# THE EFFECTS OF EQUITY SENSITIVITY AND PERSONALITY ON TRANSFORMATIONAL LEADERSHIP BEHAVIOR

by

# EUNHUI LEE

Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

# MASTER OF SCIENCE IN HUMAN RESOURCE MANAGEMENT

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 2007

Copyright © by Eunhui Lee 2007

All Rights Reserved

#### ACKNOWLEDGEMENTS

Most of all, I thank God for giving me an opportunity to study at the University of Texas at Arlington (UTA). For two years, all of the courses that I took at UTA have incredibly inspired me and furthered my understanding of the nature of human resource management. Moreover, as my supervising professor, Dr. Gary C. McMahan has led me to learn beyond theory to application based on his superior research experience. He has been my trusted mentor with his guidance, confidence, and encouragement. I will be forever thankful to him for all his help. I also appreciate the members of my committee, Dr. James Lavelle and Dr. Kenneth Wheeler, for giving me their sincere advice and appreciation on the study. Furthermore, I would like to send my special thanks to Col. Becky Neilson, Dr. James Campbell Quick, Dr. Abdul Rasheed, Dr. George Benson, Dr. Roger Dickinson, Dr. Nancy Rowe, and Mr. Josh Artherton for providing me both their physical and spiritual supports based on their deep friendship.

Finally, without the helps from my family, I could not complete my study in the United States. My mother's care for my baby, my father and husband' patience for being alone in Korea, and their continuous prayer for me... I will never forget their helps and endless love for me. I also appreciate the Republic of Korean Army to let me have a wonderful experience studying at UT Arlington.

April 13, 2007

#### ABSTRACT

# THE EFFECTS OF EQUITY SENSITIVITY AND PERSONALITY ON TRANSFORMATIONAL LEADERSHIP BEHAVIOR

Publication No.

Eunhui Lee, M.S.

The University of Texas at Arlington, 2007

Supervising Professor: Gary C. McMahan

This thesis examines the relationship between the Big Five personality traits (extraversion, agreeableness, openness to experience, conscientiousness, and neuroticism) and equity sensitivity and transformational leadership behavior, as well as interaction between equity sensitivity and specific personality traits (extraversion and agreeableness). The subjects include 95 MBA students. The Personality Inventory Questionnaire, Equity Preference Questionnaire (EPQ), and Multifactor Leadership Questionnaire-Form 5X are used to evaluate their personality, equity sensitivity, and leadership behavior. Additionally, the Equity Sensitivity Instrument (ESI) is used to measure equity sensitivity, and by comparing the results between EPQ and ESI, potential differences in the measures of equity sensitivity are identified.

The data is analyzed through hierarchical multiple regression analysis. As hypothesized, agreeableness and openness to experience have a significant positive relationship with transformational leadership behavior. However, when the model includes equity sensitivity, the effect of agreeableness disappears. As assumed in this thesis, conscientiousness and neuroticism do not have any significant relationship with transformational leadership behavior. In addition, extraversion does not positively relate to transformational leadership behavior, and equity sensitivity does not interact with extraversion and agreeableness when predicting transformational leadership behavior. When equity sensitivity is measured by the EPQ, the results show a positive relationship between equity sensitivity and transformational leadership behavior, while there is no significant relationship when equity sensitivity is measured by the ESI.

This study contributes to the determinants of transformational leadership by adding equity sensitivity. It explains that transformational leadership behavior is determined by individual characteristics. Future studies should extend the research on leadership behavior relating equity sensitivity based on the results of this study. Future studies should also regard the difference between the ESI and EPQ as a measurement of equity sensitivity. Furthermore, organizations and schools should consider benevolence as an important element of employee selection tests, and leadership education and development.

V

# TABLE OF CONTENTS

| ACKNOWLEDGEMENTS                                 | iii  |
|--|------|
| ABSTRACT   | iv   |
| LIST OF ILLUSTRATIONS                            | viii |
| LIST OF TABLES                                   | ix   |
| Chapter  |      |
| 1. INTRODUCTION                                  | 1    |
| 1.1 Statement of the Problem                     | 1    |
| 1.2 Purpose of the Study                         | 6    |
| 1.3 Overview of the Study                        | 7    |
| 2. LITERATURE REVIEW                             | 9    |
| 2.1 Leadership Research History                  | 9    |
| 2.2 Full Range of Leadership Model               | 15   |
| 2.3 Effectiveness of Transformational Leadership | 20   |
| 2.4 Equity Sensitivity Theory                    | 23   |
| 2.5 Personality and Transformational Leadership  | 27   |
| 2.6 Summary of Literature                        | 31   |
| 3. CONCEPTUAL FRAMEWORK AND METHODOLOGY          | 33   |
| 3.1 Hypotheses Development                       | 33   |
| 3.2 Participants and Procedure                   | 40   |

|     | 3.3 Measures  | 4  |
|-----|---|----|
|     | 3.4 Analysis  | 44 |
|     | 3.5 Supplemental Analysis                                       | 4: |
|     | 4. RESULTS OF THE DATA ANALYSIS                                 | 4′ |
|     | 4.1 Descriptive Statistic and Correlations for Study Variables  | 4  |
|     | 4.2 Hypotheses Test   | 4  |
|     | 4.3 Supplemental Analysis                                       | 5  |
|     | 5. DISCUSSION AND IMPLICATION                                   | 5  |
|     | 5.1 Effects of Personality Traits                               | 5  |
|     | 5.2 Equity Sensitivity and Transformational Leadership Behavior | 6  |
|     | 5.3 Limitation  | 6  |
|     | 5.4 Conclusion  | 6  |
| Арр | endix   |    |
|     | A. TRANSFORMATIONAL LEADERSHIP QUESTIONS                        | 6  |
|     | B. PERSONALTY QUESTIONS   | 6  |
|     | C. EQUITY SENSITIVITY QUESTIONS (EPQ)                           | 7  |
|     | D. EQUITY SENSITIVITY QUESTIONS (ESI)                           | 7  |
| REF | ERENCES   | 7  |
| BIO | GRAPHICAL INFORMATION   | 9  |

# LIST OF ILLUSTRATIONS

| Figure |  | Page |
|--------|--|------|
| 2.1    | Contrasting Full Range Leadership Profiles | . 19 |

# LIST OF TABLES

| Table |   | Page |
|-------|---|------|
| 4.1   | Descriptive Statistics and Zero-Order Correlations  | . 48 |
| 4.2   | Hierarchical Regression Analysis Predicting<br>Transformational Leadership Behavior with<br>Personality Traits and Equity Sensitivity                 | . 50 |
| 4.3   | Correlations of Openness to Experience and<br>Equity Sensitivity with Four I's  | . 51 |
| 4.4   | Multiple Regression Analysis for Openness to<br>Experience and Equity Sensitivity Predicting<br>Transformational Leadership Behavior                  | . 52 |
| 4.5   | Descriptive Statistics and Correlations   | . 53 |
| 4.6   | Hierarchical Regression Analysis Predicting<br>Transformational Leadership Behavior with<br>the Big Five Personality Traits and Equity<br>Sensitivity | . 54 |
| 4.7   | Correlation between ESI and EPQ   | . 55 |
| 4.8   | Correlations between ESI and EPQ and Four I's   | . 55 |
| 4.9   | Hierarchical Regression Analysis Predicting<br>Transformational Leadership Behavior with<br>Equity Sensitivity Measured by ESI and EPQ                | . 56 |
| 4.10  | ) Hierarchical Regression Analysis with<br>Reverse Order from Table 4.9   | . 56 |

# CHAPTER 1

## INTRODUCTION

#### 1.1 Statement of the Problem

In the contemporary society, the domestic business arena has been rapidly extended to world wide business with the effect of globalization. The rapid change of technology and increasing abolishment of trade barriers have required organizations to tolerate various backgrounds of business counterparts, and the components of organizations have been significantly diversified. The increase of outsourcing from developing countries and operating in another country simultaneously stimulates organizations to be flexible in their management.

As the current organizations need to be flexible in their management, leadership in all management levels has to be effective to help people adapt to the challenge from the changing environment. Therefore, effective leadership fitting a changing environment has been an important research topic for management. Northouse defines leadership as "an influence process that assists groups of individuals toward goal attainment" (2001, p. 11), and Kotter (1990) specifies the influence process as setting a direction of organizations, communicating a goal with people, and motivating them to actualize it (as cited in Nelson & Quick, 2006). Through the influence process of leadership, organizations become able to motivate their employees to accept the

1

environmental challenge and to mobilize them in accomplishing the organizational vision.

Furthermore, effective leadership can augment the competitive advantage from human resources within organizations. From the perspective of strategic human resource management, employees are regarded as a source of sustainable competitive advantage to organizations (Wright, McMahan, & McWilliams, 1994). Contrary to physical or capital resources, the value of human resources such as commitment, teamwork, decision making ability, and problem solving skills cannot always be imitated by competitors. Effective leadership enables organizations to utilize the value of their human resources by indicating a vision and motivating employees to improve performance. As a result, the organizations managed by effective leadership can be placed in a strong competitive position in the business world. Therefore, leadership research has tried to identify the characteristics of effective leadership that helps organizations to be flexible in the changing environment and increases employee performance.

By comparing effective with adverse leadership, the characteristics of desirable leadership could be identified. As the CEO of Tyco Corporation, Dennis Kozlowski managed employees with an aggressive policy of performance-based recognition and compensation. On the other hand, Kozlowski himself excessively focused on his personal gain rather than the organizational profits. While running the business of Tyco Corporation, he accumulated his own wealth through the company's money, encouraged the employees to buy Tyco's stock in order to purchase his own "yachts, fine arts and luxury homes" (Ferrell, Fraedrich, & Ferrell, 2005, p. 261), and assigned his closest people to key executive positions including to the board of directors. Following his example, several of the other key executives also deceived their employees and pursued their own profits from the company's properties. As a result, Tyco suffered an enormous loss, and its employees lost their confidence in the company. If Kozlowski's leadership had originated from an altruistic attitude toward the organization with a real concern for his employees, his company would not have confronted this problem.

By contrast, as the former CEO of Ford Motor Company, Donald Peterson made his company proactively respond to changing environments through a quality revolution in the 1980s (Nelson & Quick, 2006). Peterson recognized early the limitation of the management by objectives and emphasized the process of motivating people to achieve their shared goals. Instead of performance-result-based management, he focused on constant feedback and coaching and made the best use of developmental opportunities (Latham, Almost, Mann, & Moore, 2005). As a result, Ford Motor Company survived a severe downfall in the early 1980s (O' Toole, Galbraith, & Lawler, 2002).

In addition to the case of Donald Peterson, Howard Schultz, the founder of Starbucks, also shows several aspects of effective leadership. Schultz is well-known for open communication and active formation of partnership with his employees. Meyers describes his leadership as follows (2005, p. 1): They don't teach caring in business schools, and benevolence isn't usually discussed in corporate management seminars. But these values anchor Schultz's leadership philosophy as he seeks to build connections between people through demonstrations of heart and conscience. Starbucks' baristas, for example, receive a "Green Apron Book" that exhorts them to "be genuine" and "be considerate." And the company works hard to treat its coffee growers in Third World countries with dignity while purchasing their products at above-market prices.

Starbucks now has more than 11,000 locations, about \$6.4 billion as its annual revenues and the biggest market share of the coffee industry (Flight, 2006), and Schultz's leadership has been a significant part of the driving force to lead this success (Meyers, 2005). Through observing both Peterson and Schultz, effective leadership seems to have a continuous concern for employee development and the ability to build a desirable vision of the organization, both of which are found within the leader's benevolent characteristics. With their efforts coaching individual employees, respecting for business partners, and recognizing the needs of society, effective leaders successfully help their companies to survive the changing environment.

Research into the characteristics of effective leadership (Yukl, 2002) has drawn several paradigms such as autocratic or democratic, task-oriented or relations-oriented, directive or supportive, and participative or achievement-oriented leadership. However, these paradigms do not consider the effect of "sharing vision, symbolism, and sacrifice" (Bass, 1997, p. 133), which is important to make organizations flexible in changing environments and unifying their component efforts toward shared goals. This effect is a major part of transformational leadership changing employee needs into organizational goals (Bass, 1985). Transformational Leaders are concerned with satisfying their employees' individual needs, stimulating their thoughts, and inspiring them to yield positive outcomes for their organizations. A significant amount of empirical studies show the effectiveness of transformational leadership to organizations (Bass & Riggio, 2006).

Then, what makes leaders institute transformational leadership behaviors beyond their typical roles? Can we find how they come to this behavior by exploring the typical elements of the previous trait theories?

In regards to Schultz's transformational leadership, which is classified by Nelson and Quick (2006), the leader's tendency of caring and benevolence could be a determinant of transformational leadership behaviors. Although there is no clear classification of Peterson's leadership, his continuous coaching resembles the efforts of transformational leaders to look after their employee needs. Most of all, Shultz and Peterson both seem to be more willing to care for the whole organization rather than pursuing their own interests.

The willingness to care for people and the tendency of benevolence are related to equity sensitivity, explaining why individual reactions to inequity can be differentiated (Huseman, Hatfield, & Miles, 1985). People who are more willing to contribute to their organizations have shown a high tolerance for inequity and a great concern for maintaining a good relationship with others. These people are called benevolent individuals in equity sensitivity theory (Huseman, Hatfield, & Miles, 1987). As Meyers (2005) previously pointed out, in business education, there is little interest in the relationship between benevolent characteristics and business leadership (but not necessarily limited to business area) that can significantly impact on organizational performance. If this proposed study finds a positive relationship between equity sensitivity (benevolence) and transformational leadership, the result will not only contribute to the determinants of transformational leadership behavior but also enlighten what should be emphasized in leadership education and in the selection and training of leaders within organizations.

### <u>1.2 Purpose of the Study</u>

First, as noted earlier, this study proposes individual benevolence as a determinant of transformational leadership behavior. Individual benevolence is related to equity sensitivity theory (Huseman et al., 1985). According to the degree of benevolence, people are distinguished as entitled, equity sensitive, and benevolent. If benevolent individuals have a positive relationship with transformational leadership, we can approach the leadership research, business education, and organizational selection process in a new perspective different from previous studies.

Second, personality tests have been generally used as a selection tool to find the best candidates for specific job positions. If a significant relationship between personal traits and transformational leadership is discovered, the personality tests could be even more important. Therefore, this study evaluates the relationship between personality and transformational leadership by using a currently predominant framework of personality, the Big Five personality (McCrae & Costa, 1987).

Finally, this study considers potential interaction of equity sensitivity with different personality traits. Through a review of relevant literature, this study identifies

the possibility of interaction between equity sensitivity and personality, and if so, how this interaction can affect transformational leadership behavior.

The results of this study will facilitate our understanding of the nature of transformational leadership and how to attain the unique characteristics of this leadership behavior. With this understanding, organizations can extend the contents of their selection tools, and each individual can diagnose which characteristics are sufficient or deficient for the exertion of transformational leadership behavior.

#### 1.3 Overview of the Study

Chapter 1, including this overview, explains the importance of studying effective leadership and how transformational leadership is different from the traditional leadership styles. According to the special aspects of transformational leadership such as caring, stimulating, and inspiring people to change their needs to organizational goals, benevolence is regarded as one possible determinant of transformational leadership. In Chapter 2, through literature review, the theoretical background of how transformational leadership emerged as effective leadership is explained as well as the history of leadership studies. Additionally, Chapter 2 specifies transformational leadership theory and equity sensitivity theory. Numerous studies support equity sensitivity as an important predictor of different organizational behaviors, while a significant amount of studies explain the relationship between personality traits and transformational leadership behavior. Chapter 3 explains what kind of methodology and measures are used in this study. In order to measure transformational leadership behavior, the study uses the current version of the Multifactor Leadership Questionnaire

(MLQ–5X), and for the measurement of personality traits and equity sensitivity, the study introduces the Personality Inventory (Goldberg, 1999) and the Equity Preference Questionnaire (Sauley & Bedeian, 2000) respectively. By applying a hierarchical multiple regression analysis, the relationship between equity sensitivity and personality traits and transformational leadership behavior will be identified. Chapter 4 displays the descriptive statistics of each variable and the results of the hierarchical multiple regression analysis. Furthermore, Chapter 5 discusses the result of the hierarchical analysis and clarifies how significantly personality traits and equity sensitivity explains transformational leadership behavior. With the results of this study, we can discuss its implication for the future studies as well.

## CHAPTER 2

## LITERATURE REVIEW

This Chapter clarifies the theoretical foundation of this study by tracing relevant literature of each independent variable as well as the dependent variable. Through a review of leadership research history, the background of the transformational leadership research emergence is identified. From the transactional-transformational leadership paradigm, full range of leadership model has been developed, and a significant amount of empirical research studies support the effectiveness of transformational leadership. The following sections explain the previous theory and research of each independent variable. In short, Chapter two is composed of these six Sections: 1) leadership research history, 2) full range of leadership model, 3) effectiveness of transformational leadership, and 6) summary of the literature.

#### 2.1 Leadership Research History

Leadership research using systematic methods started from trait theories in the early 1930s (House & Aditya, 1997). The "great man" theory was another name of the trait theories because researchers tried to discover the universal traits of great leaders. As a possible trait determining great leaders, physical attributes (i.e., height, weight, physique, energy, health, appearance, and age), personality characteristics (for example, originality, adaptability, introversion, dominance, self-confidence, integrity, conviction, mood optimism, and emotional control), and abilities (for instance, intelligence, social skills, scholarship, speech fluency, cooperativeness, and insight) have been mainly examined (Nelson & Quick, 2006). In spite of the various efforts to find special traits of leaders, Stogdill's review (1948) of the previous trait research suggests that there are no common trait distinguishing leaders from non-leaders across different situations (as cited in Northouse, 2001, p. 18).

With awareness of the limitation of trait theories, the focus of leadership research shifted from leaders' characteristics to leaders' behaviors. The study of Lewin, Lippitt, and White (1939) identifies that leaders show different behaviors when they interact with their followers (as cited in Nelson & Quick, 2006). The leaders' behaviors imply one of the three different styles: autocratic, democratic, and laissez-faire. Autocratic leaders usually take a predominant position in the conversation, and direct tasks to their followers or try to control them by law and regulations. According to follow-up research (Day & Hamblin, 1964; Ley, 1966; Shaw, 1955), autocratic leadership is useful to increase productivity when the leader is on the workplace. However, eventually it often yields high employee turnover and aggression against the organization (as cited in Hackman & Johnson, 2004).

On the other hand, democratic leaders are very responsive and less dependent on the laws and regulations than autocratic leaders. Democratic leaders empower their employees, and the employees easily interact with their leaders. The follow-up studies explain that democratic leadership increases employee satisfaction (Mohr, 1971), commitment to decisions (Ziller, 1954), participation (Hespe & Wall, 1976), and innovation (Farris, 1972), while decreasing turnover and absenteeism rates (Argyle, Gardner, & Ciofi, 1958).

Laissez-faire refers to the leaders' behaviors that leave their employees to act on their own arbitrary decisions. These leaders avoid interacting with their employees and simply delegate their rights of setting regulations to the employees. Laissez-faire behavior decreases employee satisfaction and participation when leaders are absent (Aspegren, 1963; Baumgartel, 1957), while it increases employee satisfaction and productivity in a group of highly motivated experts (Weschler, Kahane, & Tannenbaum, 1952).

In the Ohio State University leadership research program, Hemphill and Coons (1957) discovered two major foundations of different leaders' behaviors through Leader Behavior Description Questionnaire (LBDQ). They termed these two foundations as 'initiating structure' and 'consideration' (as cited in Nelson & Quick, 2006). The initiating structure is about task-focused activities such as role-defining and setting work structure. The consideration means relationship-focused behaviors such as nurturing followers based on friendly relationships and facilitating structure and consideration are different continuums of leadership styles rather than two polarized points on a single continuum. Therefore, leaders could have any or all of these two different leadership behaviors. For example, leaders could have low initiating structure and high consideration or high initiating structure and low consideration.

The effectiveness of initiating structure (as directive leadership) and consideration (as supportive leadership) is later discussed in the path-goal theory with participative and achievement-oriented leadership. Path-goal theory (House & Mitchell, 1974) recommends leaders to appropriately mix various leadership styles to fit into the different characteristics of followers and tasks. For example, if employees are unskilled and their work environment is unstructured, directive leadership (initiating structure) is the most effective. However, if employees have a strong need for control and tasks are ambiguous, participative or supportive leadership (consideration) rather than directive leadership is the most desirable. According to the situation, leaders are recommended to use a proper leadership style to ensure employees to achieve their goals (Nelson & Quick, 2006).

The leadership research program in the University of Michigan (Kahn & Katz, 1960) also identified different aspects of leadership behaviors. They were labeled as employee-orientation and production-orientation. At first, the research program suggested a single continuum of leadership style with two polarized points of employee orientation and production orientation. After an in-depth study of these leadership styles, two independent continuums for each orientation emerged similar to the result of the Ohio State University research. Blake & Mouton (1985) shows two leadership dimensions in the rectangular coordinates, and this leadership grid is useful to identify a variety of leadership styles. In regards to the universally effective leadership style, there are numerous controversies, and the question still remains unsettled. With a limited number of studies, only high degrees in both task behaviors and relationship behaviors

are supposed as the most effective leadership style across various situations (Yukl, 2005).

Hersey & Blanchard (1969) insist that leaders should properly apply different leadership styles for different situations and developed the situational theory of leadership. According to the situational leadership model (Blanchard, 1985), which is developed from this situational theory, leaders could select their leadership styles among delegating, supporting, coaching, and directing depending on each development level of their employees. The development level is composed of the employee competency and commitment. However, situational theory has a lack of explanation about the changing process of the employee commitment and the possible problems from the difference between the group and individual development levels. (Northouse, 2001).

On the other hand, the contingency theory (Fiedler, 1964) emerged concerning with maintaining the best fit between the leader's style and its favorable situation. Task structure, leader position power, and leader-member relations determine the characteristics of each situation, and there are specific pairs of the best fit between different leadership and situations. Mismatches between the leader's style and the situation could be corrected by moving the leader to another place or changing the work environment to be more proper to the leader's style. Overall, task-oriented leaders are more effective in extreme situations and relationship-oriented leaders are more effective in moderate situations (Nelson & Quick, 2006).

13

In addition to the previous studies (trait theories, behavioral theories, and situational theories), the efforts to find the most effective leadership style made another paradigm of leadership studies such as leader-member exchange and the transformational leadership theory in the late 1970s. While the previous leadership research concentrates on specific leaders' traits or styles and their effects in the situational context, leader-member exchange theory (Dansereau, Graden, & Haga, 1975) enlightens the fact that relationships between leaders and their members could impact organizational performance. When leaders form a relationship with their members, they tend to differentiate in-group and out-group members. In-group members have more concern and expectations from the leaders and support the organizational value and performance. On the other hand, out-group members get stressed from being alienated and have a low commitment to the organization. For the most effective leadership application, leaders should try to make the whole unit work as in-group members and should build a high quality partnership with all members based on mutual trust and respect.

Concurrently, transformational leadership was invented by Downton (1973), and Burns (1978) clarified the difference between transformational leadership and transactional leadership. Transactional leadership is based on an exchange relationship between leaders and followers, but transformational leadership enhances both the leader and employees' needs to fit into the organizational goals. Bass develops transformational leadership into a theoretical frame and specifies the concept of transactional leadership and transformational leadership (1985, p. 32): The transactional leader induces performance among followers by negotiating an exchange relationship with them of reward for compliance. Transformational leadership arouses transcendental interests in followers and/or elevates their need and aspiration levels. In doing so, transformational leadership may result ultimately in a higher level of satisfaction and effectiveness among the led.

The ultimate effect of the transformation process is shown in the wide range of organization such as one-on-one interaction, various levels of leadership positions, different types of organizations, and even beyond national boundaries (Bass, 1997; Bass & Avolio, 1993; Hartog, House, Hanges, & Ruiz-Quintanilla, 1999). Due to the transcending effects (Bass, 1997) of the transformational leadership, it can be differentiated from the traditional leadership styles. While the effective leadership of the traditional research is varied depending on the situation, and the application is limited to a specific situation with favorable conditions, transformational leadership is effective across different settings of organizations (Bass & Riggio, 2006).

### 2.2 Full Range of Leadership Model

The definition of transformational leadership is followed by Bass & Riggio's elaborated articulation, "Transformational leadership [is] inspiring followers to commit to a shared vision and goals for an organization or unit, challenging them to be innovative problem solvers, and developing followers' leadership capacity via coaching, mentoring, and provision of both challenge and support" (2006, p. 4).

Based on these behaviors, transformational leaders motivate employees to do more than the expected and sometimes even more than thought to be possible. By factor analysis of several scholars (Avolio, Bass, & Jung, 1997; Bass, 1985; Bycio, Hackett, and Allen, 1995; Howell & Avolio, 1993), the components of transformational leadership are identified as *idealized influence, inspirational motivation, intellectual stimulation* and *individualized consideration*, which are commonly called as the "Four I's" (Avolio, Waldman, & Yammarino, 1991; Bass & Avolio, 1994).

*Idealized influence* means transformational leaders' performance as a role model to their employees. Employees identify an example of desirable behavior from their leaders since they respect the leaders. The leaders' behaviors become standards of ethical and moral conduct to the employees.

In addition, transformational leaders inspire and motivate their employees by formulating a meaning in their work. These behaviors are summarized as *inspirational motivation*. By leaders' *inspirational motivation*, team spirit, enthusiasm and optimism can be raised within organization. Leaders involve their employees to build a future vision, and clearly communicate the expectations with the employees. Through this process, leaders make the employees' understanding of shared vision and their commitment to achieve goals.

*Intellectual stimulation* is related to transformational leaders' actions of challenging old assumptions and thoughts of employees. The Leaders stimulate their employees to behave in different ways and do not criticize their mistakes. Instead, they involve their followers in the process of addressing and solving problems. Therefore, there is an innovative environment and an encouragement of a new perspective within organization.

Transformational leaders also care about their employees' individual growth and needs. *Individualized consideration* refers to those behaviors, and it is often compared to coaching and mentoring function. Leaders encourage employees to reach a higher level of their potential ability and provide new learning opportunity and supportive climates. Based on *individualized consideration*, leaders have willingness to accept followers' different needs and desires, and there are two-way communications and personalized interactions between transformational leader and employees.

On the other hand, transactional leadership is based on social exchange and mutual agreement between leaders and employees as described by Bass (1985, p. 11):

Transactional leader recognizes what it is followers want to get from their work and tries to see that they get what they want if their performance warrants it. Transactional leader exchanges rewards and promises of reward for followers' effort. Transactional leader is responsive to followers' immediate self-interests if they can be met by followers' getting the work done.

The main components of transactional leadership are *contingent reward* and *management by exceptions (active or passive)* which mean a correction by leaders of followers' deviated behaviors from a standard (Bass & Avolio, 1994). *Contingent reward* has a basis of an exchange relationship between transactional leaders and their employees. There is an agreement of employees on what they need to do in order to receive promised rewards from their leaders. When employee behaviors meet the expectation of leaders, leaders give them the promised rewards. *Contingent reward* is effective on motivating employees to achieve the higher performance but less effective than the Four I's. *Management-by-Exception Active (MBE-A)* refers to transactional leaders' behavior that monitors mistakes and deviances of their employees. When the intervention is necessary, leaders take appropriate actions to correct the employee mistakes. On the other hand, *Management-by-Exception Passive (MBE-P)* means the

action that passively waits for employee mistakes, errors and deviances from standards. If the consequences of employees' deviances are serious, transactional leaders take some corrective actions. Otherwise, they do not take an action. *Management-byexception* is less effective than *contingent reward*, since it is based on a certain situation (Lowe, Kroeck, & Sivasubiamaniam, 1996).

According to full range of leadership model developed from transactionaltransformational leadership paradigm (Bass & Avolio, 1994), there is an additional element of leadership – *Laissez-faire behavior*. This is the most ineffective leadership and often refers to non-leadership. Laissez-faire leaders avoid intervention to their employee behaviors and there is absence of leadership behavior. Therefore, laissez-faire behavior is the most far from actual leadership and it has been little concerned from scholars.

At the first time, Burns (1978) introduced a single continuum of leadership from transformational leadership to transactional leadership, and to laissez-faire behavior (non-leadership). However, a few years later, Bass suggested a different structure of leadership distribution and asserted that "Most leaders have both transactional leadership and transformational leadership but in different amounts" (1985, p. 22). This assertion has been a foundation of the full range of leadership model (Bass & Avolio, 1994). The following picture displays the full range of leadership model (Avolio & Bass, 2002, p. 4)

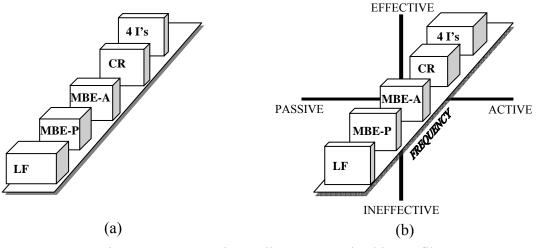


Figure 2.3 Contrasting Full Range Leadership Profiles (a) Suboptimal Profile, (b) Optimal Profile

Source: Avolio & Bass (2002, p. 4).

The full range of leadership model includes all components of transformational and transactional leadership as well as laissez-faire behavior, but each element of transformational leadership is integrated into the Four I's. While MBE-A, MBE-P, and contingent reward are independent each other, the Four I's of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration are highly correlated each other. Therefore, transformational leadership can be measured by adding the frequent degree of a leader's behavior in each element of the Four I's with consideration of a fair distribution of the degree among Four I's (Bass & Riggio, 2006). The third dimension of this model represents the frequency of the elements, and a leader represents a certain degree of frequency in all of the leadership behaviors from transformational leadership and transactional leadership to laissez-faire.

In addition, the full range of leadership model compares the optimal profile with sub-optimal profile of effective leaders. The sub-optimal profile has the largest frequency of Laissez-faire behavior followed by transactional and transformational leadership, but the optimal profile has the largest frequency of transformational behavior with a reverse order of each leadership style to those of the sub-optimal profile. Numerous empirical research studies have supported the difference between the optimal and sub-optimal profile effectiveness (Avolio & Bass, 2002; Bass, 1998). Although the contingent reward, one of the transactional leadership components, is "reasonably effective under most circumstances" (Bass & Riggio, 2006, p. 4), transactional leadership is less effective than transformational leadership. In short, the most effective leadership embraces both transactional leadership and transformational leadership but has more transformational leadership and less transactional leadership (Avolio & Bass, 2002). In other words, the best leaders have more transformational leadership conserving some of transactional leadership behaviors (Bass & Avolio, 1994; Judge & Bono, 2000). Therefore, this study focuses on the effectiveness of transformational leadership which is more significantly positive than the effects of transactional behaviors and finds out the determinants of transformational leadership.

#### 2.3 Effectiveness of Transformational Leadership

In regards to transformational leadership effectiveness, Bass (1999, p. 11) explains that transformational behaviors "elevate the follower's level of maturity and ideals as well as concerns for achievement, self-actualization, and the well-being of others, the organization, and society." For example, Rev. Dr. Martin Luther King, Jr. inspired people to accept the civil rights movement through his "I Have a Dream" speech (Greenberg, 2005). He moved the individual concern on the equal right into the

national interest, and finally the civil rights movement could succeed in the country. The civil rights movement adopted by people became a major turning point of the American society to be better place for most U.S. citizens.

Empirical studies support the effectiveness of transformational leadership. In the study by Purvanova, Bono and Dzieweczynski (2006, p. 3), the employees under transformational leaders recognize their jobs as more "challenging, meaningful, and significant," and this recognition is positively related to the employees' organizational citizenship performance. In the field study of Boerner and Streit (2005) when transformational leadership meets a cooperative climate in the organization, it develops the organizational potential performance. In 2000, Judge and Bono found that transformational leadership behavior was positively related to subordinates' satisfaction with leaders, organizational commitment, work motivation, and leader effectiveness. In short, transformational behaviors increase employee commitment, motivation, satisfaction, positive recognition of leaders and organizational citizenship behaviors as well as the quality of their work performance.

According to Bass and Riggio's explanation (2006), the effectiveness of transformational leadership has commonly been observed in military organizations in the past (Bass, 1985; Curphy, 1992; Yammarino & Bass, 1990a), but now the leadership effectiveness is found across different situations and various settings in organizations. Bass and Riggio list several empirical studies for supporting the effectiveness of transformational leadership in different organizations (2006, p.48):

In the past 20 years, many studies have examined transformational leadership and performance in a wide variety of settings. For example, transformational leadership has been shown to relate positively to performance in U.S. and North American companies (e.g., LeBrasseur, Whissell, & Ojha, 2002; Seltzer & Bass, 1990), in Russian companies (Elenkov, 2002), and in companies in Korea (Jung & Sosik, 2002) and New Zealand (Singer, 1985). It is important in military (e.g., Bass, Avolio, Jung, & Berson, 2003; Masi & Cooke, 2000), private sector (e.g., Hater & Bass, 1988; Yammarino & Dubinsky, 1994), governmental (e.g. Wofford, Whittington, & Goodwin, 2001), educational (Harvey, Royal, & Stout, 2003; Tucker, Bass, & Daniel, 1990) and nonprofit organizations (e.g. Egri & Herman, 2000; Riggio, Bass, & Orr, 2004). Transformational leadership is related to the effectiveness of groups of salespersons (e.g., Jolson, Dubinsky, Yammarino, & Comer, 1993; ManKenzie, Podsakoff, & Rich, 2001), health care workers (Gellis, 2001; Bycio et al., 1995), high school principals (Hoover, Petrosko, & Schulz, 1991; Kirby, Paradise, & Kingm 1992), and even athletes (Charbonneau, Barling, & Kelloway, 2001) and prison workers (Walters, 1998).

In addition to the positive relationship between transformational leadership and organizational performance, this leadership also augments the effect of transactional behaviors (Bass, 1985; Elenkov, 2002; Seltzer & Bass, 1990; Waldman, Bass, & Yammarino, 1990). Due to the limitation of exchange relationship, the effects of transactional leadership remain on the level of leaders' original intentions. However, since transformational behaviors facilitate the process of mutual agreement on leader-follower social exchange, the ultimate function of transformational leadership enhances the effect of transactional leadership.

Bass and Avolio (1993) summarized several aspects of transformational leadership effectiveness relating to transactional leadership as follows (as cited in Hackman & Johnson, 2004, p. 122):

- 1) Transformational leaders are more effective than leaders adopting a more transactional approach.
- 2) Transformational leadership adds value to transactional leadership, but the inverse is not true.
- 3) Whatever the country, when people think of leadership, their prototypes and ideals (which were "great leaders" in the trait theories) are transformational.

Numerous research studies, including Global Leadership and Organizational Behavior Effectiveness (GLOBE) project conducted by House and 170 research associates surveying more than 15,000 middle managers from sixty different cultures, also support these three important factors across different countries (Bass, 1997). As the impact of globalization increases, these generalized facts of transformational leadership effectiveness are becoming even more important.

In the book, *Developing potential across a full range of leadership*, Bass and Avolio (2002) asserted that the effectiveness of leadership can be increased by training transformational leadership components, which are idealized influence, inspiration, intellectual stimulation, and individualized consideration. However, if organizations select more competent people for transformational leadership behavior, the training and development will be more effective. Therefore, it is valuable to find what kind of individual traits predict transformational leadership behavior. The finding will help organizations to select competent people for transformational leadership behaviors and to rain them more effectively.

## 2.4 Equity Sensitivity Theory

As a possible predictor of transformational leadership, this study considers equity sensitivity. Equity sensitivity explains why the reaction to inequity is different for different groups of individuals. Equity sensitivity theory (Huseman, Hatfield, & Miles, 1985) was developed from equity theory (Adams, 1965) which explained that people had a tendency of comparing their ratios of outcomes/inputs with the ratios of their referent others. According to the explanation by Chhokar, Zhuplev, Fok, and Hartman (2001), inputs are referred to as the "age, social status, education, effort, and ability," and outcomes are related to the "money, increased status, authority, enjoyable work, and duties" (p. 80). In short, Inputs provide sources of a social exchange, and outcomes are attained by the social exchange. According to equity theory, when people perceive inequity between two independent ratios, they feel emotional distress and tension and try to restore the equity between their ratios and their referent-others' ratios.

However, there is difference among individuals when they react to the perception of inequity. Equity sensitivity theory specifies this individual difference and classifies each individual into three specific categories: entitled, equity sensitive, and benevolent. The studies of Huseman et al. (1985; 1987) support a single continuum distribution of equity sensitivity among individuals which starts with entitled, moves through equity sensitive, and finishes with benevolent.

Entitled individuals tend to assume that the organization and other people are their debtors, and thus usually do not endure the situations in which they are paid less than their referent others. They prefer their outcome/input ratio to exceed those of their referent others, and try to gain from the organization as much as possible. Therefore, these entitled individuals are often referred to as "getters" (Huseman et al., 1987). They mainly focus on the outcomes of their jobs and try to maximize their benefits. They prefer extrinsic to intrinsic rewards (Miles, Hatfield, & Huseman, 1994). However, equity sensitive individuals prefer that their outcome/input ratios are equal to the ratios of their referent others and normally follow the norm of reciprocity in equity theory. In contrast to the entitled and equity sensitive individuals, benevolent individuals are more tolerant of an under-reward situation (Shore, 2004). Their level of dissatisfaction and intent to leave are much lower than the other types of individuals in the under-reward situation (King, Miles, & Day, 1993). Rather, benevolent individuals prefer a relatively higher ratio of their inputs to the outcomes from their organization (Miles, Hatfield, & Huseman, 1989). They have more focus on their contribution to the organization rather than the organization's rewards. They are also concerned with keeping a good relationship with others and have more emphasis on intrinsic rewards.

Overall, benevolent individuals are more willing to contribute to the organizations than entitled or equity sensitive individuals, and they want to stay as "givers" in social relationship (Huseman et al., 1987). Benevolent individuals are more concerned with job performance than entitled individuals (Miles et al., 1989), and there is numerous research of benevolence to predict organizational behavior (Blakely, Andrews, & Moorman, 2005; O'Neill & Mone, 1998; Shore, Sy, & Strauss, 2006). Therefore, equity sensitivity could be considered as one of the individual dispositions that explains how various organizational behaviors and outcomes of different individuals are. It can be assumed that benevolent individuals have more deep concern with their organizations and a willingness to do extra efforts and to behave in the way of enhancing cooperative cultures.

In spite of the benefits of benevolence, there has been little research on equity sensitivity relating to leadership behavior. The previous research has commonly emphasized the fact that benevolent individuals are less sensitive than entitled or equity sensitive individuals and recommended that organizations manage entitled individuals or equity sensitive individuals carefully in their pay administration (Shore, 2004). In regards to benevolent individuals, research recommended focusing on the benevolent individuals' preference for intrinsic reward or entitled individuals' preference for extrinsic reward (Miles, Hatfield, & Huseman, 1994). These recommendations helped organizations understand how to motivate different individuals and how to manage them effectively.

However, there are more noticeable aspects about benevolent individuals. These individuals tend to be more pleasant when they contribute their efforts more than the outcomes that they get from the organizations. Benevolent individuals are givingoriented and have great concern for keeping a good relationship with others (Miles et al., 1989). This trait can be a valuable asset to lead other people and it can be shown as transformational leadership behavior. The giving oriented tendency is similar to the mind of transformational leaders when leading their employees. Meyers (2005) also emphasized benevolent characteristics of Howard Schultz when described his leadership as effective to the organization.

The assumption that benevolence might be related to transformational leadership behavior could be supported by Bass (1999, p. 1): "The transformational leader emphasizes what you can do for your country; the transactional leader, on what your country can do for you." In other words, transformational leader enhances employee performance through the Four I's more than expected, while the transactional leader motivates employees by simply focusing on the followers' self-interests. The

Four I's are based on the leader's willingness to develop followers' self interests to match with organizational goals (Bass, 1997), and one of the Four I's, *individualized consideration*, supports forming a good relationship between leaders and their followers. Therefore, benevolent individuals are more likely to present transformational leadership behaviors than entitled individuals or equity sensitive individuals. However, previous research on the equity sensitivity mostly focused on the employee performance and reaction. In contrast to the previous research, this study tries to enlarge the effect of equity sensitivity to the styles of leader behaviors.

#### 2.5 Personality and Transformational Leadership

Stogdill's (1948) suggestion that there were no common traits distinguishing great leaders from non-leaders across different situations was refined in the second meta-analysis in 1974. He proposed a revised conclusion, and it showed that personality was indeed a moderate part of effective leadership emergence (as cited in Northouse, 2001, p. 17). This gave new energy to the previous trait theories, and other studies also supported Stogdill's (1974) revised conclusion (Kirkpatrick & Locke, 1991; Lord, DeVader, & Alliger, 1986; Mann 1959).

Between 1930 and 1950, the test-measurement theory of individual traits was underdeveloped and had limited validity. Moreover, each trait has been differently operationalized among different studies and those studies were rarely replicated (House & Aditya, 1997). However, in the early 1970s, there was a theoretical development of research on the relationship between individual dispositions and organizational behavior (Bem & Allen, 1974; House, Shane, & Herold, 1996; Mischel, 1973; Schneider, 1983). Based on this achievement, trait-based research of leadership re-emerged in the early 1980s, and there was substantial improvement of personality theories and the operationalization of personality traits (House & Aditya, 1997). With the emergence of transformational leadership as one of the most effective leadership styles in the general context, trait research has another opportunity for making a valuable contribution to the previous research by examining the relationship between traits and transformational leadership behaviors.

Among various traits, personality traits have been continuously studied by numerous researchers. A recent PsycINFO search specifically found more than 10% of the studies published since 1990 relates to the relationship between personality and leadership (Judge & Bono, 2000). As a prevalent model of personality traits, the five factor personality model (McCrae & Costa, 1987) has been generally used. The study of McCrae and Costa (1997) proved cross-cultural validity of the model, and a significant amount of research has used this model in studying the relationship between personality and leadership emergence (Judge, Bono, Ilies, & Gerhardt, 2002).

The five factor personality traits are referred to as the "Big five" which consist of *extraversion, agreeableness, conscientiousness, openness to experience, neuroticism* (McCrae & Costa, 1987). According to the meta-analysis of the Big Five personality model by Barrick and Mount, *neuroticism* is associated with the tendency of being "anxious, depressed, angry, embarrassed, emotional, worried, and insecure" and *extraversion* is about the tendency of being "sociable, gregarious, assertive, talkative, and active" (1991, pp. 3-4). On the other hand, *openness to experience* refers to being "imaginative, cultured, curious, original, broad-minded, intelligent, and artistically sensitive," and *agreeableness* is related to being "courteous, flexible, trusting, good-natured, cooperative, forgiving, soft-hearted, and tolerant" (pp. 4-5). *Conscientiousness* includes the tendency of being "dependability, careful, thorough, responsible, organized, and planful" (p. 4), and it also refers to the vocational tendency of being "hard working, achievement-oriented, and persevering" (Peabody & Goldberg, 1989).

In meta-analyzing the previous research on the relationship between personality and leadership emergence (Judge et al., 2002), the Big Five personality traits explain 28% of the variation in leadership emergence. Extraversion ( $\rho$ =.31) is the strongest predictor of leadership followed by conscientiousness ( $\rho$ =.28), openness to experience ( $\rho$ =.24), neuroticism ( $\rho$ =-.24), and finally agreeableness ( $\rho$ =.08). Overall, the five factors of personality are regarded as strong dispositional predictors of leadership emergence with extraversion as the most important element of this prediction.

Based on the strong relationship between the Big Five personality traits and leadership emergence, researchers also tried to determine the association between personality and transformational leadership behavior. As transformational leadership predicts positive job performance and employee satisfaction, it has been meaningful to discover the association between personality and transformational leadership. However, in the meta-analysis of the previous studies, Bono and Judge (2004) find a relatively less strong relationship between personality and transformational leadership than the relationship in the research of personality and leadership emergence. In regards to each factor of personality, extraversion ( $\rho$ =.24), openness to experience ( $\rho$ =.15),

agreeableness ( $\rho$ =.14), and conscientiousness ( $\rho$ =.13) have a positive relationship, and neuroticism ( $\rho$ =-.17) shows a negative relationship with transformational leadership. However, the credibility intervals of openness to experience, agreeableness, and conscientiousness include zero, and these results indicate that more than 10 % of the corrected correlations are in negative direction. Overall the result of each study is quite different depending on the sample, and the Big Five respectively explains 12%, 5%, and 6% of the variation in charisma, intellectual stimulation, and individualized consideration. Due to the weak predictability, Bono and Judge argue that transformational leadership might not be trait-like or it strongly affected by leadership training.

On the other hand, in the study of Rubin, Munz, and Bommer (2005), agreeableness positively predicts transformational leadership behavior, but extraversion does not have a significant relationship with transformational leadership behavior. Since extraversion is the strongest predictor of both leadership emergence and transformational leadership in the meta-analyses, the result is quite different from the previous studies. As explained by Bono and Judge (2004), the difference could be derived from the various components of the sample. Rubin et al use a manager group of a biotechnology and agricultural company. Compared with the previous research on leadership emergence, the meta-analysis and Rubin et al.'s study both show a relatively strong effect of agreeableness on transformational leadership.

Considering the different results of the studies on personality and transformational leadership, this study reexamines the relationship between the Big Five

personality and transformational leadership behavior. This study will explain the result in terms of the characteristics of the sample. Due to the addition of individual disposition, equity sensitivity, and the possible interaction between personality and equity sensitivity, the study will contribute to the previous research on transformational leadership behavior.

### 2.6 Summary of Literature

The previous research shows that transformational leadership predicts follower's job performance and job satisfaction well. Even though leaders have both transactional and transformational leadership styles, increasing transformational leadership components can enhance leadership effectiveness. Therefore, it is important to determine what kind of individual disposition determines transformational leadership. The result can help in human resources selection, training, and development.

The effort of connecting personality and transformational leadership has been performed as one dimension in the trait-based studies. However, the relationship between personality and transformational leadership (Bono & Judge, 2004) is relatively less significant than in the previous research relevant to the conventional type of leadership emergence (Judge et al., 2002). Therefore, future research needs to more closely focus on what other individual characteristics can be related to transformational leadership more closely. To determine those predictable elements, various approaches to the research on individual disposition and transformational leadership behavior need to be implemented. In this study, as another possible predictor of transformational leadership, equity sensitivity is considered. Benevolent individuals are willing to contribute to their organizations and are concerned about maintaining a good relationship with others. Transformational leadership also requires leaders to possess individualized consideration of followers' interests, and the nature of transformational leadership refers to an influencing behavior which inculcates the importance of organizational vision and values. These facts may support the association between equity sensitivity and transformational leadership behavior. Therefore, it seems to be valuable to extend the boundary of the equity sensitivity research to transformational leadership studies.

In addition to equity sensitivity, personality traits are also considered as predictors of transformational leadership. Personality tests are widely used in employee selection, and the Big Five personality traits have been predominant in the categorization of personality traits. Several Big Five personality factors have already shown a positive relation with transformational leadership in the previous studies. However, the relationship is relatively less significant than the result of the research on personality and leadership emergence. Moreover, there is incongruence within the result of personality and transformational leadership studies. Therefore, this study reexamines the relationship between personality and transformational leadership and clarifies the significance of their effects on transformational leadership behavior.

# CHAPTER 3

# CONCEPTUAL FRAMEWORK AND METHODOLOGY

#### 3.1 Hypotheses Development

Based on the previous review of relevant literature, six hypotheses have been developed. As independent variables, there are equity sensitivity and extraversion, agreeableness, and openness to experience among the Big Five personality traits. From the interview (Meyers, 2005) with the transformational leader, Howard Schultz, and the observation of the other effective leaders, equity sensitivity is regarded as a possible determinant of transformational leadership. Due to the incongruence in the result of the previous studies on personality and transformational leadership and the generalization of personality tests, this study reexamines the effects of the Big Five personality traits on the transformational leadership behavior. As noted previously, the dependent variable is transformational leadership behavior.

First of all, benevolent individuals who have relatively higher equity sensitivity than others are willing to contribute to the organization. They place a focus on their inputs rather than on the outcomes from the organizations (King et al., 1993), consider the meaning of job more important than the result of the job, and care about keeping a good relationship with others (Miles et al., 1994).

Through these characteristics, benevolent individuals are considered to make a strong effort to improve the organizational performance with others. They could be more cooperative with others and take after the others' interests based on their concern for maintaining good relationships. As they recognized the important meaning of the organizational value and mission, they may turn the others' attention from individual interests to organizational performance. Since benevolent individuals reflect the importance of their work in the organizational context, they might inspire others to recognize organizational value and try to achieve the organizational mission together. In addition, benevolent individuals can affect their co-workers or followers' behavior by showing positive attitude toward the organization, accommodating the organizational benefits rather than pursuing their selfish interests. Their consistent contribution to the organization is expected to form a positive team spirit and cooperative work environment. Therefore, benevolent characteristics of individuals are assumed to be positively associated with their transformational leadership behaviors.

Hypothesis 1: Equity sensitivity is positively related to transformational leadership behavior, and specifically when benevolence increases, transformational leadership behavior also increases.

Second, extraversion has showed a positive relationship with job performance in the occupations that have interaction with others (Barrick, Mount, & Judge, 2001). Since transformational leadership also requires interacting with others to motivate them, extraversion should be positively related to transformational leadership behavior. The previous research (Bono & Judge, 2004; Judge & Bono 2000; Judge et al., 2002) also shows that extraversion is positively associated with transformational leadership behavior. This study confirms the significant positive relationship between extraversion and transformational leadership behavior, since this relationship has been shown to be relatively weaker than the relationship between extraversion and leadership emergence. Although transformational leadership specifically requires the Four I's, which are generally effective to lead others, and the characteristics of transformational leaders could be beyond the trait of extraversion, extraversion can still be the fundamental characteristic of any type of leader, except for passive and laissez-faire ones. Since transformational leadership requires forming a close relationship with followers, extraverted individuals may represent more frequent transformational leadership behavior than introverted individuals based on their strong desire to keep making interactions with others. Therefore, this study assumes that extraversion has a significant positive relationship with transformational leadership behavior.

#### *Hypothesis 2: Extraversion is positively related to transformational leadership behavior.*

Third, agreeableness has a positive relationship with job performance in the occupations involving the activities such as helping, cooperating, and nurturing others. In the study of Rubin et al. (2005), transformational leadership has a stronger relationship with agreeableness than with extraversion. However, in the meta-analysis of Bono and Judge (2004), transformational leadership has the strongest relationship with extraversion among the Big Five personality characteristics. Therefore, this study tries to identify how strongly agreeableness predicts transformational leadership behavior compared with the predictability of extraversion. Since transformational leaders, agreeableness is assumed to show a positive relationship with transformational

leadership behavior. Helping, cooperating, and nurturing behaviors should enhance the process of inspiring followers to go beyond their own interests toward the organizational vision.

Hypothesis 3: Agreeableness is positively related to transformational leadership behavior.

Fourth, openness to experience is important for the job requiring creative ideas for the success, and it may influence leaders' ability to adapt to the changing environments. According to the study of Barrick and Mount, openness to experience refers to the characteristics of being "curious, intelligent, artistically sensitive and broad-minded" (1991, p. 4). A positive relationship between openness to experience and job performance has been shown when the job requires a significant degree of creativity and innovation (George & Zhou, 2001; Lepine, Colquitt, & Erez, 2000).

Being "artistically sensitive and broad-minded" may support individualized consideration and intellectual stimulation, which compose transformational leadership behaviors. Transformational leaders accommodate development of organizations and their employees by showing a specific future vision and acting as a change agent. Therefore, openness to experience is assumed to be positively associated with transformational leadership behavior by making leaders adapt to organizational change of organization and illustrate a future vision to others in effective ways.

*Hypothesis 4: Openness to experience is positively related to transformational leadership behavior.* 

Fifth, even though there is a positive relationship between equity sensitivity and transformational leadership, this relationship may not be significant. Since leadership is "an influence process that assists groups of individuals toward goal attainment" (Northouse, 2001, p. 11), without a specific act of influence, benevolent individuals may not show transformational leadership behavior. Among the Big Five personality traits, extraversion is the most closely related to the action of influencing others (Judge et al., 2002). Individuals who are more willing to interact should show more frequent efforts to influence others with their own benevolent attitudes toward the organization. Another study previously showed a moderating effect of extraversion on the relationship between emotional recognition and transformational leadership (Rubin, Munz, & Bommer, 2005). According to the results of this study, among extraverted individuals, emotional recognition ability is positively related to transformational leadership behaviors, but among introverted individuals, emotional recognition ability does not predict transformational leadership behavior. Similar to the interaction between emotional recognition ability and extraversion, equity sensitivity is assumed to have an interaction with extraversion, and specifically equity sensitivity can be more predictive of transformational leadership behavior among extraverted individuals than among introverted. With increases in the level of extraversion, the original relationship between equity sensitivity and transformational leadership behavior should be more strengthened.

Hypothesis 5: Extraversion moderates the relationship between equity sensitivity and transformational leadership behavior. Specifically, an increased level of extraversion

strengthens the association between equity sensitivity and transformational leadership behavior.

Sixth, equity sensitivity relates to the devotional attitudes toward the organization, and benevolent individuals are more willing to give their efforts to the organization. Although some individuals are disagreeable and less willing to cooperate with others, they may, based on their benevolence, exercise transformational leadership behavior to enhance their employee performance. Bing and Burroughs's study (2001) of the relationship between equity sensitivity and job performance in team work-oriented organizations also shows the interaction between equity sensitivity and agreeableness. In spite of low agreeableness, benevolent individuals contribute to the organizational performance. This proposed study extends the results of Bing and Burroughs's study (2001) to the research of transformational leadership behavior and examines the interaction between equity sensitivity and agreeableness. Since low-agreeable benevolent individuals still pursuing the achievement of the organizational mission with concerns for the relationship with others, although they are not dependable, increasing the level of benevolence should positively affect transformational leadership behavior. Therefore, equity sensitivity is assumed to show a more significant positive relationship with transformational leadership when the individuals' agreeableness is low.

Hypothesis 6: Agreeableness moderates the relationship between equity sensitivity and transformational leadership behavior. Specifically, when agreeableness is low, an increased level of equity sensitivity is more predictive of transformational leadership behavior. In addition to these hypotheses, this study also examines the effects of conscientiousness and neuroticism on transformational leadership. The study aims at clarifying the relationship between the Big Five personality traits and transformational leadership and furthering the understanding of the nature of transformational leadership. By using all of the Big Five personality traits rather than part of the model, the study will be more effective to develop the understanding of the relationship between the Big Five personality from the transformation of the Big Five personality traits rather than part of the model, the study will be more effective to develop the understanding of the relationship between the Big Five model and transformational leadership behavior.

However, this study does not assume that conscientiousness and neuroticism have a significant relationship with transformational leadership behavior. Although conscientiousness shows a positive relationship with job performance in most situations, the effect might not be beyond the level of individual work performance. Based on their organized concepts, individuals with high conscientiousness may simply work harder than others. This does not mean that they are more concerned with increasing the organizational performance and accommodating the organizational benefits. However, transformational leaders change those individuals' concerns for the organizational level of thinking and expand their performance beyond expected outcomes. Therefore, conscientiousness and transformational leadership behavior seem to have no significant positive relationship.

Neuroticism is related to the characteristics of being anxious, embarrassed, worried, and emotionally unstable. Transformational leadership behavior could come from a deep understanding of other employees. From this perspective, neuroticism could help leaders understand the potential problems that their followers might have. For example, rich people with much property may not understand the poverty of poor people. Similarly, emotionally rich or well-balanced people might not understand the difficulties of those individuals easily embarrassed and distressed. On the other hand, emotionally unstable people might not reflect transformational leadership behavior due to their worry of potential mistakes in a conversation, even though they understand the others' difficulties. The meta-analysis of personality and transformational leadership (Bono & Judge, 2004) indeed found a significant negative relationship. However, with this regard to both potential conflicting effects from neuroticism, this study does not support that neuroticism has any significant relationship with transformational leadership behavior.

#### 3.2 Participants and Procedure

The subjects of this study include the MBA students enrolled in Management courses in the University of Texas at Arlington. MBA students mostly have job experience and opportunities to represent their leadership behavior in the interaction with their coworkers or subordinates. Transformational leadership behaviors are measured by letting MBA students complete the relevant survey questionnaire. Their personality and equity sensitivity are also examined in the classroom by personal survey questionnaires. Due to the potential problem of common source variance, the survey questionnaires are separately given at different points of time, and the interval is more than one week for each person. In order to match the results of the first survey and the second survey, both surveys asked the respondent's birth date at the end of the questionnaires. A total of 112 MBA students made up of various concentrations such as general management, finance, accounting, marketing, human resources management, and operation management are involved in this study, partly including non-MBA major such as international and organizational psychology and civil engineering. The average of the participant age is 27, and the number of female and male students is 58 and 54 respectively. Among the students, 83 students are currently working and 106 students have a previous job experience. Overall, all except for two students are either currently working or have work experience. Therefore, it seems to be proper to examine the equity sensitivity and transformational leadership behavior which could be exercised in the interaction with others by surveying the MBA students.

After explaining the purpose and overview, the students are given an opportunity to participate in the study, and 96 students responded to both surveys at different points of time. Except for uncompleted survey questionnaires, 95 students have showed almost perfect participation in the study (since there is a little missing data). According to Stevens' recommendation to have more than 15 subjects per each independent variable (1996, p. 72), the study is not limited in analyzing the results of data since it is composed of four independent variables and two interaction terms in the hypotheses. The overall response rate of the survey is 85 %, and all of the survey questionnaires are used in the original forms.

#### 3.3 Measures

The multifactor leadership questionnaire (MLQ) developed by Bass (1985) has been widely used to measure the full range of leadership which includes transformational leadership, transactional leadership, and laissez-faire behavior (Bass & Avolio, 1999). Through a sustained effort to develop the measurement, MLQ became revised to MLQ-5X with nine factors separating the attribution of idealized influence from the behavior. As a result, it would not be biased to use the updated form of MLQ-5X to measure transformational leadership behavior. In addition, the reliability is distributed from .71 to .95 for each leadership style (Machin, 2005).

The survey questionnaire is composed of forty-five items, and the nine factors are idealized influence (attributed), idealized influence (behavior), inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management-by-exception (active), management-by-exception (passive), and laissezfaire leadership. These nine factors are respectively measured by four items with a five point scale ranging from 0 ("Not at all") to 4 ("frequently, if not always"). The point indicates how frequently the respondents show the leadership behavior described by each statement in the survey. The remaining 9 items of the survey questionnaire relates to leadership outcomes such as extra effort, effectiveness, and satisfaction, and they are excluded from the study with the components of transactional leadership behavior. Due to the high correlation among the Four I's of transformational leadership, the study defines the mean of the scores of idealized influence (behavior), inspirational motivation, intellectual stimulation, and individual consideration as transformational leadership behavior following the explanation of Bass and Riggio (2006).

The Big Five personality traits, extraversion, agreeableness, openness to experience are as well as conscientiousness and neuroticism are measured by the Personality Inventory of Goldberg (1999) and the average of the reliability of this inventory for each trait is between 0.75 and 0.85. The correlation of this measurement is 0.94 with the NEO-PI-R personality inventory which is generally used as a personality measurement (Rubin et al., 2005). Each trait is measured by ten items with a five-point scale ranging from 1 ("very inaccurate") to 5 ("very accurate") which means how accurately the sentence describes the individual's characteristics.

In regards to the measurements of equity sensitivity, since there are controversies in using the Equity Preference Questionnaire (EPQ) or the Equity Sensitivity Instrument (ESI), the study applies both measures. Most of the previous studies on equity sensitivity have used the ESI developed by Huseman and his colleagues in 1985, but there were several problems in using the ESI. It is composed of five questions directing respondents to divide 10 points to two choices (entitled and benevolent) for each sentence according to how closely the choice describes their ideas and characteristics. The ESI score is determined by the sum of the rates in five benevolent choices. Among the respondents, people below 1/2 standard deviation from the mean of the ESI scores are categorized into entitled individuals, and people above 1/2 standard deviation are characterized as benevolent individuals. People between the two groups are perceived as equity sensitive individuals.

However, Sauley and Bedeian (2000) critiqued the use of the ESI regarding the scoring procedure and cutting score. The rationale of the scoring procedure is based on the consideration of the potential influence from the sample specific characteristics (King, Miles & Day, 1993). According to this procedure, individuals with the same

score could be perceived as different groups in another organization. There is no obvious explanation for why the organizational context should impact the score of equity sensitivity and how it can be corrected by the application of different cutting scores (Sauley & Bedeian, 2000). With regards to this critique, the EPQ was developed with 16 items and a five-point of Likert scale, and the validity and internal consistency (coefficient  $\alpha = .87$ ) is proved by the study of Sauley and Bedeian (2000). Contrasting the nominal measure of the ESI, the EPQ is a continuous measure, and the score means the degree of the benevolent preference that the respondent possesses. With the consideration of the critiques from Sauley and Bedeian, the study uses the EPQ as the primary measurement of equity sensitivity.

#### 3.4 Analysis

In order to examine the effect of equity sensitivity on transformational leadership behavior in addition to the effects of the Big Five personality traits, the study uses hierarchical multiple regression analysis. According to the six hypotheses, the first step introduces extraversion, agreeableness, and openness to experience, and the second step adds equity sensitivity to the model. The third step includes the interaction terms of equity with extraversion and agreeableness. Comparing the standardized coefficient of each trait relating to transformational leadership behavior, the study can identify which variable is the most positively related with transformational leadership behavior. By examining the significance of Beta and R squared change, the study can explain if equity sensitivity and its interaction with personality traits explain the variance in

transformational leadership behavior, beyond the effect of a main block formed by the personality traits included in the first step.

If there is a significant relationship with equity sensitivity and transformational leadership, the study will analyze the sole relationship between them by using simple regression analysis. The analysis should also identify what portion of variance in transformational leadership behavior is explained by the variance of equity sensitivity. If the study finds out that a significant portion of variance in transformational leadership is explained by equity sensitivity, it can be considered as an important determinant of transformational leadership behavior. Furthermore, with regard of the relationship between each independent variable and the composite of transformational leadership behavior, the study additionally examines how evenly the relationship is distributed among the four dimensions of transformational leadership behavior following the recommendation of Bass and Riggio (2006).

#### 3.5 Supplemental Analysis

As noted earlier, since there is controversy between the use of the EPQ and ESI, the study additionally identifies if there is a difference in the result between the EPQ and ESI by using both measurements at the same time. In the aspect of overcoming the shortage of the ESI, the EPQ is a more favorable measurement of equity sensitivity in the study. However, due to the predominant use of the ESI (Wheeler, 2006), it is desirable to compare the results of the ESI and EPQ in order to help progress the controversies regarding two different measurement. In the previous study, Foote and Harmon (2006) identified different results from using the EPQ and ESI when they examined the relation of equity sensitivity with Machiavellianism, Positive Affect, and Negative affect. On the other hand, Wheeler (2006) got similar results from the use of the EPQ and ESI when he tested the relationship of equity sensitivity with outcome importance and cultural values.

With regards to different results of the previous studies, the study checks the correlation between the result from the ESI and EPQ and implements regression analysis in order to identify whether the results show different effects of equity sensitivity on transformational leadership behavior according to the measurement or not. If the study shows different results from the use of the two measurements, future study should consider why there is a difference in the results, and which measure will be appropriate to measure equity sensitivity.

### CHAPTER 4

# **RESULTS OF THE DATA ANALYSIS**

This chapter displays the results of hierarchical multiple regression analysis testing the six hypotheses. In addition, the results from supplemental analysis confirms the predictability of all of the Big Five personality traits on transformational leadership behavior in order to ensure the assumption excluded from the hypotheses that conscientiousness and neuroticism would not have a significant relationship with transformational leadership behavior. By displaying the results of this supplemental analysis, the study hopes to remove any potential misunderstanding in the effects from the Big Five personality traits. At the end of this chapter, equity sensitivity measured by the EPQ is compared with the results measured by the ESI in order to reduce the ambiguity in the measurement of equity sensitivity.

### 4.1 Descriptive Statistics and Correlations for Study Variables

Before conducting the hierarchical multiple regression analysis, the study checked the zero-order correlation between independent and dependent variable. As shown in Table 4.1, equity sensitivity measured by the EPQ, extraversion, agreeableness, and openness to experience have a significant positive correlation with transformational leadership behavior as assumed in the hypotheses. Equity sensitivity measured by the ESI has a relatively high correlation with the results from the EPQ (r = 0.51, p < 0.01), but its relationship with transformational leadership behavior does not appear in the correlation analysis. According to the results of the correlation analysis, openness to experience has the strongest relationship with transformational leadership behavior followed by equity sensitivity (measured by EPQ), agreeableness, and finally extraversion.

| 10010   |      |      | anotics an |       |     | II Clation. | 5   |   |
|---|------|------|------------|-------|-----|-------------|-----|---|
| Variables                                     | Mean | S.D. | 1          | 2     | 3   | 4           | 5   | 6 |
| 1. Transformational<br>Leadership<br>Behavior | 2.97 | 0.44 |            |       |     |             |     |   |
| 2. Equity Sensitivity<br>(EPQ)                | 3.98 | 0.58 | .39***     |       |     |             |     |   |
| 3. Equity Sensitivity<br>(ESI)                | 5.16 | 1.05 | .20        | .51** |     |             |     |   |
| 4. Extraversion                               | 3.31 | 0.86 | .26*       | .20   | 04  |             |     |   |
| 5. Agreeableness                              | 3.86 | 0.59 | .31**      | .24*  | .20 | .26*        |     |   |
| 6. Openness to<br>Experience                  | 3.75 | 0.52 | .53***     | .17   | .07 | .26*        | .15 |   |

Table 4.1 Descriptive Statistics and Zero-Order Correlations

Note. N = 95.

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*\* Correlation is significant at the 0.01 level (2-tailed).

. Correlation is significant at the 0.001 level (2-tailed).

### 4.2 Hypotheses Test

According to the results of step 1 in the hierarchical multiple regression, extraversion does not show a significant relationship with transformational leadership behavior. Since the relationship between extraversion and transformational leadership shown in the previous study (Bono & Judge, 2004) is not as strong as the relationship between extraversion and leadership emergence shown in another study (Judge et al.,

2002), extraversion may not significantly predict transformational leadership behavior. In short, the results do not support hypothesis 2.

However, as assumed in hypothesis 3, agreeableness has a positive relationship with transformational leadership behavior ( $\beta = 0.22$ , p < 0.05). When the model controls equity sensitivity as an additional independent variable, the relationship disappears. Equity sensitivity is supposed to cover the explanation by agreeableness on transformational leadership behavior, and the relationship between agreeableness and transformational leadership behavior is consistent with the previous studies (Bono & Judge, 2004; Rubin et al., 2005) when not controlling for equity sensitivity.

Openness to experience shows the strongest relationship with transformational leadership among the three personality traits ( $\beta = 0.48$ , p < 0.001), supporting hypothesis 4. Overall, the first model including extraversion, agreeableness, and openness to experience explains 35% of the variance in transformational leadership, and it means the personality traits are important determinants of transformational leadership behavior. In contrast with agreeableness, the effect of openness to experience does not disappear even though the analysis adds equity sensitivity in the second step.

The significant R square change ( $\Delta R^2 = 0.06, p < 0.01$ ) proves the incremental validity of the second step. The model including equity sensitivity is better than the model involving several traits of the Big Five personality. Supporting hypothesis 1, equity sensitivity shows a significant positive relationship with transformational leadership behavior ( $\beta = 0.26, p < 0.01$ ). The model including both equity sensitivity and personality traits explains 41% of the variance in transformational leadership

behavior. On the other hand, the results do not show the moderating effects from extraversion and agreeableness on the relationship between equity sensitivity and transformational leadership behavior as assumed in hypothesis 5 and 6. Compared with the previous studies on leadership emergence and transformational leadership, this study more strongly explains the dependent variable.

| Step and predictor variables | В   | SEB | Beta   | $R^2$  | $\Delta R^2$ |
|------------------------------|-----|-----|--------|--------|--------------|
| Step 1                       |     |     |        | .35*** |              |
| Extraversion                 | .04 | .05 | .08    |        |              |
| Agreeableness                | .16 | .07 | .22*   |        |              |
| Openness to experience       | .41 | .08 | .48*** |        |              |
| Step 2                       |     |     |        | .41*** | .06**        |
| Extraversion                 | .03 | .04 | .05    |        |              |
| Agreeableness                | .12 | .06 | .17    |        |              |
| Openness to experience       | .38 | .07 | .45*** |        |              |
| Equity Sensitivity (EPQ)     | .20 | .06 | .26**  |        |              |
| Step 3                       |     |     |        | .42*** | .01          |
| Extraversion                 | .12 | .31 | .23    |        |              |
| Agreeableness                | .51 | .38 | .69    |        |              |
| Openness to experience       | .40 | .07 | .47*** |        |              |
| Equity Sensitivity (EPQ)     | .65 | .31 | .85*   |        |              |
| E.S. x Extraversion          | 02  | .07 | 23     |        |              |
| E.S. x Agreeableness         | 10  | .10 | 81     |        |              |

Table 4.2 Hierarchical Regression Analysis Predicting Transformational Leadership Behavior with Personality Traits and Equity Sensitivity

<sub>\*\*</sub> *p* < .05.

p < .01.p < .001.p < .001.

In addition to the hierarchical multiple regression analysis, a bivariate correlation analysis is used in order to specify the effects of openness to experience and equity sensitivity on transformational leadership behavior. According to the result of table 4.3, openness to experience independently explains 24% (p < 0.001) of the variance in transformational leadership behavior with a correlation coefficient of 0.53 (p < 0.001). In addition, the relationship between equity sensitivity and transformational leadership behavior also represents a significant positive relationship with a correlation coefficient of 0.38 (p < 0.001), and equity sensitivity solely explains 15% of the variance in transformational leadership behavior. The predictability of equity sensitivity exceeds the degree of explanation from the Big Five personality traits in the metaanalysis study by Bono and Judge (2004). In order to identify how evenly the positive relationship is distributed among the four distinguishable elements of transformational leadership, this bivariate correlation analysis also examines the relationship between openness to experience and equity sensitivity and each dimension of transformational leadership behavior. As shown in Table 4.3, openness to experience has a significant positive correlation with all of the dimensions, and equity sensitivity also has a significant positive correlation with all but one dimension, intellectual stimulation.

| Table 4.3 Correlations of Openness to Experience and Equity Sensitivity with Four I's |                                |                  |              |               |   |  |
|---|--------------------------------|------------------|--------------|---------------|---|--|
| Correlation   | Idealized                      | Inspirational    | Intellectual | Idealized     | Composite of                              |  |
| Correlation   | Influence                      | Motivation       | stimulation  | Consideration | Four I's                                  |  |
| Openness to   | .39**                          | 34**             | $42^{**}$    | .50**         | .53***                                    |  |
| Experience  | .39                            | .34              | .42          | .30           | $(r^2 = .24^{***})$<br>.39 <sup>***</sup> |  |
| Equity  | .38**                          | .43**            | .18          | .23*          |   |  |
| Sensitivity   |                                | .43              | .10          | .23           | $(r^2 = .15^{***})$                       |  |
| * <i>p</i> < .05, **  | * <i>p</i> < .01, *** <i>p</i> | <i>p</i> < .001. |              |               |   |  |

Based on the significant effects from openness to experience and equity sensitivity, multiple regression analysis excluding the effects of extraversion and agreeableness is additionally implemented. As a result, the model predicts 38% of the variance in transformational leadership behavior, which is above the predictability of the model involving the three personality traits assumed in the hypotheses. Specific results are shown in the Table 4.4.

| Variables              | В   | SEB | Beta   |
|------------------------|-----|-----|--------|
| Openness to experience | .04 | .01 | .48*** |
| Equity Sensitivity     | .02 | .00 | .31*** |
| $R^2$                  |     |     | .38*** |

Table 4.4 Multiple Regression Analysis for Openness to Experience and Equity Sensitivity Predicting Transformational Leadership Behavior

p < .001.

# 4.3 Supplemental Analysis

In addition to the test of the six hypotheses, the study implements a supplementary analysis on the Big Five personality model. To be consistent with the assumption of Section 1 in Chapter 3, there should be no significant relationship between conscientiousness and neuroticism and transformational leadership behavior. Before implementing regression analysis, the results of correlation analysis show a significant positive zero-order correlation between conscientiousness and neuroticism and transformational leadership behavior. Therefore, it is necessary to progress the regression analysis to identify if there are actual effects from conscientiousness and

neuroticism when the regression model includes the other personality traits previously examined in the hypotheses test.

|   | Table 4.: | b Descr | iptive S | tatistics | and Co | rrelation | ns    |    |   |
|---|-----------|---------|----------|-----------|--------|-----------|-------|----|---|
| Variables                                     | Mean      | S.D.    | 1        | 2         | 3      | 4         | 5     | 6  | 7 |
| 1. Transformational<br>Leadership<br>Behavior | 2.97      | 0.44    |          |           |        |           |       |    |   |
| 2. Equity Sensitivity<br>(EPQ)                | 3.98      | 0.58    | .39***   |           |        |           |       |    |   |
| 3. Extraversion                               | 3.31      | 0.86    | .26*     | .20       |        |           |       |    |   |
| 4. Agreeableness                              | 3.86      | 0.59    | .31**    | .24*      | .26*   |           |       |    |   |
| 5. Openness to<br>Experience                  | 3.75      | 0.52    | .53***   | .17       | .26*   | .15       |       |    |   |
| 6. Conscientiousness                          | 3.80      | 0.66    | .31**    | .42***    | .07    | .23*      | .31** |    |   |
| 7. Neuroticism                                | 2.79      | 0.79    | 26**     | 25**      | 17     | 05        | 33**  | 17 |   |

Table 4.5 Descriptive Statistics and Correlations

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\*\* . Correlation is significant at the 0.001 level (2-tailed).

Table 4.6 represents the results of the hierarchical multiple regression analysis of the model possessing the Big Five personality traits and equity sensitivity as independent variables. Since the previous hierarchical regression analysis shows no significant effect from the interaction terms, this analysis excludes the third step. As a result, consistent with the previous assumptions, there is no significant relationship between conscientiousness and neuroticism and transformational leadership behavior. Although the analysis controls all of the Big Five personality traits, equity sensitivity still has a significant relationship with transformational leadership behavior with a correlation coefficient of 0.25 (p < 0.01;  $\Delta R^2 = 0.05$ , p < 0.01). The Big Five personality model explains 36% (p < 0.001) of transformational leadership behavior, but the previous model in Table 4.5 of Section 2 including openness to experience and equity sensitivity better explains the leadership behavior with 38 % (p < 0.001) predictability.

| Step and predictor variable | В   | SEB | Beta   | $R^2$  | $\Delta R^2$ |
|-----------------------------|-----|-----|--------|--------|--------------|
| Step 1                      |     |     |        | .36*** |              |
| Extraversion                | .04 | .05 | .08    |        |              |
| Agreeableness               | .15 | .07 | .20*   |        |              |
| Openness to experience      | .36 | .08 | .42*** |        |              |
| Conscientiousness           | .08 | .06 | .11    |        |              |
| Neuroticism                 | 05  | .05 | 08     |        |              |
| Step 2                      |     |     |        | .41*** | .05**        |
| Extraversion                | .03 | .05 | .05    |        |              |
| Agreeableness               | .12 | .07 | .17    |        |              |
| Openness to experience      | .37 | .08 | .43*** |        |              |
| Conscientiousness           | .02 | .06 | .02    |        |              |
| Neuroticism                 | 02  | .05 | 04     |        |              |
| Equity Sensitivity (EPQ)    | .19 | .07 | .25**  |        |              |

 Table 4.6 Hierarchical Regression Analysis Predicting Transformational Leadership

 Behavior with the Big Five Personality Traits and Equity Sensitivity

Note. N = 95. p < .05. p < .01.p < .001.

In regard of the measurement of equity sensitivity, the EPQ and ESI show significantly different results in the relationship with transformational leadership behavior. The study analyzes the correlation between the ESI and EPQ and displays the respective correlation of the ESI and EPQ with the four dimensions of transformational leadership behavior. The results are shown in Tables 4.7 and 4.8. Although the ESI and EPQ have a correlation of 0.51 (p < 0.001), it is not enough for them to be recognized as substitutable measurements of equity sensitivity. Moreover, in the correlations with each dimension in transformational leadership behavior, there is a difference between the results from the ESI and EPQ. The ESI has only a significant correlation with idealized influence behavior; the EPQ has a significant relationship with all but intellectual stimulation. The ESI and EPQ both show no significant relationship with intellectual stimulation.

| Table 4.7 Correlation between ESI and EPQ |                                  |                             |                          |                            |  |  |  |  |
|---|----------------------------------|-----------------------------|--------------------------|----------------------------|--|--|--|--|
| Со  | orrelation                       | Equ                         | Equity Sensitivity (EPQ) |                            |  |  |  |  |
| Equity Se                                 | ensitivity (ESI)                 | .51***                      |                          |                            |  |  |  |  |
| **** <i>p</i> < .001.                     | *** $p < .001.$                  |                             |                          |                            |  |  |  |  |
| Tab                                       | ble 4.8 Correlations betw        | ween ESI and El             | PQ and Four I's          | 3                          |  |  |  |  |
| Correlation                               | Idealized<br>Influence(Behavior) | Inspirational<br>Motivation | Intellectual Stimulation | Idealized<br>Consideration |  |  |  |  |
| Equity<br>Sensitivity (ESI)               | .22*                             | .13                         | .10                      | .18                        |  |  |  |  |
| Equity<br>Sensitivity (EPQ)               | .38***                           | .43***                      | .18                      | .25*                       |  |  |  |  |
| p < .05 **** $p < .001.$                  |                                  |                             |                          |                            |  |  |  |  |

The study also introduces a hierarchical multiple regression analysis to specify how the effects from equity sensitivity on transformational leadership behavior are differentiated depending on the measurement. According to the results in Table 4.9, consistent with the results of the correlation analysis in Section 1, equity sensitivity

measured by the ESI does not account for transformational leadership behavior. However, the incremental explanation from equity sensitivity measured by the EPQ explains 12% (p < 0.001) of the variance in transformational leadership behavior beyond the effect of the ESI. On the other hand, in the hierarchical regression analysis with reversed order from the previous analysis (refer to Table 4.10), there is no valid incremental effect from equity sensitivity measured by the ESI.

 Table 4.9 Hierarchical Regression Analysis Predicting Transformational Leadership

 Behavior with Equity Sensitivity Measured by ESI and EPQ

|                              | any sensit | ivity initeasu | ieu og Bore |        |              |
|------------------------------|------------|----------------|-------------|--------|--------------|
| Step and predictor variables | В          | SEB            | Beta        | $R^2$  | $\Delta R^2$ |
| Step 1                       |            |                |             | .04    |              |
| Equity Sensitivity (ESI)     | .09        | .05            | .20         |        |              |
| Step 2                       |            |                |             | .16*** | .12***       |
| Equity Sensitivity (ESI)     | 01         | .05            | 01          |        |              |
| Equity Sensitivity (EPQ)     | .31        | .09            | .41***      |        |              |
| $^{***}$ n < 001             |            |                |             |        |              |

p < .001.

Table 4.10 Hierarchical Regression Analysis with Reverse Order from Table 4.9

| Step and predictor variables | В   | SEB | Beta   | $R^2$  | $\Delta R^2$ |
|------------------------------|-----|-----|--------|--------|--------------|
| Step 1                       |     |     |        | .16*** |              |
| Equity Sensitivity (EPQ)     | .31 | .07 | .40*** |        |              |
| Step 2                       |     |     |        | .16*** | .00          |
| Equity Sensitivity (EPQ)     | .31 | .09 | .41*** |        |              |
| Equity Sensitivity (ESI)     | 01  | .05 | 01     |        |              |
| p < .001.                    |     |     |        |        |              |

### CHAPTER 5

### DISCUSSION AND IMPLICATION

This study initiated from the recognition of transformational leadership effectiveness. With the continuous change of the environment and the rapid globalization trend, leadership in integrating various backgrounds of people and enhancing their efforts toward a shared goal is even more important than before. The research of transformational leadership has shown the importance of an adaptive and flexible leadership style across various situations. Moreover, transformational leadership is positively related to followers' job performance and their satisfaction (Avolio & Yammarino, 2002; Boerner & Streit, 2005; Judge & Bono, 2000; Purvanova, Bono & Dzieweczynski, 2006). Bass and Riggio explain that the effects of transformational leadership have been shown across different organizational settings (2006).

With regards to the effectiveness of transformational leadership, it is important to train people to exercise their transformational leadership behavior in the work place as noted by Bass and Avolio (1994). Selecting competent people who have more appropriate traits consistent with transformational leadership behavior will help the development and training of transformational leadership behavior. Therefore, this study examined several characteristics of individual disposition to identify the determinants of transformational leadership behavior. As a result, this study found equity sensitivity and openness to experience among the Big Five personality traits are related to transformational leadership behavior. Considering these results, this chapter discusses the contribution of this study's results to the current research and implications for future studies as well as for the management of organizations.

### 5.1 Effects of Personality Traits

The wide uses of personality tests in organizational selection are derived from the perception that personality traits can be predictors of job performance and occupational success (Schneider & Smith, 2004). Consistent with this perception, this study reexamined the effects of the Big Five personality traits on transformational leadership behavior by comparing the results with previous studies. As a result, agreeableness and openness to experience empirically explained transformational leadership behaviors. Contrary to the relatively weak explanation from the personality traits in the meta-analysis (Bono & Judge, 2004), agreeableness and openness to experience predicted 38% of the variance in transformational leadership behavior. Openness to experience specifically had the strongest predictability and solely explained 24% of the variance in transformational leadership. These results suggest future studies of transformational leadership should reconsider personality traits as significant predictors of this leadership behavior. The difference in the results from the meta-analysis can be interpreted within the explanation of the meta-analysis itself.

According to the explanation of Bono and Judge (2004), the effects of personality traits are quite varied across different kinds of the sample groups. In addition, the study of Judge et al. (2002) also shows a variable degree of effects from

personality traits on leadership emergence according to the characteristics of the sample groups. Therefore, the effects of personality traits could be explained within the specific organizational context.

Since the subjects of this study are MBA students, their self-rating of transformational leadership behaviors might be affected by their recent experiences in school. Due to numerous opportunities for case study group work in the MBA curriculum, the students might have evaluated their leadership behavior unconsciously considering their performance with their group members. Individuals good at articulating concepts from MBA course work and understanding the abstract ideas of the case study may have shown relatively strong transformational leadership behavior through the Four I's. For example, individuals possessing high openness to experience could lead their group members by more clearly summarizing the case contents and understanding the connections between the case and course concepts. The other group members therefore could also more clearly understand the intricacies of the case, and then they begin to offer possible recommendations. Since leaders are interested in solving problems based on their knowledge, they could also show a positive attitude to the case study and be an idealized influence for the other members. By naturally acquiring the leadership position through openness to experience, leaders might show individualized consideration to group members. According to the results of this study, openness to experience is related to all of the dimensions of transformational leadership behavior. In addition to the case studies, other activities in the MBA program including articulation and analysis could facilitate the behavior based on openness to experience.

In other words, the individuals with the personality traits being beneficial for the occupational success may represent more transformational leadership behavior than others. This explanation is consistent with the premise of the study by Hogan and Hogan (1991) on personality and occupational success (as cited in Schneider & Smith, 2004). However, this explanation is not consistent with the purpose of finding generalized characteristics of transformational leadership behavior. The results of the meta-analysis by Bono and Judge (2004), Judge et al (2002), and the study of Rubin et al (2005) as well as this study support the assumption that the predictability of each personality trait on transformational leadership (or leadership emergence) varies according to the sample characteristics. Specifically, in the meta-analysis of transformational leadership studies (Bono & Judge, 2004), the variance of the relationship between each trait and transformational leadership derived with a sampling errors was 95%, 80%, 29%, 28% and 41% for neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness respectively. In addition, both Rubin et al.'s study and this current study used the same measure for personality characteristics, Goldberg's Big Five Inventory (1999). However, Rubin et al.'s study found a significant effect of agreeableness from the manager group, and this study found a significant predictability of openness to experience from the MBA student group.

With regards to various results relating to the Big Five personality traits and transformational leadership behavior, future studies should analyze the results according to the characteristics of the sample group in the studies. If a predominant determinant of

transformational leadership is different from the sample group, and the determinant is related to the personality trait of the occupational success in the organization, we can conclude that individuals with a specific trait relating to the occupational success have more transformational leadership behavior than others. By empirically showing the significant effects from the agreeableness and openness to experience, this study supports the previous studies on transformational leadership with the assumption of the trait theory that individual disposition determines leadership behavior. In addition, this study suggests future research on transformational leadership should carefully notice that the difference in the personality prediction on transformational leadership could have originated from the characteristics of the organization.

#### 5.2 Equity Sensitivity and Transformational leadership behavior

The most innovative part of this study is the examination of equity sensitivity as a predictor of transformational leadership behavior. The previous studies on equity sensitivity have shown that individual equity sensitivity is positively related to job performance. Different from entitled and equity sensitive individuals, benevolent individuals have more tolerance for under-rewarded situation and put more emphasis on their inputs than outcomes from the organization. Therefore, they are usually referred to as givers (Huseman et al., 1987). Furthermore, they are concerned with maintaining a good relationship with others and place their focus on intrinsic rewards from their organizations.

In regards to these characteristics of benevolent individuals, this study focused on the potential relationship between individual benevolence and transformational leadership using equity sensitivity as a variable of the benevolent characteristics. Transformational leaders fundamentally shift their employees' interests to the organizational values and enhance employee performance more than normally expected. Benevolent individuals might have these transformational leadership behaviors based on the following three reasons.

First, as transformational leaders enhance the organizational performance beyond the level commonly expected, benevolent individuals have a tendency to work harder than other employees. If this tendency is explained by their inherent willingness to contribute to their organization, this willingness might also be a driver of transformational leadership behavior. As they try to be givers to their organizations, they lead employees to contribute more to their organizations. Inspirational motivation also means the behavior enhancing employee performance beyond the regular level. According to the results of this study, benevolence is positively related to inspirational motivation in transformational leadership behavior. Benevolent individuals are assumed to motivate employees to work with their best efforts for their organizations.

Second, benevolent individuals are concerned with maintaining a good relationship with others. In order to keep a good relationship, they could tend to respect other opinions and take care of other individual needs. Individualized consideration in transformational leadership behavior refers to these behaviors, and there is a positive relationship between benevolence and individualized consideration in the results of this study.

Third, as explained in the first hypothesis, benevolent individuals could be a desirable example for employees. Since they show positive thinking toward the organization and maximize the organizational benefits, employees might respect the individuals' behavior and try to imitate them. Idealized influence of transformational leadership also means the behavior displaying moral conduct and being an example to the employees. As shown in the results, there is a significant relationship between benevolence and idealized influential behavior.

However, there has been little research on the relationship between equity sensitivity and leadership behavior. This study extends the implications of the equity sensitivity research to the research of leadership behavior in an academic perspective. The empirical evidence of the predictive ability of equity sensitivity on transformational leadership will augment the importance of previous research on equity sensitivity regarding job performance. Since job performance and transformational leadership behavior are becoming increasingly more important in business organizations, equity sensitivity can be used a valuable criterion for selection tests. Therefore, future studies should consider how to develop equity sensitivity as a selection tool.

Considering measurement, there were different degrees of correlations of the results from the ESI and EPQ with each element of transformational leadership behavior. The ESI and EPQ are both positively correlated with idealized influence (behavior) but not significantly related to intellectual stimulation. Within the belief that either the ESI or the EPQ is appropriate for measuring equity sensitivity, it seems that equity sensitivity has a significant zero-order correlation with idealized influence

behavior, while there is no significant relationship with intellectual stimulation. Therefore, we can conclude that the individuals with high benevolence act as role models for the ethical and moral standards in their organizations. Although, the ESI and EPQ have a correlation of 0.52 (p < 0.01), since the prediction on transformational leadership behavior was different, the ESI and EPQ may not be substitutable instruments when examining the same criterion. Therefore, future studies should consider what the differences of the measurements are and how to more appropriately measure equity sensitivity.

### 5.3 Limitation

On the other hand, this study has several limitations regarding to sample and leadership measurement. Since this study included only 95 MBA students, in order to generalize the results of this study on the relationship between equity sensitivity and personality traits and transformational leadership behavior, future studies should involve other types of sample groups with more sufficient size of subjects. Specifically, this study suggests a potential relationship between specific personality traits for occupational success and transformational leadership behavior requiring future studies to distinguish their sample group characteristics to examine this assumption.

In addition, this study used self report of transformational leadership behavior. By using subordinate evaluation of transformational leadership behavior, future study should reexamine the relationship between equity sensitivity and this leadership behavior.

## 5.4 Conclusion

In conclusion, this study supports trait-based research on leadership by adding benevolence as a significant determinant of transformational leadership behavior. Based on the results, future studies should consider benevolence as an important foundation of effective leadership and find how this characteristic will affect the other leadership styles. Since this study used only the self report of transformational leadership behavior, future study should consider the use of subordinate evaluation of transformational leadership behavior. Additionally, the study determined the potential differences between two measurements of equity sensitivity. Therefore, future studies should specify the criterion differences in the measurements of equity sensitivity. Furthermore, organizations and schools should consider benevolence as an important element of employee selection tests, and leadership education and development, based on the implications of this study. APPENDIX A

TRANSFORMATIONAL LEADERSHIP QUESTIONS

### Idealized Influence (Behavior)

I talk about my most important values and beliefs I specify the importance of having a strong sense of purpose I consider the moral and ethical consequences of decisions I emphasize the importance of having a collective sense of mission

### **Inspirational Motivation**

I talk optimistically about the future I talk enthusiastically about what needs to be accomplished I articulate a compelling vision of the future I express confidence that goals will be achieved

### Intellectual Stimulation

I re-examine critical assumptions to questions whether they are appropriate

I seek differing perspectives when solving problems

I get others to look at problems from many different angles

I suggest new ways of looking at how to complete assignments

### Individual Consideration

I spend time teaching and coaching

I treat others as individuals rather than just as a member of a group

I consider an individual as having different needs, abilities, and aspirations from others

I help others to develop their strengths

# APPENDIX B

# PERSONALITY QUESTIONS

### Extraversion

Am the life of the party

Don't talk a lot (-)

Feel comfortable around people

Keep in the background (-)

Start conversations

Have little to say (-)

Talk to a lot of different people at parties

Don't like to draw attention to myself (-)

Don't mind being the center of attention

Am quiet around strangers (-)

## Agreeableness

Feel little concern for others (-)

Am interested in people

Insult people (-)

Sympathize with others' feelings

Am not interested in other people's problems (-)

Have a soft heart

Am not really interested in others (-)

Take time out for others

Feel others' emotions

Make people feel at ease

### Openness to experience

Have a rich vocabulary Have difficulty understanding abstract ideas (-) Have a vivid imagination Am not interested in abstract ideas (-) Have excellent ideas Do not have a good imagination (-) Am quick to understand things Use difficult words Spend time reflecting on things Am full of ideas **Conscientiousness** Am always prepared Leave my belongings around (-) Pay attention to details Make a mess of things (-) Get chores done right away Often forget to put things back in their proper place (-) Like order (-) Shirk my duties (-) Follow a schedule Am exacting in my work

# Neuroticism

Get stressed out easily

Am relaxed most of the time (-)

Worry about things

Seldom feel blue (-)

Get upset easily

Am easily disturbed

Change my moods a lot

Have frequent mood swings

Get irritated easily

Often feel blue

APPENDIX C

EQUITY SENSITIVITY QUESTIONS (EPQ)

I prefer to do as little as possible at work while getting as much as I can from my employer (-)

I am most satisfied at work when I have to do as little as possible (-)

When I am at my job, I think of ways to get out of work (-)

If I could get away with it, I would try to work just a little bit slower than the boss expects (-)

It is really satisfying to me when I can get something for nothing at work (-)

It is the smart employee who gets as much as he/she can while giving as little as possible in return (-)

Employees who are more concerned about what they can get from their employer rather than what they can give to their employer are the wise ones (-)

When I have completed my tasks for the day, I help out other employees who have yet to complete their tasks

Even if I received low wages and poor benefits from my employer, I would sill try to do my best at my job

If I had to work hard all day at my job, I would probably quit (-)

I feel obligated to do more than I am paid to do at work

At work, my greatest concern is whether I am doing the best job I can

A job which requires me to be busy during the day is better than a job that allows me a lot of loafing

At work, I feel uneasy when there is little work for me to do

I would become very dissatisfied with my job if I had little or no work to do

All other things being equal, it is better to have a job with a lot of duties and responsibilities than one with few duties and responsibilities

APPENDIX D

EQUITY SENSITIVITY QUESTIONS (ESI)

It would be more important for me to:

- a. get from the organization
- b. give to the organization

It would be more important for me to:

- a. help others
- b. watch out for my own good

I would be more concerned about:

- a. what I received from the organization
- b. what I contributed to the organization

The hard work I would do should:

- a. benefit the organization
- b. benefit me

My personal philosophy in dealing with the organization would be:

- a. if I don't look out for myself, nobody else will
- b. it's better for me to give than to receive

### REFERENCES

- Adams, J. S. (1965). Inequity in social exchange. *Advances in Experimental Social Psychology*, 2, 267–299.
- Argyle, M., Gardner, G., & Ciofi, F. (1958). Supervisory methods related to productivity, absenteeism, and labor turnover, *Human Relations*, 11, 23-40.
- Aspegrem, R. E. (1963). A study of leadership behavior and its effects on morale and attitudes in selected elementary schools. *Dissertation Abstracts*, *23*, 3708.
- Avolio, B., & Bass, B. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal* of Occupational & Organizational Psychology, 72(4), 441-462.
- Avolio, B. J., & Bass, B. M. (2002). Developing potential across a full range of leadership : cases on transactional and transformational leadership. Mahwah, NJ: Erlbaum.
- Avolio, B. J., & Bass, B. M. (2002). *Manual for the Multifactor Leadership Questionnaire (Form 5X)*. Redwood City, CA: Mindgarden.
- Avolio, B. J., Waldman, D. A., & Yammarino, F. J. (1991). Leading in the 1990s: The Four I's of transformational leadership. *Journal of European Industrial Training*, 15(4), 9-16.
- Barrick, M., & Mount, M. (1991). The big five personality dimensions and job performance: A Meta-analysis. *Personnel Psychology*, 44(1), 1-26.

- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). The FFM personality dimensions and job performance: Meta-Analysis of meta-analyses [Special issue].
   *International Journal of Selection and Assessment*, 9, 9–30.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.
- Bass, B. M. (1997). Does the Transactional–Transformational Leadership Paradigm Transcend Organizational and National Boundaries?. *American Psychologist*, 52(2), 130-139.
- Bass, B. M. (1998). Transformational leadership: Industrial, military and educational impact. Mahwah, NJ: Lawrence Erlbaum Associates Inc.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work & Organizational Psychology*, 8(1), 9-25.
- Bass, B. M. (1999). On the taming of charisma: A reply to Janice Beyer. *Leadership Quarterly*, *10*, 541–553.
- Bass, B. M., & Avolio, B. J. (1993a). Transformational leadership: A response to critiques. In M.M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions* (pp. 49–80). New York: Academic Press.
- Bass, B. M., & Avolio, B. J. (1993b). Transformational leadership and organizational culture. *Public Administration Quarterly*, 17, 112–122.
- Bass B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage publications.

- Bass B. M., & Riggio, R. E. (2006). *Transformational Leadership* (2<sup>nd</sup> ed.). Mahwah, NJ: Lawrence Erlbaum.
- Bass, B., Jung, D., Avolio, B., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional Leadership. *Journal of Applied Psychology*, 88(2), 207-218.
- Baumgartel, H. (1957). Leadership style as a variable in research administration. *Administrative Science Quarterly*, 2, 344-360.
- Bem, D. J., & Allen, A. (1974). On predicting some of the people some of the time: the search for cross-situational consistencies in behavior. *Psychological Review*, 81, 506-520.
- Bing, M., & Burroughs, M. S. (2001). The predictive and interactive effects of equity sensitivity in teamwork-oriented organizations. *Journal of Organizational Behavior*, 22(3), 271-290.
- Black, R. R., & Mouton, J. S. (1985). The Managerial Grid III: The Key to Leadership Excellence. Houston, TX: Gulf.
- Blakely, G., Andrews, M., & Moorman, R. (2005). The moderating effects of equity sensitivity on the relationship between organizational justice and organizational citizenship behaviors. *Journal of Business & Psychology*, 20(2), 259-273.
- Blanchard, K. H. (1985). SLII: A situational approach to managing people. Escondido, CA: Blanchard Training and Development.
- Boerner, S., & Von Streit, C. (2005). Transformational leadership and group climate empirical results from symphony orchestras. *Journal of Leadership &*

Organizational Studies, 12(2), 31-41.

Bono, J., & Judge, T. (2004). Personality and transformational and transactional leadership: a meta-analysis. *Journal of Applied Psychology*, *89*(5), 901-910.

Burns, J. M. (1978). Leadership. New York, NY: Haper and Row.

- Bycio, P., Hackett, R. D., & Allen, J. S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of applied psychology*, 80(4), 468-478.
- Charbonneau, D., Barling, J., & Kelloway, E. (2001). Transformational leadership and sports performance: the mediating role of intrinsic motivation. *Journal of Applied Social Psychology*, 31(7), 1521-1534.
- Chhokar, J. S., Zhuplev, A., Fok, L. Y., & Hartman, S. J. (2001). The Impact of Culture on Equity Sensitivity Perception and Organizational Citizenship Behavior: A Five-Country Study, *International Journal of Value-Based Management*, 14, 79–98.
- Curphy, G. J. (1992). An empirical investigation of the effects of transformational and transactional leadership on organizational climate, attrition, and performance. In K.E. Clark, M. B. Clark, & D. R. Campbell (Eds.), *Impact of leadership*, (pp. 177–187). Greensboro, NC: The Center for Creative Leadership.
- Dansereau, R., Graden, G. G., & Haga, W. (1975). A vertical dyad linkage approach to leadership in formal organizations. *Organizational Behavior and Human Performance*, 13, 46-78.

Donald E. Petersen Chairman of Ford and Champion of Its People. (1988). Training &

*Development Journal*, Retrieved Thursday, January 25, 2007 from the Business Source Complete database.

Downton, J. V. (1973). Rebel leadership. New York: Free Press.

- Egri, C., & Herman, S. (2000). Leadership in the North American environmental sector: values, leadership styles, and contexts of environmental leaders and their organizations. *Academy of Management Journal*, *43*(4), 571-604.
- Elenkov, D. (2002). Effects of leadership on organizational performance in Russian companies. *Journal of Business Research*, 55(6), 467-480.
- Farris, G. F. (1972). The effect of individual roles on performance in innovative groups.*R & D Management*, *3*, 23-28.
- Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2005). Business Ethics: Ethical Decision Making and Cases (6th ed.). Boston, NY: Houghton Mifflin.
- Fiedler, F. E. (1964). A contingency model of leadership effectiveness. Advances in Experimental Social Psychology, 1, 149-190.

Flight, G. (2006). Grinding Out Success Next to Starbucks. Business 2.0, 7(9), 62-63.

- Foote, D., & Harmon, S. (2006). Measuring equity sensitivity. *Journal of Managerial Psychology*, 21(2), 90-108.
- Gellis, Z. D. (2001). Social work perceptions of transformational and transactional leadership in health care, *Social Work Research*, *25*(1), 17-25.
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, 86, 513–524.

- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe*, Vol. 7 (pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.
- Greenberg, J., & Westcott, D. R. (1983). Indebtedness as a mediator or reactions to aid.In J. D. Fisher, A. Nadler & B. M. DePaulo (Eds.), *New directions in helping* (pp. 85–122). New York: Academic Press.
- Hackman, M. Z., & Johnson, C. E. (2004). *Leadership: A Communication Perspective* (4<sup>th</sup> ed.). Long Grove, IL: Waveland Press.
- Harvey, S., Royal, M., & Stout, D. (2003). Instructor's transformational leadership: university student attitudes and ratings. *Psychological Reports*, 92(2), 395.
- Hater, J. J., & Bass, B. M. (1988). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology*, 73(1), 695–702.
- Hersey, P. & Blanchard, K.H. (1969). Life cycle theory of leadership: is there a best style of leadership?. *Training and Development Journal*, *33*(6), 26-34.
- Hespe, G., & Wall, T. (1976). The demand for participation among employees. *Human Relations*, *29*, 411-428.
- Hoover, N. J., Petrosko, J. M., & Schultz, R. R. (1991). Transformational and Transactional Leadership: An Empirical Test of Theory. ERIC Document Reproduction Service No. ED 331177.

House, R., & Aditya, R. (1997). The Social Scientific Study of Leadership: Quo Vadis?.

Journal of Management, 23(3), 409-473.

House, R. J., & Mitchell, R. R. (1974). Path-goal theory of leadership. *Journal of Contemporary Business*, 3, 81-97.

House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P. W., Javidan, M.,
Dickson, M., upta, V. and 170 co-authors. (1999). Cultural influences on
leadership and organizations: Project GLOBE. In W. Mobley (Ed.), *Advances in Global leadership*, 1: JAI Press

- House, R. J., Shane, S. A., & Herold, D. M. (1996). Rumors of the death of dispositional research are vastly exaggerated. *Academy of Management Review*, 21, 203–224.
- Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated business-unit performance. *Journal of Applied Psychology*, 78, 891–902.
- Huseman, R. C., Hatfield, J. D., & Miles, E. W. (1985). Test for individual perceptions of job equity: Some preliminary findings. *Perceptual and Motor Skills*, 61, 1055–1064.
- Huseman, R. C., Hatfield, J. D., & Miles, E. W. (1987). A new perspective on equity theory: The equity sensitivity construct. *Academy of Management Review*, 12, 222–234.
- International Personality Item Pool: A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences

(http://ipip.ori.org/). Internet Web Site.

- Jolson, M. A., Dubinsky, A. J., Yammarino, F. J., & Comer, L. B. (1993), Transforming the salesforce with leadership, *Sloan Management Review*, Spring, 95-106.
- Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, 85, 751–765.
- Judge, T., Bono, J., Ilies, R., & Gerhardt, M. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87(4), 765-780.
- Jung, D. I., & Sosik, J. J. (2002). Work-Group Characteristics and Performance in Collectivistic and Individualistic Cultures. *Journal of Social Psychology*, 142(1), 5-23.
- Jung, D. I., Sosik, J. J., & Bass, B. M. (1995). Bridging leadership and cultures: A theoretical consideration of transformational leadership and collectivistic cultures. *Journal of Management Inquiry*, 2, 3–18.
- Kahn, R., & Katz, D. (1960). Leadership Pratices in Relation to Productivity and Morale. In D. Cartwright and A. Zander(Eds.), Group Dynamics, Research and Theory. Elmsford, NY: Row, Paterson.
- King, W., & Miles, E., & Day, D. (1993). A test and refinement of the equity sensitivity construct. *Journal of Organizational Behavior*, 14, 301–317.
- Kirby, P. C., King, M. I., & Paradise, L. V. (1992). Extraordinary Leaders in Education: Understanding transformational leadership. *Journal of Educational Research*, 85(5), 303-311.

- Kirkpatrick, S., & Locke, E. (1991). Leadership: do traits matter?. Academy of Management Executive, 5(2), 48-60.
- Latham, G., Almost, J., Mann, S., & Moore, C. (2005). New Developments in Performance Management. *Organizational Dynamics*, *34*(1), 77-87.
- LeBrasseur, R., Whissell, R., & Ojha, A. (2002). Organisational learning, transformational leadership and implementation of continuous quality improvement in canadian hospitals, *Australian Journal of Management*, 27.
- LePine, J. A., Colquitt, J. A., & Erez, A. (2000). Adaptability to changing task contexts: Effects of general cognitive ability, conscientiousness, and openness to experience. *PersonnelPsychology*, *53*, 563–593.
- Lord, R. G., Devader, C. L., & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalizations procedures. *Journal of Applied Psychology*, 71(3): 402-410.
- Lowe, K. B., Kroeck, K. G., & Sivasubianmaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *Leadership Quarterly*, 7(3): 385-425.
- Machin, M. A.(2005). Predictors of coach drivers' safety behavior and health status. Retrived January 25, 2007 from http://eprints.usq.edu.au/archive/00000719/02/ Machin,\_2005.pdf
- Mackenzie, S., Podsakoff, P., & Rich, G. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science*, 29(2), 115.

- Mackenzie, S., Podsakoff, P., & Rich, G. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science*, 29(2), 115.
- Mann, R. D. (1959). A review of the relationship between personality and performance in small groups. *Psychological Bulletin*, *56*: 241-270.
- Masi, R. (2000). Effects of transformational leadership on subordinate motivation, empowering norms, and organizational productivity. *International Journal of Organizational Analysis (1993 - 2002)*, 8(1), 16.
- McCrae, R. R., & Costa, P. T., Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52: 81-90.
- McCrae, R. R., & Costa, P. T., Jr. (1997). Personality trait structure as a human universal. *American Psychologist*, *52*, 509–516.
- Meyers, W. (2005, October 31). Conscience in a cup of coffee. (cover story). U.S. News
  & World Report, Retrieved January 25, 2007, from http://www.usnews.com/
  usnews/ news/articles/051031/31schultz.htm
- Miles, E., Hatfield, J., & Huseman, R. (1989). The equity sensitivity construct: Potential implications for worker performance. *Journal of Management*, *15*, 581–588.
- Miles, E. W., Huseman, R. C., & Hatfield, J. D. (1994). Equity sensitivity and outcome importance. *Journal of Organizational Behavior*, *15*, 585–596.
- Mischel, W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review*, 80, 252-283.

Mohr, L. B. (1971). Organizational technology and organizational structure, *Administrative Science Quarterly, 16*, 444-459.

Nelson, D. L., & Quick, J. C. (2006). Organizational Behavior: Foundations, Realities
& Challenges (5th ed.). Mason, OH: South-Western.

Northouse, P. G. (2001). Leadership: Theory and Practice. Thousand Oaks, CA: Sage.

O'Toole, J., Galbraith, J., & Lawler III, E. (2002). When two (or more) head are better than one: the promise and pitfalls of shared leadership. *California Management Review.* 44(4), 65-83.

 O'Neill, B., & Mone, M. (1998). Investigating Equity Sensitivity as a Moderator of Relations Between Self-Efficacy and Workplace Attitudes. *Journal of Applied Psychology.* 83(5), 805-816.

- Peabody, D. & Goldberg, L. R. (1989). Some determinants of factor structures from personality trait descriptors. *Journal of Personality & Social Psychology*, 57, 552-567.
- Purvanova, R., Bono, J., & Dzieweczynski, J. (2006). Transformational Leadership, Job Characteristics, and Organizational Citizenship Performance. *Human Performance*, 19(1), 1-22.
- Riggio, R. E., Bass, B. M., & Orr, S. S. (2004). *Improving leadership in nonprofit Organizations*, San Francisco, CA: Jossey-Bass.
- Rubin, R., Munz, D., & Bommer, W. (2005). Leading from within: the effects of emotion recognition and personality on transformational leadership behavior.

Academy of Management Journal, 48(5), 845-858.

- Sauley, K. S., & Bedeian, A. G. (2000). Equity sensitivity: Construction of a measure and examination of its psychometric properties. *Journal of management*, 26(5), 885-910.
- Schneider, B. (1983). Interactional psychology & organizational behavior. In L.L. Cummings & B.M. Staw (Eds.), *Research in organizational behavior*, Vol. 5 (pp.1-31). Greenwich, CT: JAI Press.
- Schneider, B., & Smith, D. B. (2004). *Personality and organizations*., Mahwah, NJ: Lawrence Erlbaum associates.
- Seltzer, J., & Bass, B.M. (1990). Transformational leadership: Beyond initiation and consideration. *Journal of Management*, 16, 693–703.
- Shore, T. H. (2004). Equity sensitivity theory: Do we all want more than we deserve? *Journal of Managerial Psychology*, *19*, 722–728.
- Shore, T., Sy, T., & Strauss, J. (2006). Leader responsiveness, equity sensitivity, and employee attitudes and behavior. *Journal of Business & Psychology*, 21(2), 227-241.
- Singer, A. E. (1985). Strategic and financial decision making processes in New Zealand Public Companies. New Zealand Journal of Business 7, 33-46.
- Stevens, J. (1996). *Applied multivariate statistics for the social sciences* (3rd ed.). Mahway, NJ: Lawrence Erlbaum.

Waldman, D. A., Bass, B.M., & Yammarino, F. J. (1990). Adding to contingent-reward

behaviour: The augmenting effect of charismatic leadership. *Group and Organizational Studies*, *15*, 381–394.

- Weschler, I. R., Kahane, M., & Tannenbaum, R. (1952). Job satisfaction, productivity, and morale: A case study. *Occupational Psychology*, 26, 1-14.
- Wheeler, K. (2006). The measurement of equity sensitivity: A comparison of the Equity Preference Questionnaire and the Equity Sensitivity Instrument in relation to outcome importance and cultural values. Paper presented at the meeting of the Southwest Academy of Management, Oklahoma City, OK.
- Wofford, J., Whittlngton, J., & Goodwin, V., (2001). A theoretical and empirical extension to the transformational leadership construct. *Journal of Organizational Behavior*, 22(7), 759-774.
- Wright, P. M., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: a resource-based perspective. *International Journal of Human Resource Management*, 5(2), 301-326.
- Yammarino, F. J., & Bass, B. M. (1990a). Long-term forecasting of transformational leadership and its effects among naval officers: Some preliminary findings. In K. E. Clark and M. B. Clark (Eds.), *Measures of leadership* (pp. 151-169). Greensboro, NC: Center for Creative Leadership.
- Yammarino, F., & Dubinsky, A. (1994). Transformational leadership theory: using levels of analysis to determine boundary conditions. *Personnel Psychology*, 47(4), 787-811.

Yukl, G. (2002). Leadership in Organizations (5th ed.). Upper Saddle River, NJ:

Prentice Hall.

- Yukl, G. (2005). *Leadership in Organizations* (6<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.
- Ziller, R. C. (1954). Four techniques of group decision making under uncertainty. *American Psychologist, 9*, 498.

## **BIOGRAPHICAL INFORMATION**

Eunhui Lee earned a Master of Science in Human Resource Management from the University of Texas at Arlington in 2007. Her studies included the Big 4 functional areas of Human Resource Management: Selection, Training and Development, Performance Management, and Compensation as well as Strategic Human Resource Management. Her studies had the foundation in the MBA program: Management, Accounting, Economics, Finance, Marketing, and Operation Management.

In 2003, she earned a Bachelor of Arts in Management from the Korea Military Academy. The four-year disciplined life in Military Academy furthered her understanding of the nature of leadership and management in the Military organization. Based on her Master and Bachelor degrees, her knowledge in management extended to both business and military organizations.