, studies in the 1960s held that the effectiveness of relations- and task-oriented leadership is contingent on situations. In more recent studies, researchers postulated that transactional and transformational leadership, of which charismatic leadership is the most important dimension, are effective forms of leadership. The research objective of this study, introduced here, is to determine how subordinates’ job-related knowledge affects relationships between leadership behaviour and leadership effectiveness.

1.1.1 Leadership and the Contingency Approach

In the early 1900s, as leaders were seen to differ in traits from non-leaders, researchers posited that the traits of leaders are essential indicators of leadership effectiveness (Yukl 2002). These early studies found that leaders are persons who acquire status through the demonstration of ability to facilitate the effort of groups in attaining goals. These abilities include intelligence, alertness to the needs of others, understanding of the task, initiative and persistence in dealing with problems, self-confidence, willingness to accept responsibility and occupy a position of dominance and control, adaptability to situations, assertiveness, decisiveness, high level of energy, tolerance to stress, conceptualisation skill, creativity, diplomacy, verbal fluency, administrative ability and persuasiveness (Stogdill 1974). However, it was found that the importance of each trait depends on the situation (Stogdill 1948, 1974).
The traits approach did not find a consistent set of essential traits for leadership effectiveness in all situations. Fiedler (1995) suggested that the situation moderates relationships between traits, such as intelligence and experience, and leadership effectiveness. Further, as traits are a person’s recurring behaviours (Hughes, Ginnett and Curphy 1999), it is difficult to change a leader’s traits to make the leader more effective. Thus, the focus of proceeding leadership studies was diverted to the behavioural approach, specifically in identifying behaviours that lead to effective leadership (Higgs 2003).

Leadership behaviours are actions of the leader (Adair 1973) more easily taught, learned (Adair 1973; Bass 1985) and observed than traits, which are inner personal qualities of the leader. Thus, behavioural approach implies that leaders can control their behaviours and behave in an effective manner. Further, it implies that enhancement of leadership effectiveness is on modification of leadership behaviours, which has more practical applications than the traits approach. Moreover, empirical evidence on relationships between leadership behaviours and their outcomes may be stronger than on relationships between traits of the leader and their outcomes (Bass 1990).

Likert (1961) and Blake and Mouton (1964) found that effective leaders are task- and relations-oriented. Effective leaders are goal-centred and seek results through the participation, involvement and commitment of their subordinates (Blake and Mouton 1964, 1978, 1985). However, studies (Fiedler 1967a; Hersey and Blanchard 1977) found that each of the two leadership behaviours is effective in only some situations. Researchers proceeded to develop contingency leadership theories (De Vries, Roeb and Taillieu 2002) that explain leadership effectiveness in terms of the situation that enhances or nullifies the effects of a leader’s trait or behaviour (Yukl 1994). The following subsections discuss the seminal contingency leadership theories postulated by Fiedler (1967a) and Hersey and Blanchard (1977).

1.1.1.1 Fiedler’s (1967a) LPC Contingency Model

Fiedler’s (1967a) least preferred co-worker (LPC) contingency model describes how situations moderate the relationship between leadership behaviour and leadership effectiveness. Fiedler attempted to predict leadership effectiveness from a measure called the least preferred co-worker (LPC) score. The least preferred co-worker is the
past or present co-worker with whom the leader could work well the least. Leaders generally critical in rating the least preferred co-workers will obtain low LPC scores, whereas leaders generally lenient will obtain high LPC scores. High LPC leaders are relations-oriented whilst low LPC leaders are task-oriented (Graham 1968; Rice 1978; Yukl 1968).

The relationship of leaders’ LPC scores and leadership effectiveness depends on a situational moderating variable, a situation that enhances or nullifies the effects of a leader’s trait or behaviour, called situational favourability or situational control (Yukl 1994). Favourability is the extent the situation gives a leader control and influence over subordinates and situations (Fiedler 1978), measured in terms of three aspects of each situation: leader-member relations, task structure and position power.

According to the model, the situation is most favourable to the leader when relations with subordinates are good, the task is structured and the leader has substantial position power. The situation is least favourable to the leader when relations with subordinates are poor, the task is unstructured and position power is low. When the situation is very favourable or very unfavourable, low LPC leaders will be more effective than high LPC leaders. High LPC leaders will be more effective than low LPC leaders when the situation is intermediately favourable.

1.1.1.2 Hersey and Blanchard’s (1977) Situational Leadership Model
According to Hersey and Blanchard (1977), a manager should be task- or relations-oriented depending on the subordinates’ task-relevant and psychological maturity. Task-oriented behaviours include closely supervising subordinates and providing specific instructions to subordinates. Relations-oriented behaviours include allowing subordinates in joint decision making and delegating decisions to them. Task-relevant maturity refers to subordinates’ capacity, ability, trainability, experience and psychological maturity, which includes motivation, self-esteem, confidence and willingness to do a good job (Hersey and Blanchard 1977).

The most effective leadership depends on whether the leader’s task-oriented and relations-oriented behaviours match subordinates’ maturity. Task-oriented leadership is
more effective on subordinates at a lower level of maturity and relations-oriented leadership is more effective on subordinates at a higher level of maturity.

### 1.1.2 Job-related Knowledge

Recent literature on knowledge management divides knowledge into two dimensions, tacit and explicit knowledge. Tacit knowledge is in the mind of the individual, intangible and difficult to describe. This is often expressed as ‘know-how’. Tacit knowledge captures knowledge about things we do (Nonaka and Takeuchi 1995; Polanyi 1966). It is knowledge largely acquired through experience about acting in specific situations (Hedlund 2003). However, explicit knowledge is tangible, can be captured, documented and externalised, for example in printed words, symbols or graphics, and can be expressed as ‘know-what’.

### 1.2 RESEARCH PROBLEM AND OBJECTIVE

This study attempts to build on the theoretical foundation of contingency leadership theories discussed earlier to investigate the moderating role of subordinates’ job-related knowledge on the relationship between leadership behaviour and leadership effectiveness in Singapore and China. This section presents the research catalyst before framing the research problem and articulating the research objective.

#### 1.2.1 Research Catalyst and Research Problem

The challenge faced by organisations in the industrial economy was coordinating and optimising production and physical flow of products (Boisot 1998; Schneider 2002). In the knowledge economy, the challenge is to cultivate, protect and use difficult-to-imitate knowledge assets instead of physical assets (Nonaka and Nishiguchi 2001). Rather than focusing on efficiency and control (Jones 2000), organisations find themselves placing priority on adaptability, knowledge and learning (Achtenhagen et al. 2003; Volberda 1996).

Leadership theory in the industrial economy is developed based on assumptions of the bureaucratic paradigm. The theory is effective for the industrial economy premised on physical production but not well-suited for the knowledge economy (Davenport 2001; Uhl-Bien, Marion and McKelvey 2007). The dominant paradigm of leadership theory focuses on how leaders influence others towards desired objectives within frameworks...
of formal hierarchical organisational structures (Zaccaro and Klimoski 2001). It centres on issues of motivating workers towards task objectives using a system of reward for workers’ performance as described by House and Mitchell’s (1974) path-goal theory.

Bass (1985) posited a range of leadership models that includes transformational and transactional leadership, and the non-leadership style of laissez-faire. A transformational leader enlightens followers on the value of designated outcomes and ways of reaching them and inducts followers to transcend self-interests. Most prior studies (Bass 1985, 1987; Lowe, Kroeck and Sivasubramaniam 1996; Waldman, Bass and Einstein 1986) found that transformational leadership is an effective form of leadership behaviour and is more effective than transactional leadership. Further, Bass (1997) found that the positive significant correlation between charismatic leadership and leadership effectiveness is the strongest, relative to the correlations between other leadership behaviours and leadership effectiveness. Consistent with his finding, most prior studies (Bass and Avolio 1993; Conger and Kanungo 1994; Hughes, Ginnett and Curphy 1999) identified charismatic leadership as the major component of and the most effective form of transformational leadership. Charismatic leaders transform followers by arousing strong emotions and identification with them and transmitting a sense of mission to followers.

In the range of leadership models that Bass (1985) posited, only transactional leadership, developed from House and Mitchell’s (1974) path-goal theory, is based on assumptions of the industrial economy’s bureaucratic paradigm (Uhl-Bien, Marion and McKelvey 2007). Moreover, charismatic leadership, as the major component of transformational leadership, involves communication of optimism, which is critical to the enhancement of organisational outcomes (Kelloway and Barling 2000). Thus, charismatic leadership is widely regarded as a plausible catalyst for radical individual and organisational change required in the knowledge economy (Pillai and Meindl 1998).

Bass (1997) suggested that charismatic leadership is effective in all cultures. However, cultural values may influence the relationship between charismatic leadership and leadership effectiveness (Spreitzer, Perttula and Xin 2005). Thus, there is a need to test the validity of Bass’ theory of charismatic leadership across different cultures (Leong 1997; Spreitzer, Perttula and Xin 2005). To the extent of the researcher’s knowledge,
only Leong’s (1997) and Koh, Steers and Terborg’s (1995) studies were published replicating Bass’ (1985) study in Singapore but conducted in educational settings. There is a need to extend findings to the private commercial sector in Singapore.

Bass (1985) opined that organisations need transformational and transactional leadership in varying degrees, contingent on situations. Further, contingency theories (Fiedler 1967a; Hersey and Blanchard 1977) suggest that forms of leadership behaviour are effective only in some situations. Attributes of followers affect leadership effectiveness (De Vries, Roeb and Taillieu 2002; Howell et al. 1990). Further, the ability of the leader to adapt one’s behaviour to the needs of the followers leads to leadership effectiveness (Hersey and Blanchard 1977, 1993). Thus, it can be inferred that leadership is a product of followership. The assumption of this study that leaders and subordinates are from the same culture nullifies culture as a situational moderating variable.

Prior studies (Fiedler 1967a; Hedlund, 2003; Hersey and Blanchard 1977; Lee-Kelley, 2002; Miller, Butler and Cosentino, 2004) indicated that subordinates’ job-related knowledge is a key situational moderating variable of subordinates that influences leadership effectiveness. However, there is lack of prior research with empirical evidence on the moderating role of subordinates’ job-related knowledge on the relationship between leadership behaviour and leadership effectiveness.

The sampled organisation is a multinational corporation based in the United Kingdom, which specialises in die-casting, with plants in China, Korea, Malaysia, Singapore and India. The China plant was set up later than the Singapore plant. It is commonly assumed that employees who hold longer incumbency in their jobs, such as the employees in Singapore, may possess higher levels of job-related knowledge than employees in China (Hersey and Blanchard 1977; Lord and Hall 2005). Due to different levels of subordinates’ job-related knowledge, leadership effectiveness may differ between Singapore and China (Fiedler 1967a; Hersey and Blanchard 1977; Lee-Kelley 2002; Miller, Butler and Cosentino 2004). Therefore, there is a need to investigate effective leadership practice in Singapore and China and the effective leadership practice on subordinates who possess different levels of job-related knowledge. From the discussion, the research problem of this study is:
How does the situational moderating variable of subordinates’ job-related knowledge affect the relationship between charismatic leadership and leadership effectiveness and the relationship between transactional leadership and leadership effectiveness?

To address the research problem, this study translates the research problem into research objective and hypotheses in the following sections.

1.2.2 Research Objective

Section 1.2.1 posited that the leadership behaviour widely argued to be most universally applicable and effective is charismatic leadership (Bass 1985, 1997; Bass and Avolio, 1993; Conger and Kanungo 1994; Hughes, Ginnett and Curphy 1999). In addition, Section 1.2.1 concluded that attributes of followers affect leadership effectiveness (De Vries, Roeb and Taillieu 2002; Howell et al. 1990) and effective leaders adapt their leadership behaviours to the needs of the followers (Hersey and Blanchard 1993, 1977).

Section 1.2.1 maintained that subordinates’ job-related knowledge is a key situational moderating variable that influences leadership effectiveness (Fiedler 1967a; Lee-Kelley 2002; Miller, Butler and Cosentino 2004). As articulated in Section 1.2.1, there is a lack of prior research collecting empirical evidence on the moderating role of subordinates’ job-related knowledge on the relationship between leadership behaviour and leadership effectiveness (Vogelaar and Soeters 2002). Further, in the sampled organisation, differences of leadership effectiveness between the Singapore and China plants may arise due to different levels of subordinates’ job-related knowledge (Fiedler 1967a; Hersey and Blanchard 1977; Lee-Kelley 2002; Miller, Butler and Cosentino 2004). Thus, the research problem, as articulated in Section 1.2.1, refers to examining the moderating role of subordinates’ job-related knowledge on the relationship between leadership behaviour and leadership effectiveness and is translated into a research objective:

To examine the moderating role of subordinates’ job-related knowledge on the relationship between charismatic leadership and leadership effectiveness and the relationship between transactional leadership and leadership effectiveness.
The research objective is translated into four hypotheses.

### 1.3 RESEARCH FRAMEWORK AND HYPOTHESES

This study derives and tests hypotheses to attain the research objective. The hypotheses postulate relationships among four concepts of leadership effectiveness, charismatic leadership, transactional leadership and job-related knowledge. This section highlights prior research on the four concepts before delineating the hypotheses.

#### 1.3.1 Leadership Effectiveness

Leadership effectiveness is among the most important factors in determining organisational performance (Yukl 2002). Effective leadership secures members’ commitment to attain organisational objectives (Higgs 2003; Uhl-Bien, Marion and McKelvey 2007). This study attempts to determine effective leadership behaviours on subordinates who possess different levels of job-related knowledge. However, the definition of leadership effectiveness differs among researchers and there are various dimensions of leadership effectiveness (Yukl 2002).

For comparability of this study’s results to those of Bass’ (1985), this study adopts the four dimensions of leadership effectiveness of Bass’ study: work effectiveness, meeting subordinates’ job-related needs, fulfilling organisational requirements and subordinates’ satisfaction with the leader and will be discussed in detail in Chapter 2.

#### 1.3.2 Charismatic Leadership

Charismatic leaders usually arise during crises (Weber 1947). They have extraordinary and mystical gifts espousing radical solutions to crises, which followers validate through repeated success (Trice and Beyer 1986; Weber 1947). Followers believe they are linked to leaders through transcendent powers (Trice and Beyer 1986; Weber 1947).

Charismatic leadership arises from a trigger event and a need for change (Tichy and Devanna 1986). It involves creation and articulation of a vision (Burns 1978; Conger and Kanungo 1987; Tichy and Devanna 1986); sensitivity to followers’ needs (Conger and Kanungo 1987, 2000); mobilisation of followers’ commitment and institutionalisation of change (Tichy and Devanna 1986) and the leader’s adoption of
unconventional behaviour, acceptance of personal risk and non-maintenance of the status quo (Burns 1978; Conger and Kanungo 1987).

Bass (1985, 1997) proposed that charismatic leaders have abilities relevant to the situation and are able to accomplish more than non-charismatic leaders (Bass 1985, 1997). They differ in pragmatism, flexibility, opportunism and manner of appeal from non-charismatic leaders. Charismatic leaders are likely to emerge when followers share norms, beliefs and fantasies with leaders and in organisations under stress and transition (Bass 1985, 1997). Bass (1985) defined the charismatic leadership factor as the degree to which the leader instills enthusiasm, trust, loyalty, respect and sense of mission in followers.

Bass (1985) and Lowe, Kroeck and Sivasubramaniam (1996) found that transformational leadership correlated more strongly and consistently to leadership effectiveness than transactional leadership. Bass (1985) and Conger and Kanungo (1994) found that charismatic leadership is the most effective transformational leadership. Further, Bass (1997) posited that charismatic leadership is universal and effective in most situations. His position is supported by studies on leaders at different levels of authority, in different organisations and in different countries (Bass 1997). From the discussion, the following hypothesis is proposed:

**Hypothesis One (H1):** Charismatic leadership will be positively correlated with leadership effectiveness.

### 1.3.3 Transactional Leadership

The expectancy theory (Vroom 1964) presents the cognitive-rational model: an individual decides the level of effort one puts into the task. The path-goal theory (Evans 1996; House 1971, 1996; House and Mitchell 1974) suggests that leaders can improve followers’ perception of linkage between effort and subsequent desired results. The exchange/equity theory (Adams 1963; Bhal and Ansari 2007; Homans 1958, 1961; Kanfer 1990) suggests that rewards given by the leader to followers must be equitable. In addition, the reinforcement theory (Densten 2006; Luthans and Kreitner 1985) suggests that followers will then repeat the level of effort desired by the leader with the rewards obtained. These theories form the basis for the exchange process of
transactional leadership theory that is reflected in the vertical dyads linkage theory (Yukl 2002) as leaders and followers strive to balance equity and equality.

Consistent with the premise of these prior theories, Burns (1978) postulated that transactional leaders approach followers with intent to exchange one thing for another as well as appealing to followers’ self-interest. Bass (1985) extended Burns’ definition to include clarification of roles and task requirements of followers to obtain rewards. This clarification provides followers with the confidence necessary to carry out tasks to meet set objectives.

In Bass’ (1985) study, the two factors identified as transactional are contingent reward and management-by-exception. Contingent reward shows the degree of rewards that the leader emphasises in providing based on an agreement between the leader and the follower conditioned on what the follower must accomplish to be rewarded (Bass 1985). Management-by-exception is a factor that occurs when the leader preserves the status quo and does not consider improvements as long as the old ways are working.

Whilst Bass (1985) found the correlation between transformational leadership and leadership effectiveness stronger than the correlation between transactional leadership and leadership effectiveness, transformational and transactional leadership were seen to be positively associated with leadership effectiveness. From the discussion, the following hypothesis is proposed:

_Hypothesis Two (H2): Transactional leadership will be positively correlated with leadership effectiveness._

1.3.4 Job-Related Knowledge

Bass (1997, 1985) supported the argument that the relationship between charismatic and leadership effectiveness, and the relationship between transactional leadership and leadership effectiveness, are contingent on situations. Additionally, Howell et al. (1990) suggested that situational moderating variables relating to attributes of followers significantly affect leadership effectiveness.
A relations-oriented leader is more effective than a task-oriented leader when the task is more structured (Fiedler 1967a) or when subordinates possess higher levels of job-related knowledge (Hedlund 2003; Miller, Butler and Cosentino 2004). The situation is more favourable to the leader as it is easier to direct subordinates and monitor performance (Fiedler 1967a; Hedlund 2003; Miller, Butler and Cosentino 2004). Hersey and Blanchard (1977) suggested that as subordinates accumulate more job-related knowledge, relations-oriented leadership becomes more effective whilst task-oriented leadership becomes less effective.

Literature on explicit and implicit knowledge (Bresman et al. 1999 in Holden 2002; Cortada and Woods 1999; Nonaka and Takeuchi 1995; Polanyi 1966) indicates explicit knowledge in the context of a job refers to knowing what to do on the job, whilst tacit knowledge of a job refers to knowing how to do the job (Scharmer 2001). Further, by examining the four levels of corporate actions suggested by Scharmer (2001), this study operationalises the concept of job-related knowledge as knowing what to do on the job, knowing how to do it, knowing why it has to be done and knowing its contribution to the overall objective of the organisation.

Charismatic leadership and relations-oriented leadership prioritise the subordinate’s personal identification and relationship with the leader and can be inferred that charismatic leadership is relations-oriented. A transactional leader exchanges rewards for effective task performance and clarifies task requirements for the subordinate. Hence, it can be inferred that transactional leadership is task-oriented. This study applies contingency leadership theories (Fiedler 1967a; Hersey and Blanchard 1977) to examine relations-oriented and task-oriented leadership in the context of charismatic and transactional leadership based on the inference that charismatic leadership is relations-oriented and transactional leadership is task-oriented. The aim is to postulate the moderating role of job-related knowledge on the relationship between charismatic leadership and leadership effectiveness, and the relationship between transactional leadership and leadership effectiveness.
1.3.4.1 Moderating Role of Job-related Knowledge on the Relationship between Charismatic Leadership and Leadership Effectiveness

Fiedler’s (1967a) LPC contingency leadership theory suggests relations-oriented leaders would be more effective when tasks are more structured. Job-related knowledge increases the ability of subordinates to structure tasks (Miller, Butler and Cosentino 2004). Similar to more structured task situations, it is more favourable to leaders when subordinates possess higher levels of job-related knowledge, as it may be easier to direct subordinates and monitor performance. Thus, Fiedler’s suggestion implies that relations-oriented leadership is more effective on subordinates who possess higher levels of job-related knowledge. Hersey and Blanchard’s (1977) contingency leadership theory suggests that managers should be relations-oriented when subordinates possess higher levels of job-related knowledge. Fiedler (1967a), Hersey and Blanchard (1977) and Lee-Kelley (2002) suggest that charismatic leadership, which is relations-oriented, is more effective on subordinates who possess higher levels of job-related knowledge. From the discussion, the following hypothesis is proposed:

*Hypothesis Three (H3): The effects of charismatic leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effect of charismatic leadership on leadership effectiveness will be stronger with increasing levels of subordinates’ job-related knowledge.*

The results from H3 indicate whether subordinates’ job-related knowledge significantly moderates the relationship between charismatic leadership and leadership effectiveness.

1.3.4.2 Moderating Role of Job-Related Knowledge on the Relationship between Transactional Leadership and Leadership Effectiveness

Fiedler’s (1967a) LPC contingency leadership theory suggests task-oriented leaders would be more effective when tasks are less structured. Subordinates who possess lower levels of job-related knowledge are less able to structure the task (Miller, Butler and Cosentino 2004). Hence, similar to less structured task situations, it is less favourable to leaders when subordinates possess lower levels of job-related knowledge because leaders face more difficulties in directing subordinates and monitoring performance. Thus, Fiedler’s suggestion implies that task-oriented leadership is more effective on subordinates who possess lower levels of job-related knowledge. Hersey and Blanchard
(1977) suggest managers should be task-oriented when subordinates possess lower levels of job-related knowledge. Fiedler (1967a) and Hersey and Blanchard (1977) suggest that transactional leadership, which is task-oriented, is more effective on subordinates who possess lower levels of job-related knowledge. From the discussion, the following hypothesis is proposed:

*Hypothesis Four (H4): The effects of transactional leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effects of transactional leadership on leadership effectiveness will be stronger with decreasing levels of subordinates’ job-related knowledge.*

Results from H4 indicate whether subordinates’ job-related knowledge significantly moderates the relationship between transactional leadership and leadership effectiveness.

The research framework combining the four hypotheses delineated in this subsection is depicted in Figure 1.1.

**Figure 1.1: Research Framework**

![Research Framework Diagram](image)

Source: developed for this research.
1.4 JUSTIFICATION FOR THIS RESEARCH

This section discusses the justification for this research from the practitioner’s and academician’s perspectives.

1.4.1 Practitioner’s Perspective

The results of this study will inform practitioners on the most effective leadership behaviour to practice in Singapore and China and on subordinates who possess different levels of job-related knowledge. Further, the results will inform practitioners on the selection of leaders who practice the most effective leadership behaviour. Effective leadership facilitates organisational change, which is necessary for higher rates of technological development (Conger and Kanungo 1987).

As empirical evidence indicates that individuals become more effective leaders by attending leadership development programmes that consume time and resources (Barling, Weber and Kelloway 1996; Kelloway, Barling and Helleur 2000), the findings will inform practitioners on the development of the most effective leadership behaviour for managers in Singapore and China and managers working with subordinates who possess high and low levels of job-related knowledge.

The results of this study will add to the growing support for contingency leadership theories that imply that, to enhance leadership effectiveness, the practitioner must be focused on developing a leader’s abilities to recognise one’s leadership behaviour and the situation (Fiedler 1972, 1976), identify the leadership behaviour each situation requires and to adapt one’s leadership behaviour to each situation (Higgs 2003; Howell et al. 1990).

1.4.2 Academician’s Perspective

Koene, Vogelaar and Soeters (2002) argued that more empirical research is needed on variables that moderate the relationship between leadership behaviour and effectiveness. Leadership effectiveness is contingent on the level of subordinates’ job-related knowledge (Fiedler 1967a; Hersey and Blanchard 1977; Lee-Kelley 2002; Miller, Butler and Cosentino 2004). The results of this study will provide empirical evidence on
the moderating role of subordinates’ job-related knowledge on the relationship between leadership behaviour and leadership effectiveness.

Further, the results may add to the growing support that theories of charismatic and transactional leadership and contingency leadership theories are valid in the context of Singapore and China. In addition, this study derives a new construct of job-related knowledge from the literature. The scale derived to measure this new construct can be further tested and used in future studies to postulate relationships between job-related knowledge and other constructs.

1.5 RESEARCH METHODOLOGY

This subsection introduces the research paradigm, strategy and design adopted to address the research objective. The research method and data analysis performed are also described.

1.5.1 Research Paradigm, Strategy and Design

This study adopts the positivism research paradigm as theory and research on charismatic and transactional leadership has evolved to the theory testing stage where this research paradigm is more suitable than the interpretivism research paradigm for addressing the research objective. Moreover, most prior studies adopted the positivism research paradigm. Thus, adopting this research paradigm enables the results of this study to be comparable with the results of most prior studies. Further, objective empirical evidence of the positivism paradigm is necessary in rejecting or accepting the hypotheses of this study. The replicability and testability of research studies adopting the positivist’s paradigm provides an objective and factual basis for decision-making. Likewise, the positivism paradigm’s rigorous, consistent, accurate, methodical and precise treatment of the variables is useful to practitioners (Cavana et al. 2001).

Manipulation of variables required in an experimental research is not feasible as this study is conducted in the specific natural settings of a company with the involvement of the total population of employees in two plants. Therefore, non-experimental research is conducted. Survey research, in the form of mail survey, is selected as an appropriate data collection method because of its practicality and its ability to adequately address the research question and ethical issues. As it is not a purpose of this study to
investigate changes in the perception of the respondents of their superiors’ leadership effectiveness over time, cross-sectional survey research is selected as an appropriate data collection method. The respondents are employees of the sampled organisation who rate their supervisors in natural settings with minimal interference from the researcher.

1.5.2 Research Method and Ethical Considerations
This study uses an adapted MLQ form with proven validity and reliability as the survey instrument (Bass 1985). Scale of subordinates’ job-related knowledge is derived from the literature. Due to ethical considerations and to prevent biased responses, the survey is done anonymously and each respondent returns the completed survey instrument in a stamped self-addressed envelope directly to the researcher.

1.5.3 Data Analysis
Using factor analysis, this study derives the leadership factors of the Singaporean and mainland Chinese leaders. Leadership factor scores of the Singaporean leaders are compared to those of the mainland Chinese leaders using T-tests for independent samples. Pearson correlation is used to investigate relationships between leadership factors and leadership effectiveness. The moderating effect of subordinates’ job-related knowledge is investigated by examining the bivariate regression analysis between independent variable of the product of leadership factor scores and level of subordinates’ job-related knowledge and dependent variable of leadership effectiveness (Baron and Kenny 1986).

The differences in the correlations are analysed. In addition, the level of Singaporean subordinates’ job-related knowledge is compared with the level of mainland Chinese subordinates’ job-related knowledge using T-tests for independent samples. A detailed discussion on the methodology used in this study is found in Chapter 3.

1.6 OUTLINE OF THE RESEARCH REPORT
Chapter 2 discusses prior research and theories on charismatic, transformational and transactional leadership. Contingency leadership theories and the situational moderating variable of subordinates’ job-related knowledge are explored.
Chapter 3 discusses the research methodology used, including the statistical analysis. Chapter 4 presents the descriptive statistics of the respondents, the factor analysis and the results of the statistical tests, including linear regression, correlations and t-tests performed on the survey data.

Chapter 5 draws detailed conclusions from the analysis of the survey data and considers the implications of this study to theory, practice and the sampled organisation. Finally, the limitations of this study are acknowledged and areas for future research are explored.

1.7 LIMITATIONS AND KEY ASSUMPTIONS
This study assumes that relationships among leadership behaviours, subordinates’ job-related knowledge and leadership effectiveness are as inferred from the literature. The data are collected from one manufacturing organisation with plants in Singapore and China and may be difficult to generalise with other industries in other countries.

The limitations and assumptions of the study are acknowledged in Chapters 2, 3 and 5.

1.8 CONCLUSION
This chapter introduced the theoretical background, research problem, objective and hypotheses. The value of the research is justified, the methodology is briefly described, the report is outlined and the limitations and key assumptions are acknowledged. The next chapter discusses the literature on charismatic and transactional leadership, leadership effectiveness, contingency leadership and job-related knowledge in detail.
2 CHAPTER TWO – LITERATURE REVIEW

2.1 INTRODUCTION
This chapter aims to develop an empirical model that attains the research objective and addresses the research hypotheses.

2.1.1 Chapter Outline
It discusses the evolution of leadership theories culminating in the contingency approach to leadership research. Prior studies are highlighted. Finally, this chapter explains the basis for the postulations of the moderating role of job-related knowledge on relationships between charismatic leadership and leadership effectiveness, and between transactional leadership and leadership effectiveness.

2.2 THE EVOLUTION OF LEADERSHIP
Leadership studies attempt to explain the factors involved in the emergence of leadership and its outcomes (Bass 1990). Most of the factors are related to aspects of the leader, such as traits and behaviours of the leader (Yukl 2002), and aspects of the situation, such as the task, the leader’s position power, the relationship between the leader and the follower (Fiedler 1967a) and maturity of the follower (Hersey and Blanchard 1977). Most outcomes are related to aspects of leadership effectiveness (Yukl 2002). The results of these studies are useful in the improvement of leadership development and practice (Mumford et al. 2000a).

Early leadership studies in the 1900s focused on identifying the traits of a leader essential for leadership effectiveness. However, these studies were inconsistent and inconclusive as they did not identify traits effective in all situations. Researchers found that effectiveness of leadership behaviours is contingent on the situation. Following this finding, contingency leadership theories were developed.

2.2.1 Traits Theories
Researchers held that if a leader is endowed with qualities that differentiate one from non-leaders and enables one to be effective, it should be possible to identify these qualities (Bass 1990). The identification of these qualities would facilitate the selection of persons possessing them to leadership positions. As leaders were seen to be different
in traits from non-leaders (Bass 1990), researchers maintained that these traits may constitute aspects of leadership qualities. Thus, early leadership studies held that leadership traits essential for effectiveness can be identified by empirical research (Yukl 2002).

Early leadership research included physical characteristics such as height and appearance; aspects of personality such as self-esteem, dominance and emotional stability; and aptitudes such as general intelligence, verbal fluency and creativity (Yukl 2002).

Stogdill (1948) reviewed 124 leadership studies on traits essential for leadership effectiveness from the years 1904 to 1948 and found that the results were consistent with the concept of a leader. The abilities included intelligence, alertness to the needs of others, understanding of the task, initiative and persistence in dealing with problems, self-confidence, willingness to accept responsibility and occupy a position of dominance and control.

Stogdill (1974) reviewed another 163 studies on traits essential for leadership effectiveness conducted from the years 1949 to 1970. Many of the same traits discovered by Stogdill (1948) were found related to leadership effectiveness. Some additional traits found essential for leadership effectiveness are adaptability to situations, assertiveness, decisiveness, high level of energy, tolerance to stress, conceptualisation skill, creativity, diplomacy, verbal fluency, administrative ability and persuasiveness.

2.2.2 Leadership Behaviour
Stogdill (1948, 1974) did not support the premise that a person must possess a particular set of traits to become an effective leader and posited that the traits essential for leadership effectiveness are related to the situation, such as characteristics, activities and goals of the followers. Leaders with certain traits may be effective in one situation but may not be effective in another. Further, leaders with different traits may be effective in the same situation. Fiedler (1995) suggested that situation variables, such as intelligence and experience, influence relationships between traits and leadership effectiveness.
Traits are a person’s recurring behaviours (Hughes, Ginnett and Curphy 1999). Thus, the traits approach to leadership studies implies that it is difficult to change a leader’s traits for the leader to become more effective. This approach also implies that the focus in enhancing leadership effectiveness should be on selecting persons with the right traits. In addition to this approach, the behavioural approach focuses on the description and analysis of actions of the leader that enable one to be effective. Leadership behaviours are actions the leader performs and the ways one performs them, which can be observed, taught and learned (Adair 1973). Leadership researchers who adopt the behavioural approach held that leaders can become more effective by practicing effective leadership behaviours (Blake and Mouton 1964; Likert 1961). Thus, the behavioural approach implies that the focus to enhance leadership effectiveness should be on the development of leaders to behave in certain ways.

The implication of the behavioural approach has more practical applications than the traits approach because most organisations cannot replace all of their current organisational leaders with leaders possessing traits of an effective leader (Kelloway and Barling 2000). Further, leadership behaviours, which are actions of the leader, may be more observable than traits of the leader, which are personal qualities. Thus, empirical evidence on relationships between leadership behaviours and outcomes obtained using the behavioural approach may be stronger than relationships between traits of the leader and their outcomes obtained using the traits approach. Researchers opined that the behavioural approach contributes more significantly to the understanding of leadership than the traits approach (Bass 1990). Thus, the focus of leadership studies evolved from the identification of traits of an effective leader to the identification of effective leadership behaviours and their combinations that lead to leadership effectiveness (Higgs 2003; Rost 1991).

From a comparison of effective and ineffective leaders, Likert (1961) and Blake and Mouton (1964) found two types of effective leadership behaviours, namely, task-oriented and relations-oriented behaviours. In addition, they found that effective leaders are task- and relations-oriented. Effective leaders are goal-centred and seek results through participation, involvement and commitment of subordinates (Blake and Mouton 1964, 1978, 1985).
A recent study conducted by Kellett, Humphrey and Sleeth (2006) on small workgroup peers investigated relationships among emotional abilities, cognitive abilities and leadership. The participants included 198 undergraduate and 33 graduate students enrolled in organisational behaviour classes. The sample included 101 men and 130 women with average age of 23.5. In the studies, they found that leaders who demonstrated more emotional abilities are relations-oriented, whilst those demonstrating more cognitive abilities are task-oriented. The study was replicated using 168 organisational behaviour students: 70 males and 98 females with an average age of 25 years. Results showed that leaders with emotional and cognitive abilities are more effective (Kellett, Humphrey and Sleeth 2006). Likert (1961) and Blake and Morton (1964), through comparison of effective and ineffective leaders, found that effective leaders are task- and relations-oriented. Thus, Kellett, Humphrey and Sleeth’s (2006) findings are in congruence with Likert’s (1961) and Blake and Mouton’s (1964).

2.2.2.1  Task-oriented Leadership Behaviour

The leaders’ assumptions about their role, purpose and behaviours reflect their interest in completing assignments and getting work done (Yukl 2002). Likert (1961) found that effective leaders do not spend time and effort doing the same work as their subordinates. They concentrate on task-oriented functions such as planning and scheduling, coordinating subordinates’ activities and providing necessary supplies, equipment and technical assistance (Likert 1961) because task-oriented leaders are concerned with goal attainment (Miller, Butler and Cosentino 2004), concerned with production (Blake and Mouton 1964; Liu, Yu and Tjosvold 2002) and motivated by needs for achievement (Bass 1990; McClelland 1961; Wofford 1970).

Task-oriented leaders initiate structure for subordinates, define others’ roles, explain what to do and why, establish well-defined patterns of work organisation and clear channels of communication and determine ways to accomplish assignments (Kellett, Humphrey and Sleeth 2006). Initiation of structure shows the extent leaders initiate and organise activities in groups and define the way work is done. The initiation includes such leadership behaviours as insisting on maintaining standards, meeting deadlines and deciding in detail what and how it should be done.
2.2.2.2 Relations-oriented Leadership Behaviour

Effective leaders practice task- and relations-oriented leadership behaviours (Likert 1961). Relations-oriented leaders are concerned with pursuing human relations with their subordinates whilst being supportive of and helpful to subordinates. Supportive behaviours include exhibiting concern for the welfare of subordinates, showing trust and confidence in subordinates, being friendly, understanding subordinates’ problems, helping develop subordinates and their careers, keeping subordinates informed, showing appreciation for subordinates’ ideas and providing recognition for subordinates’ contributions and accomplishments (Kellett, Humphrey and Sleeth 2006). Likert (1961) held that the leaders’ supportive behaviour builds and maintains subordinates’ self-esteem. Moreover, relations-oriented leaders are expressive and tend to establish social and emotional ties (Miller, Butler and Cosentino 2004). They have less need to control subordinates and supervise them less closely (McGregor 1960; Yukl 2002).

Relations-oriented leaders are considerate (Likert 1961; Stogdill, Goode and Day 1963; Yukl 2002). Consideration describes the extent leaders practice concern for the welfare of group members. Considerate leaders express appreciation for effective work, stress the importance of job satisfaction, maintain and strengthen subordinates’ self-esteem by treating them as equals, help subordinates feel at ease, are easy to approach, put subordinates’ suggestions into operation and obtain subordinates’ consensus on important matters before making decisions. The support provided by considerate leaders finds them oriented towards relationships, friendship, mutual trust and interpersonal warmth. Participation and maintenance of groups accompany such support (Atwater 1988; Liu, Yu and Tjosvold 2002). In contrast, inconsiderate leaders criticise subordinates in public, treat them without considering their feelings, threaten their security and refuse to accept suggestions or to allow subordinates to explain actions (Bass 1990).

2.2.3 Situational Leadership

Although Blake and Mouton (1964) and Likert (1961) posited that effective leadership behaviour is task- and relations-oriented, later studies (Fiedler 1967a; Hersey and Blanchard 1977) postulated that each of task-oriented and relations-oriented leadership behaviours is more effective in some situations. Researchers proceeded to develop contingency leadership theories (De Vries, Roeb and Taillieu 2002) examining factors
external to leaders. An aspect of the situation that enhances or nullifies the effects of a leader’s trait or behaviour is called a situational moderating variable (Yukl 1994), which affects relationships between leadership behaviours and leadership effectiveness (Sternberg and Vroom 2002). Thus, for leaders to be effective, a match between leadership behaviour and situations is needed (Osborn, Hunt and Jauch 2002). Theories that explain leadership effectiveness in relation to a situational moderating variable are called contingency leadership theories. The following subsections discuss the seminal contingency leadership theories postulated by Fiedler (1967a) and Hersey and Blanchard (1977).

2.2.3.1 Fiedler’s (1967a) LPC Contingency Model

Fiedler’s (1967a) (LPC) contingency model describes how situations moderate the relationship between leadership behaviour and leadership effectiveness. Fiedler attempted to predict leadership effectiveness from a measure called the LPC score, which is determined by asking a leader to think of all past and present co-workers, select the one with whom one could work well the least and rate this person on a set of bipolar adjective scales, for example, friendly-unfriendly, cooperative-uncooperative and efficient-inefficient, and is the sum of the ratings on all of the bipolar adjective scales.

According to Fiedler’s (1978) interpretation, the LPC score indicates a leader’s motive hierarchy. A high LPC leader is primarily motivated to have close, interpersonal relationships with other people, including subordinates and will act in a considerate, supportive manner if relationships need to be improved. Achievement of task objectives is a secondary motive that will become important only if the primary motive is already satisfied. A low LPC leader is primarily motivated by achievement of task objectives and will emphasise task-oriented behaviour whenever there are task problems. The secondary motive of establishing good relations with subordinates becomes important only if the group is performing well and there are no serious task problems.

Further studies by other researchers (Graham 1968; Rice 1978; Yukl 1968) noted that high LPC leaders are relations-oriented whilst low LPC leaders are task-oriented. A study conducted by Kellett, Humphrey and Sleeth (2002) on small workgroup peers investigated relationships among emotional abilities, cognitive abilities and leadership.
The participants included 168 students enrolled in organisational behaviour classes. The sample included 70 men and 98 women with average age of 25. They found that task-oriented leaders feel and express less empathy for co-workers. Therefore, it can be inferred that task-oriented leaders are low LPC leaders.

Fiedler (1978) defined situational favourability as the extent situations give leaders control over subordinates and the situations. Favourability is measured in terms of three aspects: leader-member relations, which is the extent the leader has the support and loyalty of subordinates and relations with subordinates are friendly and cooperative; task structure, which is the extent there are standard operating procedures to accomplish the task, a detailed description of the finished product or service and objective indicators of how well the task is being performed; and position power, which is the extent the leader has authority to evaluate subordinates’ performance and administer rewards and punishments.

Favourability is determined by weighting and combining these three aspects. The weighting procedure assumes that leader-member relations are more important than task structure, which in turn is more important than position power. The possible combinations yield eight levels of favourability called Octants as listed in Table 2.1.

Table 2.1: Relationships in Fiedler’s (1967a) LPC Contingency Model

<table>
<thead>
<tr>
<th>OCTANT</th>
<th>L-M RELATIONS</th>
<th>TASK STRUCTURE</th>
<th>POSITION POWER</th>
<th>EFFECTIVE LEADER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good</td>
<td>Structured</td>
<td>Strong</td>
<td>Low LPC</td>
</tr>
<tr>
<td>2</td>
<td>Good</td>
<td>Structured</td>
<td>Weak</td>
<td>Low LPC</td>
</tr>
<tr>
<td>3</td>
<td>Good</td>
<td>Unstructured</td>
<td>Strong</td>
<td>Low LPC</td>
</tr>
<tr>
<td>4</td>
<td>Good</td>
<td>Unstructured</td>
<td>Weak</td>
<td>High LPC</td>
</tr>
<tr>
<td>5</td>
<td>Poor</td>
<td>Structured</td>
<td>Strong</td>
<td>High LPC</td>
</tr>
<tr>
<td>6</td>
<td>Poor</td>
<td>Structured</td>
<td>Weak</td>
<td>High LPC</td>
</tr>
<tr>
<td>7</td>
<td>Poor</td>
<td>Unstructured</td>
<td>Strong</td>
<td>High LPC</td>
</tr>
<tr>
<td>8</td>
<td>Poor</td>
<td>Unstructured</td>
<td>Weak</td>
<td>Low LPC</td>
</tr>
</tbody>
</table>

According to the model, the situation is most favourable to the leader (Octant 1) when relations with subordinates are good, the leader has substantial position power and the task is structured. The situation is least favourable to the leader (Octant 8) when relations with subordinates are poor, the task is unstructured and position power is low.

The causal relationships in the model are depicted in Figure 2.1. According to the model, when the situation is either very favourable (Octants 1 to 3) or very unfavourable (Octant 8), low LPC leaders will be more effective than high LPC leaders. High LPC leaders will be more effective than low LPC leaders when the situation is intermediate in favourability (Octants 4 to 7).

Figure 2.1: Causal relationships in Fiedler’s (1967a) contingency leadership theory

Lee-Kelley (2002) interviewed a convenience sample of 73 project managers working in two pharmaceutical companies. The results of the study are consistent with Fiedler’s (1967a) postulations. Specifically, the results indicated that task-oriented leadership is more effective when the situation is very favourable or very unfavourable to the leader. Further, in congruence with Fiedler’s (1967a) contingency leadership theory, leaders were found to vary their degree of task orientation and relations orientation based on their ability to control and influence the situation.
Miller, Butler and Cosentino (2004) surveyed 108 junior enlisted personnel in six infantry battalions with the US Army in Europe. The respondents were randomly selected from a roster maintained by units directed to participate in the survey as part of a military research programme. The research methodology used was adapted from Fiedler’s (1967a) study. Consistent with Fiedler’s contingency leadership theory, the results obtained indicate that task-oriented leaders perform better in very unfavourable situations.

2.2.3.2 Hersey and Blanchard’s (1977) Situational Leadership Model

Hersey and Blanchard (1977, 1993) maintained that it is the ability of the leader to adapt one’s behaviour to the needs of the followers. Their situational leadership model was built on propositions based on their understanding of prior empirical research. These propositions were as follows:

1. Leadership styles vary considerably from leader to leader (Stogdill and Coons 1957).
2. Some leaders’ behaviour primarily involves initiating structure to accomplish tasks; there are some that are concerned in building and maintaining good personal relationships, whilst others do both or do neither (Halpin 1956).
3. The most effective behavioural style of leaders varies with the situation (Fiedler 1967a; Korman 1966).
4. The best attitudinal style is a high task and relations orientation (Blake and Mouton 1964).
5. The job and psychological maturity of followers are most crucial in determining which behavioural style leaders will have the highest rate of efficacy (Argyris 1962).
6. Maturity relates to the stage in a group’s life cycle or to the previous and current training of followers (Blake and Morton 1964, 1982).

A curvilinear relationship between a leader’s task and relations orientations and subordinates’ maturity was postulated by Hersey and Blanchard (1977) as illustrated in Figure 2.2.
Maturity is observed at four levels. Each level involves a different combination of attention to relations and tasks as shown in Table 2.2. Leadership behaviour should have a high task orientation and a low relations orientation when subordinates are unwilling and unable to do the job. The subordinates should be closely supervised and provided with specific instructions. Leadership behaviour should have a high task orientation and a high relations orientation when subordinates are willing but unable to do the job. The subordinates should be persuaded to do the job.

Leadership behaviour should have a low task orientation and a high relations orientation when subordinates are unwilling but able to do the job. A consultative style should be applied to the subordinates. Leadership should have a low task orientation and low relations orientation when subordinates are willing and able to do the job. The subordinates should be delegated assignments.
Table 2.2: Prescriptions of Hersey and Blanchard’s (1977) model

<table>
<thead>
<tr>
<th>Subordinates’ Level of Maturity</th>
<th>Leader’s Behaviour Should Be Oriented Towards</th>
<th>Prescribed Leadership Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unable-unwilling</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>2. Unable-willing</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>3. Able-unwilling</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>4. Able-willing</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>


A primary implication of Hersey and Blanchard’s (1977) model is that effective leaders working with more mature subordinates are less task- and relations-oriented. A leader’s task- and relations-oriented behaviours interact with subordinates’ task-relevant and psychological maturity to significantly influence leadership effectiveness (Chen and Silverthorne 2005). At lower levels of maturity, the leader needs to provide direction, but otherwise, subordinates become responsible for task direction (Chen and Silverthorne 2005). There is no best way to influence subordinates. Leaders need to assess the level of subordinates’ maturity and use the appropriate leadership style (Chen and Silverthorne 2005). Thus, it is the characteristics of subordinates which determine the most appropriate leadership behaviour (Chen and Silverthorne 2005).

2.2.4 Summary

The traits approach to leadership studies did not identify traits essential for leadership effectiveness in all situations. The behavioural approach identified task-oriented and relations-oriented leadership behaviours as effective. However, further studies postulated that leadership effectiveness depends on the situation. The following section discusses the construct of leadership effectiveness and its dimensions.
2.3 LEADERSHIP EFFECTIVENESS

Effective leadership engages members to secure commitment to organisations to meet the challenges of the knowledge economy (Higgs 2003; Uhl-Bien, Marion and McKelvey 2007) and the changing environment (Higgs 2003). Thus, leadership effectiveness is among the most important factors in determining organisational performance (Yukl 2002). Hence, prior leadership studies aimed to identify traits and behaviours of the leader and aspects of the situation that determine leadership effectiveness (Koene, Vogelaar and Soeters 2002). Similar to prior leadership studies, this study attempts to determine effective leadership behaviours on subordinates who possess high and low levels of job-related knowledge. Nonetheless, the definition of leadership effectiveness and its various dimensions differ among researchers (Yukl 2002). This section discusses the definition of leadership effectiveness and dimensions adopted in this study.

2.3.1 Definition of Leadership Effectiveness

Most researchers evaluate leadership effectiveness in terms of the consequences of the leader’s actions on followers and other organisation stakeholders (Yukl 2002). A major distinction between definitions of leadership effectiveness is the type of consequence or outcome selected as the effectiveness criterion. Outcomes are diverse and may include factors such as group performance, attainment of group goals, group survival, group growth, group preparedness, group capacity to deal with crises, subordinates’ satisfaction with the leader, subordinates’ commitment to group goals, the psychological well-being and development of group members, and leader’s retention of status in the group (Yukl 2002). For comparability of results of this study to those of Bass’ (1985), this study adopted the same definition of leadership as Bass (1990),

*as an interaction between two or more members of a group that involves a structuring or restructuring of the situation and the perceptions and expectations of the members. Leadership occurs when one group member modifies the motivation or competencies of others in the group. Leaders are agents of change and persons whose acts affect other people more than other people’s acts affect them.*

Further, this study defined leadership effectiveness consistently with Bass’ dimensions of leadership effectiveness as the consequences of the leader’s actions on work effectiveness, meeting subordinates’ job-related needs, fulfilling organisational requirements and subordinates’ satisfaction with the leader.
2.3.2 Dimensions of Leadership Effectiveness

Following the definition of leadership effectiveness, this section discusses Bass’ (1985) dimensions and elements of leadership effectiveness adopted in this study. Work effectiveness consists of two elements, overall work effectiveness and effectiveness relative to other departments. Subordinates’ satisfaction with the leader consists of two elements: level of subordinates’ satisfaction with the superior and level of subordinates’ satisfaction with the superior’s method of leadership.

As leaders derive their importance from their effect on subordinates and ultimately organisations (Higgs 2003; Uhl-Bien, Marion and McKelvey 2007), the discussion focuses on the importance and difference of each dimension to an organisation.

2.3.2.1 Work Effectiveness

Work effectiveness contributes directly to organisational performance (Yukl 2002). The most common and broad measure of leadership effectiveness is the leader’s contribution to a group or organisation’s work effectiveness (Rost 1991). Hooijberg and Choi (2000) surveyed 252 managers and their subordinates, peers and superiors from the public utility industry and found that most respondents perceived effective leaders as those who contribute to work effectiveness. Bass (1960, 1990) postulated that a leader’s task competency would contribute to the group’s work effectiveness. The group’s work effectiveness, in turn, leads to perception of leadership effectiveness by the members of the group. Therefore, as in Bass’ (1985) study, this study adopted work effectiveness as a dimension of leadership effectiveness.

Work effectiveness can be measured in the absolute term or relative to other groups in the same organisation (Hooijberg and Choi 2000). Work effectiveness measured in absolute term refers to meeting work objectives of the group. For example, a sales team has met its work objective if it has attained the sales target set by management. In contrast, the sales team is effective relative to other groups in one organisation if it has attained a sales level higher than other sales teams in the company. It follows that the dimension of work effectiveness has two elements, overall work effectiveness and effectiveness relative to other departments (Bass 1985).
In some cases, objective measures of work effectiveness in a commercial organisation are available, such as profit growth, profit margin, sales increase, market share, return on investment and productivity (Koene, Vogelaar and Soeters 2002). However, when there are many alternative measures of work effectiveness, it is arbitrary to decide on the most appropriate and relevant (Yukl 2002). Different criteria are often uncorrelated and may even be negatively correlated (Yukl 2002). For example, growth in sales or output is sometimes achieved at the cost of reduced efficiency and lower profits.

Some outcomes of leadership are more immediate than others (Hughes, Ginnett and Curphy 1999). For example, the immediate result of leadership may be that a subordinate is willing to do the task assigned by the leader. A delayed effect of leadership is how well subordinates perform the assigned task. When the delay is long, extraneous events such as economic conditions may influence the criteria (Yukl 2002). Delayed outcomes are less valid in measuring leadership effectiveness than immediate outcomes (Yukl 2002).

Further, tradeoffs may occur within the same criterion at different points (Yukl 2002). For example, profit may be increased in the short run by neglecting activities that have a delayed effect on profits, such as maintenance of equipment, research and development, investment in new technology and development of employees’ skills. In the long run, the net effect of cutting these essential activities is likely to be lower profits.

In addition, different stakeholders of the organisation may prefer different measures of work effectiveness. For example, top management may prefer different measures from employees, customers or shareholders (Yukl 2002). Therefore, objective measures of work effectiveness have limitations such as incompatible criteria, delayed effects and different priorities depending on the group of stakeholders.

Subjective ratings of leadership effectiveness obtained from the leader’s superior, peers or subordinates may overcome the weaknesses of objective measures (Yukl 2002). Hughes, Ginnett and Curphy (1999) held that subjective ratings capture multiple aspects of leadership effectiveness as perceived by the leader’s superior, peers or subordinates, hence, may be more valid than objective measures. Consistent with this view, Hooijberg and Choi (2000) opined that leadership effectiveness cannot be determined independent
from the organisational setting and the effective leader is one deemed as such by the followers whom they lead.

However, subjective ratings from superiors, peers or subordinates may differ from one another (Hooijberg and Choi 2000). For example, leaders may have poor relationships with their superiors and good relationships with their subordinates. Such relationships may be reflected in the ratings from superiors and subordinates such that superiors may rate the leaders as ineffective whilst subordinates rate the leaders as effective (Hughes, Ginnett and Curphy 1999).

Hooijberg and Choi (2000) maintained that leaders tend to focus on meeting the expectations of one’s superior and subordinates. Thus, the opinions of the leader’s superior and subordinates on leadership effectiveness are most important to the leader. There are two reasons why subordinates’ ratings are more valid in assessing leadership effectiveness than superior’s ratings. Firstly, subordinates are in a suitable position to make judgements on leadership effectiveness of their superior as they can observe their superior’s leadership behaviours more frequently than the leader’s superior (Hughes, Ginnett and Curphy 1999). Secondly, multiple ratings may be obtained from more than one subordinate instead of one superior only. The effects of bias from multiple ratings tend to offset one another (Hughes, Ginnett and Curphy 1999).

In summary, work effectiveness is an important dimension of leadership effectiveness adopted in this study that contributes directly to organisational performance. Subjective ratings of leadership effectiveness are more valid than objective measures of leadership effectiveness. Among subjective ratings of leadership effectiveness, subordinates’ ratings are more valid than superior’s and peers’ ratings. Therefore, similar to Bass’ (1985) study, the ratings of leadership effectiveness used in this study are obtained from subordinates.

2.3.2.2 Meeting Subordinates’ Job-Related Needs

According to Hughes, Ginnett and Curphy (1999), subordinates whose most needs are met are more likely to continue working for an organisation. Subordinates whose most needs are not met are more likely to be adversarial in their relations with the leaders, engage in counterproductive behaviours and leave the organisation (Tett and Meyer
1991). Even subordinates who perform well on the job but whose most needs are not met may leave the organisation and adversely affect organisational performance.

Subordinates have job-related needs. They need the leader to plan and schedule their work, coordinate their activities and provide necessary training, supplies, equipment and technical assistance (Likert 1961). For example, subordinates may have to be adequately trained and have the necessary equipment to do the job. Without training and equipment, subordinates’ performance may be low even if subordinates are motivated to perform effectively (Hughes, Ginnett and Curphy 1999).

Further, to perform effectively in their jobs, subordinates may need the leader to define the roles of others, explain what to do and why, establish well-defined patterns of work organisation and clear channels of communication, and determine the ways to complete the jobs (Kellett, Humphrey and Sleeth 2006). They may also need the leader to maintain standards, decide in detail what and how things should be done, and set performance goals that are high but realistic (Kellett, Humphrey and Sleeth 2006). Therefore, meeting subordinates’ job-related needs enhances subordinates’ performance as meeting subordinates’ job-related needs is a hygiene factor.

In sum, meeting subordinates’ job-related needs is an important dimension of leadership effectiveness (Hooijberg and Choi 2000; House and Podsakoff 1994) as subordinates with good performance whose needs are not met may leave the organisation. Meeting of subordinates’ job-related needs is a dimension of leadership effectiveness distinct from the dimension of work effectiveness. Hence, similar to Bass’ (1985) study, this study adopted the dimension and single item of leadership effectiveness of meeting subordinates’ job-related needs.

2.3.2.3 Organisational Requirements

The survival of an organisation depends on the organisation’s effective adaptation to the environment, meaning successfully marketing its outputs in terms of products and services, obtaining resources and dealing with external threats (Yukl 2002). Leadership is the process of influencing others to understand and agree on what needs to be done and how it can be done effectively, and the process of facilitating individual and collective effort to accomplish shared objectives (Yukl 2002). Thus, in an organisational
setting, an essential leadership function is to guide and facilitate the organisation’s adaptation to its environment through arousal of needs for change (Tichy and Devanna 1986) and envisioning ways the organisation can change to adapt to the environment (Yukl 2002). Some examples of the leadership activities of adaptation include gathering and interpreting information about the environment, negotiating agreements that are favourable to the organisation, influencing external parties to have a favourable perception of the organisation and its products, and gaining cooperation and support from outsiders to whom the organisation are dependent on (Yukl 2002).

Adaptation includes implementation of changes in the organisation (Yukl 2002). Leaders can facilitate change by adopting task-oriented and relations-oriented actions. Task-oriented actions include forming teams to guide change, selecting the right people to fill key positions, making changes that affect work, changing the organisational structure to institutionalise change and monitoring the progress of change to detect problems to be resolved on time. Relations-oriented actions include creating a sense of urgency, preparing members for change, helping members cope with change, keeping members informed of the change, demonstrating continued commitment to the change programme and empowering members to implement the change (Yukl 2002).

Organisational effectiveness depends on the efficiency of the operational processes used by the organisation to produce products and services. Efficiency is increased by finding ways to organise and perform the work and by deciding how to make best use of available technology, resources and manpower. The main function of leadership is to influence others in the organisation towards improving operations. Examples of these leadership responsibilities include designing an appropriate organisation structure, determining authority relationships and coordinating operations across specialised subunits of the organisation (Yukl 2002).

Work effectiveness relates to the group’s effective performance of function. For example, generation of targeted sales revenue is a performance indicator of the sales department of an organisation. The sales manager may secure sales contracts from customers, thus contributing to the sales department’s work effectiveness. However, fulfilling organisational requirements relates to the contribution of the group’s effective performance of its function to the organisation as a whole. Nonetheless, the sales
department will only fulfill organisational requirements if the targeted sales revenue generated results in profit for the organisation. Hence, work effectiveness and fulfilling organisational requirements can be conceived as two distinct dimensions of leadership effectiveness. Further, meeting subordinates’ job-related needs may not meet organisational requirements. For example, subordinates may perceive a need to have more resources for the completion of tasks. However, the organisation would incur higher cost to obtain more resources. The higher cost would result in lower profitability for the organisation. Allocation of more resources to subordinates for the completion of tasks may meet subordinates’ job-related needs but may not satisfy organisational requirements. Therefore, fulfilling organisational requirements is a dimension of leadership effectiveness distinct from the dimensions of work effectiveness and meeting subordinates’ job-related needs.

In sum, leadership effectiveness can be measured in terms of fulfillment of organisational requirements of adaptation to the environment and improvement of the transformational process (Yukl 2002). Further, fulfilling organisational requirements is a distinct dimension of leadership effectiveness from the dimensions of work effectiveness and meeting subordinates’ job-related needs. As in Bass’ (1985) study, this study used the dimension and single element of leadership effectiveness of fulfilling organisational requirements.

2.3.2.4 Subordinates’ Satisfaction
Leadership behaviour which satisfies subordinates leads to subordinates’ satisfaction with the leader (Conger and Kanungo 2000; House and Dessler 1974). Subordinates are more satisfied with leadership behaviours that are equal to all and equitable to the individual (Hughes, Ginnett and Curphy 1999). According to equity theory, subordinates are more satisfied when they believe what they give to a job is equivalent to what they get out of it (Adam 1963; Vecchio 1982). However, judgements of equity are based in comparison to a reference group and not on the absolute value of one’s own inputs and outcomes.

who are treated unfairly are less productive, satisfied and committed to organisations (Hughes, Ginnett and Curphy 1999). These individuals are more likely to engage in counterproductive work behaviour (Sheppard, Lewicki and Minton 1982), which influences performance. McColl-Kennedy and Anderson (2002) opined that subordinates’ satisfaction with the leader is an important factor of leadership effectiveness.

The subordinates’ satisfaction with the leader is distinct from the meeting of subordinates’ job-related needs as the former may involve satisfaction of subordinates’ needs that are not related to the job. For example, subordinates may be satisfied with the leader if the leader encourages the subordinates to put their free time to good use as they perceive the leader to be concerned for their welfare. Further, Bass (1990) and Yukl (2002) posited that subordinates’ satisfaction with the leader is a distinct dimension of leadership effectiveness from other dimensions of work effectiveness, meeting of subordinates’ job-related needs and fulfillment of organisational requirements because subordinates’ satisfaction with the leader refers to the feeling of subordinates towards the leader, whilst the other dimensions are beliefs, which are what subordinates think about the leader (Saunders et al. 1997).

In sum, subordinates’ satisfaction with the leader is an important dimension of leadership effectiveness as it influences subordinates’ performance (McColl-Kennedy and Anderson 2002). Leaders can increase subordinates’ satisfaction through clarification of subordinates’ perceptions of equity and equality (Hughes, Ginnett and Curphy 1999). Thus, as in Bass’ (1985) study, this study adopted the dimension of leadership effectiveness of subordinates’ satisfaction with the leader.

Within the subordinates’ satisfaction with the leader, satisfaction with the superior is a distinct item from satisfaction with the method of leadership (Bass 1985). The former refers to satisfaction with the superior as a person, which relates to aspects of the person not related to one’s method of leadership. Examples of these aspects of the person include the person’s personality and communication style. The latter specifically concerns the superior’s method of leadership. Hence, this study adopted the same elements measuring subordinates’ satisfaction with the leader as in Bass’ (1985) study, which refers to the level of subordinates’ satisfaction with the superior and the level of
subordinates’ satisfaction with the superior’s method of leadership. Figure 2.3 depicts the dimensions of leadership effectiveness used in this study.

Figure 2.3: Dimensions of leadership effectiveness

Source: developed for this research.

2.3.3 Research Problem

This century, society has further advanced into a knowledge economy; knowledge is a core commodity and the rapid creation of knowledge and innovation is critical to organisational survival (Bettis and Hitt 1995; Boisot 1998). Organisations face a complex and competitive business environment driven largely by globalisation and the technology revolution (Hitt 1998). Drucker (1998) held that the basic assumptions of theory and practice of leadership may not be applicable in the knowledge economy.

Leaders in the knowledge economy face adaptive rather than technical challenges (Uhl-Bien, Marion and McKelvey 2007). As defined by Heifetz and Laurie (2001), adaptive
challenges are problems that require new learning, innovation and new patterns of behaviour. They are different from technical problems, which can be solved with existing knowledge and procedures (Parks 2005). Adaptive challenges are not amenable to standard operating procedures, but rather require exploration, new discoveries and adjustments (Uhl-Bien, Marion and McKelvey 2007).

Effective leadership facilitates effective changes to organisational strategies, structures and processes so the organisation adapts to the new economy (Higgs 2003). Further, the complex and competitive business environment brings about increasing pressure on individuals within organisations to work harder and to continuously improve, which leads to higher levels of stress on individuals. Simultaneously, organisations have greater need for talents to compete in this complex business environment (Higgs 2003). Effective leadership is required to engage employees so that organisations can secure their commitment (Higgs 2003). Uhl-Bien, Marion and McKelvey (2007) held that leadership is a key factor affecting the extent that organisations meet the challenges of the knowledge economy. Nevertheless, there are still leaders who have narrow definitions of productive work in the industrial economy and have yet transcended to understand the strategic value of knowledge creation and its critical dependence on human factors (Prewitt 2003).

Leadership theories in the industrial economy assume controls must be rationalised, goals are linearly conceived and managerial practices structured to achieve those goals (Uhl-Bien, Marion and McKelvey 2007). Osborn, Hunt and Jauch (2002) argued that a radical change in perspective about leadership is necessary to go beyond this paradigm because the context in which leaders operate is radically different and diverse in the knowledge economy.

From the earlier discussion in Chapter 1, in Bass’ (1985) range of leadership models, transformational leadership is an effective form of leadership behaviour and is more effective than transactional leadership. Charismatic leadership is the major component of and the most effective form of transformational leadership and is widely argued to be the most universally applicable and effective in most situations (Bass 1997). Charismatic leadership is widely regarded as a plausible catalyst for radical individual and organisational change required in the knowledge economy (Pillai and Meindl 1998).
According to Fiedler (1967a), situations are favourable to leaders when tasks are more structured as it is easier for leaders to direct subordinates and monitor performance. Miller, Butler and Cosentino (2004) and Hedlund (2003) suggested that experience structures a task for an individual through increased familiarity with group procedures, norms and attitudes. Thus, subordinates who possess higher levels of job-related knowledge may require less supervision and monitoring. Therefore, it is easier for leaders to direct these subordinates and monitor their performance. It follows that, similar to situations when tasks are more structured, situations are more favourable to leaders when subordinates possess higher levels of job-related knowledge. As situational favourability affects leadership effectiveness (Fiedler 1967a), subordinates’ job-related knowledge is a key situational moderating variable of subordinates that influence leadership effectiveness.

Hersey and Blanchard (1977) postulated that subordinates’ task relevant maturity is a key situational moderating variable of subordinates that influence leadership effectiveness. They suggested that subordinates’ job-related knowledge is a source of subordinates’ ability, which, in turn, is an aspect of subordinates’ task relevant maturity. Following this discussion, this study posits that subordinates’ job-related knowledge is the key situational moderating variable of subordinates that facilitates or impedes leadership effectiveness. However, there is a lack of prior research with empirical evidence on this matter.

From the discussion, the research problem of this study is:

*How does the situational moderating variable of subordinates’ job-related knowledge affect the relationship between charismatic leadership and leadership effectiveness and the relationship between transactional leadership and leadership effectiveness?*

The research problem will be translated into the research objective and hypotheses at the end of the chapter.
2.3.4 Summary

This study adopted Bass’ (1985) dimensions of leadership effectiveness, that is, work effectiveness, meeting of job-related needs of the subordinates, fulfillment of organisational requirement of the organisation and subordinates’ satisfaction with the leader. Work effectiveness consists of two elements: overall work effectiveness and work effectiveness relative to other departments. Subordinates’ satisfaction with leaders includes two elements: subordinates’ satisfaction with superiors and subordinates’ satisfaction with superiors’ method of leadership.

Due to the importance of leadership effectiveness, this study focuses on the identification of effective leadership behaviours. Prior studies suggested that charismatic leadership is the most effective leadership behaviour and is effective in most situations. These studies also indicated that the key situational moderating variable of subordinates affecting the relationship between charismatic leadership and leadership effectiveness is subordinates’ job-related knowledge. Hence, this study investigated the moderating role of subordinates' job-related knowledge on the relationship between leadership behaviour and leadership effectiveness.

2.4 VALUE OF THE STUDY

This section discusses the justification for this study from the practitioner’s and academician’s perspectives.

2.4.1 Practitioner’s Perspective

The results of this study will inform practitioners on the most effective leadership behaviour to practice in Singapore and China and on subordinates who possess different levels of job-related knowledge. The results of this study will inform practitioners on the selection of leaders who practice the most effective leadership behaviour. The need for such selection criteria may be particularly important for developing countries, such as China, where greater levels of organisational change facilitated by effective leadership would be necessary for faster technological development (Conger and Kanungo 1987), which, in turn, may facilitate these countries’ participation in the global economy.
Effective leadership in the knowledge economy in the form of transformational leadership can be developed (Bass 1985; Mumford et al. 2000a, 2000b) through acquisition of complex problem-solving skills, solution construction skills and social skills (Mumford et al. 2000b). These skills facilitate the practice of intellectual stimulation, charismatic leadership and individualised consideration, which are the dimensions of transformational leadership (Bass 1985).

Complex problem-solving skills, which include defining problems, gathering information, formulating ideas, constructing prototype plans for solving problems and knowing the effective leadership behaviour, facilitate solving novel, ill-defined organisational problems that typically confront leaders. The leader’s demonstration of how complex problems can be solved is likely to lead subordinates to think in new ways, hence, leading to intellectual stimulation of subordinates (Mumford et al. 2000a).

Solution construction skills, which include the skills to exercise objectivity in appraising the implications of a solution, to identify key causes of the problems (Bass 1995), to rank and prioritise solutions (Schor 1983) and to identify consequences down the value-chain (Mumford et al. 2000a), facilitate the construction of viable solutions to organisational problems confronting leaders.

The effective exercise of solution construction skills is likely to depend on mental models reflecting working interrelationships in the organisation. These mental models and the associated mental modelling skills allow leaders to revise prototype solutions to create workable solutions (Mumford et al. 2000a). The mental models of organisational relationships may constitute an aspect of a vision that would address organisational problems (Mumford et al. 2000a). Hence, solution construction skills can be viewed as preconditions for the formulation and communication of viable visions, which are the most important aspects of charismatic leadership (Bass 1985; House 1977; House, Spangler and Woycke 1991).

Social skills, in this sense including not just traditional skills such as persuasion and negotiation, but also skills such as social judgment and decision-making that allow leaders to adapt to others and build consensus towards a goal or vision (Zaccaro et al. 1991), are needed to get others to work towards solutions. Leaders’ social skills are
likely to include the practice of charismatic leadership of being sensitive to followers’ needs (Conger and Kanungo 1987), communicating high expectations and confidence in followers (House 1977), engaging in behaviour designed to arouse appropriate followers’ motives (House 1977) and reframing issues to show the way issues can be linked to leader’s and followers’ value systems (Burns 1978). Further, social skills involve adaptability to others (Mumford et al. 2000b). Hence, social skills are likely to include the ability to understand each subordinate and to adapt leadership behaviour to each subordinate individually, which is a practice of individualised consideration on each subordinate (Bass 1985).

Empirical evidence indicates that individuals are able to become more effective leaders through attending leadership development programmes that consume time and resources (Barling, Weber and Kelloway 1996; Kelloway, Barling and Helleur 2000); the findings of this study will inform practitioners on the development of the most effective leadership behaviour.

Contingency leadership theories hold that leadership behaviours are effective only in some situations (Hersey and Blanchard 1977). For leadership effectiveness, a match is required between leadership behaviour and situations (Fiedler 1976). Thus, to be effective, leaders need to modify their leadership behaviours to suit situations (Hersey and Blanchard 1977). The results of this study will add to the growing support for contingency leadership theories that imply that to enhance leadership effectiveness, the practitioner should be focused on developing leader’s abilities to recognise one’s leadership behaviour and situations (Fiedler 1972, 1976), identify the leadership behaviour each situation requires and to adapt leadership behaviour to each situation (Higgs 2003; Howell et al. 1990), or change situations to suit existing leadership behaviour (Fiedler 1972, 1976; Howell et al. 1990).

Because the mainland Chinese subordinates have been in their jobs for shorter durations than their Singaporean counterparts, the former may possess lower levels of job-related knowledge. Hence, leadership behaviours that are effective with the Singaporean subordinates may differ from those that are effective with the mainland Chinese subordinates (Fiedler 1967a; Hersey and Blanchard 1977; Lee-Kelley 2002; Miller, Butler and Cosentino 2004). The results of this study will inform managers on the
leadership behaviour to practice. These results will also enable the sampled organisation to develop leadership development programmes for training managers that are more targeted and relevant to the managers in the plants.

2.4.2 Academician’s Perspective

Bass (1997) posited that charismatic leadership is universal and effective in most situations. However, he suggested that a situational moderating variable may enhance the strength of the correlation between charismatic leadership and leadership effectiveness. Hence, Koene, Vogelaar and Soeters (2002) opined that more empirical research is needed in the moderating role of situations on leadership effectiveness. Miller, Butler and Cosentino (2004), Lee-Kelley (2002), Hersey and Blanchard (1977) and Fiedler (1967a) suggested that leadership effectiveness is contingent on the level of subordinates’ job-related knowledge. The results of this study will provide empirical evidence on the moderating role of subordinates’ job-related knowledge on the relationship between leadership behaviour and leadership effectiveness.

This study also contributes to the validity of the leadership constructs within an Asian context. Relationships between leadership behaviours and leadership effectiveness are influenced by cultural values (Spreitzer, Perttula and Xin 2005). Thus, there is a need to test the validity of leadership theories across different cultures (Leong 1997; Spreitzer, Perttula and Xin 2005). Using Bass’ (1985) Multifactor Leadership Questionnaire, Leong (1997) surveyed a convenience sample of 188 school teachers in Singapore on their opinions of the leadership behaviours of their school principals. He found that transformational and transactional leadership are positively correlated with leadership effectiveness. Further, the correlation between transformational leadership and leadership effectiveness is stronger than the correlation between transactional leadership and leadership effectiveness. Using the same instrument, Spreitzer, Perttula and Xin (2005) surveyed a random sample of 846 school teachers in Singapore on their opinions of the leadership behaviours of their school principals. The results indicate an augmentation effect of transformational leadership on transactional leadership in the prediction of leadership outcomes. Hence, the studies from Spreitzer, Perttula and Xin and Leong found that Bass’ theories of transformational and transactional leadership are supported in the cultural context of Singapore.
Silverthorne (2000) surveyed two groups of 75 and 99 employees and managers selected from a randomly stratified sample of employees in a large construction company in Taiwan. He found that Hersey and Blanchard’s (1977) contingency leadership theory is applicable in Taiwan. Specifically, he found leaders are more effective when they are more able to match their task- and relations-oriented leadership to subordinates’ levels of maturity. Taiwan has a similar culture to Singapore and China because these countries have large populations of Han Chinese. The results of this study may support the concept that charismatic and transactional leadership and contingency leadership theories are valid in the context of Singapore and China.

This study derived a new construct of job-related knowledge from the literature. Empirical evidence collected will demonstrate the validity and reliability of the measurement of this new construct. The scale derived to measure this new construct can be further tested and used in future studies to postulate relationships between job-related knowledge and other constructs.

2.5 EMPIRICAL MODEL

This section discusses the research objective derived from the research problem, and reviews prior theories on charismatic and transactional leadership; relationships between charismatic leadership and leadership effectiveness; and relationships between transactional leadership and leadership effectiveness before defining the hypotheses that postulate these relationships. This section also discusses whether the relationships are contingent on situations and identifies subordinates’ job-related knowledge as the most important situational moderating variable of subordinates that affects the relationships. As contingency leadership theories examine relations-oriented and task-oriented leadership, this section considers the applicability of contingency leadership theories in the context of charismatic and transactional leadership by examining the extent charismatic leadership is relations-oriented and the extent transactional leadership is task-oriented.

Moreover, this section discusses the operationalisation of job-related knowledge based on the review of literature. Finally, based on the application of contingency leadership theories in the context of charismatic and transactional leadership and subordinates’ job-related knowledge, this section hypothesises relationships among charismatic leadership,
subordinates’ job-related knowledge and leadership effectiveness, and among transactional leadership, subordinates’ job-related knowledge and leadership effectiveness to attain the research objective. Figure 2.4 depicts the empirical model that illustrates these relationships between the four constructs and the hypotheses of this study.

![Figure 2.4: Empirical Model](image)

Source: developed for this research.

2.5.1 Research Objective

Section 2.3.3 articulated that the leadership behaviour widely argued to be the most universally applicable and effective is charismatic leadership (Bass, 1997; Bass and Avolio, 1993; Conger and Kanungo, 1994; Hughes, Ginnett and Curphy, 1999; Pillai and Meindl, 1998). Section 2.3.3 concluded that attributes of followers affect leadership effectiveness (De Vries, Roeb and Taillieu 2002; Howell et al. 1990) and effective leaders adapt their leadership behaviours to the needs of their followers (Hersey and Blanchard 1977, 1993).

Miller, Butler and Cosentino (2004), Lee-Kelley (2002) and Fiedler (1967a) suggested that task structure is a key situational moderating variable that influences leadership
effectiveness by influencing situational favourability, which is the extent situations give leaders control over subordinates and situations (Fiedler 1978). Subordinates’ job-related knowledge influences situational favourability as the levels of task structure do, by increasing the leader’s ease of directing subordinates and monitoring performance. Hersey and Blanchard (1977) postulated that subordinates’ task relevant maturity is a key situational moderating variable of subordinates that influences leadership effectiveness. Subordinates’ job-related knowledge is a source of subordinates’ ability, which is, in turn, the key aspect of subordinates’ task relevant maturity. Hence, subordinates’ job-related knowledge is considered a key situational moderating variable of subordinates that may facilitate or impede leadership effectiveness.

As articulated in Section 2.3.3, there is a lack of prior research that presents empirical evidence on the moderating role of subordinates’ job-related knowledge on the relationship between leadership behaviour and leadership effectiveness. Further, in the sampled organisation, differences of leadership effectiveness between the Singapore and China plants may arise due to different levels of subordinates’ job-related knowledge (Fiedler 1967a; Hersey and Blanchard 1977; Lee-Kelley 2002; Miller, Butler and Cosentino 2004). Therefore, the research problem, as articulated in Section 2.3.3, refers to examining the moderating effect of subordinates’ job-related knowledge on the relationship between leadership behaviour and leadership effectiveness. This study translated the research problem into a research objective:

To examine the moderating role of subordinates’ job-related knowledge on the relationship between charismatic leadership and leadership effectiveness and the relationship between transactional leadership and leadership effectiveness.

Significant moderation would indicate that leadership effectiveness is contingent on the level of subordinates’ job-related knowledge. The following sections will discuss the translation of the research objective to the hypotheses.

### 2.5.2 Charismatic Leadership

This section details prior theories that led to the articulation of charismatic and transformational leadership theories. Charismatic leadership theory can be traced to Weber’s (1947) concept of charisma and House’s (1977) theory of charismatic
leadership. These prior studies culminated in Burns’ (1978) and Bass’ (1985) contemporary charismatic and transformational leadership theories.

2.5.2.1 Weber’s (1947) Concept of Charisma

Weber’s (1947) concept of charisma is an adaptation of the theological concept of charisma, which involves endowment on the leader with the gift of divine grace. Charismatic leadership stems from Weber’s work that charismatic leaders are mystical, narcissistic and personally magnetic saviours with doctrines to promote and who rise in times of crisis. Charismatic leaders have extraordinary and mystical gifts to espouse a radical solution to crisis, which followers validate through repeated success (Trice and Beyer 1986; Weber 1947). Followers believe they are linked to the leader through transcendent powers (Trice and Beyer 1986; Weber 1947). More recent studies that develop on Weber’s work are described in the next subsections.

2.5.2.2 Tichy and Devanna’s (1986) Five Phases of Charismatic Transformational Process

Tichy and Devanna (1986) suggested that charismatic transformational process involves five phases: (1) a trigger event, (2) a feeling of need for change, (3) creation of a vision, (4) mobilisation of commitment and (5) institutionalisation of change. For example, the trigger event may be a decline in market share of a company due to the industry entry of a strong competitor. Followers then feel a need for change as their current method of conducting business does not work in the new environment. Followers are more willing to accept a new vision when it is created by the leader. Under the impending failure of the company, the leader would mobilise followers’ commitment and institutionalise the required change to save the company.

In comparison, Tichy and Devanna’s (1986) suggestion is similar to Weber’s (1947) work on charismatic leaders. Their suggestion of a trigger event in the transformational process is similar to a crisis in Weber’s concept of charismatic leadership that leads to a feeling of need for change. Their suggestion of creation of a vision in the transformational process is in congruence with Weber’s concept of a radical solution espoused by the charismatic leader. The mobilisation of followers’ commitment in their suggestion may constitute the creation of the followers’ link to the leader in Weber’s concept of charismatic leadership.
2.5.2.3 Conger and Kanungo’s (1987) Dimensions of Attribution of Charisma

Conger and Kanungo (1987) proposed that charisma be viewed as a set of dispositional attributions by followers and as a set of leaders’ manifested behaviours. The two are linked in the sense that the leaders’ behaviours form the basis of followers’ attributions. Contextual factors that cause potential followers to be disenchanted with the prevailing social order, or that cause followers to experience psychological distress, facilitate the emergence of charismatic leadership. This stage of Conger and Kanungo’s charismatic leadership process corresponds to Phases (1) and (2) of Tichy and Devanna’s (1986) five phases of charismatic transformational process. Conger and Kanungo (1987) held that leaders are charismatic when their vision is highly discrepant from the status quo yet remains within a latitude of acceptance by their followers. Charismatic leaders portray the status quo as negative or intolerable and the future vision as the most attractive and attainable alternative. Further, they create and articulate the vision and demonstrate their motivation to lead through assertive behaviour and expression of self-confidence, expertise, unconventionality and sensitivity to followers’ needs. This stage of Conger and Kanungo’s charismatic leadership process corresponds to Phase (3) of Tichy and Devanna’s (1986) charismatic transformational process. The leader creating and articulating a vision is also similar to the leader espousing a radical solution as suggested by Weber (1947). Leader’s sensitivity to followers’ needs may facilitate the creation of a link between the leader and the followers that was postulated by Weber (1947).

Charismatic leaders engage in realistic assessments of environmental resources and constraints affecting the realisation of their visions, and demonstrate expertise in transcending the existing order through the use of unconventional or extraordinary means. They may take on high personal risks, incur high costs and engage in self-sacrifice to achieve the shared vision. Taking personal risk and adopting unconventional behaviour may include espousing a radical solution as suggested by Weber (1947). These behaviours may build trust between leaders and followers, leading to the followers’ perception that the leaders are deploying innovative and unconventional means for achieving the visions, and a raise of the followers’ perception of the leaders’ expertise and control over events (Conger and Kanungo 1987). Thus, these leadership
behaviours are likely to lead to Phases (4) and (5) of Tichy and Devanna’s (1986) charismatic transformational process.

In sum, Conger and Kanungo (1987) postulated six dimensions reflecting subordinates’ attributions of charisma to their leaders, and include (1) vision and articulation, (2) environmental sensitivity, (3) unconventional behaviour, (4) personal risk, (5) sensitivity to followers’ needs and (6) not maintaining status quo.

2.5.2.4 House and Shamir’s (1993) Charismatic Leadership Theory
House (1977) proposed ‘a 1976 theory of charismatic leadership’ to address a long-standing gap in the formal study of leadership. He suggested that charismatic leadership should be defined in terms of its effects on followers. His theory identified the behavioural and personality characteristics of leaders who are charismatic and those who are not. His indicators take into account leadership traits, behaviour, influence and situational conditions. House and his associates conducted studies on US presidents based on aspects of his theory (House, Spangler and Woycke 1990). The findings provided considerable support for various aspects of House’s theory and differences between effective charismatic and non-charismatic leaders. The charismatic leaders were seen as dynamic, emphatic, active, fast, aggressive, bold, extroverted, energetic and frank. Subordinates who worked for charismatic leaders developed more self-assurance than those who worked for non-charismatic leaders. Subordinates who worked for charismatic leaders believed that they experienced more meaning at work. In addition, they worked longer hours per week, which suggests that their motivation was heightened and revealed a higher level of trust and acceptance of the charismatic leader in their ratings of ‘self-disclosure’ to the charismatic leader than did subordinates of non-charismatic leaders.

House’s (1977) viewpoints continued to develop into later revisions of the theory (House and Shamir 1993). House and Shamir (1993) proposed that charismatic leaders engage in the following six behaviours to achieve charismatic effects by (1) managing impressions designed to display the leader’s competence, (2) articulating ideological goals, (3) defining the followers’ roles in terms of ideological values, (4) engaging in role modelling behaviour, (5) communicating high expectations and confidence in
followers and (6) engaging in behaviour designed to arouse appropriate followers’ motives, for example, need for achievement.

The first and fourth behaviours suggested by House and Shamir (1993) refer to portraying the charismatic leader as having extraordinary gifts of competence (Weber 1947). The managed impressions may include leaders who adopt unconventional behaviour and take personal risks (Conger and Kanungo 1987). The ability of the leader to articulate ideological goals and define followers’ roles in terms of ideological values may be developed from the leader’s sensitivity to the environment (Conger and Kanungo 1987). A leader who possesses ideological goals and values indicates the leader has a doctrine to promote (Weber 1947) and a vision to articulate (Conger and Kanungo 1987; Tichy and Devanna 1986), does not maintain the status quo (Conger and Kanungo 1987) and would evoke a feeling of need for change (Tichy and Devanna 1986). The fifth and sixth behaviours refer to the ability of a charismatic leader to communicate with and motivate followers, which facilitates the creation of the link between leader and follower as suggested by Weber (1947). The ability may be developed from the leader’s sensitivity to the followers’ needs (Conger and Kanungo 1987) and is likely to lead to mobilisation of subordinates’ commitment and institutionalisation of change (Tichy and Devanna 1986). Hence, it can be inferred that House and Shamir’s proposition of charismatic leadership is consistent with the postulations of prior studies.

2.5.2.5 Burns’ (1978) Transformational Leadership Theory
Burns’ (1978) concept of transformational leadership is similar to Weber’s (1947), Tichy and Devanna’s (1986), Conger and Kanungo’s (1987) and House and Shamir’s (1993) concepts of charismatic and transformational leadership. However, in Burns’ concept, transformational leadership is a moral exercise that serves to raise the standard of human conduct. Through this moral exercise, transformational leadership advances the development of the organisation or society. He limited transformational leadership to enlightened leaders who operate at higher stages of moral development than their followers and whose vision appeals to followers’ positive moral values and higher order needs.
Burns’ concept of transformational leadership is a form of beneficial leadership that seeks fulfillment of real needs rather than manufactured needs and group delusions (Bass 1985). It also involves subscribing to a code of ethics of what is right and what is wrong accepted as such in society and by industry (Bass 1985). On the contrary, other researchers (Conger and Kanungo 1987; Tichy and Devanna 1986; Weber 1947) imply that charismatic and transformational leadership may not be forms of beneficial leadership. They viewed charismatic and transformational leaders as leaders who may activate followers’ motivation and commitment regardless of whether the effects ultimately benefit followers.

According to Burns (1978), transformational leaders and their vision appeal to followers’ end values, or ideals by which a society or organisation should strive to live such as justice, liberty, freedom, equality and brotherhood. Transformational leaders appeal to followers’ end values and are adept at reframing issues so that the issues are aligned with the leaders’ visions and followers’ end values; teaching followers how to become leaders; and inciting them to play active roles in the change movement. With reframing, transformational leaders show the way issues can be linked to leaders’ and followers’ value systems.

2.5.2.6 Bass’ (1985, 1997) Transformational Leadership Theory

The basis for Bass’ (1985) transformational leadership theory is Maslow’s (1954) theory of human motivation where individuals’ needs are observed from a hierarchical perspective. According to Bass (1985, 1997), a transformational leader elicits extraordinary performance from followers by raising levels of awareness about the value and importance of designated outcomes and ways of reaching them, inducing followers to transcend self-interests for the sake of the team or organisation and invoking their higher-order needs on Maslow’s hierarchy of needs.

According to Bass (1985, 1997), transformational leaders have the ability to recognise the needs, aspirations and values of followers, and are capable of inspiring them to heights they never thought possible. They elevate their followers to become self-regulators and self-actualisers. Such leaders set high standards of performance and provide the inspiration to subordinates in eliciting extra effort to reach the high standards (refer to Appendices 2.1 for a diagrammatic illustration of Bass’ (1985)
theory of transformational leadership). In an organisational setting, Garman, Davis-Lenane and Corrigan (2003) observed that transformational leadership focuses beyond the immediate operational processes to help followers transform their operations to meet ever-evolving needs of customers.

Bass (1985) postulated that leadership behaviour can be classified as transformational or transactional. Bass’ (1985, p. 20) operational definitions of transformational and transactional leadership are as follows:

*Transformational leader* (1) motivates you to do more than you originally expected to do, (2) raises your level of awareness about important matters, (3) increases your level of needs from need for security or recognition to need for achievement or self-actualisation and/or (4) leads you to transcend your own self-interests for the good of the team or the organisation.

*Transactional leader* (1) recognises what it is you want to get from your work and tries to see that you get what you want if your performance warrants it, (2) exchanges rewards and promises of reward for your effort and effective performance and/or (3) is responsive to your immediate self-interests if they can be met by your getting the work done.

Bass’ (1985, 1997) transformational leadership theory is consistent with Burns’ (1978) on transformational leadership. Bass depicted transformational leaders as leaders focused on transforming followers’ motivational states to higher level needs such as self-actualisation. Such leaders are transformational in terms of their effect on followers as they are not satisfied with just meeting the minimum standards. Followers feel trust, respect, admiration and loyalty towards them and are motivated to do more than originally expected to.

Although the concepts of transformational leadership proposed by Burns (1978) and Bass (1985) are similar in many respects, there are two major differences. First, Bass had included ‘the expansion of the followers’ portfolio of needs and wants’. Second, Burns (1978) saw transformational leadership at the opposite end of a continuum from transactional leadership. However, Bass (1985) viewed transformational and transactional leadership as distinct but not mutually exclusive. He stressed that leaders will show a variety of patterns of transformational and transactional leadership in different situations and in varying degrees as organisations need both types of leadership. Both are linked to the achievement of some goal or objective though they differ with regards to the process by which the leader motivates subordinates as well as
in the types of goals set. Transactional leadership does little to bring about the enhanced commitment and extra effort required for change, which occurs when members of an organisation experience transformational leadership (Leithwood, Tomlinson and Genge 1996).

With the operational definitions of transformational and transactional leadership, Bass (1985) set out to validate his model quantitatively. He began with a pilot study involving executives and graduate students. Open-ended responses of 70 executives were solicited to describe attributes of transformational and transactional leaders they knew. From a draft of 142 items derived from the responses of the executives, 11 graduate students categorised the items into ‘transformational’, ‘transactional’ or ‘can’t say’. After categorisation, 73 items were selected in a revised questionnaire and administered first to 104 and later an additional 72 US army officers. From a principal components factor analysis, five factors emerged from the responses of the army officers. They were the transformational factors of charismatic leadership, individualised consideration, intellectual stimulation, and the other two factors categorised as transactional leadership were management-by-exception and contingent reward.

Rafferty and Griffin (2004) surveyed a convenience sample of 1398 employees in an Australian public sector organisation responsible for developing and implementing policies and programmes related to government buildings, capital work initiatives, procurement development and administrative services. Their objective is to examine empirical support for the dimensions of transformational leadership. They identified similar factors of transformational leadership as Bass’ (1985) study. Further, Garman, Davis-Lenane and Corrigan (2003) administered Bass’ Multifactor Leadership Questionnaire (MLQ) to a convenience sample of 236 leaders and 620 subordinates from 54 mental health teams. Their objective is to examine the factor structure of transformational leadership in human service teams. The results support the factor structure described by Bass.

Charismatic leadership is central to the transformational process. In the military sample, this factor accounted for the largest percentage of common variance in transformational leadership ratings. Bass (1985) defined the charismatic leadership factor as the degree to
which the leader instills in followers enthusiasm, trust, loyalty, respect and sense of mission. Charismatic leadership inspires and aligns others by providing a common purpose allied with optimism about the mission and its attainability.

Individualised consideration is defined as the degree to which the leader is concerned with the individual needs of followers and treating them on a one-to-one basis (Bass 1985). As the leader is genuinely concerned with individuals’ feelings, aspirations and development, one stimulates learning experiences, teaches, provides coaching and raises need perspectives, that is, it makes followers aware of higher-order needs, such as those found in Maslow’s hierarchy of needs. Further, the leader sets realistic goals for followers to achieve with respect to the challenges (Bass 1985).

Intellectual stimulation is when leaders encourage followers to think in new ways, solve problems by reasoning and thinking on their own, address challenges and develop on their own (Bass 1985).

Charisma is a necessary ingredient of transformational leadership, but is not sufficient to account for the transformational process (Bass 1985). Charismatic leaders transform followers by arousing strong emotions and identification with the leaders and transmitting a sense of mission to the followers. Although transformational leaders may practice charismatic leadership, they may also transform their followers using other influences such as by delegation of authority, coaching and teaching followers, and emphasising problem solving and the use of reasoning to followers (Bass 1985). Charismatic leaders may demonstrate a concern for the individual needs of followers, treat followers on a one-to-one basis and encourage followers to look at old problems in new ways. However, when charismatic leaders practice these leadership behaviours, they are not practicing charismatic leadership (Kent, Crotts and Azziz 2001) but other forms of transformational leadership, such as individualised consideration and intellectual stimulation. Thus, similar to Bass’ (1985) study, this study inferred that charismatic leadership is a distinct dimension of transformational leadership.

Bass’ (1985, 1997) charismatic leadership theory was developed from House’s (1977) work on charismatic leadership. Bass also included a number of additional propositions to House’s theory. The propositions are that charismatic leaders see themselves as
having supernatural purposes and destinies. They have abilities that are relevant to situations and are able to accomplish more than non-charismatic leaders. These abilities may facilitate leaders to be perceived as those who have extraordinary and mystical gifts (Weber 1947) and competence (House and Shamir 1993).

Bass (1985, 1997) held that charismatic leaders differ in their pragmatism, flexibility, opportunism and manner of appeal from non-charismatic leaders. The differences in their pragmatism, flexibility and opportunism may include their formulation of radical solutions to crises (Weber 1947), adoption of unconventional behaviours and acts of taking personal risk (Conger and Kanungo 1984). The differences in manner of appeal may involve their articulation of vision (Conger and Kanungo 1987, 2000), communication of high expectations and confidence in followers, and adoption of behaviour designed to arouse appropriate followers’ motives (House and Shamir 1993).

Bass (1985, 1997) maintained that charismatic leaders evoke polarised responses from followers and are more likely to emerge in organisations under stress and transition. Further, Bass (1985, 1997) opined that charismatic leaders are likely to emerge when followers share norms, beliefs and fantasies with the leaders. These shared concepts may create a link between followers and leaders as suggested by Weber (1947), increase leaders’ sensitivity to followers’ needs (Conger and Kanungo 1987), facilitate the alignment of leaders’ vision and followers’ end values (Burns 1978), and lead to mobilisation of commitment and institutionalisation of change (Tichy and Devanna 1986).

The concept of charismatic leadership does not evolve significantly after Bass’ (1985) study as most studies conducted after adopted his concept (Ehrhart and Klein 2001; Mio et al. 2005; Sosik 2005; Waldman, Javidan and Varella 2004).

2.5.2.7 Charismatic Leadership and Leadership Effectiveness

Bass (1985) found that transformational and transactional leadership factors were positively correlated with leadership effectiveness. Where transformational leadership was concerned, the correlation between the dimensions of charismatic leadership and individualised consideration, and leadership effectiveness were stronger than the
correlation between the dimensions of transactional leadership and leadership effectiveness (Bass 1985).

Lowe, Kroeck and Sivasubramaniam (1996) conducted a meta-analysis of results from 39 prior studies from a variety of countries, institutions and organisational levels using the MLQ. In support of Bass’ (1985) position, the meta-analysis found that three dimensions of transformational leadership, charismatic leadership, individualised consideration and intellectual stimulation, were correlated with leadership effectiveness in most studies. Transformational leadership behaviours correlated more strongly and consistently to leadership effectiveness than transactional leadership behaviours.

Waldman and Bass (1986) found an augmentation effect of transformational leadership on transactional contingent reward leadership when the superiors led efforts in improving the physical fitness of US Navy officers. Further, transformational leaders were judged to contribute more to the organisation than those who described only as transactional (Bass 1990). If leaders were only transactional, organisations were seen as less effective, particularly if passive and reactive management-by-exception leaders only intervene when standards were not being met (Avolio, Waldman and Einstein 1988; Bass 1990; Bass, Avolio and Goodheim 1987; Onnen 1987). Mueller (1988) used an abbreviated version of the MLQ to survey the descriptions of 110 fire rescue chiefs by 732 subordinates and showed that the correlation between transformational leadership and leadership effectiveness was stronger than the correlation between transactional leadership and leadership effectiveness. These results support the view that transactional leadership functions at a lower level, whilst transformational leadership is value-added leadership that functions at a higher level (Bass 1985, 1987; Waldman, Bass and Einstein 1986). Therefore, this study adopted the position of Hughes, Ginnnett and Curphy (1999, p. 321) that ‘transformational leadership is a significantly better predictor of leadership effectiveness than transactional leadership.’

Charismatic leadership is found to be the most effective leadership behaviour in Bass’ (1985) study as charismatic leadership, among all leadership factors, accounts for the largest proportion of variance of leadership effectiveness. Conger and Kanungo (1994) surveyed 488 managers of four organisations located in the United States and Canada on managers’ perceived leadership behaviours of their superiors. Concurring with Bass,
they found charismatic leadership behaviour the most effective transformational leadership behaviour. Bass and Avolio (1993) then argued that charismatic leadership is the most significant component of transformational leadership. Therefore, this study adopted the position of Hughes, Ginnett and Curphy (1999, p. 321) that, ‘of the transformational leadership factors, charismatic leadership is the best predictor of leadership effectiveness across all industries and organisational levels.’

Bass (1997) posited that charismatic leadership is universal and effective in most situations. His position is supported by studies of leaders at different levels of authority, in different types of organisations and in different countries (Bass 1997). The countries include India, Canada, the Dominican Republic, China, Austria, South Africa, Japan, Israel, Italy, Sweden, Spain, New Zealand, Germany, Mexico, Indonesia and Singapore (Bass 1997), and covers every continent except Antarctica. When individuals in these countries are asked to identify characteristics of their ideal leaders, they invariably describe characteristics associated with charismatic leadership (Bass 1997). Therefore, charismatic leadership is widely argued to be the most universally applicable and effective.

From the discussion, the following hypothesis is proposed:

Hypothesis One (H1): Charismatic leadership will be positively correlated with leadership effectiveness.

2.5.3 Transactional Leadership

Transactional leadership may be described as process-focused, involving close attention to day-to-day tasks which need to be completed to keep a team or department operating smoothly; transactional goals are pursued using contingent reward and management-by-exception behaviours (Garman, Davis-Lenane and Corrigan 2003). The theory of transactional leadership stems from expectancy theory (Vroom 1964), path-goal theory (Evans 1996; House 1971, 1996; House and Mitchell 1974), exchange/equity theory (Adams 1963; Bhal and Ansari 2007; Homans 1958, 1961; Kanfer 1990) and reinforcement theory (Densten 2006; Luthans and Kreitner 1985). Each theory is reviewed in the following subsections.
2.5.3.1 *Expectancy Theory*

The concept of transactional leadership is rooted in the ‘expectancy theory’ (Georgopoulos, Mahoney and Jones 1957; Vroom 1964), which describes work motivation in terms of a rational choice process in which a person decides how much effort to devote to the job at a given time. According to the theory, a cognitive-rational model of human behaviour, individuals assess situations according to three variables: valence, which is the desirability of an outcome; instrumentality, which is the perceived linkage between behaviour and outcome; and expectancy, which is the perceived probability of an outcome (Evans 1996; Vroom 1964).

In choosing among maximum, minimal or moderate effort, a person considers the likelihood that a given level of effort will lead to desirable outcomes, for example, higher pay, recognition, promotion and sense of achievement, whilst avoiding undesirable outcomes, such as layoffs, accidents, reprimands, rejection by co-workers and excessive stress. In line with the expectancy theory, transactional leadership is focused on clarifying effort-reward relationships and using reward systems to achieve maximal motivation.

2.5.3.2 *Path-goal Theory*

Building on the concepts of expectancy theory (Vroom 1964), House and Dessler (1974), and House and Mitchell (1974) developed the path-goal theory, which explains how various leadership behaviours influence subordinates’ satisfaction and performance by clarifying how to obtain desired rewards. According to House and Dessler (1974), leadership behaviour will be viewed as acceptable to subordinates to the extent that subordinates see such behaviour as either an immediate source of satisfaction or instrumental to future satisfaction.

This model of leadership espouses the view that leaders need to modify the way subordinates perceive situational relationships between effort and subsequent satisfaction, and that the means for doing these are dependent on the subordinates’ task environment (Pearce et al. 2002; Evans 1996; House 1996). Thus, the path-goal theory of leadership emphasises the transactional nature of leadership. Silverthorne (2001) collected data from 46 managers, 46 peers and 92 subordinates from a convenience sampling of staff from a major company in Taiwan, whose culture is similar to
Singapore and China where data were collected for this study. He found that leadership behaviour is correlated with subordinates’ efforts that lead to performance and rewards. Thus, the results support the path-goal theory in a non-Western culture.

2.5.3.3 Exchange/Equity Theory
The basic premise of the exchange/equity theory is that individuals seek equity between what they give compared to what they obtain in an exchange (Bhal and Ansari 2007; Kanfer 1990; Landy 1985; Pinder 1984). This group of theories is cognitive-rational. Individuals in the exchange relationship are thought to assess four fundamental pieces of information: what they give in an exchange, what they receive in an exchange, what others give in a similar exchange and what others receive in a similar exchange.

Based on these, individuals are thought to strive to maintain an equitable ratio between what they give and receive from an exchange compared to what others give and receive from a comparable exchange. The theory predicts that individuals will attempt to rectify situations where these exchange ratios are deemed out of balance. Although individuals want equity, the equity must be balanced with equality. Research has demonstrated that individuals are more likely to engage in corrective actions when they perceive negative inequity than when they perceive positive equity (Bhal and Ansari 2007; Kanfer 1990; Landy 1985; Pinder 1984). Based on this theory of motivation, prescriptions are made for leadership. The prescriptions centre on motivating subordinates’ performance by providing equitable rewards for inputs. Higher levels of input can be generated through higher levels of reward. Therefore, this class of motivation theories serves as another basis for transactional leadership.

2.5.3.4 Reinforcement Theory
Reinforcement theory (Densten 2006; Thorndike 1911) suggests that the consequence of behaviour is an important determinant of behaviour being repeated. Transactional leadership influences subordinates’ behaviour by reinforcing and rewarding behaviours that are desired (Densten 2006; Luthans and Kreitner 1985).

2.5.3.5 Vertical Dyad Linkage Theory
The basic premise of the vertical dyad theory is that leaders develop a separate exchange relationship with each individual subordinate as the two parties mutually
define the role of the subordinate (Yukl 2002). The theory focuses on reciprocal influence processes within vertical dyads composed of one person who has direct authority over another person.

2.5.3.6 Burns’ (1978) Transactional Leadership

The expectancy theory presents the cognitive-rational model in which an individual decides the level of effort the individual puts into the task. The path-goal theory suggests that leaders can improve the followers’ perception of linkage between effort and subsequent desired results. The exchange/equity theory suggests that rewards given by the leader to the followers must be equitable and the reinforcement theory suggests that followers will repeat the level of effort desired by the leader with the rewards obtained. These theories form the basis for the exchange process of transactional leadership theory that is reflected in the vertical dyads linkage theory as leaders strive to balance equity and equality.

Consistent with the premises of these theories, Burns (1978) opined that transactional leaders approach followers with intent to exchange one thing for another as well as appeal to the followers’ self-interest. The transactional leader will relate to one’s followers by recognising needs and fulfilling them if performance warrants them, exchanging rewards for followers’ effort and being responsive to followers’ self-interests if met by the attainment of designated outcomes. Although transactional leadership is similar to transformational leadership in that it involves values, these are values relevant to the exchange process, such as honesty, fairness, responsibility and reciprocity.

2.5.3.7 Bass’ (1985) Transactional Leadership

Like Burns (1978), Bass (1985) viewed transactional leadership as an exchange of rewards for compliance. However, Bass extended his definition to include not only incentives, avoidance of punishment and contingent rewards to influence motivations, but also clarification of work required to obtain rewards. In Bass’ model, the leader recognises the role the follower must play to attain the outcomes desired by the leader, who clarifies the role and task requirements for the followers. This clarification provides followers with confidence necessary to carry out tasks. This aspect of Bass’
theory of transactional leadership is consistent with the path-goal theory (House and Dessler 1974; House and Mitchell 1974).

Bass (1985) postulated that the transactional leader recognises what the follower needs and clarifies how these needs and wants are satisfied if efforts are expended by the follower. This makes the designated outcome of sufficient value to the follower and will result in efforts to attain the outcome (Appendix 2.2). Bass (1985, p. 20) defined transactional leadership as:

*Transactional leader (1) recognises what it is you want to get from your work and tries to see that you get what you want if your performance warrants it, (2) exchanges rewards and promises of reward for your effort and effective performance and/or (3) is responsive to your immediate self-interests if they can be met by your getting the work done.*

In Bass’ (1985) study, the two factors defined as transactional are contingent reward and management-by-exception. Contingent reward shows the degree of rewards that the leader emphasises in providing based on an agreement between leader and follower, conditioned on what the follower must accomplish in order to be rewarded (Bass 1985).

Management-by-exception is a factor that can be conceived as contingent aversive reinforcement as leaders who practice it take corrective actions and intervene only when subordinates fail. The leader provides negative feedback to the subordinate about the subordinate’s performance that has fallen below standard. Further, management-by-exception may either be active or passive. Active management-by-exception involves the leader maintaining vigilance for mistakes or deviations and taking action if targets are not met. Passive management-by-exception occurs when the leader preserves the status quo and does not consider making improvements as long as old ways are working. A recent study was conducted by Pearce et al. (2003) on the descriptions by 253 top management team members of the leadership behaviours of the Chief Executive Officer. The objective of the study is to extend Bass’ (1985) models of leadership to include other leadership behaviours, directive and empowering leadership. The study identified similar dimensions of transactional leadership as Bass’ (1985) study. The concept has largely remained unchanged since Bass’ study (Densten 2006).

The full range of leadership models includes transformational and transactional factors, and the non-leadership factor of *laissez-faire.*
In summary, the variables of transformational and transactional leadership are operationalised into three dimensions of charismatic leadership, individualised consideration and intellectual stimulation for transformational leadership, and two dimensions of contingent rewards and management-by-exception for transactional leadership. Figure 2.5 shows these dimensions.

Figure 2.5: Dimensions of leadership

Note a: “mbe” denotes management-by-exception; “reward” denotes contingent reward; “charis” denotes charismatic leadership; “consid” denotes individualised consideration; “intell” denotes intellectual stimulation

2.5.3.8 Transactional Leadership and Leadership Effectiveness

While Bass (1985) found that the correlation between transformational leadership and leadership effectiveness were stronger than the correlation between transactional leadership and leadership effectiveness, both transformational and transactional leadership were seen to be positively associated with leadership effectiveness (Bass 1985). In their meta-analysis, Lowe, Kroeck and Sivasubramaniam (1996) found transactional management-by-exception leadership generally is weakly correlated with leadership effectiveness and the correlation is often negative when significant. However, they found transactional contingent reward leadership is correlated with leadership effectiveness in most studies. Hence, this study hypothesised that there is a positive relationship between transactional leadership and leadership effectiveness. From the discussion, the following hypothesis is proposed:
Hypothesis Two (H2): Transactional leadership will be positively correlated with leadership effectiveness.

2.5.4 Contingency Approach to Leadership

Bass (1985) emphasised that leaders practice transformational and transactional leadership depending on situations, and in varying degrees as both are needed in organisations. Further, Bass (1997) posited that although charismatic leadership is universal and effective in most situations, situational moderating variables may enhance the correlation between charismatic leadership and leadership effectiveness. Thus, Bass (1985, 1997) supported the argument that the relationship between charismatic leadership and leadership effectiveness, and the relationship between transactional leadership and leadership effectiveness are contingent on situations.

Contingency leadership theories explain leadership effectiveness in terms of situational moderating variables such as task structure, leader’s position power, relationship between leader and follower (Fiedler 1967a) and maturity of follower (Hersey and Blanchard 1977). A situational moderating variable is a situation that enhances or nullifies effects of a leader’s trait or behaviour (Yukl 1994) and variables relating to attributes of followers significantly affect leadership effectiveness (De Vries, Roeb and Taillieu 2002; Howell et al. 1990). Specifically, to be effective, leaders need to adapt one’s behaviour to the needs of followers (Hersey and Blanchard 1977, 1993).

According to Fiedler (1967a), situations are more favourable to the leader when the task is more structured because it is easier for the leader to direct subordinates and to monitor performance. Miller, Butler and Cosentino (2004) and Hedlund (2003) suggested that experience structures a task for an individual through increased familiarity with group procedures, norms and attitudes, that is, by equipping the individual with a higher level of job-related knowledge. For example, for one engineering task, an experienced engineer may be able to structure the task because of prior experience in performing similar tasks, whilst a newly appointed engineer may not be able to structure the task because of no related prior experience.

It follows that similar to situations when the task is more structured, situations are more favourable to the leader when subordinates possess higher levels of job-related
knowledge. As situational favourability influences leadership effectiveness (Fiedler 1967a; Lee-Kelley 2002; Miller, Butler and Cosentino 2004), it is arguable that subordinates’ job-related knowledge is a key situational moderating variable of subordinates on the relationship between leadership behaviour and leadership effectiveness.

Hersey and Blanchard (1977) postulated that the key attribute of subordinates that affects leadership effectiveness is the task relevant maturity of subordinates, which includes capacity, ability, training and experience. Further, they posited that as subordinates accumulate more job-related knowledge, relations-oriented leadership becomes more effective whilst task-oriented leadership becomes less effective. Therefore, it can be inferred from Hersey and Blanchard (1977) that subordinates’ job-related knowledge is the key situational moderating variable on the relationship between leadership behaviour and leadership effectiveness.

In sum, the effectiveness of charismatic and transactional leadership may be contingent on situations (Bass 1985, 1997). Among the situational moderating variables, prior studies (Fiedler 1967a; Hersey and Blanchard 1977) suggested that subordinates’ job-related knowledge is the most important. Job-related knowledge refers to knowing what to do in the job, how to do the job, why the job has to be done and the contribution of the job to the overall objective of the organisation. As prior studies identified relations-oriented leadership and task-oriented leadership to be effective (Blake and Mouton 1964, 1978, 1985; Likert 1961), most prior studies on contingency leadership examined the effect of situational moderating variables on relationships between relations-oriented leadership and leadership effectiveness, and between task-oriented leadership and leadership effectiveness (Fiedler 1967a; Hersey and Blanchard 1977). To apply existing contingency leadership theories postulated by Fiedler (1967a) and Hersey and Blanchard (1977) on the effect of situational moderating variables on relationships between charismatic leadership and leadership effectiveness, and between transactional leadership and leadership effectiveness, the following subsections examine the extent charismatic leadership is relations-oriented and transactional leadership is task-oriented.
2.5.4.1 Charismatic Leadership with Relations Orientation

The primary influence process of charismatic leadership is personal identification, which is influence derived from a subordinate’s desire to please and imitate the leader (Yukl 2002). Specifically, a charismatic leader is a model for a subordinate to follow (Bass 1985: MLQ). The leader’s approval becomes a measure of the subordinate’s self-worth and is expressed by praise and recognition of the subordinate’s behaviour and accomplishments, which builds self-confidence and a deeper sense of obligation to live up to the leader’s expectations in the future (Yukl 2002). Simultaneously, subordinates are motivated by fear of disappointing the leader and rejection (Yukl 2002).

Relations-oriented leadership includes expressing appreciation for subordinates’ ideas and providing recognition for subordinates’ contribution and accomplishments (Bass 1990; Kellett, Humphrey and Sleeth 2006; Likert 1961; Yukl 2002). Thus, it can be inferred that the primary influence processes of charismatic and relations-oriented leaderships are oriented towards subordinates’ personal identification with the leader.

Conger and Kanungo (1987) maintained that a social relationship between leader and subordinate is responsible for the emergence of charismatic leadership. Similarly, a relations-oriented leader is concerned with human relations with one’s subordinate (Bass 1990; Kellett, Humphrey and Sleeth 2006; Likert 1961; Yukl 2002). Further, charismatic leaders are concerned for others and sensitive to subordinates’ needs (Conger and Kanungo 1987). Similarly, relations-oriented leaders exhibit concern for the subordinates’ welfare, understand subordinates’ problems and help develop subordinates and their careers (Bass 1990; Kellett, Humphrey and Sleeth 2006; Likert 1961; Yukl 2002). Hence, it can be inferred that charismatic and relations-oriented leaderships prioritise relationships between leader and subordinate.

Charismatic leaders display confidence in the correctness of their positions (Burns 1978) and in their capabilities (House and Shamir 1993) so as to maintain the trust of subordinates (House and Shamir 1993). Similarly, relations-oriented leaders seek to maintain mutual trust with subordinates (Bass 1990; Yukl 2002).

From the discussion, it can be inferred that charismatic leadership is relations-oriented. Relations-oriented leadership is an effective leadership behaviour examined by
contingency leadership theories (Fiedler 1967a; Hersey and Blanchard 1977). Fiedler’s (1967a) LPC contingency model suggests that a relations-oriented leader would be more effective when the task is more structured as situations are more favourable to the leader. In addition, Hersey and Blanchard’s (1977) situational leadership model also suggests that a relations-oriented leader would be more effective when working with subordinates with high levels of maturity.

2.5.4.2 Transactional Leadership with Task Orientation

Transactional leadership involves an exchange of rewards for compliance and clarification of the work required to obtain rewards (Bass, 1985). The leader recognises the role the follower must play in order to attain the outcomes desired by the leader and clarifies the role and task requirements for the followers (Bass, 1985). Hence, it can be inferred that transactional leadership is task-oriented. Task-oriented leadership is another effective leadership behaviour examined by contingency leadership theories (Hersey and Blanchard, 1977, Fiedler, 1967a). Fiedler’s (1967a) LPC contingency model suggests that a task-oriented leader would be more effective when the task is less structured as situations are less favourable to the leader. In addition, Hersey and Blanchard’s (1977) theory also suggests that a task-oriented leader would be more effective when working with subordinates with low levels of maturity.

2.5.4.3 Summary

Bass (1985) found significant correlations between charismatic leadership and leadership effectiveness, and between transactional leadership and leadership effectiveness. However, relationships between charismatic leadership and leadership effectiveness, and between transactional leadership and leadership effectiveness may be contingent on situations (Bass 1985, 1997). This study inferred from the positions of Hersey and Blanchard (1977) and Fiedler (1967a) that subordinates’ job-related knowledge is the key situational moderating variable of subordinates that affects the relationships. To apply contingency leadership theories that examine the relations-oriented and task-oriented leadership (Fiedler 1967a; Hersey and Blanchard 1977) in the contexts of charismatic leadership and transactional leadership, this study inferred that charismatic leadership is relations-oriented and transactional leadership is task-oriented.
2.5.5 Job-related Knowledge

This section discusses the concept of job-related knowledge and the application of Hersey and Blanchard’s (1977) and Fiedler’s (1967a) contingency leadership theories in the contexts of charismatic leadership and transactional leadership in relation to the situational moderating variable of subordinates’ job-related knowledge. This section derives the hypotheses that address the research objective.

2.5.5.1 Concept of Job-related Knowledge

Literature on knowledge work and knowledge management divides knowledge into two types, namely, tacit and explicit knowledge. Tacit knowledge was first coined by Polanyi (Stenmark 2002) and is in the mind of the individual, intangible and difficult to describe. This is often expressed as ‘know-how’. Tacit knowledge captures knowledge about things we do (Nonaka and Takeuchi 1995; Polanyi 1966). It is knowledge largely acquired through experience, about how to act in specific situations (Hedlund 2003). The data point is situated and enacted reality. The experience type is based on action. Thus, capturing this type of knowledge requires ‘reflection-on-action’, reflecting on one’s actions (Argyris et al. 1985). That is, tacit knowledge is a function of an individual’s practical ability to learn from and to solve everyday problems in order to adapt to, to select and to shape one’s environment in the pursuit of one’s objectives (Hedlund 2003).

Explicit knowledge is tangible, is knowledge that can be captured, documented and externalised, for example in printed words, symbols or graphics, and can be expressed as ‘know-what’. This is a measurable commodity and can be managed, as opposed to tacit knowledge, which is often difficult to measure, unmanageable (Bresman et al. 1999 in Holden 2002; Cortada and Woods 1999; Nonaka and Takeuchi 1995), not readily articulated or widely shared (Hedlund 2003). Explicit knowledge captures knowledge about things. The data point is observed reality. The experience type is based on observation. The conceptualisation is usually based on reflection without action. The criterion for truth is the test, ‘Can you observe it?’

The statement ‘the financial reports show a profit of $2000.00’ does not enable the knower to actually prepare the financial reports that the knowledge signifies. The knower produces a statement about, but cannot bring into existence, the known. From
this point of view, knowledge represents and denotes a thing. Tacit knowledge relates to
the reality that it signifies from within (Scharmer 2001). Here, the knower does not talk
about the financial reports but actually prepares the financial reports. Tacit knowledge
enables the knower to produce and bring into existence the known. From this point of
view, knowledge denotes not a thing but a living process (Scharmer 2001).

Scharmer (2001) suggested there are at least two dimensions of knowledge in the
case of a job corresponding to tacit and explicit knowledge. Explicit knowledge of a
job refers to knowing what to do in the job whilst tacit knowledge of a job refers to
knowing how to do the job.

Scharmer (2001) differentiated four levels of corporate action, namely, delivering
results that create value (performing), improving the process-based context of
performing (redesigning), improving the assumption-based context of performing
(reframing) and improving the intention-based context of performing (regenerating).
Performing represents the stream of customer-focused value creation. The other three
action levels represent underlying layers of embedding context of ‘contextual activities’
that improve the conditions for and quality of performing.

With the four levels of corporate actions suggested by Scharmer (2001), the dimension
of tacit knowledge can be cascaded into the elements by the different layers of contexts
of which knowing how to do the job is just related to the process-based context only.
The assumption-based context suggests the element of knowing why the job is to be
done. The intention-based context suggests the element of knowing who the job is to be
done for. That is, the contribution of the job to the overall objective of the organisation.

In summary, this study adopted the dimensions and elements of knowledge and an
example of the operator’s job-related knowledge in a die-casting plant is as follows:

a. Explicit knowledge

i. Knowing what to do in the job. For example, the operator knows
what to do in the die-casting manufacturing process such as the
discrete components involved in the job, for example, the
machine to use for specific functions, which are evident in work
instructions and manuals. This form of knowledge relates to
delivery of results that create value for customers in the form of die-castings, that is, Scharmer’s (2001) corporate action of performing.

b. Tacit knowledge

i. Knowing how to do the job. For example, the operator knows how to put the discrete components together as a process to get the job done efficiently. This form of knowledge relates to knowledge of the die-casting manufacturing process, the process-based context of performing, that is, Scharmer’s (2001) corporate action of redesigning.

ii. Knowing why the job has to be done. For example, the operator knows why one has to set up the machine, why the machine running speed has to be adjusted to produce the die-cast parts. This form of knowledge relates to knowledge of the assumptions on which the die-casting manufacturing process is based, the assumption-based context of performing, that is, Scharmer’s (2001) corporate action of reframing.

iii. Knowing the contribution of the job to the overall objective of the organisation. For example, the operator knows the contribution of the production of the die-cast parts to the objective of the organisation such as profitability and where one stands in the value chain of the production line. This form of knowledge relates to knowledge of the intended organisational outcomes of the manufacturing of die-castings, the intention-based context of performing, that is, Scharmer’s (2001) corporate action of regenerating.

Figure 2.6 depicts the dimensions and elements of subordinates’ job-related knowledge derived by this study.
2.5.5.2 Moderating Role of Job-related Knowledge between Charismatic Leadership and Leadership Effectiveness

On the assumption that the leader does not rely on position power and one’s relationship with subordinates is good, Fiedler’s (1967a) LPC contingency model suggests that a relations-oriented leader with high LPC would be more effective at Octant 2, when the task is more structured as situations are more favourable to the leader. Miller, Butler and Cosentino (2004) and Hedlund (2003) suggested that experience structures a task for an individual by equipping the individual with a higher level of job-related knowledge. Similar to situations when the task is more structured, it may be easier for the leader to direct subordinates and to monitor performance when subordinates possess higher levels of job-related knowledge. Thus, such situations are more favourable to the leader. Hence, Fiedler’s (1967a) suggestion implies that relations-oriented leadership is more effective on subordinates who possess higher levels of job-related knowledge.

Hersey and Blanchard (1977) viewed subordinates’ ability to perform the task as an aspect of tasks relevant to maturity of subordinates. Further, subordinates’ job-related
knowledge is a source of subordinates’ ability to perform the task. It follows that subordinates who possess higher levels of job-related knowledge would possess higher levels of ability to perform the task and higher levels of task relevant maturity. Thus, according to Table 2.2, it can be inferred that a manager should be relations-oriented and allow subordinates who possess higher levels of job-related knowledge in joint decision making or delegate the decision to them to encourage their continuing performance in the job.

Following Hersey and Blanchard’s (1977) and Fiedler’s (1967a) contingency leadership theories, relations-oriented leadership is more effective on subordinates who possess higher levels of job-related knowledge. Their position implies that charismatic leadership, which is relations-oriented, is more effective on subordinates who possess higher levels of job-related knowledge. From the discussion, the following hypothesis is proposed:

**Hypothesis Three (H3):** The effects of charismatic leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effect of charismatic leadership on leadership effectiveness will be stronger with increasing levels of subordinates’ job-related knowledge.

Results from H3 will indicate whether subordinates’ job-related knowledge significantly moderates the relationship between charismatic leadership and leadership effectiveness.

2.5.5.3 Moderating Role of Job-Related Knowledge between Transactional Leadership and Leadership Effectiveness

On the assumption that the leader does not rely on position power and one’s relationship with subordinates is good, Fiedler’s (1967a) LPC contingency model suggests that a task-oriented leader with low LPC would be more effective at Octant 4, when the task is less structured as situations are less favourable to the leader. Miller, Butler and Cosentino (2004) suggested that an individual who possesses a lower level of job-related knowledge is less able to structure the task. Hence, situations are less favourable to the leader as it is more difficult for the leader to direct subordinates and to monitor performance when the task is less structured (Fiedler 1967a), and correspondingly, when subordinates possess lower levels of job-related knowledge. Therefore, Fiedler’s
(1967a) suggestion implies that task-oriented leadership is more effective on subordinates who possess lower levels of job-related knowledge.

According to Table 2.2, for subordinates with low task relevant maturity, task-oriented leadership is most effective. Further, job-related knowledge is a source of subordinates’ ability. Thus, subordinates who possess lower levels of job-related knowledge would possess lower levels of ability and have lower task relevant maturity. Hence, Hersey and Blanchard’s (1977) suggestion would imply that task-oriented leadership is more effective on subordinates who possess lower levels of job-related knowledge.

Following Hersey and Blanchard’s (1977) and Fiedler’s (1967a) contingency leadership theories, task-oriented leadership is more effective on subordinates who possess lower levels of job-related knowledge. Their position implies that transactional leadership, which is task-oriented, is more effective on subordinates who possess lower levels of job-related knowledge. From the discussion, the following hypothesis is proposed,

*Hypothesis Four (H4): The effects of transactional leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effects of transactional leadership on leadership effectiveness will be stronger with decreasing levels of subordinates’ job-related knowledge.*

Results from H4 will indicate whether subordinates’ job-related knowledge significantly moderates the relationship between transactional leadership and leadership effectiveness. The research framework that depicts all four hypotheses of this study is shown in Figure 1.1.

2.5.5.4 Summary
This study has argued that explicit knowledge and tacit knowledge are the two dimensions of job-related knowledge. The element of explicit knowledge is knowledge of what to do in the job. The elements of tacit knowledge are knowledge of how to do the job, why the job has to be done and the contribution of the job to the overall objective of the organisation. Contingency leadership theories suggest that charismatic leadership, which is relations-oriented, is more effective on subordinates who possess higher levels of job-related knowledge, and transactional leadership, which is task-
oriented, is more effective on subordinates who possess lower levels of job-related knowledge.

2.6 LIMITATIONS AND ASSUMPTIONS

Subordinates’ satisfaction is a dimension of leadership effectiveness assuming that subordinates know what is beneficial for them. As an example, the leader may require subordinates to acquire extra training. Subordinates may not feel satisfied if they think the training is not beneficial to them even if it is beneficial. Subordinates may be satisfied with the short-term arrangements by not having to expend their efforts in the extra training but may not fully understand the level of satisfaction in the long-term when they cannot obtain the benefits from the extra training (Hughes, Ginnett and Curphy 1999). The validity of the measurement of leadership effectiveness may be compromised if this assumption does not hold.

This study assumed that charismatic leadership is relations-oriented whilst transactional leadership is task-oriented. This assumption allows this study to apply Hersey and Blanchard’s (1977) and Fiedler’s (1967a) contingency leadership theories in the contexts of charismatic and transactional leadership. This assumption is based on literature review of similar aspects of charismatic and relations-oriented leadership and similar aspects of transactional and task-oriented leadership. However, there may be some charismatic leaders who are not relations-oriented and some transactional leaders who are not task-oriented. This is because there may be other aspects of charismatic leadership that are different from those of relations-oriented leadership and other aspects of transactional leadership that are different from those of task-oriented leadership. For example, charismatic leadership of creation of vision may not be relations-oriented because vision is related to the organisation rather than to the relationship between leader and subordinates. Further, transactional leadership of maintenance of the status quo may not be task-oriented because the leader takes no action when one maintains the status quo. The validity of this assumption would be compromised if the differences are significant. The validity of the results of this study relating to the moderating roles of job-related knowledge between leadership behaviours and leadership effectiveness may be compromised if this assumption does not hold.
This study assumed that a leader would find subordinates who possess higher levels of job-related knowledge easier to direct and to monitor than subordinates who possess lower levels of job-related knowledge in the context of Fiedler’s (1967a) contingency leadership theory. Further, this study assumed that job-related knowledge is a source of subordinates’ ability in the context of Hersey and Blanchard’s (1977) contingency leadership theory. These assumptions allow this study to hypothesise that subordinates’ job-related knowledge moderates on relationships between leadership behaviours and leadership effectiveness, in accordance to Hersey and Blanchard’s (1977) and Fiedler’s (1967a) theories. The results of this study relating to the moderating effects of subordinates’ job-related knowledge on relationships between leadership behaviours and leadership effectiveness may be compromised if these assumptions do not hold.

Higgs (2003) posited that Bass’ (1985) range of leadership models is excessively concerned with the examination of leadership behaviours. He proposed another model that focuses on the leaders’ personality, skill and competence. Nevertheless, he maintained that Bass’ models contribute to the understanding of leadership. Further, as Higgs’ model focuses on the leaders’ personality, it has disadvantages of the traits approach, such as having a fatalistic and less practical application than the behavioural approach. The traits approach has less practical applications than the behavioural approach because most organisations cannot replace all of their current organisational leaders with leaders possessing traits of an effective leader (Kelloway and Barling 2000). Leadership researchers who adopt the behavioural approach held that leaders can become more effective by practicing effective leadership behaviours (Blake and Mouton 1964; Likert 1961).

Bass (1985) suggested charismatic, transformational and transactional leadership are the only forms of leadership that correlate with leadership effectiveness. Mumford and Van Doorn (2001) suggested pragmatic leadership may also correlate with leadership effectiveness. Pragmatic leaders are knowledgeable and sensitive to social relationships and problems confronting people and organisations. They focus on finding solutions to solve the problems. It is suggested that pragmatism is a latent outcome of transformational leadership. Conger and Kanungo (1987) posited that a social relationship between leader and subordinate is responsible for the emergence of charismatic leadership. This position suggests that charismatic leadership may
encompass sensitivity to social relationships. Further, the intellectual stimulation dimension of transformational leadership involves encouragement of followers to think in new ways and solve problems by reasoning and thinking on their own (Bass, 1985). This dimension suggests that transformational leaders focus on finding solutions to solve the problems. Therefore, it can be inferred that transformational leaders are pragmatic.

Oshagbemi and Ocholi (2006) argued that, in addition to Bass’ (1985) range of leadership models, the full range of leadership includes, from lowest to highest degree of subordinates’ participation in the groups’ decision-making, directive, consultative, participative and delegative leadership. It can be conceived that the degree of subordinates’ participation corresponds to the intellectual stimulation dimension of transformational leadership, the higher the degree of subordinates’ participation, the more the subordinates are intellectually stimulated. Hence, it can be inferred that transformational leadership encompasses the four additional forms of leadership suggested by Oshagbemi and Ocholi.

Maslin-Wicks (2007) posited that transformational leaders may serve self-interested goals. They may advance those goals by using followers as a means, without regard for the needs, interests or growth of their followers. However, Bass and Steidlmeier (1999) suggested that these leaders are not transformational but pseudo-transformational. Authentic transformational leaders advance the common good and they do it through morally defensible means, by paying attention to the needs and interests of their followers, by arousing concern for others and encouraging their followers to transcend their own self-interest in the pursuit of the common good. Their suggestion implies that the individualised consideration dimension of transformational leadership is absent from pseudo-transformational leadership (Bass and Steidlmeier, 1999).

Fiedler (1967a) posited that task structure, position power of leader and relationship between leader and subordinates affect the relationship between leadership behaviour and leadership effectiveness. This study is limited to the investigation of the effect of job-related knowledge, which has a similar effect to task structure on the leader’s ease to direct and monitor performance. The effects of task structure, position power of the
leader and relationship between leader and subordinates are not investigated in this study.

Hersey and Blanchard (1977) postulated that psychological and task relevant maturity of subordinates affect the relationship between leadership behaviour and leadership effectiveness. This study is limited to the investigation of the effect of job-related knowledge as a source of subordinates’ ability, which is, in turn, the most important aspect of task relevant maturity. The effects of psychological maturity, other sources of subordinates’ ability and other aspects of task relevant maturity are not investigated in this study.

This study relied on Scharmer’s (2001) conceptualisation of knowledge to operationalise the concept of subordinates’ job-related knowledge as how the subordinate perceives one’s knowledge of what, how, why of doing a job and the contribution of the job to the organisation. The validity and/or reliability of this operationalisation of the level of subordinates’ job-related knowledge is/are not enhanced by or validated by a pilot study. Consequently, the validity of the results of this study relating to the moderating roles of subordinates’ job-related knowledge between leadership behaviours and leadership effectiveness may be affected.

Implicit leadership theory suggests that people have beliefs and assumptions about the characteristics of effective leaders (Lord and Maher 1991), which they use to differentiate leaders and non-leaders and to evaluate them (Javidan and Carl 2005). The closer the match between leadership behaviour and one’s implicit leadership theory, the higher the evaluation of the leader will be (Javidan and Carl 2005). Further, culture is an important determinant of implicit leadership theory (Bass 1990; Javidan and Carl 2005; Yukl 2002). Thus, the differences in subordinates’ perceived leadership effectiveness in the Singapore and China plants may arise from cultural differences and not from differences between the levels of subordinates’ job-related knowledge. As Han Chinese comprise a large proportion of the populations in Singapore and China, this study assumed that leaders and subordinates are from one culture and culture is nullified as an independent variable. Thus, this assumption nullifies culture as a situational moderating variable and allows this study to infer that subordinates’ job-related knowledge is the
only situational moderating variable on the relationship between leadership behaviour and leadership effectiveness.

2.7 CONCLUSION

Early leadership studies using the traits approach did not identify traits of leaders that are essential for leadership effectiveness in most situations. Behavioural leadership studies identified task- and relations-oriented leadership behaviours as effective. However, results from proceeding studies indicate that each of task- and relations-oriented leadership behaviours is more effective in some situations and less effective in others. Contingency leadership theories were developed to explain how situations influence the effectiveness of task- and relations-oriented leadership behaviours.

Bass (1985) identified leadership behaviours as either transformational or transactional. He found that transformational leadership is more effective than transactional leadership, and charismatic leadership is the most effective form of transformational leadership. In addition, Bass (1997) found that charismatic leadership is universal and effective in most situations. However, he posited that situational moderating variables may enhance the strength of the correlation between charismatic leadership and leadership effectiveness.

Prior studies suggested that subordinates’ job-related knowledge is the key situational moderating variable of subordinates that influences relationships between leadership behaviours and leadership effectiveness. Further, the inference that charismatic leadership is relations-oriented and transactional leadership is task-oriented allows contingency leadership theories to be applied in the contexts of charismatic leadership and transactional leadership. In accordance with contingency leadership theories, this study hypothesises that charismatic leadership is more effective on subordinates who possess higher levels of job-related knowledge and transactional leadership is more effective on subordinates who possess lower levels of job-related knowledge. The following chapter discusses the research methodology used to test the hypotheses.
3 CHAPTER THREE - METHODOLOGY

3.1 INTRODUCTION
Chapter 2 identified the research question, objective and hypotheses. This chapter describes the methodology used to obtain the data and test the hypotheses. It aims to provide assurance that appropriate procedures were followed. It is organised into four main topics: research paradigm and strategy, research design and plan, statistical analysis and ethical considerations.

This chapter introduces the dominant research paradigms in the field of business research: the interpretivism and positivism paradigms. It discusses the rationale for choosing the positivism paradigm, the purpose of this study and the type of investigation conducted to attain the research objective. How the appropriate research design and sampling technique were determined to accomplish the purpose of this study is also described.

The statistical analyses performed on the data for hypotheses testing were factor analysis, Pearson correlation, linear regression analysis and t-test for independent samples. The measurements of leadership behaviours, leadership effectiveness and level of subordinates’ job-related knowledge, and their validity and reliability are discussed. The questionnaire instrument used to collect the measurement is also described.

The research plan includes the translation of the questionnaire to Chinese and the distribution of the questionnaire survey. Finally, ethical considerations and limitations of the methodology are discussed.

3.2 RESEARCH PARADIGM AND STRATEGY
This subsection compares positivism research and interpretivism research paradigms and justifies the adoption of the former by this study.

3.2.1 Interpretivism and Positivism Paradigms
Much social research is based on positivism and interpretivism paradigms (Neuman 2006). This section compares both paradigms in determining the appropriate paradigm for this research.
3.2.1.1 Interpretivism Paradigm

Interpretivists apply inductive reasoning as an approach that systematically analyses socially meaningful action through direct and detailed observation of people in natural settings to arrive at an understanding and interpret how people create and maintain their social worlds (Cavana et al. 2001). It allows the focus of the research to understand what is happening in a given context and includes consideration of multiple realities, different actors’ perspectives, researchers’ involvement, taking account of the context of the phenomena and the contextual understanding and interpretation of data (Carson 2001).

Interpretivists set loose parameters at the start of qualitative research and make few explicit assumptions about sets of relationships. The drawback is that it may impose a self-blinding framework that may result in the accumulation of incoherent, bulky, irrelevant and meaningless observations, which could prove impossible to interpret (Carson 2001).

It is idiographic, meaning the approach provides an in-depth explanation and description or picture but limited abstraction about a social situation or setting (Neuman 2006). Interpretivists use induction that allows data to guide the research and theory building. It involves observations of the empirical world to allow the construction of explanations and theories about what has been observed (Carson 2001).

Interpretivists adopt relativism in that no single point of view or value position is better than others and all are equally valid for those who hold them (Neuman 2006). Interpretivists argue that researchers should reflect on, re-examine and analyse personal points of view and feelings as a part of the process of studying others (Neuman 2006).

3.2.1.2 Positivism Paradigm

The positivism paradigm in social science is an organised method of combining deductive logic with precise empirical observations of individual behaviour to discover and confirm a set of probable causal laws that can be used to predict general patterns of human activity (Cavana et al. 2001). Positivists hold that the world is external and objective; therefore its epistemology is based on the belief that observers are
independent and that science is value-free (Carson et al. 2001). Positivists, who derive their approach from the natural science school of thought, relates to facts or causes of social phenomena and attempt to identify causal relationships by means of objective facts (Cavana et al. 2001). Positivists’ research concentrates on description and explanation, where thought is governed by explicitly stated theories and hypotheses (Cavana et al. 2001). Traditionally, positivists use deduction by consulting prior theories in the literature to arrive at hypotheses (Cavana et al. 2001). Hypotheses are articulated from the development of a theoretical framework at the early stages of the research study for testing through empirical research methods.

Positivists adopt an essentialist orientation, which is oriented towards social reality that assumes people experience empirical conditions directly and the experiences reflect the essence of reality (Neuman 2006). Reality is real and exists to be discovered by the researcher; social reality is not random but patterned and has order (Neuman 2006). Science lets humans discover this order and the laws of nature. The basic patterns of social reality are stable and their knowledge is additive (Neuman 2006).

Positivists’ explanation of social reality is nomothetics, that is, the explanation relies heavily on causal laws and law-like statements and interrelations (Cavana et al. 2001). Positivists use a covering law model of explanation that a few high-level, abstract theories cover and allow deducting to many lower-level, more concrete situations (Neuman 2006). Positivists believe that general causal laws apply to or cover specific observations about social life. Positivists assume that the laws operate according to strict, logical reasoning. Researchers connect causal laws and specific facts observed about social life with deductive logic. Besides being logical and consistent with observed facts, positivists’ explanations can be replicated by any researcher (Neuman 2006).

Positivists argue for a value-free science (Cavana et al. 2001), meaning observers agree on what they see and that scientific knowledge is not based on values, opinions, attitudes or beliefs.

Table 3.1 summarises the differences between positivism and interpretivism research paradigms.
Table 3.1: Differences between positivism and interpretivism research paradigms

<table>
<thead>
<tr>
<th></th>
<th>Positivism</th>
<th>Interpretivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>The purpose of social science is to discover laws.</td>
<td>The purpose of social science is to understand social meaning in contexts.</td>
<td></td>
</tr>
<tr>
<td>An essentialist view is that reality is empirically evident.</td>
<td>A constructionist view that reality is socially created.</td>
<td></td>
</tr>
<tr>
<td>Humans are rational thinking, individualistic mammals.</td>
<td>Humans are social beings who create and reinforce shared meaning.</td>
<td></td>
</tr>
<tr>
<td>A deterministic stance is taken regarding human agency.</td>
<td>A voluntaristic stance is taken regarding human agency.</td>
<td></td>
</tr>
<tr>
<td>Scientific knowledge is different from and superior to other knowledge.</td>
<td>Scientific knowledge is different from but not better than other forms.</td>
<td></td>
</tr>
<tr>
<td>Explanations are nomothetic and advance via deductive reasoning.</td>
<td>Explanations are idiographic and advance via inductive reasoning.</td>
<td></td>
</tr>
<tr>
<td>Explanations are verified using replication by other researchers.</td>
<td>Explanations are verified using the postulate of adequacy with people being studied.</td>
<td></td>
</tr>
<tr>
<td>Social science evidence requires intersubjectivity.</td>
<td>Social scientific evidence is contingent, context specific and often requires bracketing.</td>
<td></td>
</tr>
<tr>
<td>An instrumental orientation is taken towards knowledge that is used from a technocratic perspective.</td>
<td>A practical orientation is taken towards knowledge that is used from a transcendent perspective.</td>
<td></td>
</tr>
<tr>
<td>Social science should be value-free and objective.</td>
<td>Social science should be relativistic regarding value positions.</td>
<td></td>
</tr>
</tbody>
</table>

Source: adapted from Neuman (2006).

3.2.2 Justification for Adopting the Positivism Paradigm

With such opposing belief systems, the two schools of thought are at disagreement. However, taking an exclusive stance arguing that one approach is better than the other ignores the reality that there are many paths to the goal of knowledge. Both methods have rich potential to uncover relevant and salient information that can be critical to business (Cavana et al. 2001). However, the relative suitability of the two approaches is dependent on whether the theory concerned is at the theory building or theory testing stage, the research objective and the practitioner’s perspective.

3.2.2.1 Theory Building or Theory Testing

A research can be theory testing or theory building. Theory testing occurs where an existing theory or hypothesis is taken as a guide to research and is then tested using methods that allow measurement and evaluation. Thus, theory testing would most likely be positioned under positivism. Theory building, positioned under interpretivism, seeks
out meaning and understanding of phenomena as there is no existing theory or hypothesis to test (Debra 2002).

Prior theories on charismatic and transactional leadership have been extensive (Bass 1985; Bass and Steidlmeier 1999; Burns 1978; Casimir et al. 2006; Conger and Kanungo 1987; House 1977; Krishnan 2002; Pearce et al. 2003; Tichy and Devanna 1986). Bass (1985) and associates conducted their studies on charismatic and transactional leadership in many different settings involving different professional groups such as business (Bass 1985; Waldman, Bass and Einstein 1986), military (Bass 1985), government and non-profit organisations (Bass 1985). Other researchers (Bass and Hater 1985; Deluga 1988; Garman, Davis-Lenane and Corrigan 2003; Krishnan 2002; Pearce et al. 2003; Rafferty and Griffin 2004; Seltzer 1985) replicated the methodology of Bass’ (1985) study, although mostly in the Western context (Leong 1997).

This study was concerned about prior researchers’ and Bass’ (1985) well-tested charismatic and transactional leadership theories in an Asian context. Hence, this study can be considered as in the theory testing stage, where positivism is more suitable.

This study aims at replicating Bass’ (1985) methodology to determine if prior theories on charismatic and transactional leadership, mostly tested in the Western context, can be generalised into the Asian context. Most of the studies of charismatic and transactional leadership including Bass’ (1985) adopted the positivism paradigm. Adopting the same research paradigm as Western researchers enables the results from this study conducted in the Asian context to be comparable with their results.

There are substantial prior studies relating to leaders practicing different leadership behaviours in situations with varying levels of leadership effectiveness (Fiedler 1967a; Hersey and Blanchard 1969a, 1969b, 1993; Kellett, Humphrey and Sleeth 2002; Lee-Kelley 2002; Miller, Butler and Cosentino 2004; Osborn, Hunt and Jauch 2002; Sternberg and Vroom 2002). It can be inferred that contingency leadership theories have developed in the theory testing stage, where empirical evidence to test the effects of situational moderating variables on relationships between leadership behaviours and
leadership effectiveness is to be collected. The theory testing stage is where positivism is a more suitable research paradigm.

In sum, although there are strengths and weaknesses in both paradigms, the theories of charismatic and transactional leadership, and contingency leadership theories relevant to this study have developed in the theory testing stage where positivism is a more suitable research paradigm. The next subsection discusses the suitability of the positivist paradigm in addressing this study’s research objective.

3.2.2.2 Addressing the Research Objective
Researcher interference is minimised in the positivism paradigm as the research operates independently of any personal prejudices, biases and values (Neuman 2006). As such, the positivist’s research philosophy provides more objectivity relative to the interpretivism paradigm, where the researcher is part of the context. Objective empirical evidence of the positivism paradigm is necessary to reject or accept the hypotheses. Further, the adoption of the paradigm in this study can be justified from the practitioner’s perspective as discussed in the next subsection.

3.2.2.3 Practitioner’s Perspective
The replicability and testability of research of the positivism paradigm provides an objective and factual basis for decision-making. This is especially valuable to the practitioner within commercial settings where wrong decisions can be costly and because the results of this study could be referred to by the sampled organisation in the private commercial sector. In addition, from a practical perspective, positivism provides a rigorous process for researchers in maintaining consistency and accuracy in research findings.

Furthermore, dissection of concepts into variables and operationalisation of variables into observable behaviours (or dimensions) and elements facilitates the examination of the variables in a methodical and precise manner. The results obtained from such examination may be useful to the practitioner (Cavana et al. 2001).
3.2.3 Summary
This study adopted the positivism research paradigm that assumes that reality is empirically evident, humans are rational and science is value-free and objective. This is because leadership theories have evolved in the theory testing stage from the theory building stage. The research methodology chosen is more suitable than that of interpretivism paradigm at the theory testing stage in providing precise and quantitative empirical data to form conclusive and definitive acceptance and rejection of hypotheses. Further, adoption of the same positivism paradigm as prior studies allows comparability of the results obtained from this study to those studies. The replicability and testability of research and the methodical and precise examination of the variables provides an objective and factual basis for decision making, which is valuable to the practitioner.

3.3 RESEARCH DESIGN
Quantitative research design is comprised of two distinct types of data collection methods: experimental and non-experimental (Debra 1999). Experimental research requires similar subjects to be carefully selected to respond to certain manipulated stimuli to examine the effect on the subjects in an assigned group (Debra 1999). Non-experimental research sees the researcher with diminished control, in that variables are not manipulated and groups cannot be assigned (Debra 1999). This study was conducted in the specific natural settings of two plants of a company and with the involvement of the total population of employees in both plants. Manipulation of variables were, hence, not feasible. Therefore, non-experimental research is more appropriate for this study.

Non-experimental techniques can be divided into four broad categories: observational research, archival research, case study research and survey research (Debra 1999). Descriptions of these techniques and their focuses are shown in Table 3.2 (Debra 1999, p. 42).
Table 3.2: Four categories of non-experimental research

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Type of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observational Research</td>
<td>Observation of subjects in their own environment – or – Researcher participating in naturally occurring groups and recording observations</td>
<td>How and Why?</td>
</tr>
<tr>
<td>Archival Research</td>
<td>Using data that was developed for some other purpose other than the problem at hand</td>
<td>Who, What, Where, How Much, How many?</td>
</tr>
<tr>
<td>Case Study Research</td>
<td>Researcher investigates a particular situation or problem. Is case specific</td>
<td>How and Why?</td>
</tr>
<tr>
<td>Survey Research</td>
<td>Goal is to collect information about the same variables or characteristics from a number of cases where the result is a data matrix, or a structured or rectangular set of data.</td>
<td>Who, What, Where, How Much, How Many?</td>
</tr>
</tbody>
</table>

Source: Debra (1999).

A dimension of leadership effectiveness is subordinates’ satisfaction with the leader, which is subjected to the opinions of subordinates that cannot be collected by observation. Observing transactional and charismatic leadership over an extended period of time is time-consuming and cost ineffective. Therefore, the data required by this study were not collected from observational research.

Leong’s (1997) and Koh, Steers and Terborg’s (1995) studies are the only published examples involving data collected from Singaporeans on leadership behaviours and leadership effectiveness using Bass’ (1985) MLQ. However, they did not collect data on levels of subordinates’ job-related knowledge required in this study. Further, their studies were conducted in educational settings, whilst this study is concerned about an organisation in the private commercial sector, in which effective leadership behaviours may differ (Bass 1985). Thus, the data required by this study cannot be obtained from archival research.

Case study and survey research involve subjective opinions from superiors, peers or subordinates, which may be different from one another. A leader would focus on
meeting the expectations of one’s superior and subordinates (Hooijberg and Choi 2000). It follows that the opinions of a leader’s superior and subordinates on leadership effectiveness are most important to the leader. Nevertheless, there are two reasons why subordinates’ opinions are more valid compared to superior’s opinions. First, subordinates are in a suitable position to judge the effectiveness of their leader’s leadership behaviours as they can observe the behaviours more frequently than the leader’s superior (Hughes, Ginnett and Curphy 1999). Second, multiple opinions may be obtained from more than one subordinate instead of from one superior only. The effects of bias from multiple opinions tend to offset one another (Hughes, Ginnett and Curphy 1999). Hence, this study intended to obtain the opinions of subordinates on the leadership behaviours and leadership effectiveness of their leaders. This study did not collect the opinions of a large number of subordinates from the use of case studies because it is not cost effective.

The research question is concerned about effectivity of leaders who practice more or less charismatic and transactional leadership as perceived by a large number of subordinates who possess high and low levels of job-related knowledge. The survey research method enabled the collection of data related to the perceptions of a large number of subordinates about their perceived leadership behaviours and leadership effectiveness of their superiors and their perceived own levels of job-related knowledge. Therefore, survey research was selected as an appropriate method of data collection for this study, in terms of practicality and its ability to adequately address the research question.

Survey data can be collected in a number of ways; for example, telephone interviews, personal interviews, mail interviews, and more recently, computer interviews. Table 3.3 presents the strengths of the four survey methods.
Table 3.3: Four survey methods

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Mail</th>
<th>Telephone</th>
<th>Personal</th>
<th>Computer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to handle complex questionnaire</td>
<td>Poor</td>
<td>Good</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Ability to collect large amounts of data</td>
<td>Fair</td>
<td>Good</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Accuracy on ‘sensitive’ questions</td>
<td>Good</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
</tr>
<tr>
<td>Control of interviewer effects</td>
<td>Excellent</td>
<td>Fair</td>
<td>Poor</td>
<td>Excellent</td>
</tr>
<tr>
<td>Degree of sample control</td>
<td>Fair</td>
<td>Excellent</td>
<td>Fair</td>
<td>Fair</td>
</tr>
<tr>
<td>Time required</td>
<td>Fair</td>
<td>Excellent</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Probable response rate</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
</tr>
<tr>
<td>Cost</td>
<td>Good</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
</tr>
</tbody>
</table>


As not all respondents had access to computers in the sampled organisation, computer questionnaire could not be used. The length of the questionnaire, which contains more than 80 questions, is too long for a telephone interview. As the researcher is a former manager in the company, a personal interview conducted by the researcher may have raised questions about the confidentiality and anonymity of the survey, hence, producing bias response. In addition, there are ethical issues involved as the employees’ ratings of their own current superiors may be known to a member of the management team through a personal interview. Hence, mail survey was used in this study. As the respondents are employees of a company, questionnaires were handed to respondents by their managers and completed questionnaires were returned to the researcher in self-addressed envelopes.

3.3.1 Purpose of Study and Type of Investigation

The extensiveness of prior studies on the variables of charismatic and transactional leadership, leadership effectiveness and job-related knowledge enabled the hypotheses to be developed. The hypotheses proposed in Chapter 2 indicate that the purpose of this research is to test these hypotheses that postulate relationships between the variables and the type of investigation is correlational investigation.
3.3.2 Researcher’s Interference

Researcher interference is the extent of researcher interference with the normal flow of work in the workplace during data gathering (Cavanaugh et al. 2001). As this study involved correlation and regression hypothesis-testing, the necessity for the researcher to interfere with the normal course of events in the organisation was minimal (Cavanaugh et al. 2001). There was also minimal disruption to the normal flow of work as the researcher did not request the employees to fill up the questionnaire at a specific time and place. This study was conducted in the natural setting where daily activities went on as normal (Cavanaugh et al. 2001).

3.3.3 Study Setting

This study was conducted as a field study where various factors were examined in natural setting and non-contrived (Cavanaugh et al. 2001). There was no manipulation of independent variables to observe cause and effect relationships between independent and dependent variables as required in field experiments (Cavanaugh et al. 2001). Relationships between dependent and independent variables hypothesised in this study were inferred from correlations between values of the variables obtained from the responses to the questionnaires.

3.3.4 Time Horizon

This is a cross-sectional study where data was gathered just once, over about a month (Cavanaugh et al. 2001). This is in contrast to a longitudinal study that collects data over more than one point in time (Cavanaugh et al. 2001). This study inferred relationships between independent and dependent variables from the differences in responses to the questionnaire by the respondents.

3.3.5 Unit of Analysis

The unit of analysis is the entity that is analysed in a study (Trochim 2002). The unit of analysis in this study is the individual. The superior’s leadership behaviour and leadership effectiveness were rated by each of the superior’s subordinates.
3.3.6 Sampling Design

This subsection discusses the choice of countries from the theoretical development perspective and practitioner’s perspective on the usefulness of the results. It also discusses the rationale behind choice of company and sampling method of respondents.

3.3.6.1 Theoretical Development Perspective

In a previous study conducted by Javidan and Carl (2005) examining cultural influence on leadership, two countries with diverse cultures were chosen. Canada represented Western culture and Taiwan represented Oriental Confucian culture. If culture influences leadership, two countries diverse in culture would have significant differences in leadership; similarities of leadership observed in these two countries would constitute strong evidence on the universality of leadership. The objective of Javidan and Carl’s (2005) study was to observe similarities of leadership between the two countries significantly different in culture.

This study seeks to control cultural influence on leadership. Thus, in contrast to Javidan and Carl’s (2005) study, two countries similar in culture, Singapore and China, were chosen. The similarity is evident from Hofstede’s (1980) study by taking Taiwan’s culture as a proxy for China’s culture. Singapore’s and China’s cultures are similar in terms of individualism/collectivism, power distance and gender equality, although China’s culture scores higher in terms of degree of uncertainty avoidance than Singapore’s (Hofstede 1980). Furthermore, populations in Singapore and China have large proportions of Han Chinese. Thus, choice of these two countries controls for national and ethnic cultural influence on leadership.

3.3.6.2 Practitioner’s Perspective

Multinational corporations are rapidly expanding their businesses in China due to its fast-growing economy. As Han Chinese comprise a large proportion of the populations in Singapore and China, and most Singaporeans are bilingual in English and Chinese, many multinational corporations send Singaporeans, who are effective managers and leaders in Singapore, to work as managers in China (Chow 2004). However, there are many examples of business and managerial failure of expatriates working in China (Chen 2006), including expatriates from Singapore. Contingency leadership theories imply that effective leadership is dependent on situations. Situational differences
between the Singapore and China plants may have rendered effective leadership in Singapore to be less effective in China. Also, the need for effective leadership may be particularly important for developing countries such as China, where greater levels of organisational change are necessary in facilitating adoption of new technologies and transforming traditional ways of operating (Conger and Kanungo 1987). The results obtained from this study on the effective leadership in Singapore and China will be informative to Singaporean managers on how to be effective leaders in China.

3.3.6.3 Choice of Company

There are two ways to achieve control of other variables not of interest to this study such as organisational culture. It appears that one way is to have a representative sample that has a mixture of organisational cultures such that not one organisational culture is dominant in the sample under study. Another is to choose one organisation with the same organisational culture to control for organisational culture and proceed to test the other variables of interest. This second approach is similar to Hofstede’s (1980) study where one company with employees across 40 countries was surveyed.

The results obtained using the second approach may be easier to interpret than those obtained using the first. For example, with only two companies surveyed, Javidan and Carl (2005) concluded that the telecommunication industry, due to its rapid rate of technological and competitive change, may warrant more prominent levels of visionary leadership, whilst the insurance and steel industries, due to slower pace of change, may warrant less prominent extents of mobiliser leadership. If Javidan and Carl (2005) had used a large number of companies, they may not have been able to derive such meaningful interpretation of the results. However, Javidan and Carl’s (2005) study could not control for the influence of organisational culture as two different companies were surveyed. This study followed the approach of Hofstede’s (1980) to select one company only with employees in multiple locations.

The sampled organisation is a multinational corporation based in the U.K. specialising in die-casting, selected because it had two operating units similar in size in Singapore and China and needed to understand the differences in the effective leadership in these two countries.
3.3.6.4 Sampling of Respondents

There are two major types of sampling designs, probability and non-probability sampling (Cavana et al. 2001). The elements in the population have known probability of selection as sample subjects in probability sampling. In non-probability sampling, the elements do not have a known or predetermined chance of selection as subjects (Neuman 2006). Probability sampling designs are used when the sample needs to be representative of the population so that statistical results obtained from the sample can be generalised to the population. When time or other factors rather than generalisability become critical, non-probability sampling is generally used (Cavana et al. 2001).

To obtain the sample size required in this study, all employees from the two plants were invited to participate in the survey. It follows that, in this study, the sample size is the population size. There is no issue of generalisability of the statistical results obtained from the sample to the population. Hence, non-probability sampling is used (Cavana et al. 2001).

There are two broad categories of non-probability sampling designs, convenience sampling and purposive sampling (Cavana et al. 2001). Purposive sampling is confined to specific types of participants who can provide the desired information, either because they possess it, or they conform to some criteria set by the researcher (Cavana et al. 2001). Purposive sampling is not applicable to this study as all employees in the two plants were to be invited to participate in the survey.

Convenience sampling is a non-probability sample design in which information or data for the research are gathered from members of the population conveniently accessible to the researcher (Cavana et al. 2001). Convenience sampling can be used to sample all employees in the two plants by engaging the help of the employees’ managers to distribute the questionnaires to all employees.

3.3.7 Summary

Non-experimental survey research was appropriate for this study due to its ability to capture quantitative data from a large number of respondents. The survey involved a mail survey where questionnaires were distributed to participants who volunteered for completion in the natural setting of the participants’ work environment. Hypotheses
testing were used to test relationships between the dependent variable of leadership effectiveness, independent variables of charismatic and transactional leadership and the moderating variable of subordinates’ job-related knowledge. This study involved minimal researcher interference and cross-sectional design with the individual as unit of analysis.

Two countries similar in national and ethnic cultures, Singapore and China, were selected to control for national and ethnic cultural influence on leadership effectiveness. The choice of one company with two plants for this study was made to control for other extraneous variables that were of no interest to this study such as organisational culture. As all employees in the Singapore and China plants were selected to constitute the required sample size, convenience sampling was used as there is no requirement for generalising of statistical results obtained from the sample to the population.

3.4 RESEARCH METHOD
This section details the survey instrument. The goodness of measures in terms of their validity and reliability is discussed. The design and layout of the questionnaire is also described.

3.4.1 Structured Survey Instrument
Bass’ (1985) MLQ was adopted in this study, where he identified 73 items from the pilot study. The final version of the questionnaire was derived using the opinions of respondents from different fields and professions. The MLQ, since its derivation, has been used in many studies (Bass 1985; Krishnan 2002; Pearce et al. 2003; Waldman, Bass and Einstein 1986), producing consistent results.

3.4.2 Measurements
The measure of each variable is related to the unit of analysis, the individual. Saunders et al. (1997) posited that there are generally four distinct types of variables related to the individual: attitudes, beliefs, behaviours and attributes. Attitudes are feelings towards something; beliefs are what individuals think about something; behaviours are concrete experiences based on actions and attributes are characteristics of individuals.
The survey in this study has two sections. The first section measures participants’ responses to each of the variables identified in the conceptual model and the second collects participants’ demographic information.

Operationalisation of each variable was performed by breaking down the variables into dimensions and elements (Cavana et al. 2001). Their operationalisation was inferred through constructs reflecting the behavioural dimensions as the concepts are intangible (Cavana et al. 2001).

The survey utilised a scale to record and measure the responses of participants. The five-point Likert scale is in a continuum. For the measure of leadership behaviour, the scale is: not at all, once a while, sometimes, fairly often and frequently, if not always. The scale is: not effective, only slightly effective, effective, very effective and extremely effective for the measure of leadership effectiveness. For the measure of level of subordinates’ job-related knowledge, the scale is: strongly disagree, disagree, neither agree nor disagree, agree and strongly agree. These verbal poles reflect a measure of beliefs.

For the measure of subordinates’ satisfaction, the scale is: very dissatisfied, somewhat dissatisfied, neither satisfied nor dissatisfied, fairly satisfied and very satisfied. These verbal poles represent a measure of attitudes. The measures of leadership behaviour, leadership effectiveness and subordinates’ satisfaction were adapted from Bass (1985). The measure of level of subordinates’ job-related knowledge was designed specifically for this study. A sample of the questionnaire is found in Appendix 3.1.

3.4.3 Goodness of Measures

Goodness of measures attests to the reliability and validity of measures (Cavana et al. 2001). That is, the instrument used to measure the concept is actually measuring accurately the concept that it set out to measure (Cavana et al. 2001). Reliability and validity are related to the instrument used for the process of data collection and choice of data, which is, sampling.
3.4.3.1 Reliability

Reliability means stability, consistency (Cavana et al. 2001) and precision (Baker 1994). Reliability reflects the reproducibility of findings irrespective of time, meaning the data collection instrument must possess cohesion between data groupings and should be free of systematic errors.

The inter-item consistency is a measure of reliability in observing if respondents answer all items consistently and that the items ‘hang together as they should’ (Cavana et al. 2001). The most popular test for this purpose is Cronbach’s coefficient alpha (Cavana et al. 2001), which is used for items with multi-point scales.

Of the three variables of leadership behaviour, leadership effectiveness and level of subordinates’ job-related knowledge, only the scale for level of subordinates’ job-related knowledge was developed for this research. The rest were adapted from Bass’ (1985) MLQ. According to Rowold and Heinitz (2007), each construct of charismatic leadership, transactional leadership and leadership effectiveness in the MLQ has a reliability of .70 or above. Thus, the scores for charismatic leadership, transactional leadership and leadership effectiveness are deemed to be ‘very good’ as Nunnally (1978) posited the following interpretation of Cronbach alpha scores: .8 = excellent, .7 - .8 = very good, .5 - .7 = adequate and ≤ .5 = poor.

3.4.3.2 Validity

Validity is defined as how well an empirical scale measures the conceptual definition of the concept that the scale is supposed to measure (Neuman 2006), meaning the instrument is effective in measuring the concepts, constructs and variables of interest.

Two important aspects of validity in contributing to the goodness of measure are content and construct validity. Content validity is achieved through literature, in particular, established measures such as the MLQ. Construct validity is determined by applying factor analysis to test the appropriate clustering of the items (Cavana et al. 2001) and testing whether the measured variable acts appropriately in a particular nomological network. The existing literature reported the validity of the scales used for leadership behaviour and leadership effectiveness (Bass 1985; Bass and Avolio 1989).
The scale measuring the level of subordinates’ job-related knowledge is a new, untested scale whose reliability and validity are not established. However, it was derived from the literature on knowledge, hence, likely to have achieved content validity. Further, in this study, its Cronbach’s coefficient alpha is established to indicate its reliability and factor analysis is performed on the data to demonstrate its construct validity.

3.4.4 Design of Survey Instrument
The questionnaire largely followed Bass’ (1985) format with the addition of items measuring the level of respondent’s job-related knowledge. Other items were included to collect demographic information of the leaders and the respondents.

3.4.4.1 Rating Scales
This study used Likert scales that capture attitudes or other responses in terms of ordinal-level categories, for example, agree and disagree, ranked along a continuum (Neuman 2006). As differences in leadership behaviours and leadership effectiveness of the superiors and levels of their own job-related knowledge as perceived by the respondents were investigated in this study, interval scales were required to measure the magnitude of the differences (Cavana et al. 2001). Empirical evidence shows that people treat the intervals between points on Likert scales as being equal in magnitude (Hair et al. 2003). Thus, the distance between two points on the scales can be treated as the magnitude of the differences in the degrees of preference among individuals (Cavana et al. 2001). This implies that Likert scales can be used as interval scales, allowing means and standard deviations of the responses on the variables to be computed (Cavana et al. 2001). Furthermore, the index scores give a precise quantitative measure of a person’s opinion (Neuman 2006).

There are two limitations of the Likert scale. Firstly, different combinations of several scale items can result in the same overall score or result, and secondly, the responses set biasness (Neuman 2006), which is a tendency to agree with every question in a series rather than carefully thinking through one’s answer to each, may occur (Neuman 2006). To overcome the first limitation, the factor loadings of the items suggested by the literature review measuring the same dimensions are examined to confirm these items have high loading on a single factor (Neuman 2006). To address the second issue,
leadership items were arranged in random order with transactional leadership interspersing with charismatic items (Neuman 2006).

3.4.4.2 Classification of Items
The respondents were requested to indicate the country of origin of the leaders (Singapore or China), level of hierarchy of the respondents’ superiors and departmental function of the leaders and the respondents. These data were required to ascertain that the sampling of respondents was representative of the sampled organisation.

The respondents were also requested to indicate the duration of acquaintanceship between leaders and respondents, and genders of the leaders and the respondents. The data were required to ensure that respondents sampled and their leaders were acquainted for various lengths of time and of two genders so that the results of this study are comparable to those of prior studies. The demographic information collected also ensures that results of future studies with samples of the same demographics are comparable with those of this study. These variables were coded as dummy variables in the data set.

Forced-choice, nominal scales were used to collect demographic data from the respondents. With forced-choice scales, respondents were forced to make a choice of Singapore or China, male or female, level of hierarchy, departmental function and duration of acquaintanceship in response to the demographic items.

3.4.4.3 Types and Forms of Items
The instruction is a straightforward direct statement - ‘Please rate each statement based on the options provided.’

The first section of the questionnaire has items 1 to 73 that lists the descriptions of leadership behaviours of superiors. The leadership items are similar to Bass’ (1985) MLQ, except that ‘my superior’ is added to each statement to remind the respondent that the person being evaluated is one’s superior. Likert scales are presented to the respondent to indicate one of five possible responses (Appendix 3.1).
The second section in the leadership questionnaire, items 74 to 79, captures leadership effectiveness and respondents’ satisfaction with their superiors’ leadership behaviours. These questions are similar to those in Bass’ (1985) MLQ. Items 80, 81, 82 and 83 in the third section of the questionnaire aimed to collect self-perceived level of respondent’s job-related knowledge.

The fourth section of the questionnaire containing items 84 to 87 aimed to collect demographic information of the leader that the respondent is rating, and items 88 and 89 are to collect demographic information on the respondent who is the subordinate.

Item 84 identifies whether the superior the respondent is describing is male or female (Appendix 3.1). Item 85 collects information on the superior’s country of origin. As the sampled organisation is relatively flat with three levels above factory operators, item 86 on the hierarchical level was amended from Bass’ (1985) MLQ to only three levels, namely, Manager, Executive and Supervisor. Furthermore, the item that the respondent indicates the branch service of the leader in Bass’ (1985) MLQ was modified to the department of the superior being described.

Item 88 collects information on the gender of the respondent. Item 89 is similar to that in Bass’ (1985) study that requests the respondent to indicate the duration of acquaintednesship with the superior.

3.4.4.4 Layout of Questionnaire

Debra (2002) purported that the physical layout of the survey needs to be considered in the design stage of the questionnaire. The layout directly influences the appeal and ease of administration of the survey. Therefore, a number of issues concerning opening comments and instructions, question sequence, question crowding and quality of reproduction were addressed. To minimise error and ambiguity in the written instructions, terms and wording of the instructions were carefully adapted from the well-tested MLQ used in Bass’ (1985) study. Every attempt was made to ensure that instructions were clearly presented and simply stated when preparing the questionnaire.

As recommended by Debra (2002), demographic and classification questions were placed at the end of the questionnaire due to their personal nature, the rationale being
that by the time the respondent reached the end of the questionnaire the respondent would have been convinced of the genuineness of the questions posed by the researcher and would have already committed time and effort in responding to the previous questions, and hence more open to sharing personal information (Cavana et al. 2001).

3.4.5 Summary
The questionnaire design largely follows that of the MLQ. There are additional items to measure levels of respondents’ job-related knowledge and items collecting demographics information of the respondents and their superior.

3.5 STATISTICAL ANALYSIS
The statistical procedures started with factor analysis to derive the factor for each of the concepts, which were measured by the means of the scores of the items that load on the factors. Correlations and bivariate regression analysis were used to investigate relationships between the dependent variable of leadership effectiveness and the independent variables of leadership behaviours and level of subordinates’ job-related knowledge. T-tests were performed to examine significant differences in factor scores of leadership behaviours and level of subordinates’ job-related knowledge between the Singaporean and the mainland Chinese samples.

3.5.1 Factor Analysis
Factor analysis is used to reduce large numbers of variables to smaller sets of factors summarising essential information contained in the variables (Coakes 2006). Factor loadings are correlations between each of the original variables and newly extracted factors (Hair et al. 2006), measuring the relative importance of a particular variable in representing that factor. The larger the absolute size of a factor loading, the more important it is in interpreting and naming a factor (Hair et al. 2006). This study examined the common underlying meaning among variables that have high loadings on a given factor to determine the concept the factor represents, namely, charismatic leadership, transactional leadership, leadership effectiveness or job-related knowledge. A composite variable for each of the four factors was obtained by taking the mean of those variables that loaded on it. Each of the original variables is ordinal from 1 to 5, while each of the composite variables is continuous from 1 to 5 on an interval scale.
Correlations and regressions were performed on the composite variables to examine the relationships among the four concepts.

**3.5.2 Correlation and Regression**

Pearson correlation measures the linear association between two metric variables represented by a correlation coefficient (Hair et al. 2006). The null hypothesis states there is no association between two variables and the correlation coefficient is zero (Hair et al. 2006).

This statistical test is used to determine whether the correlation coefficient is significantly greater or less than zero to conclude the rejection of the null hypothesis and that there is indeed a significant correlation between leadership behaviour and leadership effectiveness. A positive coefficient indicates a positive correlation between leadership behaviour and leadership effectiveness, as a negative coefficient indicates a negative correlation. A higher positive or negative coefficient indicates a stronger correlation between leadership behaviour and leadership effectiveness.

This study examined the relationship between charismatic leadership and leadership effectiveness by performing correlation between the composite variables of charismatic leadership and leadership effectiveness. The relationship between transactional leadership and leadership effectiveness was examined by performing correlation between the composite variables of transactional leadership and leadership effectiveness. Additionally, the differences in the correlations in Singapore and China were analysed.

Bivariate regression analysis is a statistical technique that examines the relationship between one independent and one dependent variable. The relationship is observed and compared using the formula for a straight line (Hair et al. 2006). This statistical test is used to determine whether the slope of the regression is significantly greater or less than zero to reject the null hypothesis that states there is no significant relationship. The moderating effect of subordinates’ job-related knowledge was investigated by examining the bivariate regression analysis between independent variable of the product of composite variables of charismatic leadership and subordinates’ job-related knowledge and dependent composite variable of leadership effectiveness and that
between independent variable of the product of composite variables of transactional leadership and subordinates’ job-related knowledge and dependent composite variable of leadership effectiveness (Baron and Kenny 1986). A higher positive or negative slope of the regression indicates that subordinates’ job-related knowledge has a stronger moderating effect on the relationship between leadership behaviour and leadership effectiveness. To examine identified significant moderating effect, the differences in the correlations between leadership behaviour and leadership effectiveness for subordinates who possess high level of job-related knowledge and subordinates who possess low level of job-related knowledge were analysed.

3.5.3 T-Test for Independent Samples
T-test for independent samples can be used to determine whether the difference between means for the two sets of scores is significant (Coakes et al. 2006). It considers the means and standard deviations of the two groups on the variable and tests whether the numerical difference in the means is significantly different from zero (Cavana et al. 2001).

The dependent variables are the composite variables of charismatic leadership, transactional leadership and subordinates’ job-related knowledge. The categorical grouping variable is country of the respondent. Significant difference between the two groups, that is, a large t-value, form the rejection criteria indicating there are significant differences between leadership behaviours and levels of subordinates’ job-related knowledge in Singapore and China.

The statistics were computed using Statistical Package for the Social Sciences (SPSS) Version 7.5 as this software has the functionalities required for performing the statistical analysis.

3.6 RESEARCH PLAN
This section presents the project timeline and discusses the translation of the questionnaire into Chinese, also describing the process of administering the questionnaire.
3.6.1 Project Timeline

The project was completed in 24 months’ time with the following activities listed in Table 3.4.

Table 3.4: Project timeline

<table>
<thead>
<tr>
<th>Task No</th>
<th>Description</th>
<th>Duration (Month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Finalise Chapter 1 and research proposal</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Finalise research methodology</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Questionnaire development</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Administration of questionnaire</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Analysis of data</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Writing of Chapters 1 to 4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Writing of Discussion of Findings, Implications, Limitations and Future Research</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Review of Chapters 1 to 5</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Finalisation of research</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24</td>
</tr>
</tbody>
</table>

Source: developed for this research.

3.6.2 Translation of Questionnaire

The questionnaire was translated from English to Chinese. The Chinese version was then back-translated into English to ensure that the re-translation resulted in the original English version. This back-translation ensured vocabulary equivalence, that is, that the words used have the same meaning (Cavana et al. 2001). The translation and back-translation were done by an accredited professional translator. The professional translator services Singapore governmental bodies such as Ministry of Education, Ministry of Health and multinational corporations such as Hewlett Packard, Lucent, Dell, Sharp, Sony, Nikon and Panasonic.

3.6.3 Administration of Questionnaire Survey

A total of 485 questionnaires were distributed to all employees in the Singapore and China plants who were informed by their respective managers of the survey. Each of them who wished to participate received a survey questionnaire for completion anonymously from their managers. Those who returned the completed survey instruments through stamped and self-addressed envelopes directly to the researcher implied giving their consent to the survey willingly. Two weeks’ response time was expected between the time of distribution and return of the questionnaires.
Participants were advised in the consent form and information that they should inform the researcher or if an independent person was preferred, the University's Human Research Ethics Officer, if they had issues concerning the conduct of the study.

3.7 ETHICAL CONSIDERATIONS

Ethical considerations addressed ensure that the research does not cause any physiological, psychological or reputational harm to participants. This research meets all the requirements and conditions put forth by the Business and Law Research Ethics Committee (BLREC) of the University of Newcastle. Some salient considerations include organisational consent, voluntary participation, anonymity of participants, user-friendliness of the survey instrument and confidentiality of data.

There is no conflict of interest on the part of the researcher who did not cause any harm to the participants as distribution of the survey instrument occurred within the potential participants’ work premises. The survey instrument was completed at a location of each participant’s choice. Participants returned the completed survey instruments through stamped and self-addressed envelopes directly to the researcher. In addition, only the researcher has access to the returned survey instrument.

Participation was completely voluntary and was explicitly communicated to the participants in an information letter attached to the survey instrument. A sample of the information letter is in Appendix 3.2. Consent of participants was implied by completing and returning the survey instrument. Anonymity of participants was assured as the survey instrument did not solicit any information that could be used to identify the participants. In addition, only the researcher has access to the responses as all survey instruments were returned directly.

Design of the survey questionnaire considered ease-of-use, such as the use of lay English, as a priority. Confidentiality of the data was kept as the survey questionnaires were distributed together with stamped and self-addressed envelopes that the participants used to seal the survey instrument before mailing to the researcher.
A brief report of the findings will be provided to the Management of the sampled organisation who accepted the invitation to participate. The researcher will recommend that the report be made available to all staff.

3.8 ASSUMPTIONS AND LIMITATIONS

In this study, the perceptions of leadership behaviour and leadership effectiveness were obtained from the leader’s subordinates. Hence, the evidence of correlation between leadership behaviour and leadership effectiveness was limited to the same source. The findings are based mainly on subordinates’ judgements of leadership and outcomes, which may cause the association between leadership behaviour and leadership effectiveness to be inflated (Bass 1990). The inflated association may affect the validity of the significant correlation found in this study in reflecting the relationship between leadership behaviour and leadership effectiveness. However, subordinates’ identification of charismatic leaders on the MLQ has been found to predict independent objective criteria of leadership effectiveness (Bass 1990).

This study assumed that subordinates’ perceptions are unbiased. The validity and/or reliability of the measurement of leadership behaviour, leadership effectiveness and level of subordinates’ job-related knowledge may be affected if this assumption does not hold. As the questionnaire survey involved the employees of the sampled organisation rating the leadership effectiveness of their superiors, response bias may arise from the respondents’ inhibition that their opinions may be known to their superiors in the company. In addition, self-selection bias may also arise as subordinates who perceive their superiors as more effective leaders may be more willing to respond to the survey than those who perceive their superiors as less effective leaders. To reduce interference and to protect the identity and confidentiality of the respondents, the questionnaires were completed in the privacy of the respondents and returned directly to the researcher in self-addressed envelopes. In assuring anonymity, respondents were not required to fill in their names or provide other forms of identification, thus minimising response bias and self-selection bias.

The items in the questionnaire in this study to measure leadership behaviour and leadership effectiveness were adapted from the MLQ used in Bass’ (1985) study. The items relating to subordinates’ job-related knowledge are derived from Scharmer’s
(2001) conceptualisation of knowledge that operationalises the concept of subordinates’ job-related knowledge. The validity and reliability of these items are not enhanced by or validated by a pilot study. As a consequence, the validity and reliability of the measurement may be affected.

Correlational surveys are often criticised for not allowing for tests of causality and its direction (Alderfer 1969). However, Hair et al. (1995) opined that the assumption of causation between two variables lies less in the analytical methods chosen but more in the theoretical justification provided to support the analyses. Thus, the validity of the results obtained from the correlations performed on the survey data relies on the assumption that the changes of the dependent variable, leadership effectiveness are caused by the changes of the independent variable, leadership behaviour; the changes in the relationship between the dependent variable and independent variable are caused by the changes of the moderating variable, subordinates’ job-related knowledge. The validity of this assumption relies on the validity of the theories which, in turn, relies on the assumptions and may be compromised by the limitations discussed in Chapter 2.
CHAPTER FOUR - DATA ANALYSIS

4.1 INTRODUCTION
This chapter presents the data analysis of the survey conducted according to the research methodology described in Chapter 3. The results of the data analysis aim to address the research question and hypotheses presented in Chapter 2. This chapter is restricted to the presentation and analysis of the collected data, without drawing any conclusions. Chapter 5 discusses the findings of this chapter within the context of the literature.

This chapter consists of four parts. The first part discusses the response rate and the demographics of respondents and leaders. The second part contains the findings from the factor analysis used to examine the measurement model and the descriptive statistics of latent constructs. The third part contains the results of statistical analysis performed to test the hypotheses and investigate relationships among variables of leadership, leadership effectiveness and level of subordinates’ job-related knowledge. The fourth part concludes this chapter.

4.2 RESPONSE RATE
Of the 485 questionnaires distributed, 452 or 93.2 percent were returned. However, there were 51 or 10.5 percent responses with blank or unclear response(s). Examples of unclear responses were those with more than one selection for one question and those with cancellation on selection or selections not clearly indicated such that the intended selection cannot be ascertained. This study adopted the suggestion of Cavana et al. (2001) in handling blank responses. Questionnaires with more than seven questions unanswered were not included in the data set for analysis (Cavana et al. 2001). Questionnaires with seven or less questions unanswered were still included in the data set. Each of the blank and unclear responses of the nine questionnaires was given the mean of the responses of the particular respondent to all other questions measuring this variable as recommended by Cavana et al. (2001). The total number of usable questionnaires for data analysis was 410 or 84.5 percent. Table 4.1 indicates the number of responses in each category.
Table 4.1: Number of responses

<table>
<thead>
<tr>
<th>Questionnaire Survey Responses</th>
<th>Number of Questionnaires</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total questionnaires distributed</td>
<td>485</td>
<td>100</td>
</tr>
<tr>
<td>Total questionnaires returned</td>
<td>452</td>
<td>93.2</td>
</tr>
<tr>
<td>With blank or unclear response(s)</td>
<td>51</td>
<td>10.5</td>
</tr>
<tr>
<td>With more than 7</td>
<td>42</td>
<td>8.7</td>
</tr>
<tr>
<td>With less than or equal to 7</td>
<td>9</td>
<td>1.9</td>
</tr>
<tr>
<td>Usable responses</td>
<td>410</td>
<td>84.5</td>
</tr>
</tbody>
</table>

Source: analysis of survey responses.

4.3 DEMOGRAPHICS OF THE RESPONDENTS

The demographics include the respondents’ base country, gender, functional department and number of years of acquaintanceship with the leader.

Of the total number of respondents, 155 or 38 percent were working in Singapore and 255 or 62 percent were working in China. As the company was in the manufacturing sector that requires manual strength for machine operations, females were mostly found in office jobs. The proportion of male to female respondents was four to one: 325 males or 79 percent of the respondents to 85 females or 21 percent.

A high proportion of the respondents, 213 or 52 percent, worked in the manufacturing function (Table 4.2), whilst another 25 percent of the respondents worked in each of the manufacturing-related functions of Tooling (54 respondents or 13 percent of the respondents) and Project (51 respondents or 12 percent of the respondents). The rest worked in Quality (37 respondents or 9 percent of the respondents), Customer Service (20 respondents or 5 percent of the respondents), Sales (18 respondents or 5 percent of the respondents) and Finance (17 respondents or 4 percent of the respondents).
Table 4.2: Functional departments of respondents

<table>
<thead>
<tr>
<th>Function</th>
<th>Number of Respondent (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing/Operations</td>
<td>213 (52)</td>
</tr>
<tr>
<td>Customer Service</td>
<td>20 (5)</td>
</tr>
<tr>
<td>Quality</td>
<td>37 (9)</td>
</tr>
<tr>
<td>Tooling/Engineering</td>
<td>54 (13)</td>
</tr>
<tr>
<td>Project</td>
<td>51 (12)</td>
</tr>
<tr>
<td>Sales</td>
<td>18 (5)</td>
</tr>
<tr>
<td>Finance</td>
<td>17 (4)</td>
</tr>
<tr>
<td>Total</td>
<td>410 (100)</td>
</tr>
</tbody>
</table>

Source: analysis of survey data.

Table 4.3 indicates the number of respondents by the number of years of acquaintanceship with the leaders. More than half the respondents had known the leaders for four or more years. More than 30 percent of the respondents had known the leaders between one and four years. Of the respondents, 52 or 13 percent had known the leader for less than one year. The high proportion of respondents with long acquaintanceships with the leaders reflected the large number of long-serving staff in Singapore.

Of the total number of respondents from Singapore, 80 percent had worked with the leaders for more than four years. Less than 10 percent of the respondents had worked with the leaders for less than two years ago. The remaining 19 or 12 percent had worked with the leaders between three and four years.

Table 4.3: Years of acquaintanceship by countries of respondents

<table>
<thead>
<tr>
<th>Acquaintanceship</th>
<th>Country of Respondent</th>
<th>Total (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>China (percent)</td>
<td>Singapore (percent)</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>49 (19)</td>
<td>3 (2)</td>
</tr>
<tr>
<td>Between 1 year and 2 years</td>
<td>50 (20)</td>
<td>9 (6)</td>
</tr>
<tr>
<td>Between 3 years and 4 years</td>
<td>53 (21)</td>
<td>19 (12)</td>
</tr>
<tr>
<td>Between 4 years to 5 years</td>
<td>62 (24)</td>
<td>51 (33)</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>41 (16)</td>
<td>73 (47)</td>
</tr>
<tr>
<td>Total</td>
<td>255 (100)</td>
<td>155 (100)</td>
</tr>
</tbody>
</table>

Source: analysis of survey data.

In contrast, about 40 percent of the mainland Chinese respondents worked with the leaders less than two years. Only 40 percent had worked with the leaders for more than
four years. The remaining 53 or 21 percent had worked with the leaders between three and four years.

4.4 DEMOGRAPHICS OF THE SUPERIORS

The demographics of the superiors include country of the superior, gender and organisational level.

Of the total number of responses, 231 or 56 percent of those valid were made by the respondents about leadership and leadership effectiveness of Singaporean superiors (Table 4.4). The rest, 179 or 44 percent of the valid responses, were made by the respondents about mainland Chinese superiors.

Table 4.4: Number of respondents and leaders by country

<table>
<thead>
<tr>
<th>Country of Respondent</th>
<th>Leader’s Country of Origin</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singapore (percent)</td>
<td>China (percent)</td>
<td>Total (percent)</td>
</tr>
<tr>
<td>Singapore</td>
<td>155 (100)</td>
<td>0</td>
<td>155 (38)</td>
</tr>
<tr>
<td>China</td>
<td>76 (30)</td>
<td>179 (70)</td>
<td>255 (62)</td>
</tr>
<tr>
<td>Total</td>
<td>231 (56)</td>
<td>179 (44)</td>
<td>410 (100)</td>
</tr>
</tbody>
</table>

Source: analysis of survey data.

Of the 255 responses from China, 76 or 30 percent of the respondents were about superiors seconded from Singapore and the rest (179 or 70 percent of the respondents) were about superiors from China. All responses from the Singaporean respondents (155) were about superiors from Singapore (Table 4.4).

Female superiors make up 16 percent of the respondents; the rest were males (346 or 84 percent of the respondents). Reflecting a pyramid organisational chart, 285 or 70 percent of the respondents were rating about their superiors, who were Supervisors, 82 or 20 percent who were Executives and only 43 or 10 percent who were Managers.

4.4.1 Summary

In summary, a majority of the respondents were from China (62 percent), were male (79 percent), worked in the manufacturing function (52 percent) and had known their superiors between three to five years (45 percent). Most superiors were from Singapore (56 percent), were males (84 percent) and were Supervisors (70 percent).
4.5 DESCRIPTIVE STATISTICS OF ITEMS
The SPSS software package was used to conduct principal components analyses and internal reliability analyses. Appendix 4.1 lists the measures and the corresponding names of the abbreviation used in SPSS. Appendix 4.2 shows the descriptive statistics of all items involved in the data analysis including the items measuring the dependent variable, leadership effectiveness (leadeff); independent variables, charismatic leadership (charis) and transactional leadership (tranx); and the moderating variable, job-related knowledge (jobknow).

4.6 FACTOR ANALYSIS
The questionnaire comprised a total of 83 items. Of the 83 items, 73 items pertain to leadership behaviours, 6 items pertain to leadership effectiveness and 4 items pertain to job-related knowledge. Using SPSS Version 7.5, a principal components factor analysis with Varimax rotation was carried out. Based on sample size of 350 or more, factor loadings of .30 are considered significant (Hair et al. 1995). Only 33 items were left after elimination during the factor analysis out of the original 83 items.
Table 4.5: Factor matrix$^{ab}$

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mbe69</td>
<td>.890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mbe25</td>
<td>.882</td>
<td></td>
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<td>reward31</td>
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<td>reward34</td>
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<td>leadoff2</td>
<td></td>
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<td>.718</td>
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<td>leadoff6</td>
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<td>leadoff3</td>
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<td></td>
<td>.672</td>
<td></td>
</tr>
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<td>jobknow3</td>
<td></td>
<td></td>
<td></td>
<td>.901</td>
</tr>
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<td>jobknow1</td>
<td></td>
<td></td>
<td></td>
<td>.895</td>
</tr>
<tr>
<td>jobknow2</td>
<td></td>
<td></td>
<td></td>
<td>.890</td>
</tr>
<tr>
<td>jobknow4</td>
<td></td>
<td></td>
<td></td>
<td>.884</td>
</tr>
</tbody>
</table>

Note a: Loadings > .40 are shown
Note b: mbe denotes management-by-exception; reward denotes contingent reward; charis denotes charismatic leadership; leadoff denotes leadership effectiveness; jobknow denotes job-related knowledge
Source: analysis of survey data.

As shown in Table 4.5, the first column represents transactional leadership; the second column represents charismatic leadership; the third column represents leadership effectiveness; and the fourth column represents job-related knowledge. The items are sequentially numbered as they were presented in the questionnaire. The missing numbers are for questions in the questionnaire eliminated during the factor analysis.
A composite variable for each of the four factors was obtained by taking the mean of those items that loaded on it. A composite variable for leadership effectiveness was obtained by taking the mean of the six leadership effectiveness items. A composite variable each for charismatic leadership (Charisma) and transactional leadership (Tranx) was obtained by taking the mean of the 11 charismatic items and the 12 transactional items, respectively. Likewise, a composite variable for job-related knowledge (JobKnow) was obtained by taking the mean of the four job-related knowledge items.

4.7 DESCRIPTIVE STATISTICS OF COMPOSITE VARIABLE

Table 4.6 shows the descriptive statistics for each composite variable: leadership effectiveness (LeadEff), charismatic leadership (Charisma), transactional leadership (Tranx) and job-related learning (JobKnow) that indicates the central tendencies and dispersion of each variable in relation to the population.

Table 4.6: Descriptive statistics for composite variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>LeadEff</th>
<th>Charisma</th>
<th>Tranx</th>
<th>JobKnow</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>410</td>
<td>410</td>
<td>410</td>
<td>410</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>3.371</td>
<td>2.952</td>
<td>2.423</td>
<td>2.937</td>
</tr>
<tr>
<td>Median</td>
<td>3.667</td>
<td>3.455</td>
<td>2.167</td>
<td>3.000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.171</td>
<td>1.027</td>
<td>1.048</td>
<td>1.457</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.419</td>
<td>-0.387</td>
<td>0.131</td>
<td>0.020</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>0.121</td>
<td>0.121</td>
<td>0.121</td>
<td>0.121</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-0.966</td>
<td>-1.468</td>
<td>-1.551</td>
<td>-1.534</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>0.240</td>
<td>0.240</td>
<td>0.240</td>
<td>0.240</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>5</td>
<td>4.8</td>
<td>4.5</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: analysis of survey data.

The descriptive statistics presented are the mean, standard deviation, skewness and kurtosis. The standard deviation is an indication of the spread of distribution of the data. Skewness is the asymmetry of distribution. Positive skewness occurs when the mean is larger than the median and negative skewness occurs when the median is larger than the mean. Finally, kurtosis is the degree of the peak in the histogram. High peaks are positive, whilst flatter peaks are negative. The following presents the descriptive statistics of each of the variables.
The histogram in Figure 4.1 is not symmetrically distributed hence the median is the most appropriate measure of the central tendency of the data (Hair et al. 1995). The leadership effectiveness variable (LeadEff) has a mean of 3.37 and a median of 3.67, with a standard deviation of 7.025. It is negatively skewed at -.419 (Standard Error (SE) = .121), with a kurtosis of -.966 (SE = .240). Reflecting the maximum and minimum of the mean of six 5-point Likert scales, where the maximum value is 5 and minimum value is 1.
The histogram in Figure 4.2 is not symmetrically distributed hence the median is the most appropriate measure of the central tendency of the data (Hair et al. 1995). The charismatic leadership variable has a mean of 2.95 and a median of 3.46, with a standard deviation of 1.03. It is negatively skewed at -.387 (Standard Error (SE) = .121), with a kurtosis of -1.468 (SE = .240). Reflecting the maximum and minimum of the mean of eleven 5-point Likert scales, where the maximum value is 4.8 and minimum value is 1.
The histogram in Figure 4.3 is not symmetrically distributed hence the median is the most appropriate measure of the central tendency of the data (Hair et al. 1995). The transactional leadership variable (Tranx) has a mean of 2.42 and a median of 2.167, with a standard deviation of 1.05. It is positively skewed at .131 (Standard Error (SE) = .121), with a kurtosis of -1.551 (SE = .240). Reflecting the maximum and minimum of the mean of twelve 5-point Likert scales, where the maximum value is 4.5 and minimum value is 1.
The histogram in Figure 4.4 is not symmetrically distributed hence the median is the most appropriate measure of the central tendency of the data (Hair et al. 1995). The job related knowledge variable has a mean of 2.94 and a median of 3.00, with a standard deviation of 1.457. It is positively skewed at .020 (SE = .121), with a kurtosis of -1.534 (SE = .240). Reflecting the maximum and minimum of the mean of four 5-point Likert scales, where the maximum value is 5 and minimum value is 1.

### 4.7.1 Summary

The median and standard deviation of the variables are correspondingly 3.455 and 1.027 for charismatic leadership, 2.167 and 1.048 for transactional leadership, 3.667 and 1.71 for leadership effectiveness, and 3.000 and 1.457 for job-related knowledge.

### 4.8 RELIABILITY ANALYSIS OF COMPOSITE VARIABLE

Table 4.7 contains the correlations between the four factors as well as the internal reliabilities for these factors. As shown in Table 4.7, all the scales have acceptable internal reliability of .60 as suggested by Hair et al. (1995).
Given that all the data were obtained from the same source, that is, the subordinates and using one method, it is arguable that the covariance between the constructs may be due to a single-source common method bias. To address this issue, a single-component test was conducted on all of the items retained after the principal components analysis. The results from this analysis revealed that the first component accounted for 24 percent of the total variance in the items, which indicates that common source or method variance did not explain the majority of the covariance between the items.

### 4.8.1 Reliability Analysis of Composite Variable for Singapore and China

Table 4.8 contains the correlations between the four factors as well as the internal reliabilities for the Singaporean and mainland Chinese respondents. As shown in Table 4.8, all the scales have acceptable internal reliability based on the .60 criterion of Hair et al. (1995) in Singapore and China.
The direction of the correlation relationships did not differ between the Singaporean and mainland Chinese respondents. However, respondents with higher levels of job-related knowledge generally perceived the leaders as practicing charismatic leadership less frequently in Singapore ($r = -.247$, $p < .005$) relative to China ($r = -.195$, $p < .005$), and transactional leadership less frequent in Singapore ($r = -.424$, $p < .005$) relative to China ($r = -.245$, $p < .005$) and are less effective in Singapore ($r = -.297$, $p < .005$) relative to China ($r = -.145$, $p < .025$).

4.9 HYPOTHESIS TESTING – MAIN EFFECT OF LEADERSHIP BEHAVIOUR ON LEADERSHIP EFFECTIVENESS

After establishing the reliability of measures, this section presents the results of the hypotheses testing.

4.9.1 Hypothesis One: Charismatic leadership is positively correlated with leadership effectiveness

H1 states that charismatic leadership is positively correlated with leadership effectiveness. As shown in Table 4.7, the composite factor scores of charismatic leadership (charisma) is significantly correlated with leadership effectiveness (eff) ($r = .525$, $p < .005$). Therefore, H1 was supported.
4.9.1.1 Correlation of Charismatic Leadership and Leadership Effectiveness in Singapore and China
Table 4.8 shows that charismatic leadership was correlated with leadership effectiveness in Singapore and China. However, the correlation between charismatic leadership and leadership effectiveness was stronger in Singapore ($r = .604, p < .005$) than in China ($r = .506, p < .005$).

4.9.2 Hypothesis Two: Transactional leadership is positively correlated with leadership effectiveness
H2 states that transactional leadership is positively correlated with leadership effectiveness. As shown in Table 4.7, there was a negative correlation between transactional leadership and leadership effectiveness ($r = -.280, p < .005$). Therefore, H2 was not supported.

4.9.2.1 Correlation of Transactional Leadership and Leadership Effectiveness in Singapore and China
Table 4.8 shows that transactional leadership is negatively correlated with leadership effectiveness in Singapore and China. However, the negative correlation between transactional leadership and leadership effectiveness was stronger in China ($r = -.351, p < .005$) than in Singapore ($r = -.172, p < .005$).

4.9.3 Summary
Charismatic leadership was correlated with leadership effectiveness on the overall and the correlation was stronger in Singapore than in China. Transactional leadership was negatively correlated with leadership effectiveness on the overall and the negative correlation was stronger in China than in Singapore.

4.10 HYPOTHESIS TESTING – MODERATING EFFECT OF JOB-RELATED KNOWLEDGE
The hypothesis that job-related knowledge will moderate the relationship between leadership behaviour and leadership effectiveness was tested using the product-term procedure in regression analysis. This procedure involved the creation of a third variable, used to represent the interaction between the two independent variables, by multiplying the scores from the two independent variables thereby obtaining a product-
term (Baron and Kenny 1986). The product-term of subordinates’ job-related knowledge and charismatic leadership and the product-term of subordinates’ job-related knowledge and transactional leadership were derived by the product of the composite scale of subordinates’ job-related knowledge (JobKnow) and each of the composite scales of charismatic leadership (Charisma) and transactional leadership (Tranx).

$R^2$ is the ratio of the regression sum of squares to the total sum of square, indicating the level of prediction accuracy (Hair et al. 1995). The strength of the relationship is best represented by $R^2$ (Hair et al. 1995) which denotes the percentage of variation in the dependent variable explained by the combined effect of all the independent variables (Hair et al. 1995).

4.10.1 Hypothesis Three: The effects of charismatic leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effect of charismatic leadership on leadership effectiveness will be stronger with increasing levels of subordinates’ job-related knowledge

H3 states that the effects of charismatic leadership on leadership effectiveness will be moderated by job-related knowledge. The job-related knowledge product-terms of charismatic leadership was insignificant with standard Beta of -.030 (adjusted $R^2 = .285$, $t = -.691$; $p = .490$). Therefore, H3 was not supported. Job-related knowledge did not moderate the relationship between charismatic leadership and leadership effectiveness significantly. Similar results were found when the regression analysis was performed on the Singaporean respondents (standard Beta = .024, $t = .228$, $p = .820$) and mainland Chinese respondents (standard Beta = -.068, $t = -1.216$, $p = .225$) individually (Table 4.9).
Table 4.9: Regression coefficients

<table>
<thead>
<tr>
<th>Regression Coefficients</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>SE</th>
<th>Std. Beta</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charisma*JobKnow</td>
<td>.290</td>
<td>.285</td>
<td>.990</td>
<td>-.030</td>
<td>-.691</td>
<td>.490</td>
</tr>
<tr>
<td>Charisma*JobKnow</td>
<td>.388</td>
<td>.376</td>
<td>.820</td>
<td>.024</td>
<td>.228</td>
<td>.820</td>
</tr>
<tr>
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</tr>
<tr>
<td>Charisma*JobKnow</td>
<td>.263</td>
<td>.254</td>
<td>1.077</td>
<td>-.068</td>
<td>-1.216</td>
<td>.225</td>
</tr>
<tr>
<td>(China)</td>
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<td></td>
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</tr>
<tr>
<td>Tranx*JobKnow</td>
<td>.162</td>
<td>.156</td>
<td>1.076</td>
<td>-.171</td>
<td>-3.727</td>
<td>.000</td>
</tr>
<tr>
<td>Tranx*JobKnow</td>
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<td>.434</td>
<td>.781</td>
<td>-.697</td>
<td>-8.230</td>
<td>.000</td>
</tr>
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<td>(Singapore)</td>
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<td></td>
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<tr>
<td>Tranx*JobKnow</td>
<td>.187</td>
<td>.177</td>
<td>1.131</td>
<td>-.097</td>
<td>-1.423</td>
<td>.156</td>
</tr>
<tr>
<td>(China)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Source: developed for this research.

4.10.2 Hypothesis Four: The effects of transactional leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effects of transactional leadership on leadership effectiveness will be stronger with decreasing levels of subordinates’ job-related knowledge

The composite scales of transactional leadership and job-related knowledge were regressed against the composite scale of leadership effectiveness and are shown in Table 4.9. The regression yielded $R^2$ of .162 and adjusted $R^2$ of .156 (SE = 1.076). H4 states that the effects of transactional leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effects of transactional leadership on leadership effectiveness will be stronger with decreasing levels of subordinates’ job-related knowledge, whose product-term of transactional leadership was significant and negative with standard Beta of -.171 (t = -3.727; p = .000). Therefore, H4 was supported.

To more closely examine the moderating effect, the responses were divided into two groups, high and low levels of subordinates’ job-related knowledge, according to a median split, and the correlation between the measures of transactional leadership (Tranx) and leadership effectiveness (LeadEff) was then examined for each group.

The correlation analysis for all respondents revealed that the relationship between transactional leadership (Tranx) and leadership effectiveness (Eff) was negatively significant. However, there is a higher negative correlation for the subordinates with high levels of job-related knowledge ($r = -.492$, $p < .005$) than for subordinates with low
levels of job-related knowledge ($r = -.192$, $p < .005$). Thus, H4 was supported for all respondents; the effect of transactional leadership on leadership effectiveness will be moderated by levels of subordinates’ job-related knowledge. The correlation between transactional leadership and leadership effectiveness would be negative on subordinates with high levels of job-related knowledge whilst less negative on subordinates with low levels of job-related knowledge.

4.10.2.1 Additional Analysis on the Moderating Effect of Subordinates’ Job-related Knowledge between Transactional Leadership and Leadership Effectiveness in Singapore and China

The moderating effect of subordinates’ job-related knowledge between transactional leadership and leadership effectiveness was significant in Singapore (adjusted $R^2 = .445$, standard Beta = -.697; $t = -8.230; p = .000$) but not in China (adjusted $R^2 = .187$, standard Beta = -.097; $t = 1.423; p = .156$) and are summarised in Table 4.9.

The correlation analysis involving the Singaporean respondents revealed that the relationship between transactional leadership (Tranx) and leadership effectiveness (Eff) was positively significant ($r = .551$, $p < .005$) (Table 4.10) for subordinates with low levels of job-related knowledge in contrast to subordinates with high levels of job-related knowledge, where the results were negatively significant ($r = -.711$, $p < .005$). This result reflects that subordinates’ job-related knowledge has a significant moderating effect on the relationship between transactional leadership and leadership effectiveness in Singapore.

Table 4.10: Correlations of transactional leadership and leadership effectiveness in Singapore and China

<table>
<thead>
<tr>
<th>Country of Respondent</th>
<th>Job-related Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Singapore</td>
<td>.551</td>
</tr>
<tr>
<td>China</td>
<td>-.402</td>
</tr>
</tbody>
</table>

$p < .005$ (2-tailed)
Source: developed for this research.
However, results from the mainland Chinese respondents showed that relationships between transactional leadership (Tranx) and leadership effectiveness (Eff) were negatively significant for subordinates with low levels of job-related knowledge ($r = - .402, p < .005$) and subordinates with high levels of job-related knowledge ($r = -.259, p < .005$). This result indicates that subordinates’ job-related knowledge did not moderate the relationship between transactional leadership and leadership effectiveness significantly in China.

4.10.3 Summary

Transactional leadership correlated significantly with leadership effectiveness for subordinates with low levels of job-related knowledge but the correlation is insignificant for subordinates with high levels of job-related knowledge in Singapore. Transactional leadership did not correlate significantly with leadership effectiveness in China for subordinates with high and low levels of job-related knowledge. Charismatic leadership correlated significantly with leadership effectiveness for subordinates with high and low levels of job-related knowledge in Singapore and China.

4.11 DIFFERENCE OF LEADERSHIP BEHAVIOUR AND JOB-RELATED KNOWLEDGE BETWEEN SINGAPORE AND CHINA

This section contains additional analysis examining the differences of leadership practiced by leaders in Singapore and China. Table 4.11 shows the result of a T-test on independent samples used to compare differences on leadership factor scores of Singapore and China. As indicated in Table 4.11, there were significant differences of leadership factor scores of charismatic leadership ($t = 4.666; p = .000$) and transactional leadership ($t = 5.959; p = .000$) behaviours between Singapore and China of .441 and .567 respectively. Overall, Singaporean respondents perceived their leaders as practicing charismatic and transactional leadership more frequently than the mainland Chinese respondents.
Table 4.11: T-tests for independent samples on differences of leadership factor scores for Singapore and Mainland Chinese respondents

<table>
<thead>
<tr>
<th>Leadership</th>
<th>Mean Difference</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charisma</td>
<td>.441</td>
<td>4.666</td>
<td>.000</td>
</tr>
<tr>
<td>Tranx</td>
<td>.567</td>
<td>5.959</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: developed for this research.

Table 4.12 shows the mean levels of Singaporean and mainland Chinese respondents’ job-related knowledge. Table 4.12 indicates that, overall, on the scale of 1 to 5 (that is, 5 having the highest level of job-related knowledge, 1 having the least job-related knowledge), Singaporean respondents had higher levels of job-related knowledge with a mean score of 3.58 compared to mainland Chinese respondents who had a mean score of 2.54. Hence, overall, the level of mainland Chinese respondents’ job-related knowledge was 1.04 lower than the level of Singaporean respondents.

Table 4.12: Mean levels of job-related knowledge by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Mean Job-related knowledge Level</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>3.58</td>
<td>1.415</td>
</tr>
<tr>
<td>China</td>
<td>2.54</td>
<td>1.336</td>
</tr>
</tbody>
</table>

Source: developed for this research.

Independent samples test for the mean levels of Singaporean and mainland Chinese respondents’ job-related knowledge were performed on the data. The level of mainland Chinese respondents’ job-related knowledge were significantly lower (t = 7.533; p = .000) than the level of Singaporean respondents. That is, mainland Chinese respondents possess lower levels of job-related knowledge than Singaporean respondents.

4.12 SUMMARY

Charismatic leadership correlated with leadership effectiveness significantly independent of the levels of subordinates’ job-related knowledge in Singapore and China. Overall, transactional leadership did not correlate significantly with leadership effectiveness in this study. Transactional leadership correlated significantly with leadership effectiveness for subordinates with low levels of job-related knowledge but the correlation was insignificant for subordinates with high levels of job-related knowledge for Singaporean respondents. For the mainland Chinese respondents,
transactional leadership did not correlate significantly with leadership effectiveness for subordinates with high and low levels of job-related knowledge. Charismatic and transactional leadership was more evident in Singapore compared to China. Mainland Chinese subordinates possessed lower levels of job-related knowledge than Singaporean subordinates.
5 CHAPTER FIVE - CONCLUSIONS AND IMPLICATIONS

5.1 INTRODUCTION
This chapter synthesises the study. Chapter 1 outlined the organisation of this study and provided the setting within the context of leadership, job-related knowledge and leadership effectiveness. The research catalyst established the motivation of this study and provided a basis for its justification. The research problem was identified and translated into a research objective. Four hypotheses were derived from the research objective. The hypotheses are:

*Hypothesis One (H1): Charismatic leadership will be positively correlated with leadership effectiveness.*

*Hypothesis Two (H2): Transactional leadership will be positively correlated with leadership effectiveness.*

*Hypothesis Three (H3): The effects of charismatic leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effect of charismatic leadership on leadership effectiveness will be stronger with increasing levels of subordinates’ job-related knowledge.*

*Hypothesis Four (H4): The effects of transactional leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effects of transactional leadership on leadership effectiveness will be stronger with decreasing levels of subordinates’ job-related knowledge.*

Chapter 1 briefly outlined the research methodology adopted and was detailed in Chapter 3.

In Chapter 2, the key theoretical developments of leadership were discussed, followed by the concepts of charismatic and transactional leadership and leadership effectiveness. It further discussed the concept of job-related knowledge as it is a new construct. Job-related knowledge was conceptualised in relation to knowledge as the parent theory. Situational theories on task- and relations-oriented leadership effectiveness were
explored and the extent of applicability on charismatic and transactional leadership was considered. The empirical model was discussed in detail in Chapter 2, with the discussion based on each variable and its hypothesised relationships with one another.

Having identified the gaps in existing theory through the literature reviewed in Chapter 2, Chapter 3 justified the positivist approach and structured survey research methodology used based on the type of research question. This study used existing measures of charismatic leadership (11 items), transactional (12 items) and leadership effectiveness (6 items), whilst the measure for job-related knowledge (4 items) was developed by the researcher. Items used to tap each of the variables were derived from the concepts, dimensions and elements each variable represented. The literature reported that each measure is reliable and valid with ‘very good’ Cronbach alpha reliability scores of .70 or above (Nunnally 1978). Convenience sampling was employed with voluntary participation from two manufacturing plants of one organisation. Finally, ethical issues were addressed and administrative matters discussed.

Chapter 4 presented the findings of the analysis. Most of the respondents were from China (62 percent), male (79 percent), worked in the manufacturing function (52 percent) and had known their superiors between three to five years (45 percent). Most of the superiors were from Singapore (56 percent), male (84 percent) and were supervisors (70 percent).

The validity and reliability of the items were again tested. Using principal components analysis, 23 items pertaining to leadership behaviours and all items pertaining to leadership effectiveness and job-related knowledge were found to be valid. All variables had ‘very good’ Cronbach alpha reliability scores (Nunnally 1978); charismatic leadership = .90, transactional leadership = .93, job-related knowledge = .93 and leadership effectiveness = .89.

The four hypotheses were tested. H1 was supported as charismatic leadership was found significantly correlated with leadership effectiveness. H2 was not supported as transactional leadership was found to be negatively correlated with leadership effectiveness. H3 was not supported as the moderating effect of job-related knowledge on the relationship between charismatic leadership and leadership effectiveness was
found to be insignificant. H4 was supported as the moderating effect of job-related knowledge on the relationship between transactional leadership and leadership effectiveness was found to be significant. Specifically, transactional leadership has less of a negative effect on subordinates who possess lower levels of job-related knowledge.

This final chapter brings together existing knowledge found in the literature with the findings presented in Chapter 4. This section has provided an overview of the preceding chapters and now provides a discussion of the conclusions specific to the four hypotheses and a general conclusion that addresses the research problem. The last part of this chapter discusses the research implications and suggests areas for further research.

5.2 CONCLUSIONS TO THE HYPOTHESES
This section concludes the four hypotheses from the statistical results obtained in Chapter 4.

5.2.1 Conclusion to Hypothesis One
This subsection concludes H1 and relates the conclusion to prior theories.

5.2.1.1 Charismatic Leadership and Leadership Effectiveness
H1 states that charismatic leadership is positively correlated with leadership effectiveness. The finding presented in Section 4.9.1 supports H1 in the Singaporean and mainland Chinese samples. This study concludes that charismatic leadership is effective in Singapore and China.

5.2.1.2 Prior Theories on Charismatic Leadership and Leadership Effectiveness
Section 2.5.2 articulated that, in Bass’ (1985) study, whilst transformational and transactional leadership are effective, transformational leadership is more effective than transactional leadership. Further, Lowe, Kroeck and Sivasubramaniam (1996) found that transformational leadership behaviours correlated more strongly and consistently with leadership effectiveness than transactional leadership behaviours. Hughes, Ginnett and Curphy (1999, p. 321) posited that, ‘transformational leadership is a significantly better predictor of leadership effectiveness than transactional leadership is.’
The high correlations between charismatic leadership and other dimensions of transformational leadership indicate that charismatic leadership is a major component of transformational leadership (Bass 1990). In addition, charismatic leadership was found to be the most effective leadership behaviour in Bass’ (1985) study because charismatic leadership accounts for the largest proportion of variance in leadership effectiveness. Conger and Kanungo (1994) also found that charismatic leadership is the most effective dimension of transformational leadership. Hughes, Ginnett and Curphy (1999, p. 321) posited that, ‘of the transformational leadership factors, charismatic leadership is the best predictor of leadership effectiveness across all industries and organisational levels.’

Bass’ (1997) position that charismatic leadership is universal and effective in most situations is supported by the positive significant correlation between charismatic leadership and leadership effectiveness that was replicated in multiple studies (Bass 1997). The finding that charismatic leadership is effective in the Singaporean and mainland Chinese samples is congruent to these prior theories.

5.2.1.3 Charismatic Leadership in Singapore

Section 4.9.1 indicated that charismatic leadership was significantly correlated to leadership effectiveness for the Singaporean sample. Therefore, it can be inferred that charismatic leadership is effective when practiced in Singapore.

Moreover, Section 4.11 highlighted that leaders in the Singapore plant practiced charismatic leadership more frequently than leaders in the China plant. The China plant was set up by managers from the Singapore plant. The Singaporean managers may possess higher levels of managerial competence relative to the newly recruited mainland Chinese managers. Managerial competence may encompass the practice of charismatic leadership. For example, it is conceivable that with more competent managers, there is strong likelihood that their interpersonal skills are more developed as a basic necessity for charismatic leadership. Thus, the Singaporean managers may have a higher propensity, due to their experience, to demonstrate charismatic leadership.
5.2.1.4 Charismatic Leadership in China

Section 4.9.1 indicated that charismatic leadership was significantly correlated to leadership effectiveness for the mainland Chinese sample. However, the correlation is weaker than the correlation between charismatic leadership and leadership effectiveness for the Singaporean sample. Thus, it can be inferred that charismatic leadership is effective when practiced in China but less effective when compared to the Singaporean sample.

5.2.1.5 Trust as a Mediating Variable between Charismatic Leadership and Leadership Effectiveness

Section 4.3 indicated the durations of acquaintanceships between the Singaporean sample and their leaders were longer than between the mainland Chinese sample and theirs. A relationship between leader and subordinate, such that the two parties demonstrate concern about each other’s welfare is necessary building affective trust (Dirks and Ferrin 2002). It follows that the levels of affective trust may be higher in established relationships due to longer acquaintanceships than in relationships of shorter duration owing to the familiarity of the parties (Kurt and Donald 2002). Therefore, trust between the Singaporean sample and their leaders may be at a higher level than trust between the mainland Chinese sample and theirs.

Trust between leader and subordinate is a mediating variable between charismatic leadership and leadership effectiveness (Casimir et al. 2006). Thus, the Singaporean sample may perceive charismatic leadership behaviour of their leaders as more effective than the mainland Chinese sample perceived that of theirs. This result is consistent with Krishnan’s (2005) finding that the positive effect of charismatic leadership on leadership effectiveness is enhanced by the durations of acquaintanceship between leader and follower from data collected from a convenience sample of 174 teachers of a high school in western India.

5.2.2 Conclusions to Hypothesis Two

This subsection concludes H2 and relates the conclusion to prior theories.
5.2.2.1 Transactional Leadership and Leadership Effectiveness

H2 states that transactional leadership will be positively correlated with leadership effectiveness. The finding articulated in Section 4.9.2 indicated that overall, transactional leadership is negatively correlated with leadership effectiveness. Hence, the finding does not support H2. Contrary to Bass’ (1985) finding on the significant correlation between contingent reward, a dimension of transactional leadership, and leadership effectiveness, this study found transactional leadership to be significantly negatively correlated to leadership effectiveness. This subsection discusses the possible reasons for the finding.

Yukl (2002) enumerated the conditions for managers to practice effective transactional leadership. Managers need substantial authority and discretion to administer tangible rewards to their subordinates. Their subordinates have to be dependent on them for access to the rewards that are valued. Performance outcomes are determined primarily by the subordinates’ effort and skills. However, this assumes that subordinates’ performance can be measured accurately.

The data of this study were collected from employees in one manufacturing company whilst Bass’ (1985) data were collected from a military setting. In the sampled organisation, the managers have no authority to administer monetary rewards such as pay increment to the employees without the general manager’s approval. Hence, the managers do not have the required authority and discretion to administer tangible rewards to their subordinates. Yukl (2002), Bass (1990) and Tsui (1982) maintained that these managers who fail to deliver the rewards are not perceived as effective transactional leaders by their subordinates. On the contrary, there may be clearer line of authority in the military setting (Wong, Bliese and McGurk 2003) where Bass’ (1985) data were collected such that leaders were given authority to administer rewards and punishments to subordinates with less interference from leaders’ superiors.

In the private commercial sector, performance outcomes may be affected more by extraneous factors beyond control of subordinates than in a military setting. For example, sales generated by each salesperson may be affected by economic forces, irrespective of his or her effort. The presence of extraneous factors also compromises the accuracy of measurement of subordinates’ performance. For example, the effect of
the economic forces may offset the effect of the salesperson’s effort and compromises the accuracy of the measurement of his or her performance outcomes. Military exercises may be carried out in relatively more controlled environments such that performance outcomes of each officer may be less affected by extraneous factors and can be measured more accurately (Wong, Bliese and McGurk 2003). It can be inferred that the military sample in Bass’ (1985) study may have met the conditions enumerated by Yukl (2002) whilst the sampled organisation in the private commercial sector may have not.

Implicit leadership theory suggests that people have beliefs and assumptions about the characteristics of effective leaders (Javidan and Carl 2005). They use these beliefs and assumptions to differentiate leaders and non-leaders and to evaluate their leaders (Javidan and Carl 2005). The closer the match between the leader’s behaviours and one’s implicit leadership theory, the higher is one’s evaluation of leadership effectiveness (Javidan and Carl 2005).

The management philosophy of the sampled organisation has included emphasis on teamwork, which management emphasises to employees during meetings, training seminars and other company functions.

The employees also attend annual team-building sessions with management, which aims to inculcate the attitude of teamwork among employees. The implicit leadership theory evolves as a result of the individual’s experiences and other environmental influences (Javidan and Carl 2005). These activities specific to the sampled organisation may form part of the employees’ experiences, and influence the implicit leadership theory of employees on the belief that effective leaders are those who have the attitude of teamwork and focus more on team achievement and less on individual self-interest.

Transactional leadership is based on the exchange of rewards or avoidance of punishments for the compliance of individual subordinates (Bass 1985; Burns 1978). This principle is incongruent with the implicit leadership theory of employees that focuses on teamwork and may have created a negative perception of transactional leadership by the employees of the sampled organisation.
5.2.2.2 Transactional Leadership in Singapore

Section 4.11 highlighted that transactional leadership was practiced more in the Singapore plant relative to the China plant. As discussed in Section 5.2.1.3, the Singaporean managers may possess higher levels of managerial competence relative to the mainland Chinese managers. Managerial competence may encompass the practice of contingent rewarding dimension of transactional leadership. For example, it is conceivable that with more competent managers, there is stronger likelihood that they are effective organisers of work, as a basic characteristic of transactional leadership. They are more likely to clarify with subordinates what they can expect if their performance meets designated standards and ensure that payoffs for good subordinate performance are made as quickly as possible. The Singaporean managers may have a higher propensity, due to their experience, to demonstrate transactional leadership.

Bass (1985) opined that leaders practice charismatic and transactional leadership in different situations and in varying degrees as organisations need both types of leadership. The finding that leaders in the Singapore plant practiced charismatic and transactional leadership more frequently than leaders in the China plant is congruent to Bass’ (1985) opinion that both types of leadership are distinct but not mutually exclusive. For example, it is conceivable that leaders can give a sense of overall purpose to subordinates (charismatic leadership) and simultaneously, reward their subordinates for their effort (transactional leadership). The leader, whilst being a symbol of success and accomplishment to the subordinates (charismatic leadership), clarifies with the subordinates what to expect if performance meets designated standards (transactional leadership).

Section 4.9.2 showed that transactional leadership was significantly negatively correlated to leadership effectiveness for the Singaporean sample. This may be because the Singapore plant does not meet Yukl’s (2002) conditions for transactional leadership effectiveness and non-conformance of transactional leadership to the implicit leadership theory of the employees in the Singapore plant.

5.2.2.3 Transactional Leadership in China

Section 4.11 highlighted that transactional leadership was practiced in the China plant. Section 4.9.2 showed that transactional leadership was significantly negatively
correlated to leadership effectiveness for the mainland Chinese sample. This may be because the China plant does not meet Yukl’s (2002) conditions for transactional leadership effectiveness and non-conformance of transactional leadership to the implicit leadership theory of the employees in the China plant. Further, Section 4.9.2 showed that transactional leadership was more significantly negatively correlated to leadership effectiveness for the mainland Chinese sample than for the Singaporean sample.

In the sampled organisation, managers can only reward subordinates from profits generated by the plant. The China plant has been less profitable than the Singapore plant. Thus, managers in the China plant may have fewer tangible rewards to be administered to their subordinates than managers in the Singapore plant. For example, even if the mainland Chinese subordinates perform to the designated standards, their managers may not be able to give them their expected pay rise due to lack of profit generated by the China plant. This may lead to managers in the China plant being perceived by their subordinates as possessing less authority and discretion to administer tangible rewards relative to managers in the Singapore plant. To practice effective transactional leadership, leaders need substantial authority and discretion to administer tangible rewards to their subordinates (Yukl 2002). The perception that may be held by mainland Chinese subordinates of their leaders may account for the more significant negative correlation between transactional leadership and leadership effectiveness for the mainland Chinese sample as compared to the Singaporean sample.

5.2.3 Conclusion to Hypothesis Three
This subsection concludes H3 and relates the finding to prior theories.

5.2.3.1 Job-related Knowledge and Charismatic Leadership
H3 states that the effects of charismatic leadership on leadership effectiveness will be moderated by the level of subordinates’ job-related knowledge. Specifically, the effect of charismatic leadership on leadership effectiveness will be stronger with increasing levels of subordinates’ job-related knowledge. The finding presented in Section 4.10.1 does not support H3. This study found that subordinates’ job-related knowledge does not significantly moderate the relationship between charismatic leadership and leadership effectiveness, and charismatic leadership is effective on subordinates who
possess high and low levels of job-related knowledge. The following subsection 
discusses the possible reasons for the finding.

5.2.3.2 Prior Theories on Job-related Knowledge and Charismatic Leadership
Section 2.5.5.2 put forth arguments from Hersey and Blanchard (1977) and Fiedler (1967a). In Fiedler’s (1967a) contingency theory, leaders generally critical of past or present co-workers whom they could work well the least with will obtain low LPC scores, whereas leaders generally lenient will obtain high LPC scores. Rice (1978), Graham (1968) and Yukl (1968) found that low LPC leaders are task-oriented and high LPC leaders are relations-oriented. Fiedler (1967a), through his contingency theories, suggested that high LPC leaders are more effective when situations are more favourable to the leaders. Fiedler’s (1967a) contingency theory suggests that charismatic leadership, which is relations-oriented, is more effective when situations are more favourable to the leader.

According to Fiedler (1967a), situations are more favourable to the leader when the task is more structured because it is easier for the leader to direct subordinates and to monitor performance. Miller, Butler and Cosentino (2004) suggested that experience structures a task for an individual by equipping the individual with higher levels of job-related knowledge, implying that subordinates who possess higher levels of job-related knowledge may require less direction and monitoring from the leader to structure the task. Therefore, it is easier for the leader to direct subordinates who possess higher levels of job-related knowledge and to monitor performance. It follows that similar to situations when the task is more structured, situations are more favourable to leaders when subordinates possess higher levels of job-related knowledge. Therefore, Fiedler’s suggestion implies that charismatic leadership is more effective on subordinates who possess higher levels of job-related knowledge.

Hersey and Blanchard (1977) postulated that as subordinates accumulate more job-related knowledge, relations-oriented leadership becomes more effective in engaging subordinates’ application of knowledge. Leaders should allow subordinates who possess high levels of job-related knowledge in joint decision making or delegate the decision to them. On the assumption that charismatic leadership is relations-oriented, their
postulation implies that charismatic leadership is more effective on subordinates who possess higher levels of job-related knowledge.

Contrary to Hersey and Blanchard’s (1977) and Fiedler’s (1967a) suggestions, the finding indicates that subordinates’ job-related knowledge is not a situational moderating variable on the relationship between charismatic leadership and leadership effectiveness. The finding contradicts those of Miller, Butler and Cosentino (2004), Vecchio, (1987), Peters, Hartke and Pohlmann (1985), Haley (1983), Hersey, Angelini and Carakushansky (1982), Hambleton and Gumpert (1982), and Strube and Garcia (1981). The finding, however, supports Bass’ (1997) position on the universality and effectiveness of charismatic leadership as discussed in Section 2.3.3 on subordinates who possess different levels of job-related knowledge.

As discussed in Section 5.2.2.1, the management philosophy of the sampled organisation has included emphasis on teamwork, which the management emphasises to employees during meetings, training seminars and other company functions, irrespective of the level of employees’ job-related knowledge. Thus, the values of employees who possess high levels of job-related knowledge are similar to those of the employees who possess low levels of job-related knowledge. It follows that the implicit leadership theory of employees who possess high levels of job-related knowledge are similar to those of employees who possess low levels of job-related knowledge because all employees are influenced by management on the belief that effective leaders are those who have the attitude of teamwork and focus more on team achievement and less on individual self-interest (Javidan and Carl 2005). A charismatic leader leads the subordinate to transcend the subordinate’s own self-interests for the good of the team (Bass 1985). Therefore, most, if not all, employees perceive charismatic leadership as effective. Hence, this study found that subordinates’ job-related knowledge has no significant moderating effect on the relationship between charismatic leadership and leadership effectiveness.

5.2.3.3 Job-related Knowledge and Charismatic Leadership in Singapore and China

Section 5.2.1.3 and 5.2.1.4 concluded that charismatic leadership was practiced and was effective in the Singapore and China plants. Section 4.10.1 indicated that subordinates’ job-related knowledge did not significantly moderate the relationship between
charismatic leadership and leadership effectiveness in the Singapore and China plants. Hence, it can be inferred that charismatic leadership is effective on subordinates who possess high and low levels of job-related knowledge in Singapore and China.

The Singapore and China plants were set up by Singaporean managers, who may have emphasised teamwork to the employees in both plants, irrespective of the levels of employees’ job-related knowledge. Thus, the experiences of the Singaporean and mainland Chinese employees who possess high levels of job-related knowledge are similar to those who possess low levels of job-related knowledge in both countries. It follows that the implicit leadership theories of employees who possess high and low levels of job-related knowledge in both plants are influenced by management’s inculcation of the attitude of teamwork. Therefore, employees, in both plants perceive charismatic leadership as effective. Hence, this study found that subordinates’ job-related knowledge has no significant moderating effect on the relationship between charismatic leadership and leadership effectiveness in the Singapore and China plants.

5.2.4 Conclusion to Hypothesis Four
This subsection concludes H4 and relates the finding to prior theories.

5.2.4.1 Job-related Knowledge and Transactional Leadership
H4 stated that the effects of transactional leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effects of transactional leadership on leadership effectiveness will be stronger with decreasing levels of subordinates’ job-related knowledge. Overall, transactional leadership was significantly negatively correlated to leadership effectiveness in the sampled organisation. The finding presented in Section 4.10.2, which articulated that transactional leadership was less significantly negatively correlated to leadership effectiveness for subordinates who possess lower levels of job-related knowledge, supports H4.

The finding that transactional leadership effectiveness is moderated by the levels of subordinates’ job-related knowledge is in contrast to the finding presented in Section 5.2.3, which found that the relationship between charismatic leadership and leadership effectiveness was not moderated by the levels of subordinates’ job-related knowledge. This indicates that Bass’ (1997) proposition on the universality and effectiveness of
charismatic leadership does not apply to transactional leadership. The following subsection discusses the finding that supports Fiedler’s (1967a) and Hersey and Blanchard’s (1977) contingency theories in the context of transactional leadership.

5.2.4.2 Prior Theories on Job-related Knowledge and Transactional Leadership

Fiedler (1967a), through his contingency theories, suggested that low LPC leaders are more effective when situations are less favourable to the leader. Rice (1978), Graham (1968) and Yukl (1968) found that low LPC leaders are task-oriented and high LPC leaders are relations-oriented. Fiedler’s (1967a) contingency theories suggest that transactional leadership, which is task-oriented, is more effective when situations are less favourable to the leader.

Consistent with the arguments in Section 5.2.3.2, the situation is less favourable to the leader when the task is less structured as it is more difficult for the leader to direct subordinates and to monitor performance (Fiedler 1967a). Miller, Butler and Cosentino (2004) suggested that experience structures a task for an individual as one gains a higher level of job-related knowledge through experience. It follows that subordinates who possess lower levels of job-related knowledge may require more direction and monitoring from the leader to structure the task. Hence, the leader may encounter more difficulties in directing subordinates who possess lower levels of job-related knowledge and monitoring performance. Therefore, similar to the situation when the task is less structured, the situation is less favourable to the leader when subordinates possess lower levels of job-related knowledge. Thus, Fiedler’s suggestion implies that transactional leadership is more effective on subordinates who possess lower levels of job-related knowledge.

According to Hersey and Blanchard (1977), leaders should closely supervise and provide specific instructions to subordinates who have low level task relevant maturity. Hence, task-oriented leadership is more effective on subordinates who have low level task relevant maturity. Task relevant maturity includes subordinates’ ability, capacity, training and experience. This study assumed that job-related knowledge is a source of subordinates’ ability to do the task; that is, subordinates who possess lower levels of job-related knowledge have lower levels of task relevant maturity. Therefore, Hersey
and Blanchard’s suggestion implies that transactional leadership, which is task-oriented, is more effective on subordinates who possess lower levels of job-related knowledge.

Overall, as transactional leadership was significantly negatively correlated to leadership effectiveness in the sampled organisation, the finding articulated in Section 4.10.2 that transactional leadership is less significantly negatively correlated to leadership effectiveness on subordinates who possess lower levels of job-related knowledge is consistent with Fiedler’s (1967a) and Hersey and Blanchard’s (1977) suggestions presented in Section 2.2.3. The finding is also consistent with those of Miller, Butler and Cosentino (2004), Vecchio, (1987), Peters, Hartke and Pohlmann (1985), Haley (1983), Hersey, Angelini and Carakushansky, (1982), Hambleton and Gumpert (1982), and Strube and Garcia (1981), which are consistent with Fiedler’s (1967a) postulation.

5.2.4.3 Job-related Knowledge and Transactional Leadership in Singapore and China

Section 4.10.2.1 observed that in the Singaporean sample transactional leadership was significantly correlated to leadership effectiveness for subordinates who possess low levels of job-related knowledge but was significantly negatively correlated to leadership effectiveness for subordinates who possess high levels of job-related knowledge. Therefore, Hersey and Blanchard’s (1977) and Fielder’s (1967a) contingency theories on transactional leadership discussed in Section 5.3.2 are supported in Singapore in relation to the situational moderating variable of subordinates’ job-related knowledge.

The result presented in Section 4.10.2.1 indicates that in the mainland Chinese sample, transactional leadership was significantly negatively correlated to leadership effectiveness for subordinates who possess high and low levels of job-related knowledge. Hence, Hersey and Blanchard’s (1977) and Fielder’s (1967a) contingency theories on transactional leadership are not supported in China in relation to the situational moderating variable of subordinates’ job-related knowledge.

As discussed in Section 5.2.2.3, managers in the China plant may be perceived by their subordinates as possessing less authority and discretion to administer tangible rewards relative to managers in the Singapore plant. The managers’ authority and discretion to administer tangible rewards are the same to subordinates who possess low and high levels of job-related knowledge. As discussed in Section 5.2.2.1, to practice effective
transactional leadership, managers need substantial authority and discretion to administer tangible rewards to their subordinates (Yukl 2002). It follows that the mainland Chinese subordinates who possess low levels of job-related knowledge may share the same perception on the negative effect of transactional leadership with those who possess high levels of job-related knowledge. This is contrary to the suggestion of Hersey and Blanchard (1977) and Fiedler (1967a) as the mainland Chinese subordinates who possess low levels of job-related knowledge would perceive transactional leadership as having less of a negative effect than those who possess high levels of job-related knowledge. The finding that there is no significant moderating effect on subordinates’ job-related knowledge among the mainland Chinese respondents may arise from this shared perception.

5.2.5 Summary

The finding that charismatic leadership is an effective form of leadership behaviour and that it is more effective than transactional leadership extends Bass’ (1985) finding on the relationship between charismatic leadership and leadership effectiveness to the context of Singapore and China. The finding also extends Leong’s (1997) finding on the relationship between charismatic leadership and leadership effectiveness to that of an organisation in the private commercial sector. In addition, contrary to the findings of some prior studies (Bass 1985; Lowe, Kroeck and Sivasubramaniam 1996) on the significant correlation between transactional leadership and leadership effectiveness, overall, this study found transactional leadership to be significantly negatively correlated to leadership effectiveness in the Singapore and China plants. The contradictory finding may arise from the inability of the sampled organisation to meet Yukl’s (2002) conditions for transactional leadership effectiveness. The contradictory finding may have emerged due to the non-conformance of transactional leadership to the implicit leadership theory of employees, which is influenced by management’s inculcation of attitude of teamwork among employees.

Prior studies indicated that trust is a mediating variable on the relationship between charismatic leadership and leadership effectiveness. The Singaporean respondents may perceive charismatic leadership as more effective than the mainland Chinese respondents due to the former’s higher level of trust in their leaders, which may arise from longer acquaintanceships with the leaders relative to the mainland Chinese
respondents. As the sampled organisation has a policy that managers can only reward subordinates from profits generated by the plant and the China plant was less profitable than the Singapore plant, managers in the China plant may be perceived as having less authority and discretion to administer tangible rewards relative to the managers in the Singapore plant. This may lead to the finding that transactional leadership was more significantly negatively correlated to leadership effectiveness in the mainland Chinese sample than in the Singaporean sample.

This study found that charismatic leadership is effective on subordinates who possess high and low levels of job-related knowledge in the Singaporean and mainland Chinese samples. The finding indicates that charismatic leadership is universal and effective on subordinates who possess high and low levels of job-related knowledge. The finding does not support contingency theories’ suggestion that charismatic leadership, which is relations-oriented, is more effective on subordinates who possess higher levels of job-related knowledge. This incongruity may be due to the influence of the management philosophy of the sampled organisation on the implicit leadership theories of all employees in both plants.

This study found that subordinates’ job-related knowledge significantly moderates the relationship between transactional leadership and leadership effectiveness. The finding supports the contingency leadership theories of Fiedler (1967a) and Hersey and Blanchard (1977) in relation to the situational moderating variable of subordinates’ job-related knowledge on the relationship between transactional leadership and leadership effectiveness. However, the moderating effect was not observed in the mainland Chinese sample. The mainland Chinese subordinates who possess low levels of job-related knowledge may share the perception that their managers’ lack authority and discretion to administer tangible rewards with those who possess high levels of job-related knowledge. The finding that subordinates’ job-related knowledge has no significant moderating effect in the mainland Chinese sample may arise from this shared perception.

5.3 ADDRESSING THE RESEARCH PROBLEM AND OBJECTIVE
From the literature review, this study identified that the leadership behaviour widely argued to be the most universally applicable and effective is charismatic leadership and
the form of leadership behaviour that is effective in most situations is also charismatic leadership. The literature review also identified the key situational moderating variable of subordinates that may facilitate or impede leadership effectiveness is subordinates’ job-related knowledge. The research problem is:

*How does the situational moderating variable of subordinates’ job-related knowledge affect the relationship between charismatic leadership and leadership effectiveness and the relationship between transactional leadership and leadership effectiveness?*

This study collected the opinions of employees on the leadership behaviours of their superiors in the sampled organisation. The results of statistical analysis performed on the data collected discussed in this chapter addressed the research problem. The results indicate that charismatic leadership is an effective form of leadership behaviour whilst transactional leadership is negatively correlated to leadership effectiveness. Further, subordinates’ job-related knowledge does not significantly moderate the relationship between charismatic leadership and leadership effectiveness whilst transactional leadership is less negatively correlated to leadership effectiveness on subordinates who possess lower levels of job-related knowledge.

### 5.4 RESEARCH IMPLICATIONS

This section discusses the implications of the findings on theory, policy and practice and the sampled organisation.

#### 5.4.1 Implications for Theory

The findings support prevalent contingency leadership theories. Further, the findings do not falsify Bass’ (1985) proposition on universality of charismatic leadership. In addition, the findings emphasise the importance of charismatic leadership in the knowledge economy.

#### 5.4.1.1 Contingency Leadership Theories

The finding indicates that subordinates’ job-related knowledge has a significant moderating effect on the relationship between transactional leadership and leadership effectiveness. Transactional leadership is less negatively correlated to leadership effectiveness on subordinates who possess lower levels of job-related knowledge and is
an effective form of leadership behaviour on subordinates who possess lower levels of job-related knowledge in the Singapore plant. Subordinates’ job-related knowledge affects situational favourability in the same manner as task structure. Leaders face more difficulties in directing subordinates and monitoring performance when the task is less structured and when subordinates possess lower levels of job-related knowledge. Further, as transactional leadership is task-oriented, it can be inferred that task-oriented leadership is more effective when the work is less structured. This argument is consistent with Fiedler’s (1967a) contingency leadership theory.

Subordinates’ job-related knowledge is a source of subordinates’ ability, which is an aspect of subordinates’ task relevant maturity in the context of Hersey and Blanchard’s (1977) contingency leadership theory. Subordinates who possess lower levels of job-related knowledge have lower levels of task relevant maturity. As transactional leadership is less negatively correlated to leadership effectiveness on subordinates who possess lower levels of job-related knowledge, it can be inferred that task-oriented leadership is more effective on subordinates with lower levels of task relevant maturity. This inference is congruent with Hersey and Blanchard’s (1977) contingency leadership theory.

Contingency leadership theories suggest that leaders be more aware and recognise their leadership behaviours and situations (Fiedler 1972, 1976), determine the situations when their leadership behaviours are more likely to be effective or ineffective and modify their leadership behaviours (Fiedler 1972, 1976; De Vries, Roeb and Taillieu 2002; Howell et al. 1990) or the situations (Fiedler 1972, 1976). Fiedler (1972) suggested that leaders may modify situations by asserting or deemphasising their position power, demanding more authority or downplaying authority they already have, choosing assistants whose abilities complement theirs and requesting for certain types of assignments whilst avoiding others. Further, Fiedler (1976) proposed that leaders may modify situations by changing their accessibility to subordinates, the degree to which information is shared with subordinates and the extent to which contacts with subordinates are formal.

In addition, Hersey and Blanchard (1977) suggested that leaders should be more task-oriented when subordinates are less able and have lower levels of task relevant maturity.
They suggested that task-oriented leaders be assigned to or chosen to supervise subordinates who are less able and have lower levels of task relevant maturity.

In congruence with the suggestion of contingency leadership theories, Mumford et al. (2000b) suggested that to be effective, leaders require social skills, which include being adaptable to others to build consensus towards a goal or vision. Adaptability is likely to include being able to recognise situations and leadership behaviours that are effective in situations and being flexible to practice effective leadership behaviours in accordance to the demand of situations (Fiedler 1976).

5.4.1.2 Universality of Charismatic Leadership

Most of Bass’ studies were conducted in the Western context (Leong 1997). This study found charismatic leadership to be effective in the Singapore and China plants. Thus, Bass’ (1985) proposition of universality of charismatic leadership is not falsified in the context of the private commercial sector in Singapore and China. Leong (1997) and Koh, Steers and Terborg (1995) replicated Bass’ study in Singapore using high school teachers as their samples and did not falsify Bass’ proposition. The finding extends Leong’s (1997) and Koh, Steers and Terborg’s (1995) findings on charismatic leadership in Singapore from educational settings to that of an organisation in the private commercial sector.

Bass (1997) postulated that situational moderating variables may enhance the strength of correlation between charismatic leadership and leadership effectiveness. However, this study found that the moderating effect of subordinates’ job-related knowledge on the relationship between charismatic leadership and leadership effectiveness is insignificant. The finding indicates that charismatic leadership may be universal and effective on subordinates who possess high and low levels of job-related knowledge.

5.4.1.3 Importance of Charismatic Leadership in the Knowledge Economy

Uhl-Bien, Marion and McKelvey (2007) held that leadership is a core factor in whether organisations meet the challenges of the knowledge economy, characterised by deregulation, globalisation, restructuring and escalating competitive pressures (Kelloway and Barling 2000). Further, developing countries with emerging economies, such as China, require accelerated leadership and managerial development to participate in the
global economy. The need for effective leadership may be particularly important in these countries, where greater levels of organisational change facilitated by effective leaders would be necessary in facilitating the adoption of new technologies and transforming traditional ways of operating (Conger and Kanungo 1987). The finding of this study that charismatic leadership is effective on subordinates in the Singaporean and mainland Chinese samples suggests that charismatic leadership is a leadership behaviour helpful to organisations towards meeting challenges of the knowledge economy in developing countries.

Leaders face constant challenges such as the need to adjust and adapt to new competitive landscapes based on a knowledge economy (Schilling and Steensma 2001; Tichy and Devanna 1986; Uhl-Bien, Marion and McKelvey 2007). Exploration, new discoveries and adjustments (Uhl-Bien, Marion and McKelvey 2007) involving challenging and changing the status quo in organisations are required in overcoming challenges. Charismatic leadership, through mobilisation of the commitment of subordinates to realise the vision created by the leader, may facilitate overcoming adaptive challenges of the knowledge economy.

Mumford et al. (2000b) suggested that leaders in the knowledge economy need the ability to generate and tailor solutions that fit organisations and implement these solutions. The ability of a charismatic leader to create and articulate a vision (Bass 1985; Burns 1978; Conger and Kanungo 1987; Tichy and Devanna 1986) may enhance the ability to generate and tailor solutions to organisations’ idiosyncrasies. The charismatic leader’s ability to create and articulate a vision (Conger and Kanungo 1987; Tichy and Devanna 1986), manage impressions designed to emphasise the leader’s competence (House 1977) and mobilise subordinates’ commitment to realise the vision (Tichy and Devanna 1986) may facilitate the implementation of tailored solutions within the organisation. Thus, it can be inferred that charismatic leaders possess the ability suggested by Mumford et al. (2000b). It follows that charismatic leaders are effective in the knowledge economy by possessing the ability that facilitates the generation and implementation of solutions to the problems confronting various constituencies in the organisations.
5.4.2 Implications for Policy and Practice

The findings inform the practitioner that charismatic leadership is the most effective form of leadership behaviour and highlight the importance of charismatic leadership development. Further, the findings indicate the influence of leaders’ lack of authority and discretion in administering tangible rewards on the relationship between transactional leadership and leadership effectiveness.

5.4.2.1 Charismatic Leadership is the Most Effective Leadership Behaviour

Charismatic leadership is found to be an effective form of leadership behaviour whilst transactional leadership is found to be negatively correlated to leadership effectiveness. This suggests that business leaders in Singapore and China should focus on utilising charismatic leadership instead of transactional leadership to influence their subordinates. Further, this conclusion suggests that for higher levels of leadership effectiveness, members of organisations who practice charismatic leadership be appointed or promoted to leadership positions in Singapore and China.

5.4.2.2 Importance of Charismatic Leadership Development

This study found that charismatic leadership is the most effective form of leadership behaviour in Singapore and China and on subordinates who possess high and low levels of job-related knowledge. This finding suggests that the organisation should establish leadership programmes that focus on the development of charismatic leadership. Further, Lord and Hall (2005) held that charismatic leadership has an emotional aspect. For example, during crises, charismatic leaders regulate their own emotions and communicate appropriate emotions to others. They maintained that it is difficult but not impossible to develop insight into one’s own emotions and skill at regulating and communicating emotions to others. Kelloway and Barling (2000) suggested that charismatic leadership can be developed through workshops and feedback sessions that emphasise the presentation of charismatic behaviours, demonstration of charismatic behaviours, opportunities to practice charismatic behaviours and feedback on performance.

Mumford et al. (2000b) suggested that leaders should develop three key types of skills: complex problem-solving skills, solution construction skills and social skills. Among the most important aspects of charismatic leadership is the construction and
communication of a motivating vision (Bass 1985; House 1977; House, Spangler and Woycke 1991). The leadership skills suggested by Mumford et al. (2000b) can be viewed as preconditions for the formulation of viable visions. For example, complex problem-solving and solution construction skills may contribute to the creation of a vision that would address an organisational problem (Mumford et al. 2000b). Further, a leader’s practice of social skills suggested by Mumford et al. (2000b) is likely to include charismatic leadership behaviours of being sensitive to followers’ needs (Conger and Kanungo 1987), communicating high expectations and confidence in followers (House 1977), engaging in behaviour designed to arouse appropriate followers’ motives (House 1977) and reframing issues to show the way issues can be linked to leader’s and followers’ value systems (Burns 1978). These behaviours are likely to lead to mobilisation of followers’ commitment (Tichy and Devanna 1986). Charismatic leadership can be developed by training the leader on the three key types of skills suggested by Mumford et al. (2000b).

Consistent with Mumford et al.’s (2000a) suggestion on the envisioning aspect of charismatic leadership, Hughes, Ginnett and Curphy (1999) specifically highlighted exercises to engage managers in envisioning their organisation’s future. In such exercises, managers are asked to talk about how they expect to spend their day at some future date or what they expect their organisation to look like at some future date. They may be asked to write a business article about their organisation’s future. From these visions, they can draw up mission statements and specifications for the organisation to achieve (Hughes, Ginnett and Curphy 1999).

5.4.2.3 Influence of Leader’s Lack of Authority and Discretion in Administering Tangible Rewards on the Relationship between Transactional Leadership and Leadership Effectiveness

The leader’s lack of authority and discretion in administering tangible rewards to subordinates may have affected the relationship between transactional leadership and leadership effectiveness such that transactional leadership was found to be negatively correlated to leadership effectiveness in the sampled organisation and more negatively correlated to leadership effectiveness in China relative to Singapore. It can be inferred that leaders and practitioners should recognise whether they possess the authority and discretion in administering tangible rewards to subordinates. If they do not possess the
authority and discretion, they should practice other forms of leadership behaviours such as charismatic leadership.

Leaders’ superiors should assign transactional leaders or select them for positions where they possess the authority and discretion, and give these leaders the authority and discretion. Conversely, specifically in the Singapore plant and on subordinates who possess low levels of job-related knowledge, transactional leadership may be an effective form of leadership behaviour for leaders who possess the authority and discretion in administering tangible rewards to subordinates. Thus, leaders who recognise the situation when they have the authority and discretion may practice transactional leadership on subordinates who possess low levels of job-related knowledge in the Singapore plant.

5.4.3 Implications to the Sampled Organisation

The implications to policy and practice also apply to the sampled organisation. This section discusses the implications specifically on the sampled organisation. The results of this study inform the sampled organisation on the strength of correlation between transactional leadership and leadership effectiveness being contingent on the level of subordinates’ job-related knowledge. Further, the results emphasise the importance of transactional leadership development that focuses on the recognition of the level of subordinates’ job-related knowledge and leadership behaviour. In addition, the results highlight the importance of charismatic leadership in Singapore and the need for leadership substitutes in China.

5.4.3.1 Relationship between Transactional Leadership and Leadership Effectiveness Contingent on Subordinates’ Job-related Knowledge

This study found that transactional leadership is frequently practiced by leaders in Singapore compared to their counterparts in China. As transactional leadership is effective on subordinates who possess low levels of job-related knowledge but negatively correlated to leadership effectiveness on subordinates who possess high levels of job-related knowledge in Singapore, leaders in Singapore should practice transactional leadership only on subordinates who possess low levels of job-related knowledge but not on those who possess high levels of job-related knowledge.
This can be achieved by the leader modifying one’s leadership behaviour, or practitioner selecting or appointing the leader or subordinate to a position such that the transactional leader only supervises subordinates who possess low levels of job-related knowledge. For example, a subordinate who just graduated and assumes a new job in the organisation is likely to possess a low level of job-related knowledge.

The result of this study suggests that transactional leadership involving an exchange process in which subordinates are rewarded for meeting their targets is effective on the subordinate in Singapore. Therefore, the leader may utilise transactional leadership to influence this subordinate in Singapore. As the subordinate learns on the job, one accumulates more job-related knowledge and transactional leadership becomes less effective. The leader then needs to practice charismatic leadership or utilise leadership substitutes or both on the subordinate who possess a higher level of job-related knowledge to continue influencing performance. Alternatively, the transactional leader who supervises the subordinate may be appointed to another position where one can continue supervising subordinates who possess low levels of job-related knowledge.

5.4.3.2 Importance of Transactional Leadership Development that Focuses on Recognition of Level of Subordinates’ Job-related Knowledge and Leadership Behaviour

This study found that transactional leadership is effective on subordinates who possess low levels of job-related knowledge in the Singapore plant. Thus, this study suggested that leadership development for Singaporean leaders focus on the ability of leaders to recognise the level of the subordinates’ job-related knowledge and their own leadership behaviours, and the flexibility of leaders to practice transactional leadership only on subordinates who possess low levels of job-related knowledge.

5.4.3.3 Importance of Charismatic Leadership in Singapore

This study found that more charismatic leadership is practiced by leaders in Singapore than by those in China. Charismatic leadership is the most effective form of leadership behaviour and is effective on subordinates who possess high and low levels of job-related knowledge in the Singapore plant. To further facilitate the practice of charismatic leadership, the Singapore plant should focus on identification of charismatic
leaders, selection of charismatic leaders to leadership positions and development of charismatic leadership among leaders.

5.4.3.4 Need for Leadership Substitutes in the China Plant
Charismatic leaders who are capable of communicating a vision and of mobilising subordinates’ commitment to realise the vision (Conger and Kanungo 1987; Tichy and Devanna 1986) would facilitate the achievement of rapid growth and profitability (Landrum, Howell and Paris 2000) of the China plant. However, the lower level of trust between the mainland Chinese employees and their leaders relative to that between the Singaporean employees and their leaders may have rendered charismatic leadership less effective in the China plant.

Further, the lower profitability of the China plant relative to the Singapore plant may have rendered transactional leadership more negatively correlated to leadership effectiveness in China than in Singapore. Therefore, at this stage in time, leaders in the China plant may have to practice less transactional leadership and enhance organisational outcomes through leadership substitutes and enhancements. Podsakoff (1996) suggested organisational formalisation, advisory and staff support and group cohesiveness as potential substitutes and enhancements for leadership.

Organisational formalisation refers to the establishment of formal rules and regulations in the organisation (Podsakoff 1996). Organisational formalisation increases employees’ perceptions of role clarity and decreases role conflict (Podsakoff 1996). Employees’ perception of a vision, improved work attitudes, improved role perception, increased role clarity and decreased role conflict may enhance leadership effectiveness. Leadership effectiveness may be enhanced because it is measured in terms of group performance, satisfaction of employees’ needs, fulfillment of organisational requirements and employees’ satisfaction with the leader. Thus, group cohesiveness and organisational formalisation may be conceived as leadership substitutes for transactional leadership in the China plant.

Effective advisory and staff support generally enhances employees’ satisfaction with work (Podsakoff 1996). Enhanced general work satisfaction, in turn, increases the level of subordinates’ satisfaction with the leader (Conger and Kanungo 2000). Hence,
advisory and staff support may enhance the strength of correlation between charismatic leadership and leadership effectiveness, such that charismatic leadership leads to greater organisational outcomes in the China plant.

Fiedler (1976) indicated that behaviours are more difficult to change than other aspects of situations. As group cohesiveness is a behavioural aspect of an organisation, it can be inferred that group cohesiveness is relatively more difficult to change as compared to structural aspects of an organisation, such as organisational formalisation and effective advisory and staff support. Nevertheless, group cohesiveness can be enhanced by team-building activities (Hughes, Ginnett and Curphy 1999; Yukl 2002). Group cohesiveness may substitute for the absence of vision (e.g. goals and objectives) (Podsakoff 1996). Further, cohesive groups generally improve employees’ work attitudes and role perceptions (Podsakoff 1996).

In addition to the enhancement for charismatic leadership suggested by Podsakoff (1996), Landrum, Howell and Paris (2000) proposed a team-based approach to substitute and enhance for leadership in the China plant. The team-based approach involves using employees from all levels of the organisation, including management, to design and implement the vision and strategic plan. These work teams of individuals may be responsible for the overall strategic direction of the organisation. The work team does not solely rely on the characteristics or behaviours of one individual, thus the organisation avoids the risk associated with the loss of a charismatic leader.

Work teams have been shown to increase employees’ productivity, pro-activeness, customer service, organisational commitment and team commitment (Kirkman and Rosen 1999). These effects of work teams may lead to increased group performance, satisfaction of some subordinates’ job-related needs and fulfillment of some organisational requirements, which constitute as organisational outcomes of leadership. In addition, Kirkman and Rosen (1999) held that employees in work teams experience more job satisfaction, which increases their level of satisfaction with the leader. Landrum, Howell and Paris (2000) suggested that work teams are substitutes and enhancements for charismatic leadership. This study opined that Landrum, Howell and Paris’ (2000) suggestion on the team-based approach be implemented to enhance organisational outcomes of leadership in the China plant.
5.5 LIMITATIONS AND ASSUMPTIONS

The focus on a single organisation and the use of a well-tested questionnaire instrument are the strengths of this study. This section acknowledges the limitations despite these strengths.

The conclusion of this study assumed that the duration of acquaintanceship is associated with the level of trust between subordinates and leaders. Further, this study assumed that trust is a mediating variable between charismatic leadership and leadership effectiveness. Following these assumptions, this study suggested that the different levels of trust in leaders may have led to the differences of perceived charismatic leadership effectiveness between the Singaporean and mainland Chinese samples. The validity of this suggestion would be affected if these assumptions do not hold.

Although there is anecdotal evidence, it remains an assumption that the mainland Chinese managers were perceived as possessing less authority and discretion than the Singaporean managers to administer tangible rewards to their subordinates due to lower profitability of the China plant. Based on this assumption, this study reasons that the finding that transactional leadership is more negatively correlated to leadership effectiveness in the mainland Chinese sample relative to the Singaporean sample is due to the mainland Chinese respondents’ perception that their leaders lack the authority and discretion to administer tangible rewards. The strength of this reasoning may be compromised if these assumptions do not hold.

As the data is collected from one organisation, the differences in leadership effectiveness between the Singapore and China plant may have been caused by specific conditions in the sampled organisation. For example, the higher level of profitability of the Singapore plant may be due to stronger relations with customers as it had been in operation for a longer time relative to the China plant. The higher level of profitability may not be due to more effective leadership practiced in the Singapore plant relative to the China plant. One of the organisational requirements of the sampled organisation is to generate a profit and meeting of organisational requirements is a dimension of leadership effectiveness. Thus, assuming that subordinates are aware of the company’s financial position, they may perceive charismatic leadership to be more effective and
transactional leadership to be less negatively correlated to leadership effectiveness in the Singapore plant relative to the China plant if they attribute the higher profitability of the Singapore plant to the leaders in that plant.

An aspect of transactional leadership involves detailing tasks to be done. This study assumed that leaders have job-related knowledge to provide specific instructions to subordinates that entail methods in undertaking tasks. Further, this study assumed that charismatic leadership is not an aspect of personality or traits, such that it can be developed through training and experience. In addition, the data are collected from one manufacturing organisation with plants in Singapore and China. Although only two plants were sampled, it is an assumption of this study that the results are fairly generalisable to other organisations in Singapore and China. The limitations do not compromise the strengths of this study but merely provide platforms for future research.

5.6 AREAS FOR FURTHER RESEARCH
This section suggests areas for further research based on this study’s implications and limitations.

5.6.1 Duration of Acquaintanceship and Trust
This study assumed that duration of acquaintanceship may have affected trust between leaders and subordinates. There are limited studies that have investigated the moderating role played by the duration of acquaintanceship between leaders and subordinates on the relationship between leadership behaviour and leadership effectiveness (Krishnan 2005). Further research should test if the duration of acquaintanceship is longer, the level of trust between leaders and subordinates is higher.

5.6.2 Specific Level of Trust for Leadership Effectiveness
The lower level of trust between the mainland Chinese employees and their leaders relative to the Singaporean employees and their leaders may have rendered charismatic leadership less effective in the China plant relative to the Singapore plant. Further research may choose to investigate whether there is a specific level of trust between leaders and subordinates that is required for charismatic leadership to be effective.
Affective forms of trust emerge from a relationship with the leader whilst cognitive forms of trust reflect issues such as the reliability, integrity, honesty and fairness of a leader (Dirks and Ferrin 2002). As a social relationship between leader and follower is responsible for the emergence of charismatic leadership (Conger and Kanungo 1987), it may be hypothesised that affective forms of trust may affect the relationship between charismatic leadership and leadership effectiveness more than cognitive forms of trust. Further research may test this hypothesis.

5.6.3 Other Situational Moderating Variables

Bass (1997) postulated that situational moderating variables may enhance the correlation between charismatic leadership and leadership effectiveness. However, this study found that the moderating effect of subordinates’ job-related knowledge on the relationship between charismatic leadership and leadership effectiveness is insignificant. Further research may investigate whether other situational moderating variables influence the relationship between charismatic leadership and leadership effectiveness. For example, whether charismatic leadership is more effective in situations where relationships between leader and subordinate is poor as suggested by Fiedler’s (1967a) contingency leadership theory.

Fiedler’s (1967a) contingency leadership theory suggests that similar to the situation when the task is less structured, the situation is less favourable to leaders when relationships between leaders and subordinates are poor and/or leaders have weak position power. Future research may consider the situational moderating variables of the quality of relationships between leaders and their subordinates, and the strength of position power of leaders. It may be postulated that similar to the situation when the task is more structured, it is easier for leaders to direct their subordinates when relationships between leaders and their subordinates are good and/or leaders possess strong position power. The research objective may involve investigating transactional leadership in situations suggested by Fiedler’s (1967a) contingency leadership theories.

Hersey and Blanchard (1977) postulated that subordinates’ motivation to do the work moderates the relationship between leadership behaviour and leadership effectiveness. Subordinates have higher levels of maturity when they are more able and/or more motivated to do the work, and subordinates’ level of maturity moderates the relationship
between leadership behaviour and leadership effectiveness (Hersey and Blanchard 1977). It may be postulated that similar to the situation when subordinates possess higher levels of job-related knowledge and are more able to do the work, transactional leadership is less effective when subordinates are more motivated to do the work.

5.6.4 Characteristics of the Leader

This study investigated a characteristic of the subordinate, which is one’s level of job-related knowledge. A potential topic for future study may include investigation of leadership effectiveness’ contingency on the characteristics of the leader that may include the leader’s job-related knowledge, leader’s authority and discretion in tangible rewards to subordinates. For example, an aspect of transactional leadership involves detailing tasks to be done and informing subordinates what they have to know to do the job. Thus, it may be postulated that leaders who possess higher levels of job-related knowledge can practice more effective transactional leadership as suggested by Mumford (2000b). Yukl (2002) suggested that transactional leadership is more effective when the leader has authority and discretion to administer tangible rewards to subordinates.

5.6.5 Different Cultures and Industries

This study was conducted on one specific manufacturing organisation with plants located in Singapore and China. Further studies may test whether the results can be generalised to other manufacturing organisations, other organisations in Singapore and China such as those in the other industries or the government sector, or to other countries and cultures. It may be postulated that employees in industries that are more knowledge-intensive such as those involving research and development may possess higher levels of job-related knowledge than employees in the manufacturing industries. Mossholder, Niebuhr and Norris (1990) opined that leadership effectiveness from an industry in which employees possess high levels of job-related knowledge may not be generalisable to other industries. Thus, further research may investigate whether the results of this study are replicable in other industries.

Trust is a mediating variable on the relationship between charismatic leadership and leadership effectiveness (Casimir et al. 2006). The levels of trust between subordinates
and leaders vary in different cultural settings (Casimir et al. 2006). Thus, further research may investigate whether this study is replicable in other cultural settings.

5.6.6 Summary
Potential areas for further research include the investigation of other situational moderating variables - the leader’s characteristics, and forms and levels of trust between leaders and subordinates for leadership effectiveness. In addition, further research may investigate the effect of acquaintanceship on trust between leaders and subordinates, and whether the results of this study can be generalised to other industries, countries and cultures.
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APPENDIX 2.1: TRANSFORMATIONAL LEADERSHIP AND FOLLOWER’S EFFORT

L = Leader
F = Follower

APPENDIX 2.2: TRANSACTIONAL LEADERSHIP AND FOLLOWER’S EFFORT

L: Recognises what F must do to attain designated outcomes

L: Recognises what F needs

L: Clarifies F’s role

L: Clarifies how F’s need fulfillment will be exchanged for enacting role to attain designated outcomes

F: Confidence in meeting role requirements (subjective probability of success)

F: Motivation to attain desired outcomes (expected effort)

F: Value of designated outcomes (need fulfilling value for F)

L = Leader
F = Follower

APPENDIX 3.1: LEADERSHIP LEVEL QUESTIONNAIRE

**LEADERSHIP LEVEL QUESTIONNAIRE**

**Instructions:**
Please rate each statement based on the options provided.

<table>
<thead>
<tr>
<th>Not At All (NAA)</th>
<th>Once in a While (OA)</th>
<th>Sometimes (ST)</th>
<th>Fairly Often (FO)</th>
<th>Frequently, if not Always (F/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 My superior makes me feel good to be around him/her</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>2 My superior makes me feel and act like a leader.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>3 My superior is satisfied when I meet the agreed-upon standards for work.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>4 My superior makes me feel ready to sacrifice my own self-interests for the good of the group.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>5 My superior makes me feel we can reach our goals without him/her if we have to.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>6 I earn credit with my superior by doing my job well.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>7 My superior assures me I can get what I personally want in exchange for my efforts.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>8 My superior makes me go beyond my own</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td></td>
<td>Not At All (NAA)</td>
<td>Once in a While (OA)</td>
<td>Sometimes (ST)</td>
<td>Fairly Often (FO)</td>
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</tr>
<tr>
<td>9</td>
<td>My superior put suggestions by the group into operation.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
<tr>
<td>10</td>
<td>My superior finds out what I want and tries to help me get it.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
<tr>
<td>11</td>
<td>You can count on my superior to express his/her appreciation when you do a good job.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
<tr>
<td>12</td>
<td>My superior commands respect from everyone.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
<tr>
<td>13</td>
<td>I put all my effort into accomplishing each task as a consequence of my superior’s leadership.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
<tr>
<td>14</td>
<td>Because of my superior I am less concerned about my own immediate needs and am concerned about our group reaching its objectives.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
<tr>
<td>15</td>
<td>My superior gives personal attention to members who seem neglected.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
<tr>
<td>16</td>
<td>My superior earns my esteem by helping me to get what I want.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
<tr>
<td>17</td>
<td>My superior is a model for me to follow.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
<tr>
<td>18</td>
<td>In my mind, my superior is a symbol of</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
</tr>
</tbody>
</table>
success and accomplishment.

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</thead>
<tbody>
<tr>
<td>19</td>
<td>My superior has provided me with new ways of looking at things which used to be a puzzle for me.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>20</td>
<td>My superior is a good team player.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>21</td>
<td>My superior talks a lot about special commendations and promotions for good work.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>22</td>
<td>I am ready to trust my superior’s capacity and judgement to overcome any obstacle.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>23</td>
<td>My superior makes me concentrate on my self-interests rather than what is good for the group.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>24</td>
<td>My superior makes me do more than what I expect I could do.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>25</td>
<td>My superior is content to let me continue doing my job in the same way as always.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>26</td>
<td>My superior is an inspiration to us.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>27</td>
<td>My superior makes me proud to be associated with him/her.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>28</td>
<td>My superior lets me know how I am doing.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td></td>
<td>Not At All (NAA)</td>
<td>Once in a While (OA)</td>
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<tr>
<td>29</td>
<td>My superior has a special gift of seeing what it is that really is important for me to consider.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>30</td>
<td>My superior's ideas have forced me to rethink some of my own ideas which I had never questioned before.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>31</td>
<td>My superior makes clear what I can expect if my performance meets designated standards.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>32</td>
<td>My superior enables me to think about old problems in new ways.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>33</td>
<td>My superior is a dominant figure in our group.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>34</td>
<td>My superior makes me feel that as long as I do my job satisfactorily I can expect to move ahead.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>35</td>
<td>My superior makes sure that payoffs for good subordinate performance are made as quickly as possible.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>36</td>
<td>My superior inspires loyalty to him / her.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>38</td>
<td>My superior increases my optimism for the future.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>39</td>
<td>My superior is inner-directed.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>40</td>
<td>My superior inspires loyalty to the organisation.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td></td>
<td>Not At All (NAA)</td>
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</tr>
<tr>
<td>41</td>
<td>I have complete faith in my superior.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>42</td>
<td>My superior feels that effort should match the reward.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>43</td>
<td>My superior treats each subordinate individually.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>44</td>
<td>My superior spends time talking about the purposes of our organisation.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>45</td>
<td>My superior arouses my awareness about what is really important.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>46</td>
<td>My superior accepts me for what I am as long as I do my job.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>47</td>
<td>My superior is a father figure to me.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>48</td>
<td>I decide what I want; my superior shows me how to get it.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>49</td>
<td>My superior sets standards for me which can be easily maintained.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>50</td>
<td>My superior encourages me to express my ideas and opinions.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>51</td>
<td>My superior motivates me to do more than I originally expected I would do.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>52</td>
<td>My superior heightens my motivation to succeed.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
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<td><strong>Sometimes (ST)</strong></td>
<td><strong>Fairly Often (FO)</strong></td>
<td><strong>Frequently, if not Always (F/A)</strong></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Whenever I feel it necessary, I can negotiate with my superior about what I can get for what I accomplish.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>54</td>
<td>My superior asks no more of me than what is absolutely essential to get the work done.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>55</td>
<td>My superior provides means for me to communicate with others.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>56</td>
<td>My superior encourages me to put my free time to good use.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>57</td>
<td>My superior tends to spend his/her time “putting out fires” rather than focusing on long-term considerations.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>58</td>
<td>My superior only tells me what I have to know to do my job.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>59</td>
<td>My superior gives us a vision of what needs to be done and depends on us to fill in the details</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>60</td>
<td>My superior encourages understanding of other people’s points of view.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>61</td>
<td>As long as things are going all right my superior does not try to change anything.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>62</td>
<td>My superior gives me a sense of overall purpose.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>63</td>
<td>My superior tells me what I should do if I want to be rewarded for my efforts.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>64</td>
<td>I cannot succeed in reaching our goals without my superior.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>65</td>
<td>My superior gives me what I want in exchange for showing my support for him/her.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>66</td>
<td>My superior has a sense of mission which he/she transmit to me.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>67</td>
<td>My superior sees to it that my needs are met.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>68</td>
<td>My superior makes everyone around him/her enthusiastic about assignments.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>69</td>
<td>As long as the old ways work, my superior is satisfied with my performance.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>70</td>
<td>I model my own behaviour after my superior.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>71</td>
<td>It is all right if I take initiatives but my superior does not encourage me to do so.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>72</td>
<td>My superior makes sure that there is a close agreement between what I am expected to put into the group effort and what I can get out of it.</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>193</td>
<td>Without my superior’s vision of what lies ahead of us, we would find it difficult, if not impossible, to get very far.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| 73 | Not Effective (NE) | Only Slightly Effective (SE) | Effective (E) | Very Effective (VE) | Extremely Effective (EE) |
| 74 | The overall work effectiveness of my unit/department under my superior. | NE | SE | E | VE | EE |
| 75 | The unit/department’s effectiveness compared to all other units/departments I have known. | NE | SE | E | VE | EE |
| 76 | The effectiveness my superior in meeting job-related needs of the subordinates. | NE | SE | E | VE | EE |
| 77 | The effectiveness of my superior in meeting the requirement of the organisation. | NE | SE | E | VE | EE |
| 78 | The level of my satisfaction with my superior. | Very Dissatisfied (VD) | Somewhat Dissatisfied (SD) | Neither Satisfied or Dissatisfied (NSD) | Fairly Satisfied (FS) | Very Satisfied (VS) |
| 79 | In all, the level of my satisfaction that the methods of leadership used by my superior are or were the right ones for getting my | VD | SD | NSD | FS | VS |</p>
<table>
<thead>
<tr>
<th>Very Dissatisfied (VD)</th>
<th>Somewhat Dissatisfied (SD)</th>
<th>Neither Satisfied or Dissatisfied (NSD)</th>
<th>Fairly Satisfied (FS)</th>
<th>Very Satisfied (VS)</th>
</tr>
</thead>
</table>

group’s job done.

<table>
<thead>
<tr>
<th>Strongly disagree (SD)</th>
<th>Disagree (D)</th>
<th>Neither Agree nor Disagree (NAD)</th>
<th>Agree (A)</th>
<th>Strongly Agree (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 I know what to do in my job.</td>
<td>SD</td>
<td>D</td>
<td>NAD</td>
<td>A</td>
</tr>
<tr>
<td>81 I know how to do my job.</td>
<td>SD</td>
<td>D</td>
<td>NAD</td>
<td>A</td>
</tr>
<tr>
<td>82 I know why my job has to be done.</td>
<td>SD</td>
<td>D</td>
<td>NAD</td>
<td>A</td>
</tr>
<tr>
<td>83 I know the contribution of my job to the organisation.</td>
<td>SD</td>
<td>D</td>
<td>NAD</td>
<td>A</td>
</tr>
</tbody>
</table>

**My Superior’s Demographic information**

<table>
<thead>
<tr>
<th>84 My superior’s gender:</th>
<th>Male / Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 My superior is seconded from or based in Singapore:</td>
<td>Yes / No</td>
</tr>
<tr>
<td>86 My superior’s level in the organisation:</td>
<td>Manager / Executive / Supervisor</td>
</tr>
</tbody>
</table>

**My Demographic Information**
Gender (please circle) Male / Female

Number of years Working with Current Supervisor (circle one only):
1. Less than 1 year
2. Between 1 and 2 years
3. Between 3 and 4 years
4. Between 4 to 5 years
5. More than 5 years

Thank you for your participation and support

Source: The questionnaire is adapted from a standard questionnaire used in prior leadership studies conducted by Bernard M. Bass in 1985 documented in the book Leadership and Performance Beyond Expectation published by The Free Press in New York.
## 领导能力级别调查问卷

提示：
请根据所给选项评价每个问题

<table>
<thead>
<tr>
<th></th>
<th>根本没有(NAA)</th>
<th>偶尔(OA)</th>
<th>有时(ST)</th>
<th>时常(FO)</th>
<th>经常，如果不总是(F/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>与我的上司接触时，他/她让我感觉舒服。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>2</td>
<td>我的上司使我在感觉和行为上都像个领导。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>3</td>
<td>在我完成约定的工作标准时，我的上司很满意。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>4</td>
<td>我的上司使我想为小组利益而牺牲自己的利益。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>5</td>
<td>我的上司使我感到，我们能在没有他/她的情况下（不得已时）仍能实现我们的目标。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>6</td>
<td>我以出色的工作赢得我的上司的信任。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>7</td>
<td>我的上司使我确信，我能够以自己的付出得到想要的回报。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>8</td>
<td>我的上司使能够为了小组的利益而超越我自身的利益。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>9</td>
<td>我的上司采纳小组提出的建议。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>10</td>
<td>我的上司发现我要实现的目标后，努力帮助我实现。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>11</td>
<td>在您工作出色时，您期望我的上司表达他/她的欣赏。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>12</td>
<td>我的上司得到所有人的尊敬。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>13</td>
<td>由于我上司的领导，我竭尽全力完成每项任务。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>根本没有(NAA)</td>
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</tr>
<tr>
<td>14 由于我的上司，我不怎么担心我自己的眼前需要，但担心本小组是否能实现其目标。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>15 我的上司亲自关照被忽视的成员。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>16 我的上司因帮助我实现我的目标而赢得我的尊重。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>17 我的上司是我学习的榜样。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>18 我认为，我的上司是成功和成就的化身。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>19 对于过去常常困扰我的问题，我的上司提供了我考虑问题的新思路。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>20 我的上司是一位优秀的团队合作伙伴。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>21 对于出色的工作，我的上司给予特别的赞扬和鼓励。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>22 我十分相信我的上司克服任何困难的能力和判断力。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>23 我的上司使我关注我的自身利益而不是小组的利益。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>24 我的上司让我去做认为力所不能及的工作。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>25 我的上司满意于让我照常以我的方式继续做我的工作。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>26 我的上司能激发我们的灵感。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>27 我的上司让我感到做他/她的同事很自豪。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>28 我的上司让我明白我该如何工作。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>29 我的上司有特别敏锐的观察力，能观察到我要考虑的真正重要事情。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
</tr>
<tr>
<td>30 我上司的想法促使我对自己以前从未怀疑的某些想法有</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
<td>F/A</td>
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</tr>
<tr>
<td>31</td>
<td>我的上司清楚的表明在业的业绩达到指定标准时我能够得到什么。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>32</td>
<td>我的上司使我能够用新思路思考老问题。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>33</td>
<td>我的上司是我们小组的主导人物。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>34</td>
<td>我的上司使我相，只要我工作令人满意，我就可以取得升迁。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>35</td>
<td>我的上司确信，对下属的良好业绩，应尽快给予奖励。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>36</td>
<td>我的上司激发了我们对他/她的忠诚度。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>38</td>
<td>我的上司增强了我对未来的乐观态度。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>39</td>
<td>我的上司是个有主见的人。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>40</td>
<td>我的上司激发了组织成员对组织的忠诚度。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>41</td>
<td>我完全信任我的上司。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>42</td>
<td>我的上司认为，业绩应与回报相匹配。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>43</td>
<td>我的上司分别对待每一位下属。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>44</td>
<td>我的上司花时间谈论组组织的目标。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>45</td>
<td>我的上司使我意识到，什么事情才是真正重要的。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>46</td>
<td>只要我尽职尽责，我的上司就认可我的存在。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>47</td>
<td>对于我来说，我的上司是父辈式的人物。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>Rating (NAA, OA, ST, FO, F/A)</td>
<td>Statement</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>48</td>
<td>我决定了我想要的目标；我的上司向我展示实现方法。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>49</td>
<td>我的上司为我制订了可轻易维持的标准。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>50</td>
<td>我的上司鼓励我表达我的想法和意见。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>51</td>
<td>我的上司激励我去做我原先认为做不到的事情。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>52</td>
<td>我的上司增强我获得成功的动力。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>53</td>
<td>任何时候，在我认为有必要时，我都能就我的业绩及能得到何种回报的情况下，与我的上司沟通。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>54</td>
<td>除了为完成工作所绝对必需的事情，我的上司对我再无更高要求。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>55</td>
<td>我的上司为我提供了我与其他人交流的方法。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>56</td>
<td>我的上司鼓励我要很好地利用我的业余时间。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>57</td>
<td>我的上司一般只花时间在“头痛医头、脚痛医脚”的方式，而不是着眼于长远考虑。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>58</td>
<td>我的上司只告诉我在我的工作中不得不了解的内容。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>59</td>
<td>我的上司对于需要做什么的问题，只是向我们提供愿景，指望我们补充细节。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>60</td>
<td>我的上司鼓励我们了解其他人的观点。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>61</td>
<td>只要一切事情顺利，我的上司就不去试着改变什么。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>62</td>
<td>我的上司使我懂得组织的整体目的。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>63</td>
<td>我的上司告诉我，如果我希望因业绩而得到奖励，我应该做什么。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>64</td>
<td>没有我的上司，我不可能成功地实现我的目标。</td>
<td>NAA</td>
<td>OA</td>
<td>ST</td>
<td>FO</td>
</tr>
<tr>
<td>放弃(NAA)</td>
<td>偶尔(OA)</td>
<td>有时(ST)</td>
<td>时常(FO)</td>
<td>经常，如果不总是(F/A)</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>65 我的上司给了我对他/她表示支持而希望得到的回报。</td>
<td>NAA OA ST FO F/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66 我的上司有一种使命感，并会将使命感传递给我。</td>
<td>NAA OA ST FO F/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>67 我的上司确保我的需要得到满足。</td>
<td>NAA OA ST FO F/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68 我的上司使他/她周围的人对工作任务充满热情。</td>
<td>NAA OA ST FO F/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69 只要旧方法奏效，我的上司就对我的业绩满意。</td>
<td>NAA OA ST FO F/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 我的行为以我的上司为榜样。</td>
<td>NAA OA ST FO F/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71 如果我在工作中采取主动，本来很好，但我的上司不鼓励我那么做。</td>
<td>NAA OA ST FO F/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72 我的上司确保，期望我对组织所做的贡献与我能得到的回报要高度一致。</td>
<td>NAA OA ST FO F/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>73 没有我的上司对我们未来的高瞻远瞩，我们发现很难（如果不是不可能的话）取得大的成功。</td>
<td>NAA OA ST FO F/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>无效(NE)</th>
<th>收效甚微(SE)</th>
<th>有效(E)</th>
<th>很有效(VE)</th>
<th>非常有效(EE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>74 我所在单位/部门在我的上司领导下的整体工作效力。</td>
<td>NE SE E VE EE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75 我所了解的与所有其它单位/部门相比本单位/部门的效力。</td>
<td>NE SE E VE EE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76 我的上司满足下属工作需求的效力。</td>
<td>NE SE E VE EE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77 我的上司满足本组织需求的效力。</td>
<td>NE SE E VE EE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
201

<table>
<thead>
<tr>
<th>很不满意(VD)</th>
<th>有些不满意(SD)</th>
<th>既不是满意又不是不满意(NSD)</th>
<th>满意(FS)</th>
<th>非常满意(VS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>78</td>
<td>我对我上司的满意度。</td>
<td>VD SD NSD FS VS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>总体而言，我对我上司现在或过去使用的领导方法，是否是完成本组织工作的正确方法的满意度。</td>
<td>VD SD NSD FS VS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>极不同意(SD)</th>
<th>不同意(D)</th>
<th>既不是同意又不是非常不同意(NAD)</th>
<th>同意(A)</th>
<th>非常同意(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>我懂得在我的工作中做什么。</td>
<td>SD D NAD A SA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>我懂得如何做我的工作。</td>
<td>SD D NAD A SA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>我懂得为什么必需做我的工作。</td>
<td>SD D NAD A SA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>我懂得我的工作对本组织的重要性。</td>
<td>SD D NAD A SA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

我上司的个人信息

84  我上司的性别：  男/女
85  我的上司是从新加坡调来还是在新加坡工作：  是/否

86  我的上司在本组织内的职位：  经理/主任/主管

87  我上司所在部门（只勾选一个）
1. 制造/运营
2. 客户服务
3. 质量
4. 加工/工程
5. 项目设计
6. 销售
7. 财务
本人个人信息

88 性别（请勾选）
男/女
89 与现主管一起工作的年限：
1.一年以下；
2.一至二年之间；
3.三至四年之间；
4.四至五年之间；
5.五年以上。

谢谢您的参与和支持！
APPENDIX 3.2: INFORMATION LETTER TO SURVEY PARTICIPANT

The University of Newcastle
University Drive
CALLAGHAN NSW 2308

For further information:
Supervisor: Dr. Mark Loon
Tel: +61423704074
Fax: +61287860213
Email: Mark.Loon@newcastle.edu.au

2 October 2006

An Empirical Study of Transactional and Transformational Leadership in an Organisation

SURVEY INFORMATION SHEET

Dear Potential Participant,

I am, Kwa Wee Keng, a student in the Newcastle Graduate School of Business at the University of Newcastle, Australia undertaking Doctor of Business Administration. As part of my studies, I am conducting a research project titled "An Empirical Study of the Moderation Effect of Job-related knowledge on the Effectiveness of Transactional and Transformational Leadership in an Organisation". Your company has agreed to take part in this research project which examines the leadership behaviours of the leaders of your organisation from the perception of the employees. You are invited to complete a questionnaire on leadership behaviours of your current immediate supervisor and demographic information of the supervisor and you including gender, country, department and number of years of acquaintanceship with the supervisor. The questionnaire is adapted from a standard questionnaire used in prior leadership studies conducted by Bernard M. Bass in 1985 documented in the book Leadership and Performance Beyond Expectation published by The Free Press in New York. You are also requested to indicate your self-assessed level of job-related knowledge. It is hypothesised that leadership effectiveness will be moderated by the job-related knowledge of the employees.

You are invited to participate in this research. If you consent to participate, this will involve:

- Completing the questionnaire that will take between 15 to 20 minutes.
- Returning the survey form directly to me by using the self-addressed stamped envelope attached. This will be taken as your informed consent to participate.

Your company was chosen because the researcher was a Finance Manager who understands the business, organisational culture and industry dynamics of the organisation well enough to interpret the results from the data. All employees of your company are chosen for this study.

Participation is entirely voluntary. You can withdraw at any time before the surveys are submitted and there will be no disadvantage if you decide not to complete the survey. Once the surveys are submitted, any individual’s questionnaire may not be withdrawn because it cannot be identified. All information collected will be confidential. All information gathered from the survey will be stored securely and once the information has been analysed all questionnaires will be destroyed. At no time will any individual be identified in any reports resulting from this study.

If you have any concerns or would like to know the outcome of this project, please contact my supervisor Dr. Mark Loon at the above address.

Thank you for your interest,

Kwa Wee Keng
Ph: +6598386405

Dr. Mark Loon
Ph: +61423704074
Complaints Clause:
This project has been approved by the University’s Human Research Ethics Committee, Approval No. Bus-Law - [insert approval number when known).

The University requires that should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, telephone (02 49216333, email HumanEthics@newcastle.edu.au
### APPENDIX 4.1: ABBREVIATION OF MEASURES IN DATA ANALYSIS

**Leadership Behaviour**
- **charis1**: My superior makes me feel good to be around him/her.
- **charis4**: My superior makes me feel ready to sacrifice my own self-interests for the good of the group.
- **charis8**: My superior makes me go beyond my own self-interest for the good of the group.
- **charis12**: My superior commands respect from everyone.
- **charis14**: Because of my superior I am less concerned about my own immediate needs and am concerned about our group reaching its objectives.
- **charis17**: My superior is a model for me to follow.
- **charis18**: In my mind, my superior is a symbol of success and accomplishment.
- **charis20**: My superior is a good team player.
- **charis47**: My superior is a father figure to me.
- **charis52**: My superior heightens my motivation to succeed.
- **charis62**: My superior gives me a sense of overall purpose.

**Charisma: Composite charismatic leadership**
- **mbe25**: My superior is content to let me continue doing my job in the same way as always.
- **mbe49**: My superior sets standards for me which can be easily maintained.
- **mbe57**: My superior tends to spend his/her time ‘putting out fires’ rather than focusing on long-term considerations.
- **mbe61**: As long as things are going all right my superior does not try to change anything.
- **mbe69**: As long as the old ways work, my superior is satisfied with my performance.
- **mbe71**: It is all right if I take initiatives but my superior does not encourage me to do so.

**reward7**: My superior assures me I can get what I personally want in exchange for my efforts.
- **reward31**: My superior makes clear what I can expect if my performance meets designated standards.
- **reward34**: My superior makes me feel that as long as I do my job satisfactorily I can expect to move ahead.
- **reward35**: My superior makes sure that payoffs for good subordinate performance are made as quickly as possible.
- **reward48**: I decide what I want; my superior shows me how to get it.
- **reward65**: My superior gives me what I want in exchange for showing my support for him/her.

**Tranx: Composite transactional leadership**
<table>
<thead>
<tr>
<th>Leadership Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>leadeff1: The overall work effectiveness of my unit/department under my superior.</td>
</tr>
<tr>
<td>leadeff2: The unit/department’s effectiveness compared to all other units/departments I have known.</td>
</tr>
<tr>
<td>leadeff3: The effectiveness my superior in meeting job-related needs of the subordinates.</td>
</tr>
<tr>
<td>leadeff4: The effectiveness of my superior in meeting the requirement of the organisation.</td>
</tr>
<tr>
<td>leadeff5: The level of my satisfaction with my superior.</td>
</tr>
<tr>
<td>leadeff6: In all, the level of my satisfaction that the methods of leadership used by my superior are or were the right ones for getting my group’s job done.</td>
</tr>
<tr>
<td>LeadEff: Composite leadership effectiveness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job-related Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>jobknow1: I know what to do in my job.</td>
</tr>
<tr>
<td>jobknow2: I know how to do my job.</td>
</tr>
<tr>
<td>jobknow3: I know why my job has to be done.</td>
</tr>
<tr>
<td>jobknow4: I know the contribution of my job to the organisation.</td>
</tr>
<tr>
<td>JobKnow: Composite job-related knowledge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product-term of Job-related Knowledge and Leadership Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charisma*JobKnow: Knowledge Moderator of Charismatic leadership effectiveness</td>
</tr>
<tr>
<td>Tranx*JobKnow: Knowledge Moderator of Transactional leadership effectiveness</td>
</tr>
</tbody>
</table>
APPENDIX 4.2: DESCRIPTIVE STATISTICS

<table>
<thead>
<tr>
<th>Leadership Behaviour</th>
<th>charis1</th>
<th>charis4</th>
<th>charis8</th>
<th>charis12</th>
<th>charis14</th>
<th>charis17</th>
<th>charis18</th>
<th>charis20</th>
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<tr>
<td>N Valid</td>
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<td>0</td>
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<td>0</td>
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</tr>
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<td>Median</td>
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<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
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<tr>
<td>Std. Deviation</td>
<td>1.235</td>
<td>1.612</td>
<td>1.635</td>
<td>1.256</td>
<td>1.576</td>
<td>1.239</td>
<td>1.187</td>
<td>1.646</td>
</tr>
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Philosophy

• Open and honest communication
• Respect the individual
• Focus on facts
• Learn and apply new knowledge
• Teamwork
• Celebrate the success
• Take suppliers as our partners

TIP
Teamwork empowers people

Performance is the difference High Quality, High Speed

Source: Presentation Slide of Dynacast (Singapore) Pte Ltd and Dynacast (Shanghai) Ltd Company Meeting.