

A POSITIVE ORGANIZATIONAL BEHAVIOR
APPROACH TO WORK MOTIVATION:
TESTING THE CORE CONFIDENCE MODEL IN CHINA



The Dissertation Presented to
The Faculty of the Graduate School of
Bangkok University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy in Business Administration

by

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December, 2002

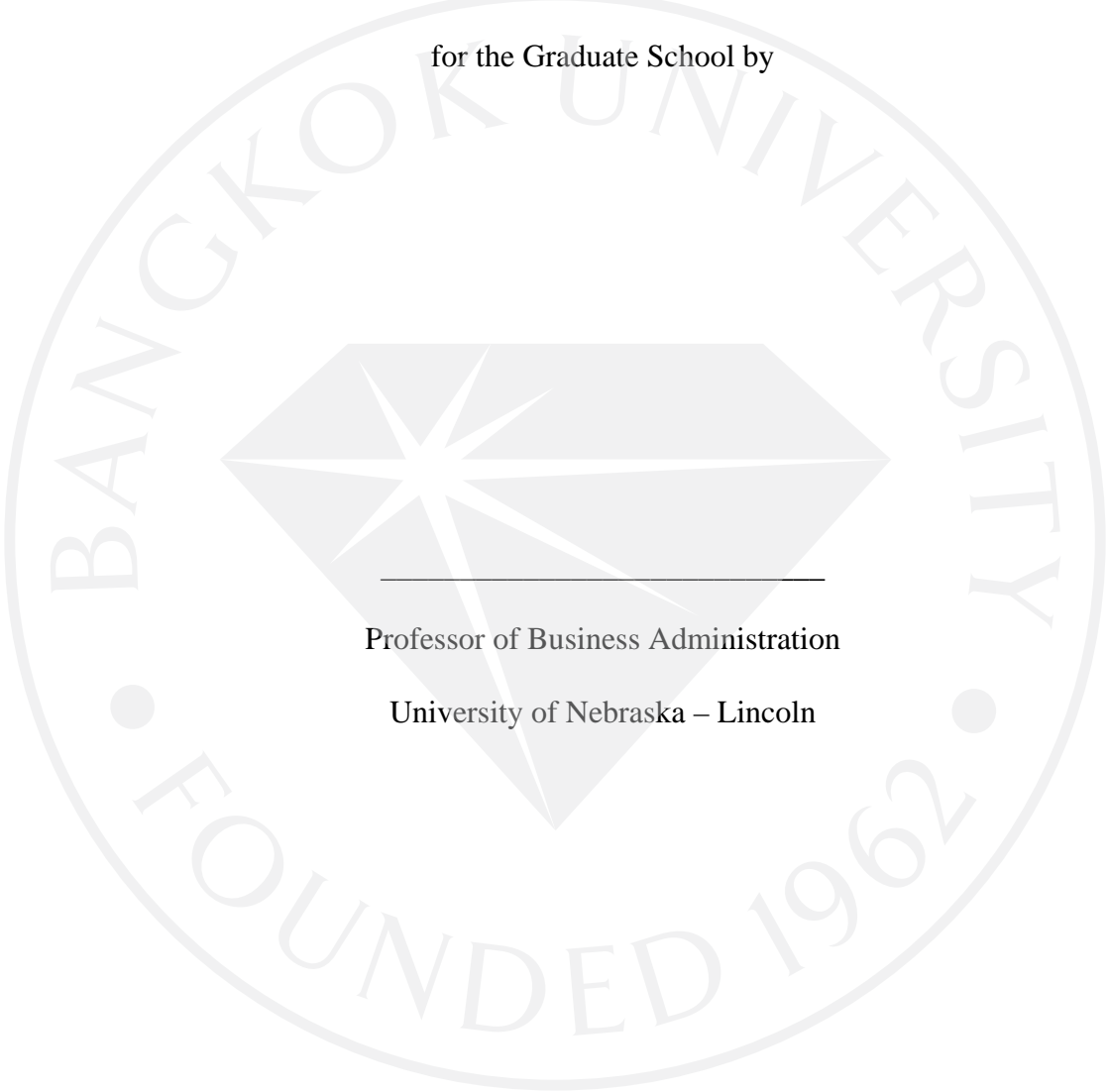


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A Positive Organizational Behavior Approach to Work Motivation: Testing the Core
Confidence Model in China (93 pp.)

Advisor of dissertation: Professor Fred Luthans, Ph.D.

ABSTRACT

Positive organizational behavior (POB) provides a new, positive approach to work motivation by developing and managing people's strengths and psychological capacities. Based upon the POB construct, Stajkovic and Luthans have developed a Core Confidence Model that integrates the four widely recognized human strengths of self-efficacy, hope, optimism, and resiliency into one latent factor. This integrated factor is proposed as key in understanding motivation in the workplace. Because all four individual indicators meet the unique POB criteria of being measurable, open-to-development, and manageable for performance and leadership improvement, the Core Confidence Model seems to be exceptionally well suited for today's rapidly changing political, cultural, and economic environment. The purpose of this study is to test this Core Confidence Model in the State Owned Enterprises (SOEs) of the transitional country of the People's Republic of China.

For this study, the sample consisted of the production workers in a Chinese SOE. Two hundred thirty nine workers from Luoyong Copper Working Group, a typical Chinese SOE with approximately 10,000 employees, participated in this study. Multiple regression analysis was used to analyze the questionnaire survey data. Factor analysis was also used to suggest the optimal outcome of the latent variable, the core

confidence factor, proposed in the model. Statistical analysis provided the correlations and their significance levels among the individual observed variables and that between the latent core confidence factor and predicted performance.

The results of the analysis indicate the latent core confidence factor (derived from the four components of self-efficacy, hope, optimism, and resiliency) provided a significant positive impact on performance. The impact of the integrated latent core confidence factor was, in fact, more effective than derived from any one individual component, as well as any core trait-like self-evaluations such as self-esteem, general efficacy, internal locus of control, and emotional stability. The results also revealed that resiliency has a significantly positive relationship with performance.

This study provides initial empirical support for the core confidence model as a positive approach to work motivation in a Chinese SOE. The analysis indicated the latent core confidence factor, consisting of state-like positive psychological capacities, to be significantly related to employee performance. In particular, the important role that psychological strengths may play in motivating employees in the relatively difficult context of Chinese SOEs was demonstrated. Implications for future research and practice are discussed.

ACKNOWLEDGMENT

My sincere thanks and deepest appreciation are, of course, given to my advisor, Professor Dr. Fred Luthans. During my entire academic and research program, he has spent his time professionally instructing my course work, continuously providing new thoughts and concepts, effectively directing every step of my dissertation, and consistently motivating me for a “good shot”. It is not only his top academic credibility and continuous research intentions, but also his positive reinforcement on student performance that makes Dr. Luthans an outstanding example of “Authentic Leadership” (his new book chapter). He is not only my best golf partner, but also has proved to be a most reliable, helpful, supportive, and positive advisor. My true and heartfelt thanks are also expressed to Professor Dr. Sang M. Lee, the Chairman of my committee. Dr. Lee was the person who not only made this cross-cultural program happen, but also specifically instructed and directed my course and research work. His insightful comments regarding “chain concepts” (i.e., managing an organizations is like a chain in which management must reinforce weak links of the chain), “learning from teaching”, and “knowing from writing” prompted many sleepless nights. I thank both Dr. Lee and Dr. Luthans for their leadership, their friendship, and their most joyful and memorable cooperation in my program. I also want to thank other committee members, Associate Professor Dr. Terrence Sebor and Associate Professor Dr. Cary Thorp for their continuous support, encouragement, valuable comments, and ideas.

A special thanks goes to my true friend, Dr. Alexander Stajkovic. I have cited his recent and current work more than a hundred times in both my previous work and this dissertation. I followed Dr. Luthans and his work in creating my dissertation. It is

not only his academic achievements, but also his leadership and great communication skills that make him my hero. Another person who deserves my special thanks is Susan Jensen, whose time spent in editing and providing comments on my dissertation was invaluable.

I also give my high appreciation to all the participants in Luoyang Copper Working Group and their director, Mr. Houqi Song. Without their participation and cooperation, this research work would never have been possible.

I certainly thank Dr. Thanu Kulachol, President of Bangkok University, Dr. Mathana Santiwat, Vice-President for Academic Affairs of Bangkok University, and Dr. Srisuda Chongsithiphol, Assistant to the President of Bangkok University as well as all administrators of Bangkok University. Without them, I would never have become the person I am today.

I am also grateful for my two long-time friends, two brothers, Mr. Fisher Fu and Mr. Frank Fu. Their real-time experience of management practice was very helpful for me to understand the contemporary management theories and techniques. I also thank them for introducing me to the wonderful world of golf, which has become one of the most significant contributors to my life satisfaction.

The author is also thankful to the following people for their assistance with various stages of the study: Linda Rohn, Cathy Watson, Milan Larson, Tracy Chen, Carl Li, Apiradee Wannawongsorn, and all my fellow Bangkok doctoral students who provided comments, suggestions, and inspirations throughout this study.

Finally, I would like to thank my wife Lily for her deepest love and uncompromising support. A special thanks goes to my little angelic daughter Jessica, who brings tremendous happiness to my life. My last thanks is given to my mom, my

deceased father, and all my family members as well as my parents-in-law for their love and support that has helped me to reach where I am today.



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CHAPTER 1

INTRODUCTION

Organizational behavior scientist Fred Luthans has recently developed the Positive Organizational Behavior (POB) approach, which focuses on managing and improving employees' psychological strengths such as confidence/self-efficacy, hope, optimism, subjective well-being/happiness, emotional intelligence, and resiliency (Luthans, 2001a, 2001b, 2002a, 2002b, 2003; Luthans & Jensen, 2002a, 2002b; Luthans, Luthans, Hodgetts, & Luthans, 2002). This POB approach was immediately embraced by both researchers and practitioners. For example, Allan H. Church states:

“As I see it, the primary objective of POB is to refocus and perhaps even re-energize our academic and applied attention on the more positive aspects of human nature as they apply to our life at work. By focusing on the five key attributes outlined in his CHOSE model – i.e., confidence, hope, optimism, subjective well-being, and emotional intelligence – Luthans is clearly sending a powerful message to the field and to organizations in general that it is time to move away from the study of dysfunctional behavior and workplace problems... As a frequent proponent of a normative, values-based approach to organization development efforts, I appreciate Luthans' attempt to redirect the field to reflect more humanistic goals” (Church, 2002, pp. 72).

Following the POB movement, Stajkovic and Luthans (2002) propose a POB-based motivational approach named “Core Confidence Model” in response to the call for new motivation theories. This model suggests that the core confidence factor consisting of self-efficacy, hope, optimism, and resiliency has a strong relationship with employees’ work-related performance. Such a positive approach to work motivation seems to have considerable promise as a new motivation framework and theory not only because it is deeply based on the theoretical foundation of positive psychology, but also because it is completely positively oriented. Based on the POB perspective construct, this attempt continues to work on shifting the attention away from the traditional organizational behavior field, which often focuses on “what is wrong with employees”, to the positive organizational behavior, which emphasizes “what is right with employees” (Luthans, 2002a; Luthans and Jensen, 2002b; Stajkovic & Luthans, 2002).

Today the transitional economy of mainland China (PRC) is gaining increased attention. The unique cultural aspects of China and its complicated transitional process fascinate, yet are largely unclear to the rest of the world. Media reports suggest China will emerge as an economic giant. In a recent World Journal article, Duke George, president of Bank of England, claims that China continues to rank as the world leader in terms of economic growth. However, others point to the pain and challenges that accompany China’s transition, highlighting the “four fears” of China (farmers’ anger, unemployment, corruption, and inflation) and caution that the society of mainland China is extremely volatile (Hodgetts & Luthans, 1997). Drucker (2002) further asserts that Chinese state owned enterprises (SOEs) are the biggest challenge to Beijing’s administration (World Journal, September 18, 2002).

Under such developing circumstances, business organizations and governmental offices in China welcome a performance improvement approach that is effective but less financially oriented. The positively oriented Core Confidence Model to approach work motivation seems to not only best meet the need, but also face the challenges present in this complex cultural and environmental context. Therefore, an examination of the Core Confidence Model in China can not only provide the organizations in this country with a new, non-monetary approach for motivating employees (and “motivation without money” is an extremely popular concept in China), but also enhance our understanding of the model and serve as an impetus for future comparative studies in the United States and other countries.

Statement of the Problems

Organizational behavior and human resource management researchers emphasize the important role that people play in organizational success and survival. Sherman (1993, pp. 96) claims “the only way we can beat the competition is with people”. Hamel and others point out that, in today’s global hyper-competitive environment, a skilled work force, cutting edge technology, exemplary customer service, and high quality products and services are especially needed to thrive or just survive (see Stajikovic & Luthans, 2002). The rapid, discontinuous change in the 21st century organizational environment challenges the OB and HR researchers to create effective “empirically supported” motivational approaches.

The definition of work motivation focuses on both positive and negative aspects, or cognitive appraisals regarding what behavior to engage in, how much effort in terms of direction, intensity and duration to exert, and how to deal with obstacles encountered along the way (Ambrose & Kulik, 1999; Baron, 1991; Pinder,

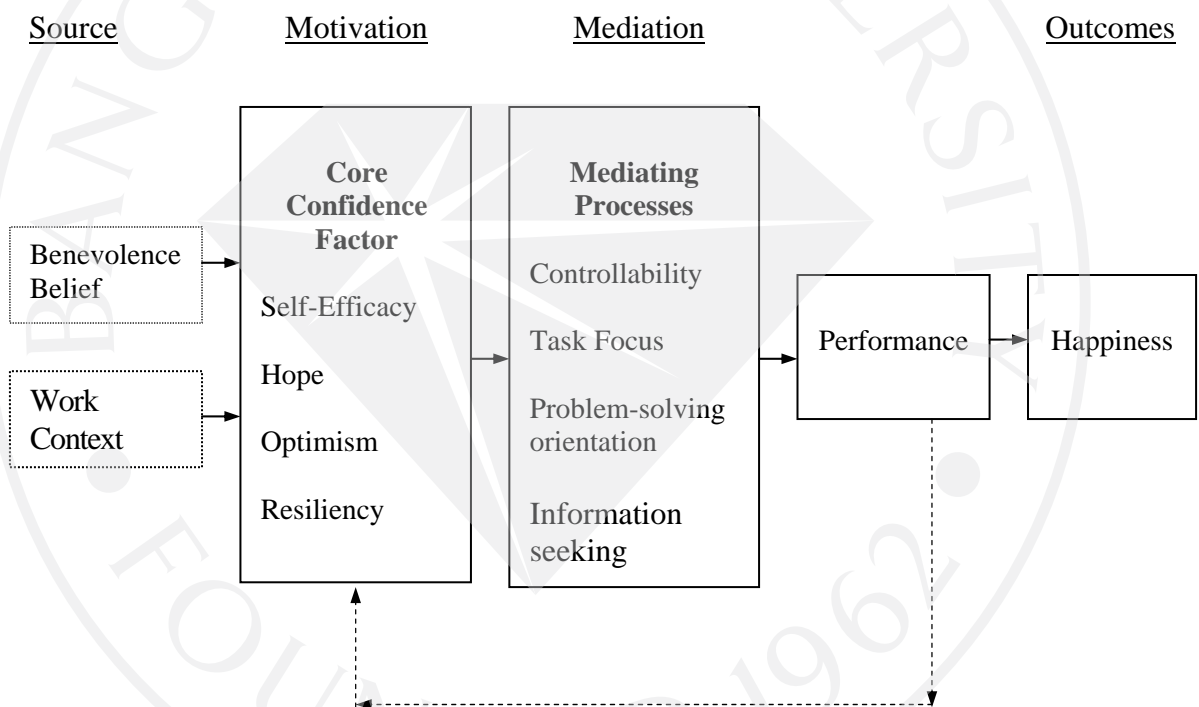
1998; Vroom, 1995). However, contemporary research has predominantly focused attention on managing “things” (Luthans & Jensen, 2002b), dealing with “what’s wrong with employees” (Luthans, 2002a), and coping with the “mainstream of negativity” (Bandura, 2000). Many studies attempt to provide ways to solve the negative things in terms of dysfunctional attitude and behavior (Judson, 1991; Kotter, 1995), negative affectivity and neuroticism (Burke, Brief, & George, 1993; Costa & McCrae, 1980), conflict resolution (Taylor, 2000), fear of technology (Hill, Smith, & Mann, 1987), stress and burnout (Aspinwall & Taylor, 1997). Even though Luthans (2001b) has pinpointed the negative effects (temporaries, emotional side effect, and no win game) caused by punishment, punishing employees is still a popular phenomenon in today’s organizations. Additionally, a survey of 14 large organizations located in Lincoln, Nebraska demonstrates that few organizations have given attention to the improvement of job-related psychological capacities such as confidence/self-efficacy in the employees’ training program (HR Seminar led by Dr. Cary Thorp, UNL), even though the significant impact of self-efficacy on work-related performance has been well documented (Stajkovic and Luthans, 1998a).

In his advancement of the POB approach, Luthans (2002a, 2002b) was inspired by, and builds upon, the theoretical background of the widely recognized positive psychology movement initiated by Seligman (1998), Diener (2000), and Bandura (2000, 2002). In a further refinement and expansion of the POB approach, Stajkovic and Luthans (2002) propose the Core Confidence Model (Figure 1). Instead of viewing the individual psychological variables as separate, stand-alone constructs, the Core Confidence Model integrates the selected measures of self-efficacy, hope, optimism, and resiliency into one latent factor termed the “core confidence factor”.

This core confidence factor is then proposed to have a strong relationship with work performance, that is, in fact, even stronger than any one of the component factors.

This core confidence factor is further proposed to have a stronger relationship with performance than Judge and Bono's (2001) trait-like core evaluations of self-esteem, general self-efficacy, internal locus of control, and emotional stability.

Figure 1: Core Confidence Conceptual Model



Source: Luthans, F., Stajkovic, A. D. (2002). Introducing positive psychology to work motivation: Theoretical development of a core confidence model. Submission to Academy of Management Review (second revision). (Used with permission but not be quoted without permission of the authors).

Due to its positive and non-monetary nature, this Core Confidence Model provides a potentially relevant and applicable theoretical framework to use in examining the motivational process in the complex transitional economy of China.

Research Questions

This study attempts to address research questions as follows: 1) what kinds of people tend to do a good job in organizations? Who are these people? How do they differ from other people? 2) Do highly confident employees outperform the low confident employees? Does confidence impact employee performance? 3) Where does the confidence factor come from? Is it measurable, developmental, and manageable? A fourth research question that has been hotly debated between personal traits and states should be added to this list: 4) Does a changeable confidence state really motivate employees better than relatively fixed dispositional traits?

The Core Confidence Model also allows analysis of the following specific research questions: How do the four core confidence components (self-efficacy, optimism, hope, and resiliency) correlate with each other? How does the internal correlation influence the predictive power of the Core Confidence Factor and the resulting performance? Additional questions with practical implications include: How can each of the core confidence components be further developed for performance improvement? Are certain components more readily changed and developed to create improvement in increasing the latent Core Confidence Factor? What makes the biggest contribution to confidence building and improvement?

Purpose of the Study

The purpose of this study is to test the Core Confidence Model in the organizational context of China. The relationships of each of the four core confidence components or appraisals and the latent Core Confidence Factor to employee performance are examined. This study allows evaluation of the overall “fit” of the Core Confidence model, as well as the test of individual hypotheses, which reflect the

impact of each component on core confidence as well as performance. More importantly, the study may yield valuable insights regarding ways to use a non-monetary approach to work motivation. This “motivate without money” approach is sorely needed in the organizational context of China.

Organization of the Dissertation

This dissertation is organized into five chapters. The first chapter introduces the statement of problem and the purpose of the study. The second chapter reviews the literature on Positive Organizational Behavior and the Core Confidence Model itself as well as the political and cultural environments of China. This chapter presents the derived hypotheses that are tested in this study. The third chapter explains the study design, measures, and methodology used. The statistical results and their translation into practical implications are positioned in the fourth chapter. The final and fifth chapter of the dissertation summarizes the research results, discusses the impact of the research findings, offers contributions and limitations of this study, and suggests implications for future research and practice.

CHAPTER 2

LITERATURE REVIEW AND HYPOTHESES

The Core Confidence Model is based upon the new movement of positive organizational behavior or POB. First, I review the definitional concept of the POB construct and its CHOSE framework. Secondly, I explain the theoretical development of the Core Confidence Model under the POB construct. Lastly, the Chinese political and cultural environments are discussed and the hypotheses are outlined.

Positive Organizational Behavior or POB

The organizational behavior field has long focused on managing “things” (Luthans & Jensen, 2002b) and “what’s wrong with employees” (Luthans, 2002a, 2002b). Inspired by the emerging positive psychology movement led by recent American Psychological Association president Martin Seligman, Fred Luthans began to realize that an important positive approach to work motivation through developing and managing psychological strengths had been neglected and was sorely needed in the OB field. Luthans systematically reviewed the theories and frameworks used in the positive psychology field, effectively applied the constructs and frameworks to the organizational context, and developed a new, positive approach termed Positive Organizational Behavior or POB. Luthans defines the POB approach by stating:

“Using the positive psychology movement as the foundation and point of departure, I will specifically define positive organizational behavior (POB) as the study and application of positively oriented human resource strengths and psychological capacities that can be measured,

developed, and effectively managed for performance improvement in today's workplace" (Luthans, 2002a, pp. 59).

The POB approach is distinct from, and complements the conventional approach to organizational behavior, by its focus on unique variables of human strengths and psychological capacities that are measurable and amenable to change for performance improvement. The criterion of being measurable makes a clear distinction between the theory-based POB constructs and "the positively oriented personal development best sellers" (Luthans, 2002a). The developmental or state-like nature of POB differs from the relatively fixed, trait-like, dispositional oriented human aspects such as personality and attitudes. The emphasis on managing these positive variables for performance improvement embraces important practical implications for human resource management and leadership development.

Drawing from the positive psychology field, Luthans (2002a) has identified five important human constructs of confidence/self-efficacy, hope, optimism, subject well-being, and emotional intelligence (or CHOSE), as meeting the POB definitional criteria of "being positive, relatively unique to OB, measurable, and capable of being developed and managed for performance improvement in today's workplace" (Luthans, 2002a).

Self-Efficacy

Self-efficacy is derived from social cognitive theory, which is closely associated with well-known theorist and researcher Albert Bandura (1986, 1997). He defined self-efficacy as "one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, pp. 3). People who possess greater self-efficacy willingly put forth more effort, persistently keep going in

spite of setbacks and failure, and ultimately, perform better (Bandura, 2000; see also Stajkovic and Luthans, 2002). Specifically, Bandura states that:

“Unless people believe that they can produce desired effects and forestall undesired ones by their actions, they have little incentive to act. Whatever other factors may operate as motivators, they are rooted in the core belief that one has the power to produce desired results” (Bandura, 2000, pp. 120).

Luthans and Stajkovic have done extensive work on self-efficacy and made Bandura’s cognitive concepts applicable to the workplace. They offered a definition of self-efficacy as “an individual’s conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context” (Stajkovic and Luthans, 1998b, pp. 66). Defining self-efficacy as being task and context specific clearly rules out the relatively fixed, trait-like general efficacy, which Luthans (2002a) believes is “conceptually opposite” to the self-efficacy discussed in this study. For example, many Chinese commercial pilots can skillfully operate an aircraft in terms of departing, flying, and landing even in turbulent skies. However, these same pilots may not know how to drive a car (specific task) on the road (given contexts). More than half of the Chinese commercial pilots do not own private cars. Clearly, the confidence these pilots possess in the cockpit of a plane differs markedly from that encountered in the driver’s seat of a car, and has little to do with their general efficacy in life. The level of confidence in the face of specific tasks is learned and developed.

According to Bandura (1997), self-efficacy can be measured by its magnitude in terms of the level of task difficulty (yes or no for believing he or she can complete

the level of task) and strength in terms of certainty of the person's believing (percent of person's judgment under "yes" and "no") (see also Stajkovic and Luthans, 1998a). Practically, data collection conducted in a large size Chinese SOE for manufacturing copper showed that self-efficacy is indeed measurable in the Chinese workplace.

Research has also demonstrated ways that self-efficacy can be developed and enhanced. Four widely recognized sources (or antecedents) of self-efficacy have been identified: 1) enactive mastery (prior successful experience); 2) vicarious learning (modeling); 3) verbal persuasion; and 4) psychological and physiological arousal (Bandura, 1986, 1997; see also Stajkovic and Luthans, 1998). Significant implications for efficacy improvement and resulting performance improvement have been developed based upon this framework. For example, training programs for leaders/managers and employees have been demonstrated effective in increasing confidence levels at work (Bandura, 2000). Also, a widely cited meta-analysis with self-efficacy by Stajkovic and Luthans (1998a) revealed a positive .38 correlation between self-efficacy and work-related performance, which translates into a 28% average increase of performance. This performance gain from self-efficacy is greater than that achieved through other popular OB/HR interventions such as goal-setting (10.39%), feedback (13.6%), and OB Mod (17%)(Luthans, 2002a).

Hope

Unlike self-efficacy, the concept of hope has not yet received much research attention from the field of organizational behavior. However, the positive psychology field identifies hope as a major construct and demonstrates a significant relationship between hope and academic achievement, emotional health, and the ability to cope with stress, illness and other hardships (Luthans and Jensen, 2002b). As a result, the

practical implication of hope to workplace performance merits additional study. The widely recognized definition of hope provided by positive psychologist C. Rick Snyder states that hope is “a cognitive set based on a reciprocally derived sense of successful: (a) agency (goal-directed determination) and (b) pathways (planning of ways to meet goals) thinking” (Snyder, et al., 1991, pp. 570). Agency reflects the willpower (goal directed energy or motivation) that serves as the driving force needed by a person to move toward the goals and not abandon the journey prematurely. Pathways (way-power) are described as one’s capability to generate various optional channels that a person can choose to attain the goal. These two agency and pathways components are interrelated and operate in a combined fashion to generate hope. The following example may help to illustrate the two distinct components of hope: an entrepreneur in the Thailand advertising industry was invited to speak to the students from the University of Nebraska-Lincoln during the Pan Pacific Conference in Bangkok. This entrepreneur had founded her business right before the financial crisis occurred in Thailand. Her entire talk indicated that hope was the dominating factor behind her success, in that her abilities to generate both strong willpower (agency) and multiple practical path ways (way-power) to persevere through the sluggish economic situation after the crisis enabled her to develop the business in this difficult economic period. The entrepreneur made it quite clear that without hope, she would not have been able to succeed.

Hope is similar to but distinct from other constructs such as self-efficacy and optimism. Snyder (2000) realized that the willpower and pathway dimensions are conceptually similar to efficacy expectancies and efficacy outcome expectancies respectively. However, Bandura (1997) believed that the efficacy expectancies are all-

important (can not be separated), while Snyder (2000) clearly demonstrated in his hope theory that the agency and pathway are equally important, operating in a combined, iterative manner (see also Luthans, 2002a). Seligman (1998) asserts that optimism expectancies are formed through others and outside forces, while Snyder (2000) initiated and determined his hope theory through a person himself and pointed that optimism does not include pathways. Conclusively, empirical evidence (Magaletta & Oliver, 1999; Scioli, et al., 1997) has indicated that while hope has some conceptual similarities to self-efficacy and optimism, it provides clear discriminate validity.

Although hope has been considered as a trait-like disposition, Snyder (2000) also provides theoretical support that hope is a state-like appraisal, open to change and development. The validated measure of “state hope” as Snyder and others (Snyder, et al., 1996) developed has been widely used in today’s hope research. Supportively, Magaletta and Oliver (1999) contended that hope is largely uninfluenced by social desirability (see also Luthans, 2002a; Stajkovic and Luthans, 2002). The body of hope research provides extensive evidence that hope fits the POB criteria of being measurable and developmental. Importantly, “state hope” carries considerable indirect and the beginning of direct implications for leadership effectiveness and employee performance and certainly merits future research in workplace applications.

Optimism

The concept of optimism has been long used in anthropology (Tiger, 1979) and clinical psychology (Peterson, 2000). Beyond Norman Vincent Peale’s positive thinking, positive psychologists defined optimism as a cognitive characteristic in terms of positive outcome expectancy and/or a positive causal attribution (See

Luthans and Jensen, 2002b). In his book Learned Optimism, Seligman (1998) clearly demonstrates the impact of optimism on physical and psychological health and characteristics such as perseverance, achievement, and motivation. These characteristics are associated with academic, athletic, political, and occupational success. Seligman's early work with optimism emerged from research focused on learned helplessness, depression, and death (Seligman, 1975; see also Stajkovic and Luthans, 2002). The notion of optimistic and pessimistic explanatory styles Seligman developed later describes how an individual attributes the causes of failure, misfortune, or bad events. Based on Seligman's Learned Optimism (1998), Luthans stated:

“Pessimists make internal (their own fault), stable (will last a long time), and global (will undermine everything they do) attributions; optimists make external (not their fault), unstable (temporary setback), and specific (problems only in this situation) attributions” (Luthans, 2002a, pp. 64).

The beneficial aspects from optimism have been well documented. Peterson (2000) pointed out that optimism is not simple cold cognition and that optimistic people are likely to be motivated and also motivating others. Empirically, Seligman's (1998) pioneering study of the sales force of Metropolitan Life Insurance not only proved that optimism is measurable and developmental, and positively related to sales performance, but also highlights the tremendous implications for manager and employee selection and training processes. In particular, his work with the theory-based Attribution Style Questionnaire (ASQ) has been widely used to measure optimism in today's studies.

Some studies with optimism attempted to find the relationship of optimism to competent managers (Boyatzis, 1982), leaders and followers (Wunderley, Reddy, and Dember, 1998), and general performance, satisfaction, retention, and stress (Peterson, 2000; Schneider, 2001; Schulman, 1999; Wanberg, 1997; see also Stajkovic and Luthans, 2002).

Some academics warn that in addition to positive effects, optimism can also produce negative effects in some areas such as financial control, accounting, and safety engineering. The most recent studies on optimism development recognized the importance of realistic and flexible optimism (see Luthans, 2002a for a review). Particularly, flexible optimism reflects the state-like nature of optimism (Schneider, 2001). Seligman's (1998) work with temporary attributions, specificity, and the learned optimism and flexibility suggests that optimism has strong theoretical support to be state-like. Thus, the optimism construct yields a good fit with the definitional criteria of the POB construct.

Happiness or Subjective Well-Being (SWB)

Beyond the loosely used common word happiness, positive psychologists widely use the broader and more precise term of subjective well being (SWB), which is more comprehensive than happiness, and involves individuals' affective (moods and emotions) and cognitive evaluations of their lives (Diener, 2000; Luthans, 2002a). The reason that positive psychology and the recent POB studies give attention to happiness or SWB is that people tend to value happiness (SWB) over money. Diener's (2000) empirical evidence suggests that almost 94 percent of 7,204 college students across 42 countries place a higher value on happiness (SWB) as compared to monetary gain.

The largest contributor to the SWB research is the widely recognized positive psychologist Ed Diener. Based upon his research, Diener has redirected research attention away from a basic focus on who is happy to a more precise analysis of when and why people are happy and what processes impact SWB (see Luthans & Jensen, 2002b). The components of SWB as identified by Diener include a general judgment of one's life, satisfaction with important domains as job satisfaction and others, relative levels of positive affect as the experience of pleasant emotions and moods, and negative effects as the experience of unpleasant moods and emotions (see also Luthans and Jensen, 2002b). The questionnaire developed by Diener and colleagues provides a reliable way to measure SWB.

Unlike the other POB constructs, SWB has been widely researched across cultures. For example, a multi-cultural study including 1,000 participants from 29 nations empirically revealed a positive .62 correlation between income and life satisfaction, and the relative levels of life satisfaction in each nation. Another study with Judge and Hulin (1993) found that SWB has a significant impact on job satisfaction. The body of research indicates that people who are satisfied with their life tend to find more satisfaction in their work (see Luthans, 2002a for a review). The body of SWB knowledge not only identifies the measurability of SWB, but also provides important implications for the critical issue of balancing career and family demands. For example, the increasing focus on work-family balance is not only present in the United States, but also in China, and other countries. Csikszentmihalyi's (1990, 1997) concept of optimal "flow" (a person's work and family challenges as aligned with his or her time and skill, (see Luthans, 2002a) is broadly accepted in the recent research and management practices.

Evidence also suggests that SWB is influenced by the organizational context.

The recent situational literature in the organizational behavior field indicates the value of attaining a good fit between person-task, person-job, person-organization (P-O fit), and person-person (P-P fit). These types of fit allow organizations to encourage and develop meaningful work relation between managers and employees (Luthans and Jensen, 2002b). Diener's recent call for a national index on SWB also implies the strong SWB characteristic of being developmental. Theoretically and empirically, SWB is identified to fit the definitional criteria of the POB construct.

Emotional Intelligence (EI)

The concept of emotional intelligence (EI) had not received wide recognition until psychologist and journalist Daniel Goleman published his best selling book Emotional Intelligence in 1995. Initial definitions of EI offered by Peter Salovey and John Mayer a decade ago focused on "the subset of social intelligence that involves the ability to monitor one's own and other's feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, pp. 189). Although this definition is still relevant, a more popularly recognized description of EI construct is provided by Goleman's (1995) simple definition as the "capacity of recognizing one's and other's emotions". Goleman identifies four components of EI, including self-awareness, self-management, self-motivation, empathy, and social skills, and asserts a strong relationship between EI and effective performance.

The distinction between IQ (mathematical/logical and verbal/linguistic dimensions) and EI (capacity of recognizing self and other's emotions) could be stated by the catchy phrase "IQ gets you hired, but EQ gets you promoted". Further,

Goleman insists that EI is not fixed, but largely learned, and continues to be developed through one's life span and learned from experiences (see Luthans, 2002a). Including the Multifactor Emotional Intelligence Scale or MEIS with Mayer, Salovey study, the body of EI literature provides support that EI can be measured, developed, and managed for performance improvement in today's workplace. Thus, EI is an important human capacity that fits the definitional criteria of the POB framework.

To better clarify the concepts of the POB framework, Luthans (2002a) also summarizes the key points of each POB concept in Figure 2. The unique criteria of being positive, measurable, learnable, developmental, and manageable seem to provide the five POB constructs with considerable promise as a point of departure for the new POB movement.

Figure 2: Representative POB Concepts (Chose)

CONFIDENCE/SELF-EFFICACY – one’s belief (confidence) in being able to successfully execute a specific task in a given context.

- Specific not general
- Performance process: involvement, effort, perseverance
- Sources: mastery experience, vicarious learning/modeling, social persuasion, physiological/psychological arousal

HOPE - one who sets goals, figures out how to achieve them (identifies pathways), and self-motivated to accomplish them, i.e., has willpower and waypower.

- Beyond feeling of things will work out for the best
- Brand-new concept for OB with considerable performance potential
- Valid measures show positive link with goal expectancies, perceived control, self-esteem, positive emotions, coping, and achievement

OPTIMISM – positive outcome expectancy and/or a positive causal attribution but is still emotional and linked with happiness, perseverance, and success.

- Beyond “Power of Positive Thinking”
- Both motivated and motivating
- Seligman’s optimism explanatory style of bad event: external, unstable, specific

SUBJECTIVE WELL-BEING – beyond happiness emotion, how people cognitively process and evaluate their lives, the satisfaction with their lives.

- Beyond demographics to when and why people are happy
- Components of SWB: life satisfaction, satisfaction with important domains such as the workplace, and positive affect
- SWB leads to job satisfaction but reverse not necessarily true

EMOTIONAL INTELLIGENCE – capacity for recognizing and managing one’s own and others’ own and others’ emotions – self-awareness, self-motivating, being empathetic, and having social skills.

- Currently very popular
- One of the multiple intelligences
- “IQ gets you the job, EQ gets you promoted”.

Source: Luthans, F. (2002a). Positive organizational behavior: Developing and managing psychological strengths. Academy of Management Executive, 16(1), 57-72.

The Core Confidence Model

To answer Steer’s (2002) call for new motivation theories and framework, Stajkovic and Luthans (2002) took an integrated perspective based on the POB approach and proposed the Core Confidence Model as shown in Figure 1. Unlike the traditional analysis of individual indicators, this model suggests that the combined or

integrated predictive power of the four core confidence appraisals (self-efficacy, hope, optimism, and resiliency) as a latent “core confidence factor” not only provides predictive power regarding individual performance in the workplace, but also yields stronger predictive power than any one of the four individual core confidence appraisals viewed separately. Stajkovic & Luthans (2002) further assert that the four psychological constructs influence employee performance and happiness through cognitive processes such as controllability, task focus, problem-solving orientation, and information seeking (see Figure 1).

Reasons for Core Confidence

The concept of the Core Confidence Model is consistent with Luthans’ (2002a) suggested POB approach. He argues that relatively more attention has been given to confidence because of the considerable theory, research, and application given to self-efficacy over the years. According to Bandura (1997), employees have feelings of uncertainty and stress because of heightened nervous activation resulting from job loss, frequent change or transfer – all realities of today’s rapidly changing organization environment. Armenakis and Bedeian (1999) also argue that a failure to resolve the increasing concern or negative psychological arousal results in less motivated, even de-motivated employees that lead to dissatisfaction, less commitment, and of course, performance ineffectiveness. Emphatically, Bandura (1997) asserts that feelings of uncertainty, stress, and anxiety are closely related to only a person’s self-doubt to cope with the changing environment, not to the change itself. A real-time example may help understand the arguments. To initiate a cross-cultural collaborated doctoral program, Professor Fred Luthans was asked to give a talk to a group of new Bangkok doctoral students. However, following this talk, many

of the students opted to change their major area of study. This shift from their originally chosen OB field reflected the students' perceived lack of confidence in their abilities to meet Professor Luthans' expectations of doctoral education and research. Another example in the technology context provided by Hill, Smith, and Mann's (1987) study indicates employees resist a new technology, not because of their fear of the technology itself, but because of their poor beliefs in their capacities to successfully use the technology. Certainly, an employee's past failure experience in achieving the expected results in coping with the changing work contexts also threatens self-beliefs regarding abilities (Stajkovic and Luthans, 2002). Supportively, Bandura (1997) suggested that less motivation results from threatening self-beliefs and prevents employees from successfully obtaining the new skills. However, the new skills are necessary, but not sufficient for successful performance. To identify more variables needed for desired performance, Stajkovic and Luthans (2002) insist that self-efficacy (he or she believes that he or she can do it), hope (he or she has the willpower and knows the way or path), optimism (he or she has a positive outlook about the future), and resiliency (he or she can bounce back from failure and setback) are extremely necessary for resulting employee successful performance. Borrowing evidence of the confidence from Bandura's (2000) social cognitive theory, Stajkovic and Luthans (2002) pinpointed that only confident employees are likely to be motivated enough to successfully accomplish their jobs in the face of the rapidly changing organizational contexts. Rooted in the overall POB framework, the Core Confidence Model presents the integrated core confidence factor as a state-like motivational concept, open to change.

Reasons for Integration

Bandura's (1986) social cognitive theory suggested that a single theory couldn't aspire to achieve much productive value in the ever-changing circumstances of life and work. Bandura's (2000) recent work also indicated that a single psychological variable couldn't have an all-encompassing and unchanging relationship to human action. Integration approaches have been effectively used in core dispositional traits (Jude et al., 1997; Judge, Erez, & Bono, 1998) and "bundling" high performance practices in HR management literature (Huselid, 1995; Huselid et al., 1977). Therefore, an integrated core confidence factor seems appropriate to best explain employee performance, particularly in the increasing complexity of today's organizational contexts.

Resiliency

The Core Confidence Model replaced the variable of Emotional Intelligence and SWB with Luthans' (2002b) newly added POB construct of resiliency, not only because it can be more readily measured, but also due to its increasing importance in today's dramatically changing, turbulent environment. The concept of resiliency has been widely used in clinical psychology, particularly child psychopathology (Huey & Weisz, 1997; Hunter & Chandler, 1999; Stewart, Reid, & Mangham, 1997).

The most recognized, state-like definition of resiliency by Stewart, Reid, and Mangham (1997) focused on the capability of individuals to cope successfully in the face of significant change, adversity, or risk. This capability changes over time and is enhanced by protective factors in the individual and environment. More practically, Luthans (2002b) has defined resiliency as the positive psychological capacity to rebound, to "bounce back" from adversity, uncertainty, conflict, failure or even

positive change, progress and increased responsibility. Clearly, people with different levels of resiliency have different capacities to “bounce back” in the face of failure or setback.

Resiliency also shows a strong fit with the astute observations of the widely recognized father of stress studies, Hans Selye. Selye argues that it is not what happens to you that matters, but how you take it (see Stajkovic and Luthans, 2002). Research has also discovered the narrower boundaries and more reactive nature that resiliency has than self-efficacy and locus of control (Huey & Weisz, 1997; Hunter & Chandler, 1999). Unlike the negative focused coping, the concept of resiliency is used in both negative situations such as failure and positive events like transition and change (Stewart, et al., 1997). Considerable evidence (England, Carlson, & Stroufe, 1993; Rutter, 1993; Stewart, et al., 1997) indicates that resiliency is not only measurable, more state-like than either locus of control or coping mechanism (Stajkovic and Luthans, 2002), but also developmental and changing over time.

Although the construct of resiliency carries significant implications for application, literature shows that little attention has been given to resiliency in the workplace. To include the state-like, open-to-development POB construct of resiliency in the Core Confidence Model seems to increase impetus to the integrated latent core confidence factor for approaching work motivation.

Core Self-Evaluations and Job Satisfaction /Performance

Judge and Bono (2001) conducted a meta-analysis in an attempt to find empirical evidence for the model of “self-evaluations” or “positive self-concepts” as Judge Locke, and Durham (1997) proposed. This model suggested that each of the four self-evaluations of self-esteem, general self-efficacy, internal locus of control,

and emotional stability has a significant relationship with job satisfaction and performance. Unlike the criteria of the POB construct, the core self-evaluations have three different criteria: evaluation-focus, fundamentality, and breadth or scope (Judge et al., 1997). Their study found correlations between each of the four core self-evaluations and performance (.26 for self-esteem, .23 for generalized self-efficacy, .22 for internal locus of control, and .19 for emotional stability) (see Table 1).

Table 1: Correlations Between Core Self-Evaluations and Job Satisfaction and Job Performance (A Meta-Analysis)

Core Evaluations	Job Satisfaction	Job Performance
Self-Esteem	.26	.26
General Self-Efficacy	.45	.23
Internal Locus of Control	.32	.22
Emotional Stability	.24	.19

Source: Adapted from Judge, T. A., Erez, A., & Bono, J. E. (1998). The power of being positive: The relation between positive self-concept and job performance. *Human Performance*, 11, 167-187.

Judge and Bono (2001, pp. 80) concluded that, “these traits are among the best dispositional predictors of job satisfaction and job performance.” However, debate has long existed regarding the relative value of relatively trait-like concepts as compared to state-like concepts that are changeable, learnable, and open-to-development. Therefore, there is a need to examine and compare the relationships of the trait-like and state-like predictors of performance. Such a comparison may not only help enhance our understanding of these relationships, but also yield valuable insights for management practice in general, leadership development and improvement in particular.

The Chinese Context of the Study

The external environment or context is an important initial factor in influencing the strategy, structure, and processes of any organized endeavor (Luthans, et al., 2000). Particularly, cultural values embraced in the social environment can profoundly affect the attitudes, behavior, and performance of organizational participants (Adler, 1983; Hofstede, 1983; House et al., 1997; Schwartz, 1994). Studies (Bass, 1990; House et al., 1997; Yukl, 1998) suggest that national culture is one of the important determinants of organizational behavior. An understanding of the political and cultural environments of China is a necessary context for the study of the psychological concepts of the people from the nation and their relationship with performance at work.

Political Background

A few young and knowledgeable people initiated the Chinese Communist Party (CCP) in 1921, with the aim to establish a new China that could rescue the national people out of the “deep water and fiery fire” (poor living conditions and high compression). These visionary people eventually emerged as the Chinese leadership in 1949. However, such a newly built complex Chinese political system that combined the rich culture and history of the country was deeply rooted in the feudal political and social heritage (Hodgetts & Luthans, 1997). Since that time, Chinese society has retained an underlying conservatism resulting in a pattern of “up and downs” or “speed-ups and slow-downs” as adjustments and readjustments on the political, economic, and business scenes (Schermerhorn and Nyaw, 1990), particularly because of the poor fundamentals resulting from the previous

underdeveloped economy and a lack of managerial knowledge and skill in the CCP members (Li & Sebor, 2001).

Very few countries have experienced the number and magnitude of social changes that have occurred in recent Chinese history (see Figure 3).

Figure 3: Chinese Communist Consolidations

Time Period	Events
Before 1910	Qing Dynasty
1911-1948	Republic Era (Civil War + Japanese War)
1949-1965	Communist Revolution Era
1966 – 1976	Cultural Red Revolution
1977 – the present	Economic development

Source: Adapted from Ralston, D. A., Egri, C. P., Stewart, S., Terpstra, R. H., & Kaicheng, Y. 1999. Doing business in the 21st century with the new generation of Chinese managers: A study of generational shifts in work values in China. *Journal of International Studies*, 30 (2), 415-428.

During the Republican Era, Confucianism flourished and a Western presence was prominent in commercial areas such as Shanghai. The following Communist Consolidation Era, which began with the establishment of the People's Republic of China, was epitomized by violent purges against the educated, and an attempt to supplant Confucian ideas with Marxism/Leninist/Maoist communist doctrine. During that period, anything Western was denied. The Economic Development Era after 1976, initiated by Deng Xiao Peng, saw a movement back to acceptance of Confucian values and a continuation of commerce with the West (Ladany, 1988). The essence of the evolution from the period under Mao's "work for the good of society" philosophy can be captured by Deng's (1984) acknowledgement that a "few flies" (Western influence) could likely come through the open door, in the new and pragmatic "to be

rich is glorious” plan to modernize China by the early twenty first century. Obviously, many of the changes have radically reshaped beliefs and attitudes which logically may have had marked influence on the value of the Chinese workforce, and in particular its managers (Ralston, et al., 1999).

Cultural Environment

Most studies associated with Chinese culture ended up arguing or concluding the outstanding nature of the collectivism-dominated cultural dimension in China. However, Ralston and other’s (Ralston, et al., 1999) recent empirical evidence revealed that Chinese people in general, Chinese younger generation in particular, are increasingly becoming individualistic. This study is recognized because it used the widely known Schwartz Value Survey (SVS) method of measuring cultures. The SVS is believed to better measure personal score values at the individual level because it includes power, achievement, hedonism, stimulation, self-achievement, universalism, benevolence, tradition, conforming, and security (Schwartz, 1994).

Uniquely, Confucianism as a typical Chinese cultural measure provides a new perspective for interpreting the various complicated and deep-rooted Chinese cultures. The mainstream of harmony and Guanxi (connections) in the Confucianism construct profoundly supports particularism and ascription cultural dimensions in China. However, Ralston et al. (1999) found that the influence of Confucianism tends to decline particularly when young Chinese people increasingly move into positions of power and start leading the country in this new millennium.

Chinese State Owned Enterprises (SOEs)

The existing Chinese SOEs represent a special issue that attracts the world and management research attention. The Fall 2001 issue of the Journal of World Business published articles specially focusing on Chinese SOEs. According to Kynge (2000), Chinese SOEs account for about 37% of China's economy (see also Mar and Young, 2001) and employ about 110 million workers, approximately the same size as the entire workforce of the United States (Bruton, et al., 2000). Unlike any other type of business organizations, Chinese SOEs simultaneously must support systems that serve political and social objectives (Schermerhorn, 1987). A structural chart developed by Schermerhorn and others (Schermerhorn et al., 1990) revealed the parallel internal authority structures in traditional Chinese industrial enterprises (see Figure 4). His claim that Chinese enterprises now unavoidably face pressure to increase productivity and production (Schermerhorn, 1987) is still relevant as their managers make business decisions under the influence of government involvement that typically recognized political and social consensus. The administrative and Party authority co-existing phenomenon continues to dominate the power and authority structure of Chinese SOEs. Such a power and authority pattern produces two organizational phenomena: the substitute for leadership and learned helplessness (Schermerhorn and Nyaw, 1990), which undoubtedly lead to production and operation inefficiency and ineffectiveness (Leonard, 1997). Not surprisingly, many of the current Chinese administrative and Party cadre are falling short and have the challenge of providing managerial leadership.

Figure 4: Parallel Internal Authority Structure in the Chinese SOEs

Factory Director	Typical decision involvement First Secretary
Management Cadre	- production targets Party Cadre
Work Group Leaders	- work incentives Party Group Leaders
Workers	- promotions Worker Holding Party
	- pay raises honors & recognition	
	- employment discipline	

Source: Adapted from Schermerhorn, J. R. & Nyaw, M. (1990). Managerial leadership in Chinese industrial enterprises. International Studies of Management and Organization, 20(1).

The largest ongoing issue faced by Chinese SOEs is that of tremendous unemployment. An estimated 20 to 30 million workers in the SOEs are considered surplus, and thus unnecessary to the production process. Even though the communist party's legitimacy rests on protecting workers, a large number of SOEs employees have been forced away from their jobs. The threat of losing jobs has dramatically increased workers' psychological pressures and directly affects their performance, job satisfaction, and happiness.

Hypotheses of the Study

The POB approach was reviewed earlier in the chapter. The POB definitional criteria of being measurable and open-to-development pose a strong impact from the POB constructs on work-related performance. Given the serious influence of the political and cultural context on employees in Chinese SOEs, developing employee's psychological capacities (particularly the core confidence appraisals utilized in this study) seems to have considerable promise for improving performance. Those psychological capacities impact performance through different cognitive processes.

Bandura (1986, 1997) asserts that the level of people's perceived ability leads to people's judgment of controllability of an event. The higher efficacy they have, the higher perceived ability to manage controllability, and the more productively they accomplish their work. In contrast, employees with low efficacy are likely to harbor self-doubt and not as able to control the task.

Sarason's (1975) early study indicated that the relationship between a person's confidence and self-orientation decides whether or not he or she can successfully accomplish the task in a particularly changing environment. Low perceived confidence or low level of hope lead to a person-oriented focus, and in turn, to self-doubt, stress building, and finally adverse task outcome. However, high efficacy people or those with high hope remain more focused on the task at hand (Stajkovic and Luthans, 2002). For example, highly confident golfers usually focus on the middle of the green while less confident golfers become nervous (focus on their own beliefs whether or not they can make it), or focus on the water or bunker hazards around the green. It is clear that the levels of psychological states internally determine peoples' assessment of task demands, strategy development, and effective use of personal capacities, which are closely related to the quality of task accomplishment or performance.

Cervone, Jiwani, and Wood (1991) and Lazarus (1991, 1995) argued that there are two types of strategies employees usually take: emotion-focused strategy and problem-focused strategy. The emotion-focused strategy is employed by those who emotionally respond to problems and doubt about their personal deficiencies; while the problem-focused strategy is associated with those who concentrate on the task and take action to solve the problem (Stajkovic & Luthans, 2002). Lazarus (1991, 1995)

developed the influence of the personal psychological capacities on choice and effectiveness of strategies and argued that highly confident people are more likely to use a problem-focused strategy while less confident people tend to use emotion-focused strategy. Those using problem-focused strategies tend to perform better at work (Stajkovic & Luthans, 2002).

Organizations can use feedback to direct and instruct an employee's performance. Meanwhile, employees can use feedback to assess, evaluate, and improve the quality of their task accomplishments (Stajkovic & Luthans, 2002). Feedback also helps employees reduce the uncertainty that may slow progress toward successful performance (Ashford, 1986; Ashford & Cummings, 1983). There are two strategies that employees usually take to seek feedback: the monitoring strategy (seeking feedback by observing others) and the inquiry strategy (seeking feedback by directly asking) (Ashford & Cummings, 1983; Ashford and Tsui, 1991). The choice of the strategies depends on their perceived confidence level (Stajkovic & Luthans, 2002). Highly confident employees are more likely to use the inquiry strategy for feedback, while low confident employees take the monitoring strategy. Confident people perceive feedback as a self-improvement approach and tend to receive accurate, immediate, direct feedback information through straight asking, and eventually, this feedback results in high performance.

Chinese employees are subjected to poor or at least relatively poor leadership practices and experience learned helplessness (Schermerhorn and Nyaw, 1990), which lead to operational and production inefficiency and ineffectiveness (Leonard, 1997). The deep-rooted Confucian culture that promotes connection and harmony in Chinese organizations may block employees from opportunities and even hope for promotions

and other career development. Employees often display a helpless attitude toward the rapid environmental change and the increasingly challenging need for technological skills and product and service quality. This is because to improve organizational situations is extremely difficult and rather time-consuming. Chinese governmental involvement in corporate governance in the SOEs seems to be another huge “umbrella” that prevents the employees from seeing the real “sky”. Employees believe that they have little influence on management and perceive inabilities in managing the controllability of their job because bureaucracy and hierarchy fail to offer close cooperation and efficiency among each working process. They lack self-beliefs or psychological capacities and are less motivated. Those who give high performance at work seem to have high confidence or strong psychological capital such as efficacy, hope, optimism, and resiliency. Based on the foundation discussion in this chapter on these four psychological capacities, the following hypotheses are offered:

Hypothesis 1: A Chinese SOE employee’s self-efficacy is positively related to his or her performance at work.

Hypothesis 2: A Chinese SOE employee’s hope is positively related to his/her performance.

Hypothesis 3: A Chinese SOE employee’s optimism is positively related to his or her performance at work.

Hypothesis 4: A Chinese SOE employee’s resiliency is positively related to his/her performance at work.

Bandura's (1986, 2000) social cognitive theory suggested that no single theory or variable alone is enough to explain the all-encompassing relationship to human action, particularly in today's ever changing circumstances of life and work. The integrated theoretical approach used in the personality field (Judge et al., 1997; Judge, Erez & Bono, 1998) and the human resource management studies (Huselid, 1995) appear to better address the increased complexity of the workplace. The core confidence appraisals used in this study seem to theoretically fit the integration approach in the complicated environmental background of China in general, and Chinese SOEs in particular, thus the following hypotheses are offered:

Hypothesis 5: The core confidence factor for Chinese SOE employees is positively related to performance.

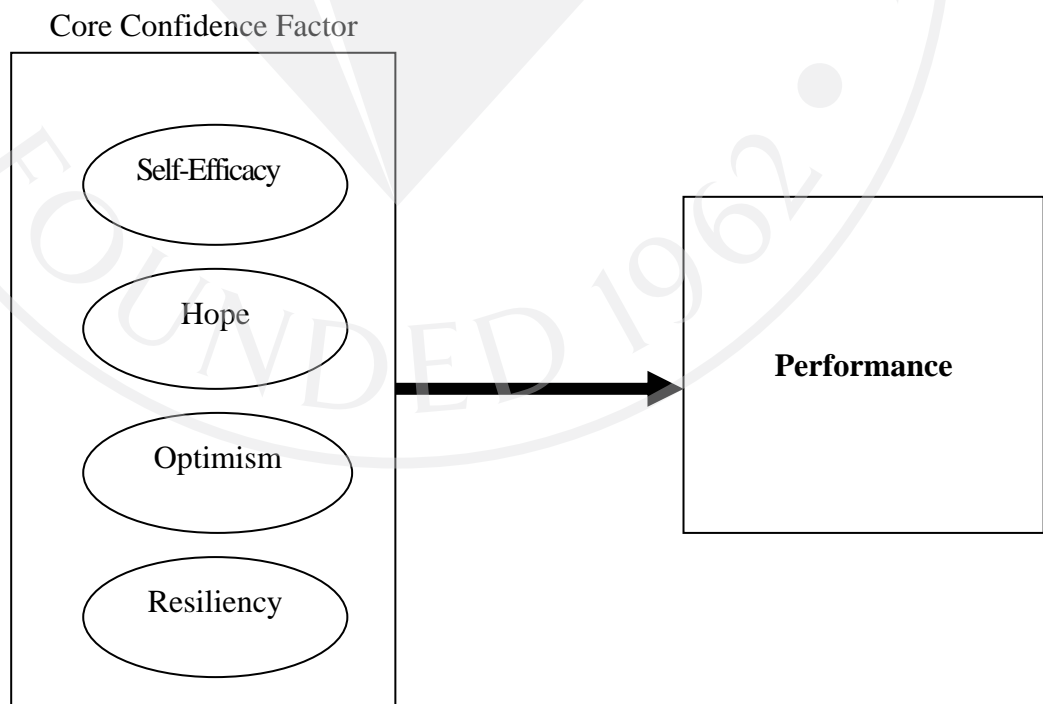
Hypothesis 6: The core confidence factor for Chinese SOE employees has a stronger relationship with performance than any of the four core confidence appraisals (self-efficacy, hope, optimism, and resiliency) individually.

Even though personality studies (Judge and Bono, 2001) suggest that there is a relationship between the core self-evaluations and job satisfaction/performance, motivation researchers still believe that there is limited potential for the trait-like dispositions because they are relatively fixed. Instead, the state-like capacities of the core confidence appraisals seem to have considerable promise for work motivation and carry tremendous implications for management because of the criteria of being measurable, developmental, and manageable. Theoretical and empirical support from the positive psychology movement for the POB framework offers evidence that the state-like capacities may have relatively stronger influence on performance than the trait-like core self-evaluations. Thus, the final hypothesis for this study is:

Hypothesis 7: The core confidence factor for Chinese SOE employees has a stronger relationship with performance than any of the trait-like self-evaluations (self-esteem, general self-efficacy, internal locus of control, and emotional stability).

Overall, the conceptual framework to be tested in this study is the relationship between the core confidence factor and performance (see Figure 5). To compare and contrast the magnitude of the relationship with individual components and each of the four core self-evaluations, the conceptual framework and hypotheses (see Figure 6) are offered to address the research questions presented in Chapter 1. The following chapter reports the setting and sampling characteristics of the study, the research design, the variable measures, and the methodology used in this study.

Figure 5: Conceptual Framework



(Cont'd)

Figure 5: Conceptual Framework

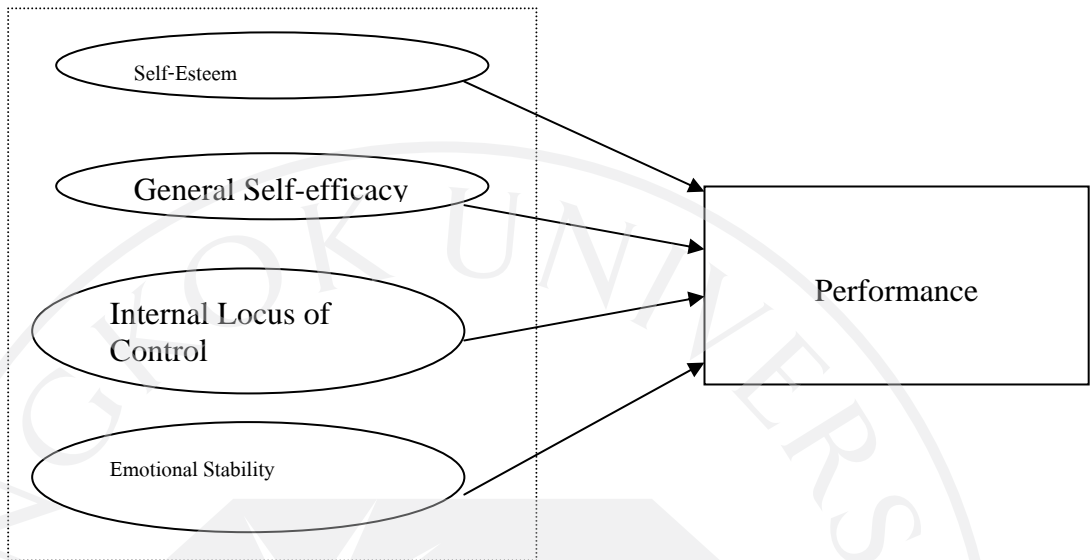
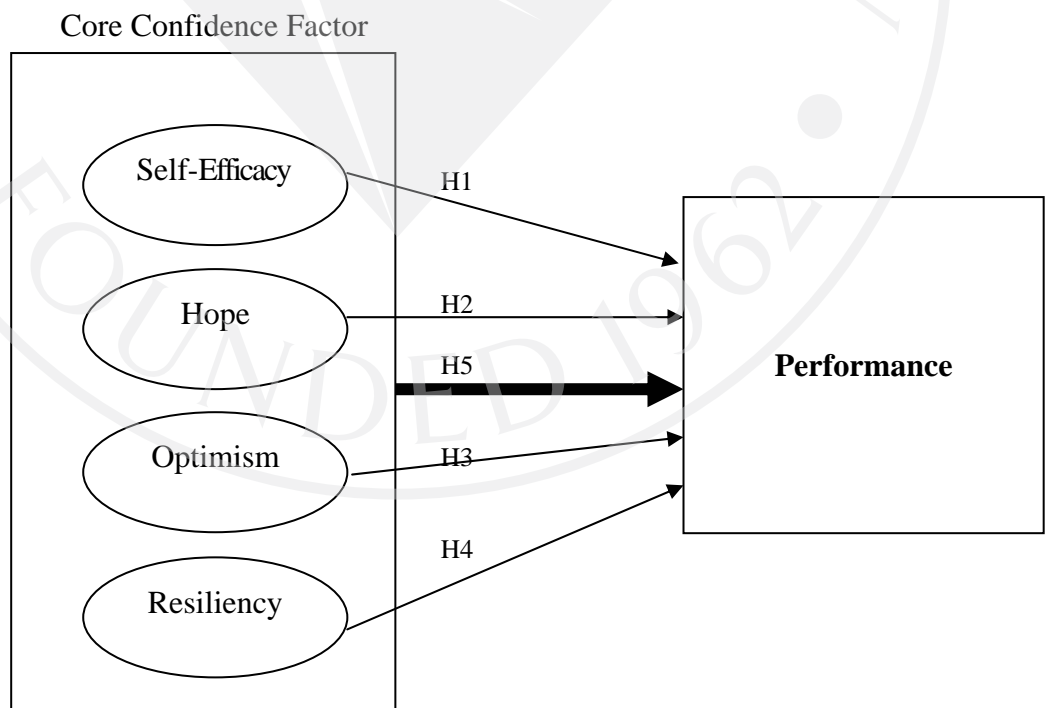


Figure 6: Conceptual Framework and Hypotheses



CHAPTER 3

STUDY DESIGN AND METHODOLOGY

The previous chapter described the POB approach and its CHOSE framework, the Core Confidence Model, and Chinese political and cultural environment, and yielded the hypotheses. This chapter discusses the study design including the subjects, retranslation method, variable measures, control variables, and the multiple regression methodology used in this study.

Research Design and Measures

Data collection for this study was conducted via questionnaires administered to Chinese employees in a large SOE. The questionnaires used are widely recognized, research-based, standardized measures.

Study Sites

This study took place in Luoyang Copper Working Group, located in the central part of China, about 800 miles southwest of Beijing. With downsizing from 15,000 employees to the current 10,000 employees within five years, this factory is a typical example of Chinese SOEs, but could be recognized as a successful transitional or reformed SOE. The re-engineering process included technology innovation, downsizing, total quality management, and ISO9000. These initiatives are what most of the Chinese manufacturers, particularly the SOEs, are presently undergoing. Thus this large factory is representative of most Chinese manufacturing SOEs. Similar to the Russian textile factory used in Luthans, Welsh, & Rosenkrantz (1993) Russian study, this Chinese factory is a self-contained community. Around the factory are grocery stores, schools, day-care, hospitals, apartments and dormitories, recreation

centers, auditorium, social cultural center, and sanitarium. Originally, Russian engineers built the factory in 1956. There are eight sub-factories for each process needed for copper products. The participants for this study were from three major process sub-factories.

Sample

There are approximately 10,000 total employees at this manufacturer used as the study site and a sample consisting of 250 employees was drawn from the 2,000 production line workers in the copper factory. Out of 250 systematically selected employees from this operations process, 239 respondents answered all or most of the questions and contributed their names on the answer sheet. On a separate sheet, their department managers, or supervisors, using a 10-point Likert scale format for the months of April and May 2002, evaluated the performance of these respondents. In addition, archival data on salaries and bonuses for each of the participants in April and May were obtained from the HR Department. This archival data of salaries and bonus is provided as a way to reduce potential perception bias related to the subjective evaluations of performance from the direct boss of each participant.

The demographic information obtained from the questionnaires indicated that the average age of the participants was 32, ranging from 16 to 57 years of age, and that the educational level among the participants averaged 12 years. There were 194 males and 45 females out of the 239 participants.

Re-Translation Method Used On the Questionnaires

A major concern with cross-cultural research is the translation accuracy from the US-based measurements to other cultures and languages. A cultural gap occasionally triggers affective or conceptual response (Ibrayeva, 1999). Different

meanings of words, such as “ambitious” evidenced in Ibrayeva’s (1999) study between the U.S. and previous CIS countries, are also relevant to China. To avoid or narrow the cultural difference and interpretations, Earley (1989) suggests the use of the re-translation method.

This study involved two languages: English and Chinese. A Chinese student (who is a native speaker of Chinese language) studying for a doctoral degree in the management field in the U.S. translated the English questionnaires into the Chinese language. Before the questionnaires were distributed, the Chinese version of questionnaires was translated back to English by an English major Chinese graduate student. The original and the re-translated versions of the questionnaires were carefully compared and discrepancies in terminology or intent were discussed and reconciled. This re-translation method was used in the study for all the measures.

Performance Measures (Dependent Variables)

Two performance instruments were combined as the performance measure in the study: the supervisor’s performance evaluation and the employee’s salary and bonus.

Supervisor’s performance evaluations on employees’ performance were based upon the criteria of the employee’s productivity (quantity, quality, and efficiency) and cooperation with other team members. A 10-point Likert scale of evaluation was used.

Clearly, using pay such as salary and bonus as performance measurement seems to be questionable. Under many circumstances, pay is unable to represent performance. For example, people at different organizational levels may receive very different amount of pay. People receive high pay maybe because of their positions, working experience, length of working time, etc. not solely because of their

performance. However, pay such as salary and bonus is used to measure performance in this study because of the specific working contexts and the character of working group. The participants in this study are solely copper production workers, excluding any level of managers. They work in team or group. Their individual pay is based upon a designated coefficient times the total volume of copper their team or group produces within the paid period. The coefficient for each individual is calculated based upon 360 degrees feedback (including evaluation from self, colleague, and department managers). This is a typical example of pay for performance. The measure by integrating supervisor's evaluation and salary plus bonus is the few possible and realistic measures for copper worker's performance. Relatively young age (average 32) also limits the impact of individual working experience and working years in the organization on its pay. Since team or group members play different role in the entire team or group work, the supervisor's evaluation of individual performance was deemed by management and knowledgeable analysts of this work situation to be the most appropriate measure of the individual worker's performance. However, to add objectivity and convergence to the perceptual measure, salary and bonus as archival data was also used. The HR department of this Chinese organization provided data of salary and bonus (based on merit) for the participants in the same months.

The Core Confidence Factor and Other Independent Variables

The Core Confidence Factor: As presented in the theoretical foundation, the proposed core confidence latent variable consists of four state-like appraisals: self-efficacy, hope, optimism, and resiliency and is able to be generated by factor analysis.

Self-Efficacy: Self-efficacy questionnaires used in this study were based upon Bandura's (1986, 2000) concepts of magnitude and strength of self-efficacy. Because self-efficacy is task and context specific, Luthans and Stajkovic developed the questionnaires for different tasks. For example, a grade range from D to A+ as the increase of performance level was used to measure student's self-efficacy (see Appendix A), while a range from last year's average copper production and the highest achievable copper production record (divided in ten levels and each level increases by 10%) was used to measure copper producing worker's self-efficacy. Lee and Bobko (1994) assert this is the best way to measure for self-efficacy (see Appendix B).

Hope: The hope questionnaire used in the study was developed by Snyder, Simpson, Ybasco, Borders, Babyak, & Higgins (1996) (see Appendix C). The questions are based upon an 8-point Likert scale and 8 items.

Optimism: The widely used Attribution Style Questionnaire (ASQ) for optimism questionnaire was derived from Scheier and Carver (1985) (see Appendix D). A 5-point Likert scale and ten items are included in the questionnaire.

Resiliency: The resiliency questionnaire comes from the widely recognized work of Block and Kreman (1996) and Klohlen, (1996) (see Appendix E). The measures use a 4 –point Likert scale and 14 items.

Core Trait-Like Self-Evaluations: The questionnaires for measuring the four core self-evaluations (self-esteem, general self-efficacy, internal locus of control, and emotional stability) were based upon studies of Rosenberg (1965), Judge, Locke, Durham, & Kluger (1998), Levenson, 1981, and Eysenck & Eysenck (1968).

Control Variables

Measures of age, gender, and education served as control variables in this study.

Age: Hodgetts and Luthans (1997) argued that unemployment is one of the “four fears” in China. In fact, a large number of Chinese employees, particularly from the SOEs, have lost their jobs and the job-loss threat continues to affect the existing workers. People who are working on the production lines are predominantly young people. The average age of the survey participants was 32.

Gender: About 13% of the study subjects were women. Because of a long period of Mao’s ideological approach in China, Chinese basic governmental legitimacy still rests on equal employment opportunities between men and women.

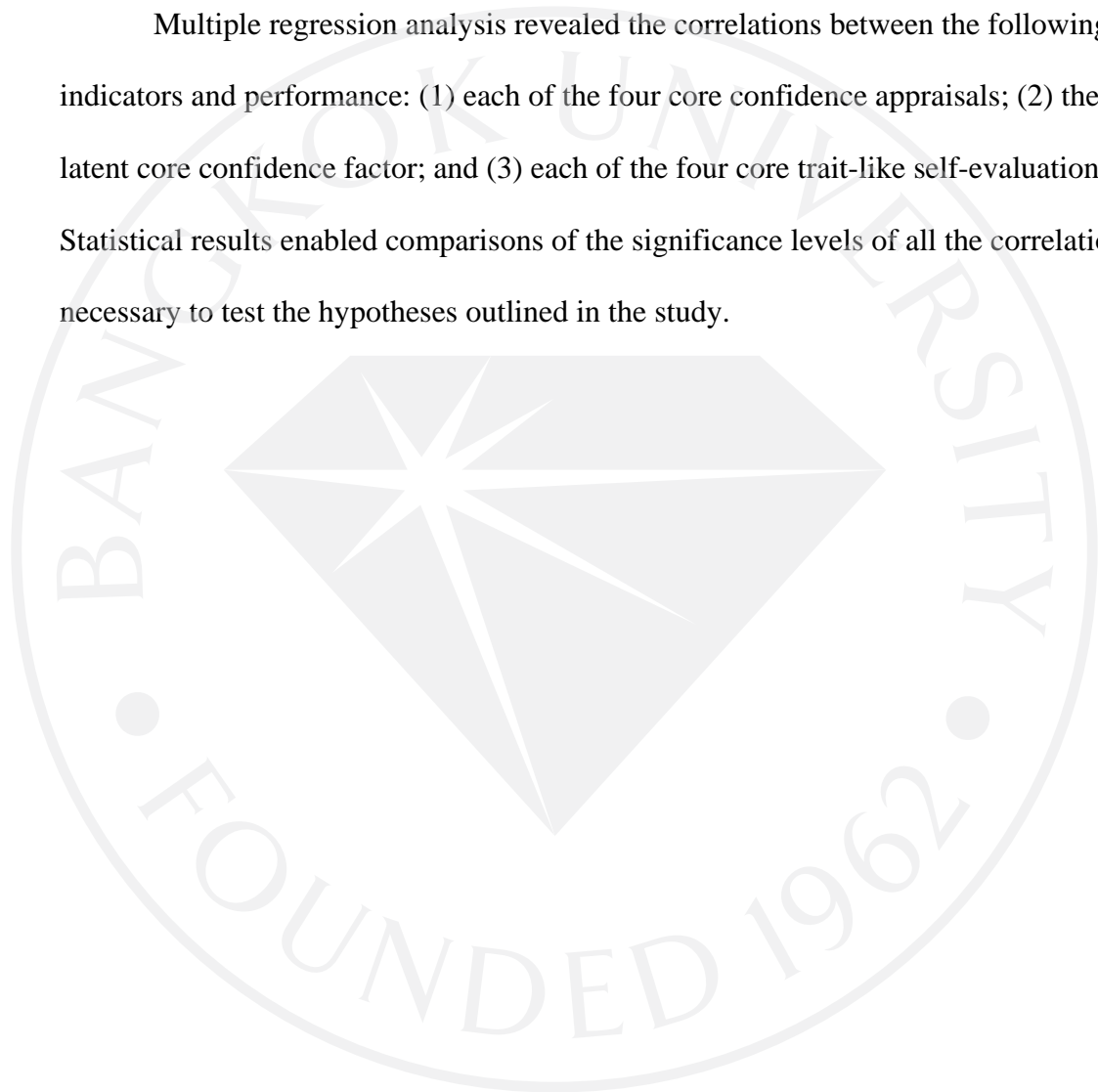
Education: As more young people from college join the organizations, the education level tends to increase. The mean education period for the participants was 12 years. Well-educated employees, particularly those with specialized expertise and skills, have strong personal capacities in effectively dealing with problems, challenging jobs, and interpersonal relationships. Many of them carry characteristics that may lead to increased responsibility in the short future.

Methodology of Multiple Regressions

The type of analysis used in this study is multiple regression. The scores of self-efficacy, hope, optimism, and resiliency as well as the four core trait evaluations were obtained through raw scores from the questionnaires. Factor analysis was also used to suggest and create the latent core confidence factor, which reflects the integrated psychological capital of self-efficacy, hope, optimism, and resiliency for each of the study participants. The measure of dependent variable of performance

included both supervisors' performance evaluations and employee's salary and bonus and expressed on a 10-point scale through a z-score transformation (to be discussed in the next chapter).

Multiple regression analysis revealed the correlations between the following indicators and performance: (1) each of the four core confidence appraisals; (2) the latent core confidence factor; and (3) each of the four core trait-like self-evaluations. Statistical results enabled comparisons of the significance levels of all the correlations necessary to test the hypotheses outlined in the study.



CHAPTER 4

RESULTS OF THE STUDY

This chapter describes the results of the statistical analyses used in testing the model and individual hypotheses. The first section reports data preparation such as data cleaning, score recoding, and calculation of variables. The second section shows descriptive statistics including correlations among the study variables, the normality of the data, and the reliability estimates for the observed variables. The third section discusses the statistical results of the study and the results of testing the original hypotheses. Finally, the summary section concludes this chapter.

Data Preparation

Data preparation includes data cleaning, score recoding, and calculation of variables. This process is necessary before statistical analysis starts.

Data Cleaning

After the primary data was loaded into the statistical software (SPSS), a descriptive printout indicated that the minimum and/or maximum scores of each item of some variables exceeded the designated scales for the corresponding variables. The mistakes resulted from mistyping or original wrong answers from the respondents. The mistakes would affect the correlations and significance levels if they were not cleaned. There are three choices for cleaning data: (1) replacing with original data if mistyped, (2) replacing with mean score of the variable (after the wrong data is eliminated), and (3) considering wrongly answered scores as missing data. The method used for this study was replacing incorrect data with the original data and taking the wrongly answered areas as missing data.

Score Recoding

Some of the questions in the data collection used reverse scoring to attain precise measurement of the construct. In particular, psychological variables often use reverse scoring to measure psychological capabilities. For example, all the questions for measuring emotional stability developed by Eysenck and Eysenck (1968) are reverse scored on a 5-point Likert type scale. The reverse scores of the primary data in this study were recoded from 1 to 5, 2 to 4, 3 unchanged, 4 to 2, and 5 to 1.

Calculation of Variables

The dependent variable in this study was employee's performance at the individual level. The observed independent variables included the four core confidence appraisals of employee's self-efficacy, hope, optimism, and resiliency, and the four core trait-like self-evaluations of self-esteem, general self-efficacy, internal locus of control, and emotional stability. The latent independent variable was presented by the core confidence factor consisting of the four core confidence appraisals as discussed in the previous chapters.

Dependent Variable: Performance served as the dependent variable in this study, and was assessed based upon the total of an employee's salary and bonus (in April and May, 2002) and the supervisor's performance evaluation for that employee. The supervisor's performance evaluation was based on a 10-point Likert type scale, while the salary and bonus of the individual employee was the absolute amount of Chinese currency RMB Yuan. Therefore, the sum score of the salary and bonus was transformed into a z score and retransformed at the same scale as the supervisor's evaluation before the score was added up to the supervisor's performance evaluation score through the following formula. Pay is the sum of salary and bonus in the

formula. This resulting variable was used to measure performance in all the statistical analyses.

$$Z \text{ score} = (\text{Individual Pay} - \text{Lowest Pay}) / (\text{Highest Pay} - \text{Lowest Pay})$$

$$\text{New pay score} = (\text{Individual Z score} + \text{Standard Deviation of pay score}) + \text{mean score of supervisor's evaluation}$$

$$\text{Performance score} = \text{New pay score} + \text{supervisor's evaluation score (1-10 point)}$$

Independent Variables: Eight variables (self-efficacy, hope, optimism, resiliency, self-esteem, general self-efficacy, internal locus of control, and emotional stability) served as the independent variables in this study. Except for self-efficacy, the scores of the other variables were the mean scores of the raw data sums, which could be obtained from descriptive analysis. However, to reach a precise score for self-efficacy, two calculation methods were used. The first method was to transform the raw self-efficacy score by multiplying a weighed coefficients ranging from 1.1 to 2.0. The coefficients from 1.1 to 2.0 were derived from 10% task difficulty increase for each of the next self-efficacy questions. The second way for obtaining the self-efficacy score was to average the raw score of each of the self-efficacy questions. The raw data added-up score of self-efficacy by the second method was believed to better represent self-efficacy because the weighted transformation could cause data redundancy due to collinearity among all the observed variables. However, the correlation between these two self-efficacy scores was .997, which means that the two measures represent self-efficacy at the same level.

Latent Independent Variable: The core confidence factor as Stajkovic and Luthans (2002) proposed was considered as a latent independent variable. As depicted in the Core Confidence Model, this latent factor consists of self-efficacy, hope,

optimism, and resiliency. According to factor analysis (see Table 2), the extraction values for the consisting variable are .111 for self-efficacy, .655 for hope, .553 for optimism, and .645 for resiliency. Table 2 also shows that eigenvalue 1.965 and explained variance is 49.12%. According to Pedhazur, (1999), there is factor to be suggested when eigenvalue is less than 1.00. This also proved that there does exist one latent factor among the four individual variables and this factor represents the major portion of the four variables. In another word, the latent factor was generated based upon the best correlation combination of the four state-like core confidence appraisals. That is, the correlations between the latent factor and each of the four indicators best explained the latent variable or the core confidence factor used in the proposed model.

Table 2: Factor Analysis

Variables	Extraction Value	Component	Eigenvalue	% of Variance
Self-efficacy	.111	1	1.965	49.12
Hope	.655			
Optimism	.553			
Resiliency	.645			

Descriptive Statistics

Table 3 presents descriptive statistics for the variables and correlations among them. Overall means and standard deviations or each of the variables are presented in Table 3.

Table 3: Means Standard Deviations and Correlations^a

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1 Self-Efficacy	5.47	2.08	1.00									
2 Hope	5.62	1.21	.18	1.00								
3 Optimism	3.43	.41	.14	.34	1.00							
4 Resiliency	3.17	.40	.14	.49	.43	1.00						
5 Latent Factor 1	0	1.00	.33	.81	.74	.80	1.00					
6 Self-Esteem	4.00	.58	.73	.41	.30	.35	.40	1.00				
7 General Self-Efficacy	3.82	.64	.22	.36	.27	.31	.41	.67	1.00			
8 Locus of Control	3.63	.49	.09	.41	.29	.49	.52	.42	.45	1.00		
9 Emotional Stability	3.50	.68	.07	.28	.29	.12	.25	.28	.39	.10	1.00	
10 Performance	15.64	2.50	-.14	.15	-.11	.19	.31	-.15	-.15	.03	-.17	1.00

^a N = 239

The mean of self-efficacy was 5.47 on a 10-point scale, hope was 5.62 on an 8-point Likert type scale, optimism was 3.43 on a 5-point Likert type scale, and resiliency was 3.17 on a 4-point Likert type scale. Comparatively, on a 5-point Likert type scale, were the means of self-esteem (4.00), general self-efficacy (3.82), internal locus of control (3.63), and emotional stability (3.50). The mean scores suggested reasonably high levels of the measured cognitive variables among the Chinese copper production workers.

As proposed, there were positive relationships between some of the study variables. Table 3 shows that the level of relationship suggests convergent validity, but because they were not highly positive, discriminant validity is also evident, thus providing evidence of construct validity of these psychological states. Specifically, self-efficacy was positively correlated with hope ($r = .18$), optimism ($r = .14$), and resiliency ($r = .14$). Similarly, hope had stronger correlations with optimism ($r = .34$) and resiliency ($r = .49$). Optimism and resiliency had a positive .43 correlation.

The latent variable (the core confidence factor) derived from factor analysis also had positive correlations with self-efficacy ($r = .33$), hope ($r = .81$), optimism ($r = .74$), and resiliency ($r = .80$). Factor analysis indicated that the latent factor explained 49.12% of the variance in the four consisting variables.

The data's normality was assessed in this study. As evidenced in Table 4, all the individual variables are normal because all the skew and kurtosis coefficients are smaller than a critical value 1.96. Therefore, the sample data is assumed as multivariate normality (value of index of multivariate kurtosis is non-significant) (Kline, 1998), which means that the joint distributions of all combinations of variables are normal as well.

Table 4: Assessment to the Data Normality

Variables	Scale	Min	Max	Skew	Kurtosis
1 Self-Efficacy	1-10	.50	9.6	.16	-.65
2 Hope	1-8	1.50	7.83	-.72	.72
3 Optimism	1-5	1.70	4.6	-.01	1.15
4 Resiliency	1-4	2.21	4.0	-.13	-.58
5 Latent Factor 1			2.26	-.30	0.01
6 Self-Esteem	1-5	.24	5	-.31	-.03
7 General Self-Efficacy	1-5	1.63	5	-.62	.12
8 Locus of Control	1-5	2.00	5	-.41	-.02
9 Emotional Stability	1-5	1.67	5	.11	-.42
10 Performance	1-5	9.7	20.16	-.31	-.77

Reliability estimates were also computed in this study. According to Kline (1998), reliability coefficients around .90 can be considered as “excellent”, values around .80 as “very good”, and values around .70 as “adequate”. The Cronbach alpha reliability coefficient for self-efficacy was .93, hope .76, resiliency .79, self-esteem .76, general self-efficacy .76, and emotional stability .84. The coefficients for optimism and internal locus of control were only .51 and .52 (see Table 5), which may

require scale adjustments. However, because this study was initial empirical work, the scales were not changed in order to view the basic relationship among variables.

Table 5: Reliability Estimates

Variables	Number of Items	Reliability (Alpha)
1 Self-Efficacy	10	.93
2 Hope	6	.76
3 Optimism	10	.51
4 Resiliency	14	.79
6 Self-Esteem	10	.76
7 General Self-Efficacy	8	.76
8 Locus of Control	8	.52
9 Emotional Stability	10	.84

Collinearity estimates were conducted for each significance test. According to Pedhazur (1997, p295), collinearity refers to “the case of data vectors representing two variables falling on the same line”. Simply, collinearity means that two or more independent variables are highly correlated. Pedhazur (1997) also believes that collinearity has the potential adverse effects on the estimates of regression statistics through the standard errors of regression coefficients and the accuracy of computations due to rounding errors. Variance Inflation Factor (VIF) is used to test the effect on the standard errors of regression coefficients, while Tolerance is used to measure the effect on the accuracy of computations due to rounding errors. The VIF and Tolerance are obtained by the following formula:

$$VIF_i = 1 / (1 - R_i^2)$$

$$Tolerance = 1 / VIF_i$$

i stands for independent variable. VIF less than 10 and Tolerance greater than .01 suggest that collinearity does not have significant adverse effect on regression statistics and is acceptable.

Collinearity estimates were conducted for each regression analysis through both VIF and Tolerance. When all the nine independent variables (including the latent factor) are entered, the significant levels for each of the nine variables (four core confidence appraisals, core confidence factor, and four core self-evaluations) are found. Table 6 indicates that VIF value for the nine independent variables ranges from 1.172 to 9.488 (< 10) and Tolerance from .105 to .853 ($> .01$) (see Table 6). Thus, collinearity is acceptable.

When the four core confidence appraisals (self-efficacy, hope, optimism, and resiliency) are entered, collinearity statistics show that VIF ranges from 1.115 to 1.435 (< 10) and Tolerance from .697 to .897 ($> .01$) (see Table 7). Thus, Collinearity is acceptable.

Table 6: Collinearity Estimates (1)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	47.018	9.134		5.148	.000		
ESTEEM	-2.073	.920	-.578	-2.253	.031	.268	3.735
GSE	1.693	.811	.528	2.087	.045	.275	3.638
LC	-.705	.689	-.157	-1.023	.314	.748	1.337
ES	-.465	.444	-.151	-1.048	.302	.853	1.172
SE_1	-.452	.158	-.430	-2.869	.007	.782	1.279
HOPE	-.900	.574	-.402	-1.569	.126	.268	3.736
OPTIM	-5.330	1.633	-.909	-3.264	.003	.227	4.409
REGR factor score 1 for analysis 2	3.855	1.043	1.510	6.695	.001	.105	9.488

Dependent Variable: PERFORMB

Table 7: Collinearity Estimates (2)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	7.586	3.574		2.123	.040		
SE_1	5.18E-02	.150	-.051	-.346	.731	.897	1.115
HOPE	.354	.355	.158	.996	.325	.781	1.281
OPTIM	-1.242	.950	-.215	-1.307	.199	.722	1.386
RESIL	3.175	1.062	.501	2.990	.005	.697	1.435

Dependent Variable: PERFORMB

When the four core self-evaluations (self-esteem, general self-efficacy, internal locus of control, and emotional stability) are entered, VIF values are from 1.120 to 3.260 (<10) and Tolerance values from .307 to .893 ($> .01$) (see Table 8).

Thus, collinearity is considered acceptable.

When eight variables (excluding the latent factor) are entered, the VIF values shows from 1.172 to 3.735 (<10) and Tolerance values from .268 to .853 ($> .01$) (see Table 9). Thus, collinearity is accepted.

Table 8: Collinearity Estimates (3)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	18.484	2.950		6.265	.000		
ESTEEM	-1.737	.900	-.449	-1.930		.315	3.173
GSE	1.152	.760	.357	1.516	.136	.307	3.260
LC	.410	.685	.085	.599	.552	.853	1.172
ES	-.471	.423	-.154	-1.115	.270	.893	1.120

Dependent Variable: PERFORMB

Table 9: Collinearity Estimates (4)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	11.323	3.890		2.911	.006		
SE_1	-.136	.152	-.129	-.895	.377	.841	1.189
ESTEEM	-2.073	.920	-.578	-2.253	.031	.268	3.735
GSE	1.693	.811	.528	2.087	.045	.275	3.638
LC	-.705	.689	-.157	-1.023	.314	.748	1.337
ES	-.465	.444	-.151	-1.048	.302	.853	1.172
HOPE	.497	.367	.222	1.354	.185	.654	1.528
OPTIM	-1.515	.953	-.258	-1.590	.121	.666	1.501
RESIL	4.132	1.118	.651	3.695	.001	.567	1.764

Dependent Variable: PERFORMB

To avoid collinearity of four core confidence appraisals and the latent variable (because the latent variables are generated from the four core confidence appraisals through factor analysis), the latent variable and four core self-evaluation variables (self-esteem, general self-efficacy, internal locus of control, and emotional stability) are entered. Collinearity statistics also indicate that VIF values are between 1.061 and 3.440 (< 10) and Tolerance values between .291 and .942 ($> .01$) (see Table 10). Thus, collinearity is acceptable.

Table 10: Collinearity Estimates (5)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	19.555	3.793		5.155	.000		
ESTEEM	-1.587	1.006	-.442	-1.577	.124	.291	3.440
GSE	1.091	.886	.340	1.231	.226	.299	3.346
LC	-4.96E-02	.755	-.011	-.066	.948	.810	1.235
ES	-.535	.481	-.173	-1.112	.274	.942	1.061
REGR factor score 1 for analysis 2	.983	.443	.385	2.221	.033	.761	1.314

Dependent Variable: PERFORMB

Statistical Results

Regression analysis was used to test the hypothesized correlations of both the observed independent variables and the latent independent variable to the dependent variable of performance.

Core Confidence Appraisals and Performance

The correlations between each of the core confidence appraisals and performance are shown in Table 3. As shown, self-efficacy had a non-significant negative relationship with performance ($r = -.14, p = .35 > .05$) and thus Hypothesis 1 was not supported. This is not consistent with prior extensive research on self-efficacy. Stajkovic and Luthans (1998a) have well documented the strong positive correlation between self-efficacy and work-related performance ($r = .38$). This study's result could be explained by a lack of understanding of the measure of the self-efficacy construct among the Chinese workers. For example, the question on increasing the task difficulty could have confused these Chinese production workers. The percentage scale of perceived confidence may have created problems of practical judgment for the workers as well. Although the workers had been trained and answered self-efficacy questionnaires in previous data collected efforts, missing data on self-efficacy is still evident. The previously attempted data collection in a pilot study in Bangkok showed in the questionnaire answers that most of the Thai participants did not provide self-efficacy scores.

Table 3, 11, and 13 also revealed that “state hope” ($r = .15, p = .28 > .05$) and optimism ($r = -.11, p = .39 > .05$) did not significantly related to performance. Therefore, Hypothesis 2 and 3 were not supported. However, Table 11, 12, and 13 do indicate that resiliency had a significant positive relationship with performance ($r =$

.19, $p = .005 < .05$) when four core confidence appraisals were entered. When eight factors (core confidence appraisals and core evaluations) were entered, resiliency was also found to significantly relate to performance ($p = .001 < .05$). Therefore, Hypothesis 4 received support.

Table 11: Tests of Significance Results (1)

Variables	Significance level	Significance level ^a	Significance level ^c
1 Self-Efficacy ^b	.34	.73	.38
2 Hope	.28	.33	.19
3 Optimism ^b	.39	.20	.12
4 Resiliency	.14	.005*	.001*
5 Core Confidence Factor	.045*		
6 Self-Esteem ^b	.23		.031*
7 General Self-Efficacy ^b	.91		.045*
8 Locus of Control	.80		.31
9 Emotional Stability ^b	.20		.30

Note:

^a when each of four variables entered

^b negatively related

^c when each of eight variables entered

* statistically significant

Table 12: Tests of Significance Results (2)

Variables	Significance level
Self-Esteem	.059
General Self-Efficacy	.14
Locus of Control	.55
Emotional Stability	.27

In order to verify the results, we used multiple approaches to test the significance level of each correlation. First, the group of the core confidence appraisals and the group of core self-evaluations were entered separately. Secondly,

the two groups together were entered. However, similar results of significance levels to the originally single test of each significance level were found.

The Core Confidence Factor and Performance

Tables 3, 11, and 13 indicate a positive .31 correlation between the latent core confidence factor and performance and this correlation was significant ($p = .045 < .05$). With respect to the relationship with performance, correlations were -.14 for self-efficacy, .15 for hope, -.11 for optimism, .19 for resiliency, -.15 for self-esteem, -.15 for general self-efficacy, .03 for internal locus of control, and -.17 for emotional stability. Table 12 also indicates that none of these relationships is significant. Thus, the latent core confidence factor had the strongest relationship with performance among all the individual indicators. This supported the following three hypotheses concerning the Core Confidence Model on which this study is largely based:

Hypothesis 5: The core confidence factor for Chinese SOE employees is positively related to performance.

Hypothesis 6: The core confidence factor for Chinese SOE employees has a stronger relationship with performance than any of the four core confidence appraisals (self-efficacy, hope, optimism, and resiliency) individually.

Hypothesis 7: The core confidence factor for Chinese SOE employees has a stronger relationship with performance than any of the trait-like self-evaluations (self-esteem, general self-efficacy, internal locus of control, and emotional stability).

Because the core confidence factor is derived from the four core confidence appraisals, it is necessary to test the significance level of the correlation of the core confidence factor to performance when the core confidence factor and the four core

self-evaluations are entered. Significant relationship between the core confidence factor and performance was found ($p = .033 < .05$) (see Table 13). None of significant relationship between the core self-evaluations and performance was found this analysis.

Table 13: Tests of Significance Results (3)

Variables	Significance level
Core Confidence Factor	.033*
Self-Esteem ^b	.12
General Self-Efficacy ^b	.23
Locus of Control	.95
Emotional Stability ^b	.27

To further test the results reached, we conducted a stepwise analysis by entering the four core confidence appraisals as “block 1” and entering the four trait-like self-evaluations as “block 2”. We found that “block 1” significantly explained 29.1% of the performance ($p = .001 < .05$) and “block 2” non-significantly increased by 12.9% the explanation of performance ($p = .147 > .05$). Then we changed the order by entering “block 2” first and “block 1” second. The results revealed that “block 2” non-significantly explained 6.5% of performance and “block 1” significantly increased by 35.5% the explanation of performance ($p = .003 < .05$). This finding suggested that the combined predictive power of the core confidence appraisals for performance is significantly stronger than the combination force of the core trait-like self-evaluations.

Statistical analysis also showed that the combination of the four core confidence appraisals as one block (labeled “block 1”) better predicts performance than the latent core confidence factor derived from factor analysis. After entering

“block 2” (self-esteem, general self-efficacy, internal locus of control, and emotional stability), we entered “block 1” and the latent factor “factor1-1” separately and found that the increase of explanation was 35% for “block 1” and 11% for “factor 1-1” (R Square Change) even though both increase explanations were significant. This could be explained by the fact that the latent factor derived from factor analysis overlapped part of all four of the core confidence appraisal indicators and represented the best outcome from collinearity or internal correlations. However, the combination may suppress some of the parts that were not necessarily overlapped by all four indicators, but still explained performance. The explanation by this part may not be suppressed in the “block 1” combination.

Summary of the Results

In summary, Hypothesis 1, 2, and 3 were not supported. Hypothesis 4, 5, and 6 received support (see Table 14). Although self-efficacy, hope, and optimism were not found to have significant positive relationships with performance in this study, the latent variable of the core confidence factor derived from factor analysis was found to have a significant impact on performance and, importantly, had a stronger relationship with performance than any of the individual indicators of the core confidence appraisals or any of the trait-like self-evaluations (see Figure 7). This supported the major assumptions and propositions from the Core Confidence Model that the latent factor (the integration of self-efficacy, hope, optimism, and resiliency) not only exists, but also provides the greatest power to predict and explain performance. Therefore, the Core Confidence Model as a positive approach to work motivation received its first empirical support in the SOE workers of the transitional country of the People’s Republic of China.

Figure 7: Test Results of the Conceptual Model

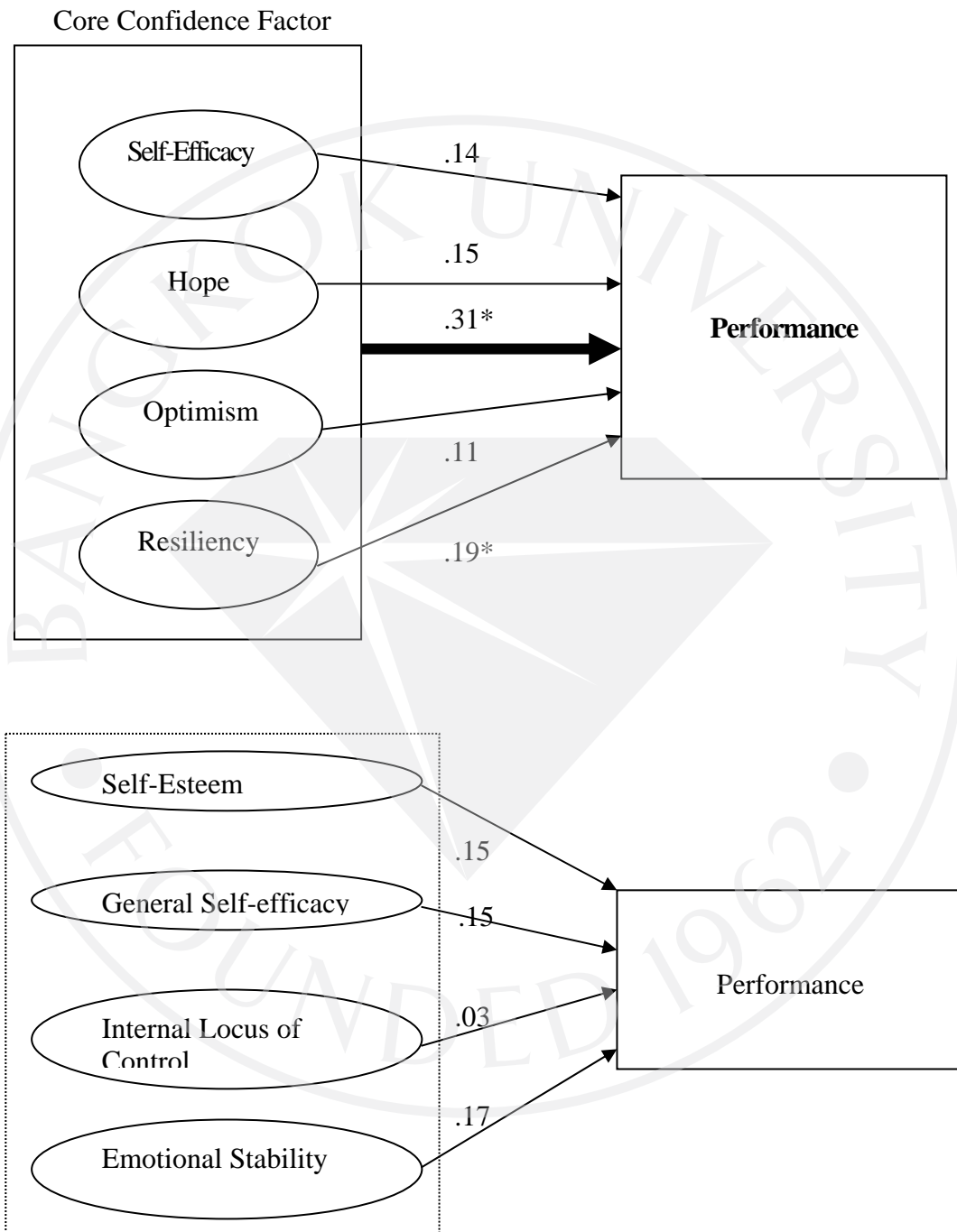
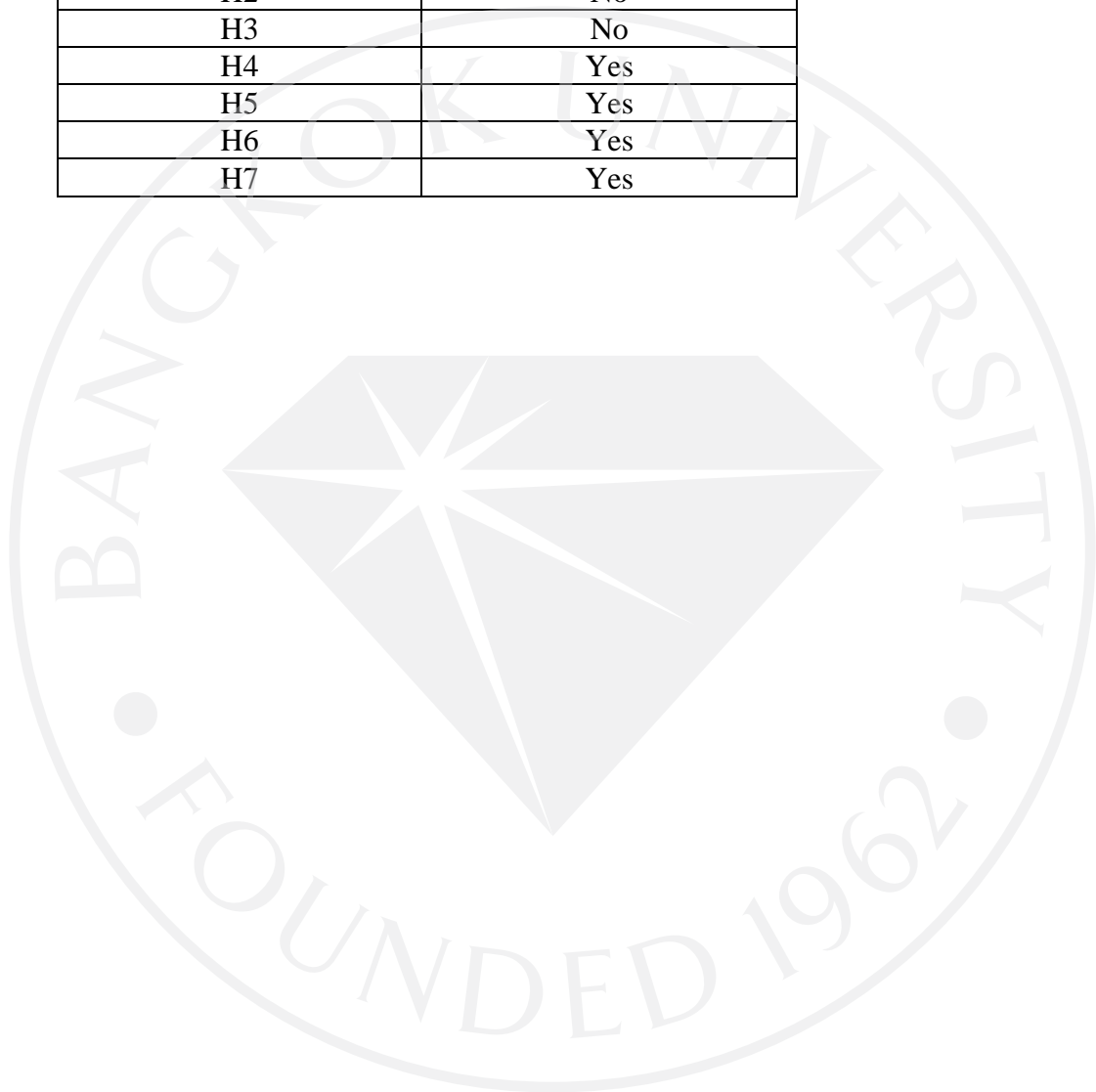


Table 14: Test results of the Hypotheses

Hypotheses	Support Yes / No
H1	No
H2	No
H3	No
H4	Yes
H5	Yes
H6	Yes
H7	Yes



CHAPTER 5

DISCUSSION AND IMPLICATIONS

This chapter reviews the purpose of the study, summarizes the results, discusses the contributions and limitations, and highlights implications for future research and practice.

Review of the Purpose of the Study

Many (Argyris, 1993; Hitt & Ireland, 2002; Pfeffer, 1995, 1998) have highlighted the importance of people in organizations. However, effective use of human resources is still lacking (Spitzer, 1995; Coffman & Gariell-Molina, 2000). The real world continues to challenge organizational scholars to develop more effective approaches to work motivation.

The traditional, comprehensive definition of work motivation focuses on cognitive appraisals regarding what behavior to engage in, how much effort in terms of direction, intensity, and duration to exert, and how to deal with obstacles encountered along the way (Ambrose & Kulik, 1999; Baron, 1991; Pinder, 1998; Vroom, 1995). However, too much attention has been given to “how to deal with obstacles” or negative things such as conflict, stress and burnout, fear of technology, and other negative psychological arousals, and not enough on developing what and how cognitive appraisals increase employees’ efforts at work (Stajkovic & Luthans, 2002). The POB framework developed by Luthans (2002a, 2002b) specifically addresses this problem. The POB construct emphasizes the positively oriented human resource strengths and psychological capacities such as self-efficacy, hope, optimism, subjective well being, and emotional intelligence as well as lately adding resiliency.

Theoretical evidence indicates that all the POB variables are measurable, developmental, and importantly, can be effectively managed for improving employee's performance in organizational contexts. The POB construct immediately received much attention from researchers and practitioners, not only because the concept is unique and redirects the OB field from negatively oriented control to positive motivational approaches, but also because it is based upon a solid theoretical foundation and research base of the widely recognized positive psychology movement.

Following the POB framework, Stajkovic and Luthans (2002) took an integration model, which had been previously been applied to personality trait theories, and developed the Core Confidence Model as a new positive model for work motivation. In this model, a latent variable termed the core confidence factor was created by integrating the recognized state-like psychological capacities of self-efficacy, hope, optimism, and resiliency. This latent variable was hypothesized to have a significant impact on employees' performance, and a stronger impact on performance than any of the individual variables. Significant implications for management drawn from this model suggest that developing human psychological capacities could provide a new, positive, and less money-oriented approach to work motivation.

At present, the transitional country of China is attracting tremendous attention from the world. This fast developing country has long struggled to find ways to grow its economy. However, the lack of financial resources has been viewed as a major barricade in the attempts of both business companies and the public sector to achieve performance objectives. Therefore, an approach is needed to motivate employees

toward stronger performance that is not solely financially oriented. The Core Confidence Model discussed in this study seems to fit the needs of China. Empirical evidence for this important model may improve the “confidence” of the leaders and managers in the organizations of this country to physically practice this new approach to employee motivation that can result in performance improvement.

This study recognizes the unique political and cultural context of Chinese SOEs in testing the Core Confidence Model. However, the integrated approach utilized in this study addresses some of the most fundamental theoretical and practical issues of performance development across culture. For example, to address the research question (1): “What kinds of people tend to do a good job in organizations? Who are these people? How do they differ from other people?” this study reveals that only those who are confident, hopeful, optimistic, and resilient tend to do a good job at their workplace. They are more likely to be a team leader, or department manager, or some other leadership positions. They are different from the other people because of their strong beliefs that they are able to successfully accomplish the assigned job rather than doubting about their own abilities. Their focus is always on task or problem-solving rather their own beliefs. In answering the research question 2): “Do highly confident employees outperform the low confident employees? Dose confidence impact employee performance?” the result of this study indicates that high confidence employees do better job than low confidence people and that confidence is a core factor among psychological capacities or human strengths to seriously impact performance. Research question 3) is “Where does the confidence factor come from? Is it measurable, developmental, and manageable?” This empirical study shows that the core confidence factor is derived from people’s psychological capacities and

human strengths such as self-efficacy, hope, optimism, and resiliency and has proved that the core confidence factor and the individual psychological variables are measurable, open-to-development, and importantly, manageable. This study has also answered the fourth research question “Does a changeable confidence state really motivate employees better than fixed dispositional traits?” Statistical results suggests that the core confidence factor or confidence state has a much stronger relationship with performance than any of these traits such as self-esteem, general self-efficacy, internal locus of control, and emotional stability. That is, improving confidence of employees is a much more effective motivation approach than working on the traits, which are usually fixed for people after 30 years old.

To reiterate, this study tested the Core Confidence Model in China by (1) examining the relations of the four state-like core confidence appraisals, the latent core confidence factor, and each of the core trait-like self-evaluations to employee performance; (2) comparing the core confidence factor with the core self-evaluation factors in relation to the performance of Chinese workers in a large SOE.

Discussion of the Results of the Study

Considerable U.S.-based theory and research served as background for testing a new and positive motivational approach, the Core Confidence Model, in the transitional economy of China. The results of this beginning research study provide some evidence that the combination of state-like psychological capacities of self-efficacy, hope, optimism, and resiliency does influence the performance level of employees in a Chinese SOE.

Although China is currently considered as an emerging economic giant, the economic development in this country has been faced with tremendous challenges,

including poor management practices, a large population, political consolidations, cultural disadvantages, and difficulties resulting from a history of planned economic strategies and ideology. In particular, the Chinese SOEs have proved to be one of the largest barricades for China's economic development. Improvement of performance, especially of human resource performance, is critically important and urgent for Chinese SOEs. A new approach to motivating employees such as the Core Confidence Model appears particularly well suited to meet the needs of Chinese SOEs.

Statistical analysis indicated the following means for the psychological variables among the 239 production workers in a Chinese SOE: self-efficacy = 5.47 on a 10-point scale; hope = 5.62 on an 8-point scale; optimism = 3.43 on a 5-point scale; and resiliency = 3.17 on a 4-point scale. The relatively low score (compared to U. S. employees) on most of the variables may be explained by the fact that production workers in Chinese SOEs work and live under the long-time pressure of communist ideology, which has resulted in hopelessness and helplessness. The relatively high score of resiliency may reflect that the dynamism in their working environment has long challenged the workers to pull themselves through an unfavorable climate that fails to provide them needed internal cooperation among departments.

Statistical findings were that the core confidence factor had a significant positive correlation ($r = .31$) with performance. Another important finding was that the core confidence factor is a better predictor of performance than any of individual factors of self-efficacy, hope, optimism, and resiliency. This is consistent with Bandura's argument that no single variable can aspire to have great predictive powers

of human action. Sulloway (1997, pp. 363) also showed support of this point that: “In the world around us, a multitude of crisscrossing influences limits our ability to predict individual action. Still, multiple predictors – far more effectively than single ones – provide an effective means of explaining individual behavior” (original emphasis). Based upon this integration approach, the Core Confidence Model, proposed as the nomological network of core confidence appraisals, received empirical support in this study.

Unlike self-efficacy, hope, and optimism, resiliency was found to have a significant impact on performance. This supports the Stajkovic and Luthans’ (2002) proposition that the Core Confidence Model integrates the capacity of resiliency in this study that is especially relevant to the Chinese SOE context. A significant implication for management in general and Chinese managers in particular, drawn from this finding, is that enhancing and developing employees’ resiliency as a human strength can be especially important in motivating employees in today’s dramatically changing, turbulent environment.

Limitations and Future Research

Like any research, limitations of this study must be acknowledged. The non-random sample used was necessary for practical reasons in obtaining the needed data for analysis (i.e., those available for performance evaluation and bonus pay).

Therefore, generalizability of the results is questionable. The possibility exists that the respondents were not representative of the population from which the sample was drawn.

Relatively low reliability with the optimism and internal locus of control measures may also pose a challenge to the findings. Additionally, cross-cultural

research that uses questionnaires (even if using the re-translation method) may still be problematic (Luthans, Welsh, & Rosenkrantz, 1993).

The sample selected in this study may have serious limitations for the construct validity. It is evident that the copper production workers have a limited understanding of the complicated psychological concept such as self-efficacy, hope, optimism, and resiliency. Importantly, these human capacities may not be highly correlated with their physically oriented performance at workplace. Stajkovic and Luthans (1998a) found the significant impact of work complexity on performance. Another planned study with sampling commercial airline pilots may be more accurate in finding human capacities and performance.

Measure of performance poses limitations for the generalizeability of the results. The performance in this study is measured by supervisor's evaluation and salary plus bonus. Clearly, pay such as salary and bonus is closely associated with managerial level, working experience, working years in the current organization and sometimes connections to the top management. Therefore, using pay to represent performance may generate bias on the conclusion.

Another limitation of this empirical study is the absence of mediating process testing. The original Core Confidence Model by Stajkovic and Luthans (2002) (see Figure 1) was presented as a nomological network. In this model, four mediating processes were discussed to explain how human capacities influence employee's final performance. These four processes are controllability, task focus, problem-solving orientation, and information seeking. Without empirical support, it is still unclear specifically how the core confidence variables work on employee performance. That is, it would be much clearer if the mediating processes were included empirically.

Future research should address the limitations inherent in this first study of positive motivation approach in the transitional economy of China. Because of time limits for field study and reliance on self-reported data, method bias may have affected the relationships found in this study.

The job context utilized for sampling in this study could be another limitation and help explain why self-efficacy had no significant impact in this study. According to Stajkovic and Luthans (1998a), the level of task complexity significantly mediates the relationship of self-efficacy to work-related performance. That is, performance with low task complexity tends to have less impact on one's confidence level. However, employee performance in a rather complicated situation such as a commercial pilot job may be greatly influenced by his or her confidence level in the specific position. The organizational contexts used in this study did not give attention to task complexity. Consideration of task complexity in future studies may offer a better test. However, the overall confidence factors had a significant impact on performance, but self-efficacy did not contribute to the conceptual independence and construct validity of the proposed confidence factors (i.e., it is not just self-efficacy).

Because most the theories on which the Core Confidence Model is based were developed in the U.S., comparison studies between China and the U.S. as well as other countries are necessary.

Finally, longitudinal research on psychological capacities is clearly needed to assess issues of causality as well as the strength and duration of each relationship in this study.

Practical Implications

This research contributes to the theoretical background of the positive organizational construct by examining the new positive motivational approach of the Core Confidence Model within the context of the political and cultural environments in China. It also demonstrates both the theoretical and practical importance of the relationship between an employee's confidence related to psychological capacities and his or her performance at work

The definitional criteria of being measurable, manageable, open-to-development carry over to numerous practical implications for solving real-world organizational problems. Unlike fixed traits such as self-esteem or neuroticism, the strong state-like features of the four confidence variables emphasized in this study suggest that managers do not have to accept and adapt to the employees' confidence levels. Rather, they can build and improve the confidence levels of employees through use of the processes prescribed to approach high performance (Stajkovic and Luthans, 2002). The following suggestions may help leaders/managers to practice confidence improvement in the workplace in China (or elsewhere):

Increasing Attention To Core Confidence: Leaders and managers should not only give increased attention to the psychological capacities making up core confidence, but should also present themselves as examples of confidence. Besides emphasizing the importance of confidence, they should also provide employees opportunities to build their confidence through successful practice and performance. According to Bandura's (1986) social cognitive theory, previous successful experience is the first major source for building and improving self-efficacy. Confident, hopeful, optimistic, and resilient leaders and managers tend to be more

competent (Boyatzis, 1982), to have optimistic followers (Wunderley, Reddy, & Dember, 1998), and to achieve high performance, satisfaction, and retention (Peterson, 2000; Schneider, 2001; Schulmna, 1999; Wanberg, 1997) and to practice “Authentic Leadership” (Luthans & Avolio, 2003)

Modeling: Confidence and other human capacities can be built and improved through modeling. The successful performance of expert models may encourage vicarious learning by others (Stajkovic and Luthans, 1998a). By directly observing the model’s performance, employees may increase their beliefs in their abilities to successfully perform work just like the expert models.

Feedback Seeking: Employees usually seek feedback to reduce uncertainty (Ashford, 1986; Ashford & Cummings, 1983) and confident employees are likely to ask directly for feedback information. Instead of waiting for employees to ask, managers should provide employees with direct performance feedback (whether or not their performance is satisfied and why) and suggest ways to improve performance. Stajkovic and Luthans (2002) believe that feedback is a crucial to the development of employee confidence.

Self-Regulation Encouraging: Leaders and managers enable employees to build and improve confidence through encouraging them to learn new things and adjust to organizational change (Stajkovic and Luthans, 2002). Continuous learning helps employees be motivated, exert more effort, and develop high performance and leadership strategies (Bandura, 2002). The more knowledge employees believe they are able to learn, the higher confidence they will have in dealing with the increasing demands and pressures of contemporary organizations.

In summary, this study is the first step toward an empirical test of the positive approach to work motivation of the Core Confidence Model. The study's findings underscore the potentially important role of the core confidence factor and each of the appraisals, at least in the transitional country of China. Further, the results add to the existing evidence that reliance on monetary incentive oriented motivation may be too limiting. Psychological capital in the form of confidence may be an overlooked, yet defining factor, for meeting the challenge of improving human resource performance in the battle-field of global competition.



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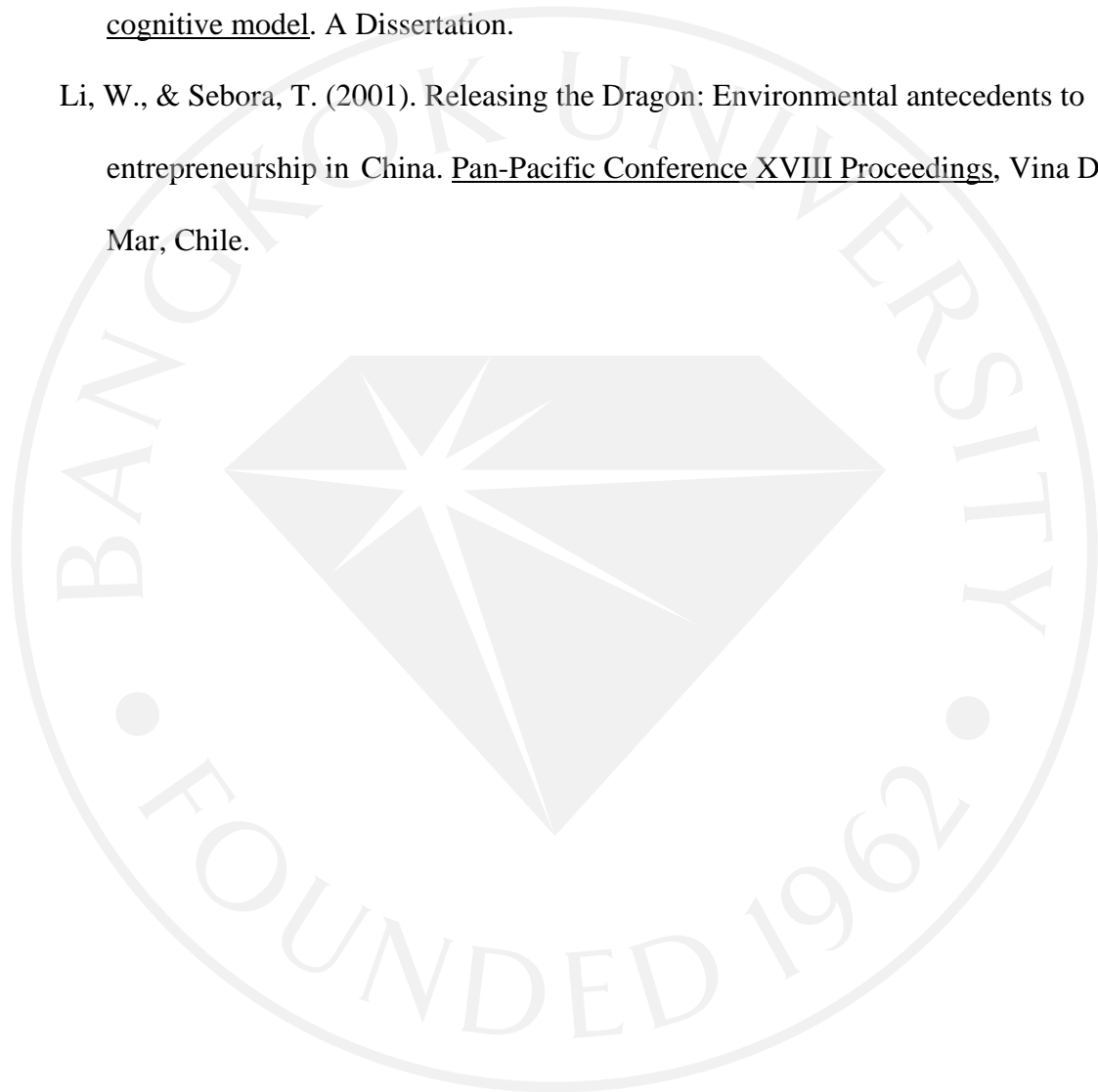
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APPENDIX A

SELF-EFFICACY QUESTIONNAIRE FOR STUDENTS

Please use the scale below to indicate:

a). Whether you believe that you are capable or not (yes, no) of performing in this class at each of the level outlined in this scale. Please use column A for these responses.

b). How certain you (0 – 100 %) about each yes/no response. For example, 0% would indicate no chance, whereas 100% would indicate absolute certainty. Please use column B for these responses.

Level of Your Performance in This Class	Column A CAN DO (Y = YES) (N = NO)	Column B CERTAINTY (0-100%)
I believe I can perform in this class at the level necessary to get a final grade of "D"		
I believe I can perform in this class at the level necessary to get a final grade of "C-"		
I believe I can perform in this class at the level necessary to get a final grade of "C"		
I believe I can perform in this class at the level necessary to get a final grade of "C+"		
I believe I can perform in this class at the level necessary to get a final grade of "B-"		
I believe I can perform in this class at the level necessary to get a final grade of "B"		
I believe I can perform in this class at the level necessary to get a final grade of "B+"		
I believe I can perform in this class at the level necessary to get a final grade of "A-"		
I believe I can perform in this class at the level necessary to get a final grade of "A"		
I believe I can perform in this class at the level necessary to get a final grade of "A+"		

APPENDIX B

SELF-EFFICACY QUESTIONNAIRE FOR COPPER WORKERS

Please use the scale below to indicate:

a). Whether you believe that you are capable or not (yes, no) of performing in copper production line at each of the level outlined in this scale. Please use column A for these responses.

b). How certain you (0 – 100 %) about each yes/no response. For example, 0% would indicate no chance, whereas 100% would indicate absolute certainty. Please use column B for these responses.

Level of Your Performance in This Class	Column A CAN DO (Y = YES) (N = NO)	Column B CERTAINTY (0-100%)
I believe I can produce() tons of copper products in my sub-factory		
I believe I can produce() tons of copper products in my sub		
I believe I can produce() tons of copper products in my sub		
I believe I can produce() tons of copper products in my sub		
I believe I can produce() tons of copper products in my sub		
I believe I can produce() tons of copper products in my sub		
I believe I can produce() tons of copper products in my sub		
I believe I can produce() tons of copper products in my sub		
I believe I can produce() tons of copper products in my sub		
I believe I can produce() tons of copper products in my sub		

Note: The first amount of copper product is based upon the average of last year's monthly production and the last amount is the highest amount of copper products he or his team has achieved. Each level increases by 10% in terms of amount of copper products.

APPENDIX C

STATE HOPE QUESTIONNAIRE

Directions: Read each item carefully. Using the scale below, please select the number that best describes how you think about yourself right now and put that number in the blank provided. Please take a few moments to focus on yourself and what is going on in your life at this moment. Once you have this Ahere and now≡ set, go ahead and answer each item according to the following scale.

- 1 = Definitely False
- 2 = Mostly False
- 3 = Somewhat False
- 4 = Slightly False
- 5 = Slightly True
- 6 = Somewhat True
- 7 = Mostly True
- 8 = Definitely True

- 1. If I should find myself in a jam, I could think of ways to get out of it.
- 2. At the present time, I am energetically pursuing my goals.
- 3. There are lots of ways around any problem that I am facing now.
- 4. Right now, I see myself as being pretty successful.
- 5. I can think of many ways to reach my current goals.
- 6. At this time, I am meeting the goals that I have set for myself.

Source: Adapted from Snyder, C. R., Sympson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A., & Higgins, R. L. 1996. Development and validation of the state hope scale. Journal of Personality and Social Psychology, 70: 321-335.

APPENDIX D

OPTIMISM QUESTIONNAIRE

This scale consists of a number of words that describe how you perceive yourself. Please read each item and then write the one number that best indicates to what extent you feel each of the following statements applies to you.

- | | | | | |
|----------------------|-------------------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly
disagree | Disagree
agree | Neutral | Agree | Strongly
agree |
-
- ___ 1. In uncertain times, I usually expect the best.
- ___ 2. It's easy for me to relax .
- ___ 3. If something can go wrong for me, it will.
- ___ 4. I'M always optimism about my future.
- ___ 5 . I enjoy my friends a lot.
- ___ 6. It's important for me to keep busy.
- ___ 7. I hardly ever expect things to go my way.
- ___ 8. I don't get upset too easily.
- ___ 9. I rarely count on good things happening to me.
- ___ 10. Overall, I expect more good things to happen to me than bad.

Source: Scheier, M. F., & Carver, C. S. 1985. The life orientation test (LOT). Health Psychology, 4: 225.

APPENDIX E

RESILIENCY QUESTIONNAIRE

Directions: There are no correct or incorrect answers to these questions. Please be as accurate and honest as you can throughout, and try not to let answers to one question influence your answers to other questions. Indicate the extent to which you agree with each of the following items using the following response format:

1	2	3	4
Does not apply at all	Applies Slightly	Applies Somewhat	Applies very Strongly

- ___ 1. I am generous with my friends.
- ___ 2. I quickly get over and recover from being startled.
- ___ 3. I enjoy dealing with new and unusual situations.
- ___ 4. I usually succeed in making a favorable impression on people.
- ___ 5. I enjoy trying new foods I have never tasted before.
- ___ 6. I am regarded as a very energetic person.
- ___ 7. I like to take different paths to familiar places.
- ___ 8. I am more curious than most people.
- ___ 9. Most of the people I meet are likable.
- ___ 10. I usually think carefully about something before acting.
- ___ 11. I like to do new and difficult things.
- ___ 12. My daily life is full of things that keep me interested.
- ___ 13. I would be willing to describe myself as a pretty “strong” personality.
- ___ 14. I get over my anger at someone reasonably quickly.

APPENDIX E (Continued)

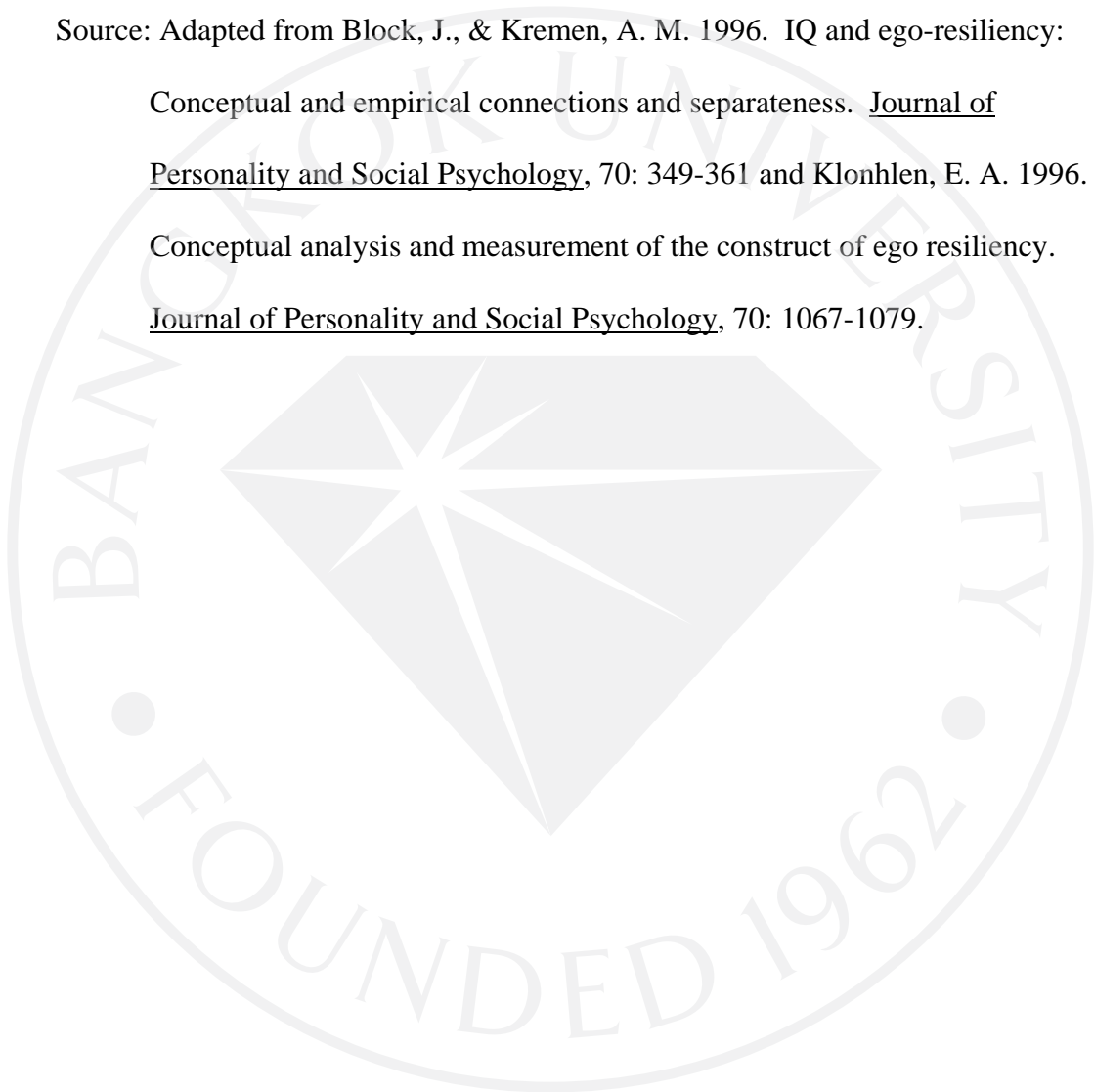
RESILIENCY QUESTIONNAIRE

Source: Adapted from Block, J., & Kremen, A. M. 1996. IQ and ego-resiliency:

Conceptual and empirical connections and separateness. Journal of Personality and Social Psychology, 70: 349-361 and Klonhlen, E. A. 1996.

Conceptual analysis and measurement of the construct of ego resiliency.

Journal of Personality and Social Psychology, 70: 1067-1079.



APPENDIX F

CORE SELF-EVALUATION QUESTIONNAIRE

This scale consists of a number of words that describe how you perceive yourself. Please read each item and then write the one number that best indicates to what extent you feel each of the following statements applies to you.

1	2	3	4	5
Strongly disagree	Disagree agree	Neutral	Agree	Strongly agree

Rosenberg (1965) Self-Esteem Scale

1. I feel that I am a person of worth, at least on an equal basis with others.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure. (r)
4. I am able to do things as well as most other people.
5. I feel that I do not have much to be proud of. (r)
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself. (r)
9. I certainly feel useless at times. (r)
10. At times I think I am no good at all. (r)

Generalized Self-Efficacy (Judge, Locke, Durham, & Kluger, 1998)

1. I am strong enough to overcome life's struggles.
2. At root, I am a weak person. (r)
3. I can handle the situations that life brings.
4. I usually feel that I am an unsuccessful person. (r)
5. I often feel that there is nothing that I can do well. (r)
6. I feel competent to deal effectively with the real world.
7. I often feel like a failure. (r)
8. I usually feel I can handle the typical problems that come up in life.

Locus of Control (from Levenson, 1981)

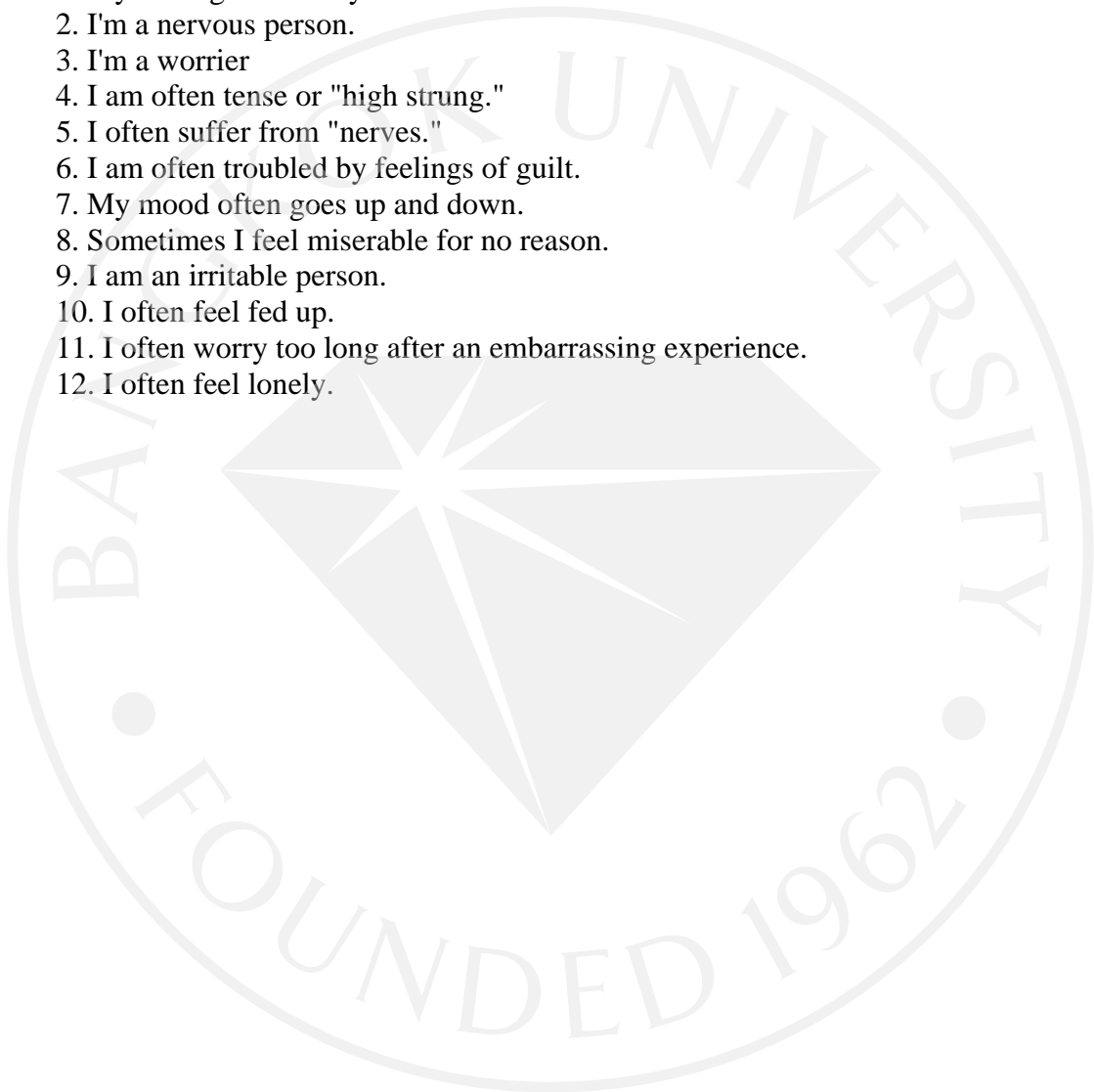
1. Whether or not I get to be a leader depends mostly on my ability.
2. When I make plans, I am almost certain to make them work.
3. When I get what I want, it's usually because I'm lucky. (r)
4. I have often found that what is going to happen will happen. (r)
5. I can pretty much determine what will happen in my life.
6. I am usually able to protect my personal interests.
7. When I get what I want, it's usually because I worked hard for it.
8. My life is determined by my own actions.

APPENDIX F (Continued)

CORE SELF-EVALUATION QUESTIONNAIRE

Neuroticism (Eysenck & Eysenck, 1968)

1. My feelings are easily hurt.
2. I'm a nervous person.
3. I'm a worrier
4. I am often tense or "high strung."
5. I often suffer from "nerves."
6. I am often troubled by feelings of guilt.
7. My mood often goes up and down.
8. Sometimes I feel miserable for no reason.
9. I am an irritable person.
10. I often feel fed up.
11. I often worry too long after an embarrassing experience.
12. I often feel lonely.



APPENDIX G

DEMOGRAPHIC QUESTIONNAIRE

1. **Age:** _____
2. **Gender:** Male _____ Female _____
3. **Educational level (total number of years of school completed):**

4. **Major:** _____
5. **Would you rank your compensation in this organization as:**
Low _____ Medium _____ High _____
6. **Where would you rank your compensation in this organization on a scale of 1 - 10?**
Assume that 1 represents the lowest paid employee, and that 10 represents the highest paid executive.

1 2 3 4 5 6 7 8 9 10
Lowest Paid Highest Paid

APPENDIX H

AGREEMENT

The nature of this research project requires me, Weixing Li, to obtain your consent before your participation in this project. Please read the following content carefully. If you agree to participate in this project, please sign on the provided two-page agreement. You can keep one copy of them for records.

* * *

The purpose of this research project is to study the performance in organizational structures. Some information about individuals will be asked in this questionnaire, please answer the questions honestly. This questionnaire may take you 20 minutes approximately.

The information you provide will be strictly held confidential. The result of this project will be presented in an aggregate form; no individual name will be involved. All participants can share the results of this project.

Your participation is voluntary; you can end up your participation at any time without any punishment. Refusal to participate in this project will not result any influence in your position in the department.

Any questions about this questionnaire can be addressed to:

Weixing Li
 Department of management, University of Nebraska-Lincoln
 Tel. 1-402-325-8509 (USA) 010-6257-3018 (China) Email: weixingli@hotmail.com

I, _____ (your name), have read through this agreement, and agree to participate in this study described as above.

 (Signature of the participant)

 (Date)

Name of Organization: _____

Name of Department: _____

Name of Work Team _____