

## CHAPTER 2

### Literature Review

This chapter describes the literature review and conceptual framework of the study.

The literature review consists of the following topics:

1. Core self-evaluation
  - 1.1 Definitions of core self-evaluation
  - 1.2 Theories/Conceptual Models and Components of core self- evaluation
  - 1.3 Measurement of core self-evaluation
  - 1.4 Factors related to core self-evaluation
  - 1.5 Studies related to core self-evaluation
2. Subjective career success
  - 2.1 Definitions of subjective career success
  - 2.2 Dimensions of subjective career success
  - 2.3 Measurements of subjective career success
  - 2.4 Factors related to subjective career success
  - 2.5 Studies Related to subjective career success
3. The relationship between core self-evaluation and subjective career success
4. Situations related to core self-evaluation and subjective career success among Nurses in China
5. Conceptual framework

## Core Self-evaluation

### Definitions of Core Self-evaluation

According to literature review, the definitions of core self-evaluation was defined by Judge and his different colleagues in their different studies as follows:

Core self-evaluation (CSE) is defined as a basic assessment that a person made about her/his ability, overall value and competence with four dimensions: self-esteem, generalized self-efficacy, neuroticism, and locus of control (Judge et al., 1997). The concept of core self-evaluations was introduced in an effort to provide a trait that would be a useful predictor of job satisfaction, as well as, perhaps, other applied criteria. After that core self-evaluation is defined as “fundamental premises that individuals hold about themselves and their functioning in the world” (Judge, Erez, & Bono, 1998, p. 168). Core self-evaluation is a comprehensive and fundamental character trait that embodies the conceptual and empirical overlap of four dispositional traits: neuroticism, self-esteem, self-efficacy, and internal locus of control (Judge, Erez, Bono, & Thoresen, 2002). Core self-evaluation is an intrapersonal resource that refers to how individuals evaluate themselves in terms of their personal worth and capabilities, and influences how individuals interpret and respond to experiences in their work environment (Judge et al., 2003). Core self-evaluation is an individual’s self-appraisal of four intrapersonal resources: self-esteem; locus of control; general self-efficacy; and neuroticism. Core self-evaluation represented stable personality traits including an individual’s subconscious and fundamental evaluation of him/herself, one’s own self-control and abilities and was seen as a higher order trait comprising four related dimensions including neuroticism, generalized self-efficacy, locus of control and self-esteem (Judge et al., 2003). Although there are three different descriptions of core self-evaluation, each description emphasized core self-evaluation as an ability which an individual can assess themselves in personal worth and capabilities, and influences his/her action in their work environment. From the definition by Judge et al. (1997) three criteria have been proposed whether a trait is representative of core self-evaluations: 1) The traits of self-esteem, generalized self-efficacy, neuroticism, and locus of control are evaluation of the self and not a description

of behaviors of what you do; 2) The traits are fundamental and basic compare with other potential traits; 3) the traits have a wide scope and was measured broadly (Ferris, 2008). Thus in this study, the core self-evaluation defined by Judge et al. (1997) is used as an assessment that a person made about her/his ability, overall value and competence which has four traits: self-esteem, generalized self-efficacy, neuroticism, and locus of control.

### **Theories/Conceptual Models and Components of Core Self-evaluation**

Each theory or model that is related to core self-evaluation has a different point of view on component of core self-evaluation.

**Core self-evaluation (CSE) theory.** The theory of core self-evaluation developed by Judge et al. (1997) is a stable personality trait, which contains a person's subconscious, his basic evaluation, his ability and his own control. People with a high level of core self-evaluation will actively think about themselves and be confident in their abilities. On the contrary, people with a low core self-evaluation will have their own negative evaluation, and a lack of confidence. According to Judge et al. (1997), core self-evaluation is a broad, latent, higher-order trait indicated by four well established traits in the personality literature: self-esteem, generalized self-efficacy, Neuroticism and locus of control.

1. Self-esteem refers to a person's overall appraisal of his or her own worth. Self-esteem is one of the most essential core self-evaluation purviews because it is the overall value one places on oneself as a person (Harter, 1990).

2. Generalized self-efficacy refers to an individual's estimate of his or her own ability to perform well and handle a variety of situations (Judge et al., 1997). Even though individuals may have different levels of self-efficacy in different domains, generalized self-efficacy is a global estimate of abilities in all situations and can be considered a stable trait (Judge et al., 1997). Individuals high in generalized self-efficacy are more likely to take on new tasks that allow for growth in their ability and are more persistent than those low in generalized self-efficacy.

3. Neuroticism refers to an enduring tendency to easily experience unpleasant emotions such as anger, anxiety, and depression. Neurotic people react more negatively to stress, tend to be anxious, and tend to feel helpless. (Costa & McCrae, 1988). Judge,

Locke, Durham, and Kluger (1998) study showed that when neuroticism is considered a part of the core self-evaluation, neuroticism is conceptualized as the opposite of emotional stability such as non-neuroticism. Because neuroticism and emotional stability are merely markers of the two aspects of the same feature, they are often used interchangeably in literature. (Mount & Barrick, 1995). Neurotic tendencies have a negative cognitive and explanatory style and focus on the negative aspects of self (Watson, 2000).

4. Locus of control refers to a tendency for individuals to attribute life's events to their own doing or to outside forces beyond their control. For the basic categories of control points, the internal considers that they control their environment, while the external believes that external forces control their own lives. Spector (1982) results pointed out that those with an internal locus of control are more likely to be satisfied with their work and life because they believe they can control the situation. Those who have an external locus of control or who are low on proactivity are likely to experience lower subjective career success (Erez & Judge, 2001).

The concept of core self-evaluations was first examined by Judge et al. (1997). Core self-evaluation is an intrinsic resource in how individuals evaluate themselves based on their personal values and abilities, and influences how individuals interpret and respond to the experiences of their work environment. This is an important concept, because individuals with a high level of core self-evaluation, good adaptability, initiative, self-confidence, effectiveness, and belief in his own competency will lead to positive outcomes that are important to individuals and organizations.

**The hierarchical model of approach and avoidance motivation (Elliot & Church, 1997; Elliot & Covington, 2001; Elliot & McGregor, 1999).** The hierarchical model of approach and avoidance motivation was developed to account for the effects of personality on distal outcomes. In particular, the model assumes that distal personality traits are associated with intermediate motivational mechanisms. A key difference in this model between approach and avoidance; the model shows that certain personality traits can be categorized according to whether they represent attitudes or avoid temperament, or biologically sensitivity based on positive or negative information. In addition, it is shown that these temperaments affect outcome of target selection, and once again

distinguish between goals based on whether they represent positive or negative (avoidance) outcomes as a result of regulation (Elliot & Church, 1997). In this model, approaching temperament involves approaching goals, while avoidance of temperament involves avoidance of goals, which fully mediate the effects of personality variables on performance outcomes (Elliot & McGregor, 1999). The hierarchical model of approach and avoidance motivation is suitable for dealing with the relationship between core self-evaluation and performance, and whether core self-evaluation is a close or evasive temperament. Especially consistent with the theory of job performance (Campbell, McHenry, & Wise, 1990). It shows that personality influences performance by influencing motivational mechanisms. The study of Ferris (2008) used the hierarchical model of approach and avoidance motivation, the results show that the effect of core self-evaluation on job performance is achieved by avoiding rather than approaching the goal.

Based on the literature review, core self-evaluation theory was developed and was the first examined by Judge et al. (1997). The main suggestion of this theory was how to influence outcomes through self-esteem, generalized self-efficacy, neuroticism and locus of control. The researcher selected core self-evaluation theory of Judge et al. (1997) as a framework, because the theory was widely used in previous studies.

### **Measurements of Core Self-evaluation**

Core self-evaluation has been measured by different instruments. Based on the literature review, the following instruments are commonly used to measure core self-evaluation in different settings:

**Rosenberg's (1965) 10-item Self-esteem Scale.** This 10-item scale is the most commonly used scale for measuring self-esteem with a good validity (Blascovich & Tomaka, 1991), however the value of validity was not reported. The four example items included, "I feel that I have a number of good qualities," and "I feel that I am a person of worth, at least on an equal basis with others." The coefficient alpha ( $\alpha$ ) reliabilities of the scale were .82, .80, .88 and .89 for Samples 1-4, respectively.

**10-item Scale developed by Judge et al. (1998).** This scale was developed by Judge et al. (1998). This 10-item instrument was used to measure generalized self-

efficacy. The example items included, “When I make plans, I am certain I can make them work” and “If something looks too complicated, I will not even bother to try it.” the coefficient alpha ( $\alpha$ ) reliabilities of the scale were = .85, .80, .84, and .89 for Samples 1-4, respectively. There was no information about validity.

**12-item Neuroticism Scale (Costa & McCrae, 1992).** This scale developed by Costa and McCrae (1992). This 12-items in four samples scales was used to measure Neuroticism. Example items included, “I often feel inferior to others” and “Too often, when things go wrong, I get discouraged and feel like giving up.” In this study, the reliabilities of the scale were  $\alpha = .87$ ,  $\alpha = .84$ ,  $\alpha = .89$ , and  $\alpha = .89$  for Samples 1-4, respectively. The information of validity could not be found in previous studies.

**Levenson’s Scale (1981).** The internality subscale of Levenson (1981) was used to measure locus of control. The moderate reliability of the Levenson’s measurement, it has been widely applied to various samples (Levenson, 1981). Example items included “When I get what I want, it’s usually because I worked hard for it,” and “My life is determined by my own actions.” The coefficient alpha ( $\alpha$ ) reliabilities of the scale were .57, .70, .69 and .60 for Samples 1-4, respectively. Previous studies did not report the validity of this instrument.

**The Core Self-Evaluations Scale (CSES).** The Core Self-Evaluations Scale (CSES) developed by Judge et al. (2003) encompasses 12-items. It has four subscales including generalized self-efficacy three items (1, 2, 3), self-esteem five items (4, 5, 6, 7, 8), Neuroticism two items (9,10) and locus of control two items (11, 12). The items include the content areas of the constituent core characteristic. Items are rated from 1 (strongly disagree) to 5 (strongly agree). Examples of items include “I am confident I get the success I deserve in life,” and “Sometimes when I fail, I feel worthless.” The scale scores is the sum of the item scores. After the 2, 4, 6, 8, 10 and 12 items are reverse-coded. Higher scores indicate higher core self-evaluation. Judge et al. (2003) showed that construct validity ( $\chi^2/df = 2.03$ ; RMSR = .06; RMSEA = .08; GFI = .92; CFI = .92; RFI = .79). The internal consistency alpha ( $\alpha$ ) reliability was .84; test–retest  $r$  was .81).

**The modified version of Core Self-Evaluation Scale.** The Core Self-Evaluation Scale (CSES) (Judge et al., 2003) was translated into Chinese by Du et al. (2012). During

the process of translation and back-translation, they deleted two items from the Core Self-Evaluation Scale: the item “When I try, I generally succeed”, and the item “I determine what will happen in my life”. In China, individuals with a high degree of personal self-affirmation can be regarded as conceited and arrogant. In addition, Heine, Lehman, Markus, and Kitayama (1999) suggested that the need for self-esteem must be culturally different because there are differences between self-construction and different cultures. For example, in a Western country such as the United States, people assess themselves as having a positive self-regard; however, in an East Asian country such as Japan, people assess themselves with a self-critical attitude. The modified version of Core Self-Evaluation Scale involves ten items to self-report measure of core self-evaluation. There are four subscales including generalized self-efficacy (2 items), self-esteem (5 items), Neuroticism (1 item), and locus of control (2 items). Items are rated from 1 (strongly disagree) to 5 (strongly agree). Six of the ten are reversed scores (item 2, 3, 5, 7, 8, and 10). Higher scores indicate a higher core self-evaluation. The results of the study by Du et al. (2012) showed construct Validity ( $\chi^2/df=2.20$ ; GFI=0.94; CFI=0.91; NFI=0.86; IFI=0.92; TLI=0.90; RMSEA= 0.065). The internal consistency reliability of the scale was 0.83, the split half reliability was 0.84 and the test-retest reliability was 0.82 (three weeks).

**The Chinese General Self-Efficacy Scale (CGSS) developed by Zhang and Schwarzer (1995).** Except for the above measurements, researchers attempted to find some general versus domain-specific and state measurements such as The Chinese General Self-Efficacy Scale (CGSS) (Zhang & Schwarzer, 1995) which was used to measure self-efficacy. This 10-item, 4-point Likert scale was developed by Zhang and Schwarzer (1995) and showed a good reliability (0.81). There was no information about the validity of this scale.

In summary, there was no information about the validity among the scales of core self-evaluation’s traits, the Chinese general versus domain-specific and state measurement scales. The instruments used to measure the core self-evaluation scale (CSES) (Judge et al., 2003) have some limitations.

1. The core of the core self-evaluation scale is the characteristics of self-evaluation, which should be represented by factor analysis on four scales. The measure

of core self-evaluation is comparatively long (a total of 38 items), the length of the instrument may bound its efficacy, especially in organizational settings. Some researchers choose only one index to measure rather than using lengthy measurements, such as Emotional Stability or Neuroticism, and thus miss a considerable amount of valid variance. The last possible limitation is empirical validity (Judge et al., 2003).

2. The Chinese general versus domain-specific and state measurement only focuses on some special domains, the level of core self-evaluation will not be measured completely.

3. The 12 items of the Core Self-Evaluation Scale (Judge et al., 2003) can be used directly to measure different criteria at the same time. It is widely used in organizational settings with high construct validity and good reliability. In short, CSES measures core commonalities among traits rather than specific factors, accounting for core features of variance. However, the items of CSES “When I try, I generally succeed”, and “I determine what will happen in my life” did not quite fit the Chinese expression of core self-evaluation. Thus, Du et al. (2012) deleted these two items and translated into Chinese. In Du et al. (2012) study tested the quality of this instrument, the results showed that the modified version of CSES with high construct validity ( $\chi^2/df=2.20$ ; GFI=0.94; CFI=0.91; NFI=0.86; IFI=0.92; TLI=0.90; RMSEA= 0.065) and good reliability ( $\alpha=0.84$ ). This instrument has been widely used in China to measure individual’ core self-evaluation. So therefore, it was used in this study.

### **Demographic Factors Related to Core Self-evaluation**

Based on the literature review, some demographic factors were related to core self-evaluation including age, gender, experience, and educational level.

**Age.** There was positive relationship between age and perceived core self-evaluation (Karatepe et al., 2010). The older the person, the higher the scores of core self-evaluation.

**Gender.** Abas, Omar, Halim, and Hafidz (2015) reported that male nurses who had perceived high level of core self-evaluation by a high level self-esteem.

**Working experience.** Karatepe et al. (2010) found that a positive correlation between core self-evaluation and working experience, when individuals have more working experience they will become more competent.

**Education.** A positive relationship was found between education level and core self-evaluation. Karatepe et al. (2010) found that having high scores of core self-evaluation indicated more education.

### **Research Studies Related to Core Self-evaluation**

Many studies have been conducted among nurses based on Judge's core self-evaluation theory (Judge et al., 1997), measured by 12 items Core Self-Evaluations Scale (Judge et al., 2003), and proved that core self-evaluation is related to several outcomes.

In Canada, Laschinger et.al. (2013) examined the influence of personal and situational factors on direct-care nurses' interests in pursuing nursing management roles among 1241 nurses. The result showed that the nurses' core self-evaluation was at a moderate level ( $\bar{X} = 5.39$ ,  $SD = 0.77$ ) (Core self-evaluation score range 1-7).

In China, Zhou et al. (2014) explored the impact of core self-evaluation on job burnout of nurses, verified the intermediary role of organizational commitment between the two variables among 473 nurses in Xi'an. The result showed that the core self-evaluation was at a high level ( $\bar{X} = 4.27$ ,  $SD = 0.53$ ). Yang, Ma, Feng, Hu, and Su (2014) examined the relationship among core self-evaluation, job satisfaction and turnover intention of clinical nurses in Xi'an, the result showed that core self-evaluation was at a moderate level ( $\bar{X} = 3.41$ ,  $SD = 0.48$ ). In China, several researchers using the 10-item Core Self-Evaluations Scale developed by Judge et al. (2003) and modified by Du et al. (2012) examined the level of core self-evaluation among different settings. Xu et al. (2011) investigated the core self-valuation and job performance among 188 nurses in Harbin, the core self-evaluation of nurses was at a moderate level ( $\bar{X} = 3.65$ ,  $SD = 0.54$ ). Zhong et al. (2012) examined the correlation between job performance and core self-evaluation among nurses ( $n=247$ ) in two hospitals in Guangzhou. The result suggested that the level of nurses' core self-evaluation was moderate ( $\bar{X} = 3.42$ ,  $SD = 0.14$ ). Cai et al. (2012) tested the relationship between core self-evaluation and job-burnout among

45 midwives from primary hospitals in Zhejiang Province. The result showed the total score of core self-evaluation was at a moderate level ( $\bar{X} = 3.46$ ,  $SD = 0.49$ ). Li, Guan, Chang, and Zhang (2014) examined the relationship between core self-evaluation and the burnout syndrome among Chinese nurses ( $n=1559$ ) from five hospitals in Shenyang. The results showed that the level of nurses' core self-evaluation was at a moderate level ( $\bar{X} = 3.37$ ,  $SD = 0.45$ ). Peng et al. (2016) to explore the influence of core self-evaluation on Job Burnout among female nurses ( $n=583$ ) from six general hospitals in Guangxi, of China. The results showed nurses' core self-evaluation was at a high level ( $\bar{X} = 4.26$ ,  $SD = 0.54$ ).

In summary, many studies those have been conducted based on Judge's core self-evaluation theory (Judge et al. 1997) in different settings with different groups of nurses shown a moderate level of core self-evaluation of nurses. However, two studies showed that nurses' core self-evaluation was at a high level. The inconsistent results of these previous studies is the major reason to conduct this study in China.

### **Subjective Career Success**

#### **Definitions of Subjective Career Success**

There are many different definitions of subjective career success as defined by different studies. The various definitions of subjective career success as follows:

Hughes (1958) defined subjective career success as "landmarks" that can be readily compared across people as a means of judgment for success. Gattiker and Larwood (1986) defined subjective career success as the individual's evaluation of achievements in his/her work experiences, which includes job success, inter-personal success, financial success, hierarchical success and life success. Judge, Cable, Boudreau, and Bretz (1995) defined subjective career success as the reaction and attitude of an individual to work and career. Job satisfaction is the subjective response to career, which leads to subjective career success. (Judge et al., 1999). Subjective career success was defined as a positive work and psychological outcomes accumulated through work experience (Seibert, Kraimer, & Liden, 2001). Arthur, Khapova, and Wilderom (2005) defined subjective career success

as the “accomplishment of desirable work-related outcomes at any point in a person’s work experiences over time” (p. 179).

In summary, subjective career success has been defined with different meanings by different authors at different times. In this study subjective career success is defined as the individual’s evaluation of achievement in his/her work experiences, which includes job success, inter-personal success, financial success, hierarchical success and life success (Gattiker & Larwood, 1986).

### **Conceptual and Dimensions of Subjective Career Success**

There are various concepts and dimensions for career success, as follows

**Gattiker and Larwood’s concept (1986).** Gattiker and Larwood (1986) developed a concept for subjective career success along with the review study of Gattiker (1985) and defined subjective career success as the individual’s evaluation of achievements in his/her work experiences. Subjective career success (SCS) has been defined as an individual’s feeling of accomplishment in his/her career or individual’s appraisal of career development. It referred to an individual’s perception and personal standards on job and life satisfaction, career satisfaction; receive fair benefits; have a balance of work and family life, and have opportunities to fulfill one’s achievements. Individuals who do not achieve personal standards and are dissatisfied with their jobs, interpersonal relationships, unfair benefits, promotion and life balance are not likely to consider their careers to be successful. In contrast, individuals who are satisfied with their jobs, interpersonal relationships, promotion and life balance are likely to consider their careers to be successful. Employees with high subjective career success perceive themselves as subjectively happier than those with low subjective career success. Gattiker and Larwood (1986) suggested that subjective career success is not only correlated with the employee's perception of job characteristics but also correlated with occupational self-concept which is the person's self-esteem and self-evaluated job qualifications and suggested that subjective career success mainly consists of five dimensions: job success, inter-personal success, financial success, hierarchical success and life success.

1. Job success refers to all positive results obtained from the job, like the satisfaction with work, receiving positive feedback about their performance, obtaining development opportunities for further education or learning new skills, having enough responsibilities on the job, and being fully supported by management. Individuals derive happiness from performing their work and from having responsibilities at their job.

2. Inter-personal success refers to personally having good relationships with colleagues or other teams, including respect, being accepted or recognized by colleagues, receiving good performance evaluations, as well as having a manager's confidence.

3. Financial success refers to individuals feel that their salary and benefits from their career are fair and equitable. When compared with the colleague at the same level, all incomes are appropriate for the work, dedication and performance.

4. Hierarchical success refers to the position or status advancement that the individual feels is appropriate with their job responsibilities, wherein they are encouraged to step into a higher position and achieve career advancement in a given time.

5. Life success refers to balancing work and private life, and feel happiness or contentment with one's overall life.

**Criteria for subjective career success developed by Childs and Klimoski (1986).** Childs and Klimoski (1986) state subjective career success include several factors: earnings, job satisfaction, life satisfaction, self-assessed success, prestige, budget, career identification, problem solving, and job effectiveness, number supervised, peer rate and progress.

1. Earnings refer to all sources of personal income that an individual earns.
2. Job satisfaction is defined as a person's satisfaction with his/her job.
3. Life satisfaction is based on a person's feelings about his/her life as a whole.
4. Self-assessed success refers to the successful feeling assessed by a person when he/she is compared to other people who are of the same age, or in the same occupation or types of work.

5. Prestige refers to the prestige rating of the most recent full-time or primary job.
6. Budget responsibilities refer to the largest (work or personal) budget that a person has ever been responsible for.
7. Career identification is the feeling that a person has identified, or been involved in his/her career.
8. Problem solving effectiveness is defined as the effectiveness that a person perceives in him/herself in dealing with problems.
9. Job effectiveness refers to a person's perception of his/her job effectiveness.
10. Number supervised refers to the greatest number of people that a person has ever supervised.
11. Peer rate is the evaluation of a person's success from his/her peers.
12. Progress is the progressing feeling about one's career when he/she compared to his/her peers.

**Dimensions of subjective career success developed by Parker and Chusmir (1992).** Parker and Chusmir (1992) suggested that the subjective career success was made up of six dimensions: status/wealth, security, social contribution, and family relationships, professional fulfillment and personal fulfillment.

1. Status / wealth means public recognition, high salaries and influence.
2. Security refers to work related safety, long-term stability, regular salary increases and good benefits.
3. Social contribution means actively participating in society, beneficial to others, and beneficial to society.
4. Family relationships mean happy marriage and good parenting.
5. Professional fulfillment means commitment to the job, satisfaction of the organization and position, and respect for colleagues and managers.

6. Personal fulfilment refers to personal meaning and happiness obtained from non-work activities such as self-respect, inner peace and satisfaction.

**Dimensions of subjective career success developed by Nabi (2001).** Nabi (2001) identified subjective career success as the perception of success in one's work-role and relationship with colleagues such as a happy work environment, supervision support, lovely colleagues, good performance evaluation and confidence in management. Employees with high subjective career success perceive themselves as subjectively happier in these areas than those with low subjective career success.

Subjective career success has been widely studied based on different perspectives. Gattiker and Larwood's concept (1986) is used as a framework in this study because this concept examined and suggested the construct of subjective career success not only related to the job features, but also related to the occupational self-concept. This concept is more comprehensive because it includes the dimensions of occupational self-concept and job features.

### **Measurements of Subjective Career Success**

Subjective career success has been measured by different methods. Based on the literature review, the following instruments were commonly used to measure subjective career success in different settings:

**The Career Satisfaction Scale developed by Greenhaus, Parasuraman, and Wormle (1990).** The career satisfaction scale analyzes five aspects: career success, career progress, income, promotion and skill development. It is a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). An example item is "I am satisfied with the progress I have made toward meeting my overall career goals". Greenhaus et al. (1990) reported Cronbach's  $\alpha$  of the scale was 0.88.

**The Life Success Measures Scale (LSMS) developed by Parker and Chusmir (1992).** The LSMS (Parker and Chusmir, 1992) is a 42-item measure of subjective career success across six dimensions: status/wealth (8 items), such as "Getting others to do what I want", security (5 items), such as "Having economic security", social contribution (8 items), such as "Being able to contribute to society", family relationships (8 items), such

as “Having a happy marriage”, professional fulfilment (5 items), such as “Being satisfied with my profession” and personal fulfilment (8 items), such as “Having personal satisfaction” The items are rated on a 5-point scale, ranging from 1 (never important) to 5 (always important). In Hon and Rensvold’s (2006) study, the Cronbach’s alpha coefficients were from 0.72 to 0.77.

**The Chinese Career Success Scale (CCSS) developed by Eby, Butts, and Lockwood (2003) and translated by Yan, Wang, Du, and Qiu (2008).** The original English version scale (CSS) developed by Eby et al. (2003) that had been translated into Chinese (CCSS) by Yan et al. (2008) The CCSS comprises of eleven items with three subscales: Career Satisfaction (5 items), Perceived in Organization Competitiveness (3 items) and Perceived External Organization Competitiveness (3 items). It was a 5-point Likert scale which ranged from 1 (strongly disagree) to 5 (strongly agree). A higher score indicates a higher level of career success. The CSS was translated into Chinese for measuring career success in different professions. The English version and the Chinese version of the CSS had a high internal consistency reliability (Yan et al., 2008). And in Li, You, Lin, and Chan (2014) study the Cronbach  $\alpha$  was 0.87. It has been used to measure nurses’ subjective career success in mainland China. The findings were useful for nurse managers and politicians in the evaluation of nurses’ subjective career success and developed strategies to promote nurse retention and career development (Z. K. Li et al., 2014).

**The Subjective Career Success Scale (SCSS) developed by Gattiker and Larwood (1986).** This instrument developed by Gattiker and Larwood (1986) is widely used to measure subjective career success. There are 22 items in this instrument with five subscales including job success (8 items), inter-personal success (4 items), financial success (3 items), hierarchical success (3 items) and life success (4 items). Possible responses of each item in these subscales were scaled from 1 = “strongly disagree” to 5 = “strongly agree”. The higher the total score, the higher perception of subjective career success. The reliability coefficient of the overall instrument was .70. The Cronbach’s coefficient alpha of each subscale ranged from .65 to .79: job success, inter-personal success, financial success, hierarchical success and life success were 0.75, 0.79, 0.74, 0.65 and 0.71 respectively.

The Subjective Career Success Scale (SCSS) was translated into Chinese by Yin (2012). Since took into consideration the Chinese situation and can be easily understood by nurses, Yin (2012) modified some items of the Subjective Career Success Scale. The item in job success subscale “I am receiving positive feedback about my performance from all quarters”, “all quarters” was modified to “my colleagues”; the item in hierarchical success subscale, the term “career goals” was modified to “career ladder”. In terms of the financial success subscale, the item mentioned about the receive compensation when nurses get an occupational injury was deleted due to this policy does not exist in Yunnan Province. There were 21 items. In Yin (2012) study showed that the Content Validity Index (CVI) was 0.92. The reliability of MSCSS was 0.80, and the Cronbach’s alpha coefficient of the subscales of job success, inter-personal success, financial success, hierarchical success, and life success were 0.84, 0.90, 0.83, 0.88, and 0.91, respectively.

Based on the literature review, the Subjective Career Success Scale developed by Gattiker and Larwood (1986) is an instrument widely used to measure subjective career success. Considering the situation of China the modified version of Subjective Career Success Scale (SCSS) was used in this study. The reasons include:

1. The Career Satisfaction Scale (Greenhaus et al., 1990) only have five items, which look at one aspect of subjective career success. However, the results which is measured by this instrument doesn’t seem very comprehensive since only one item is used.

2. In the Life Success Measures Scale (Parker & Chusmir, 1992), the dimensions of status/wealth, social contribution, family relationships, personal fulfilment, professional fulfilment, and security not only measure subjective career success, but also measures objective career success. Objective career success is seen as an external measurement and involves high salaries, upper level positions and quick promotions (Gattiker & Larwood, 1986). Status/wealth belongs to objective career success.

3. The Chinese Career Success Scale developed by Eby et al. (2003) and translated by Yan et al. (2008) has been used to measure nurses’ subjective career success in mainland China. However, nurses use this instrument to evaluate the organization

competitiveness and external organization competitiveness, not evaluate themselves. The findings were useful for nurse leaders and policymakers in the evaluation of nurses' subjective career success and developed strategies to promote nurse retention and career development.

4. The Subjective Career Success Scale (Gattiker & Larwood, 1986) has been widely used to measure subjective career success with satisfactory validity and reliability. However, the modified version of Subjective Career Success Scale is more suitable for the actual situation in Yunnan. In addition, Yin (2012) pointed out the modified version of SCSS also has satisfactory validity and reliability. It was easily understood by Chinese nurses. Therefore, the researcher selected the modified version of Subjective Career Success Scale developed by Gattiker and Larwood (1986) and translated into Chinese by Yin (2012) in this study.

### **Factors Related to Subjective Career Success**

Researchers have found that the following factors are related to subjective career success of employee. The factors including demographic factors and other factors.

#### **Demographic factors**

**Gender.** Previous studies found that gender was significantly related to subjective career success. Male nurses can positively impact subjective career success by receiving highly valued resources from their organization (Rhoades & Eisenberger, 2002). Liu, Yang, Yang, and Liu (2015) also suggested that the male nurses who accept themselves and have personal worth might be likely to obtain subjective career success when they can achieve perceived organizational support. Asegid, Belachew and Yimam (2014) found that 47.4% of female nurses had lower subjective career success and job satisfaction than male nurses.

**Age.** Age was a significant factor of subjective career success in previous study. Asegid, Belachew, and Yimam (2014) result showed that there was a positive relationship between age and subjective career success, the subjective career success (job satisfaction) of 31-40 year old nurses was three times that of 20-30 year old nurses; 41-50 years old nurses' occupational satisfaction was 15 times that of 20-30 year old nurses.

**Years of work experience.** Park, Jeoung, Lee, and Sok (2015) investigated 214 nurses who worked in 11 emergency medical centers in South Korea. The results showed that number of years of work experience in the Emergency Medical Center of Hospital greatly influenced subjective career success. The nurses who had less than ten years of work experience had lower level subjective career success (Altuntas, 2014).

**Marital status.** Seibert and Kraimer (2001) showed that marital status is also an important factor in subjective career success.

### **Other factors**

Subjective career success also is affected by many other factors. In general, the main hurdles of individual subjective career success include dispositional characters, motivation, social support, organizational or job support and low promotion opportunities (Ng & Feldman, 2014). In health care system, a stressful occupation (Sherring & Knight, 2009) and a heavy workload (Guo, Chen, Fu, & Liu, 2016) will seriously influence job subjective career success of nursing personnel (Rasdi, Ismail, Uli, & Noah, 2009). In China, previous studies showed organizational, personal and human capital factors influenced subjective career success in nursing personnel, as described in the following: 1) organizational factors include work environment, organizational support, style of the hospital, working time arrangement, organizational and management mode, and other organizational factors; 2) personal factors include region and interpersonal relationship are important factors influencing the nurses' subjective career success; 3) human capital factors include education level.

### **Research Studies Related to Subjective Career Success**

In Australia, Allen (2011) used the Job Satisfaction Scale (Greenhaus et al., 1990) to examine the potential differences in interactional commitment and subjective career success (career success, career progress, income, promotion, and development of skills) employment status among 657 nurses. The results show that temporarily employed nurses reported lower levels of occupation satisfaction ( $\bar{X} = 3.30$ ,  $SD = 0.77$ ) compared with the permanent nurses.

In Thailand, Jeenkool (2004) used the Subjective Career Success Scale developed by Gattiker and Larwood (1986) to test the relationships among personal factors, organizational support, achievement motivation and subjective career success of professional nurses at government university hospitals ( $n = 370$ ). The results pointed out that subjective career success of professional nurses in governmental university hospital was at a moderate level ( $\bar{X} = 3.49$ ,  $SD = 0.76$ ).

In China, Yin (2012) used the modified version of Subjective Career Success Scale (SCSS) developed by Gattiker and Larwood (1986) to test the relationship between work empowerment and career success among 382 nurses in four university hospitals in Yunnan Province of the People's Republic of China. The results showed that overall subjective career success was at a moderate level ( $\bar{X} = 3.02$ ,  $SD = 0.64$ ). The subscales of job success ( $\bar{X} = 3.20$ ,  $SD = 0.76$ ), inter-personal success ( $\bar{X} = 3.47$ ,  $SD = 0.80$ ), hierarchical success ( $\bar{X} = 2.62$ ,  $SD = 0.85$ ) and life success ( $\bar{X} = 3.47$ ,  $SD = 0.80$ ) were at a moderate level, while financial success ( $\bar{X} = 2.17$ ,  $SD = 1.02$ ) was at a low level.

Ji et al. (2012) used Job Satisfaction Scale (Greenhaus et al., 1990) examined the influence of psychological capital of nurses on their job performance and subjective career success among 428 nurses in five tertiary university hospitals of Harbin. The results showed that nurses' subjective career success was at a moderate level ( $\bar{X} = 3.20$ ,  $SD = 0.66$ ).

In summary, previous studies showed the inconsistent results of nurses' subjective career success. Therefore, it is significant to examine the level of subjective career among nurses in Dali.

### **The Relationship Between Core Self-evaluation and Subjective Career Success**

The relationship between core self-evaluation and subjective career success have been studied in Western countries and in China as follows:

In the United States, Judge and Hurst (2008) examined the relationship between core self-evaluation and subjective career success for 12,686 participants at different stages in their career (early, growth over time, growth in education over time, and growth

in health problems). Results indicated that core self-evaluation correlated to the subjective career success level of job success ( $r = 0.104$ ,  $p < 0.01$ ).

Ng and Feldman (2014) using a meta-analysis review of 191 empirical articles which was published over the past 30 years with 94,090 employees from 216 groups found that low core self-evaluation is one of hurdle of individual subjective career success, low core self-evaluation negatively related to subjective career success ( $r = -.53$ ,  $p < 0.01$ ).

In Germany, Stumpp et al. (2010) using a German version of the Core Self-Evaluations Scale (Judge et al., 2003) and life satisfaction with Life Scale examined the relationship between core self-evaluation and subjective career success among 475 employee. The results revealed that the core self-evaluation correlated to three indicators of subjective career success: job satisfaction ( $r = 0.40$ ,  $P < 0.01$ ); career satisfaction ( $r = .45$ ,  $P < 0.01$ ) and life satisfaction ( $r = .42$ ,  $P < 0.01$ ).

In Israel, Ganzach and Pazy (2014) used the original sample of 12,686 participants were individuals examined the relationship between core self-evaluation and individual subjective career success level of job satisfaction differences in: (1) early; (2) growth in over time; (3) Growth in education partly mediates the effect status over time; (4) Growth in health problems effect. The result found there is no significant relationship ( $r = 0.0008$ ,  $P > 0.7$ ) between core self-evaluation and subjective career success (job satisfaction).

In China, Wang and Sun (2012) using Job Satisfaction Scale (Greenhaus et al., 1990) examined the effects of core self-evaluation, support, and their interaction subjective career success among 212 employees from three organizations in Beijing. The results indicated that core self-evaluation were positively correlated ( $r = 0.12$ ,  $P < 0.05$ ) with subjective career success (job, career and life satisfaction) through organizational support. Core self-evaluation and organizational support the impact of the number of promotion interactions ( $r = 0.12$ ,  $P < 0.05$ ). After that, Chen (2015) used the Job Satisfaction Scale (Greenhaus et al., 1990) to examine the influence of core self-evaluation on subjective career success among 226 employees of eight enterprises in Zhejiang Province. The results showed that core self-evaluation does not directly affect the subjective career success: 1) core self-evaluation significantly affects occupation

commitment ( $r = 0.06$ ), then occupation commitment affects subjective career success ( $r = 0.43, p < 0.001$ ); 2) core self-evaluation significantly affects work involvement ( $r = 0.27, p < 0.01$ ), then work involvement affects subjective career success ( $r = 0.17, p < 0.05$ ). Further, Wei and Lee (2016) used Singh, Ragins, and Tharenou (2009) eight-item of subjective career success instrument to examine the ethical leadership, core self-evaluation and staff education level on the subjective career success among 285 employees in Shanghai. The results showed that core self-evaluation correlated with subjective career success ( $r = 0.364, P < 0.01$ ).

In summary, most studies had examined the relationship between core self-evaluation and subjective career success among employees in Australia, the United States, Israel, Germany, and in China. They found that there was a positive correlation between core self-evaluation and subjective career success. One study showed that no relationship between these two variables. However, barely studies focused on nurses has been found. Therefore, it is important to study the relationship between core self-evaluation and subjective career success among nurses in China.

### **Situation Related to Core Self-evaluation and Subjective Career Success Among Nurses in China**

It is important that the organization provides a good working environment to encourage employees to contribute more to their jobs and help them in personal subjective career success (Raziq & Maulabakhsh, 2015). The nursing work environment has a direct impact on nurses' job satisfaction, turnover rate and the safety of patients, and the positive working environment is one of the key factors to stabilize the nursing team and ensure high quality nursing and patient safety practices (Chen, You, Zheng & Liu, 2012; Twigg & McCullough, 2014). However, the Chinese nursing work environment is characterized by a heavy workload and a sizeable shortage among nurses (Yin, 2012). Compared with many countries, there is a very serious nursing shortage in China (Cai & Zhou, 2009). In 2010, there were approximately 88% hospitals facing nursing shortages in China (Chen & Li, 2010). The Ministry of Health of China (2015) reported that at the end of 2014, there were 25,860 general hospitals, 6.6 million beds and 3.0 million nurses. The nurse to population ratio was 2.20:1000 which is less than 2.30:1000 (World Health Organization, 2012). This shortage is the most impact factor of nursing environment

(Zhang, Zhao, Li & Chou, 2014). With the implementation of the national policy of allowing families to have a second child, there will be a lot of families including nurses who will plan to have a second child. This may exacerbate the situation of the nurse's shortage of hospitals in China since the majority of nurses are married women (Wang et al., 2014). The Ministry of Human Resource and Social Security of China (2016) pointed out since 1 January 2016, "female employees enjoy at least 98 days of maternity leave, increased 15 days if the dystocia (such as Caesarean birth); increase 15 days when multiple births (more than one child per birth)".

In China, the biggest difference from most western countries are the roles of registered nurses. Unlike hospitals in western countries where there are other health professionals such as nurses assistants or nurses aids to do more menial tasks for Registered Nurses, all nurses are Registered Nurses in Chinese hospitals. So all nurses in China must do the same job in clinical wards even if they have different education levels such as 3-year associate degree or a PhD degree (Fang, 2007). There are no nurses' assistants or nurses' aides to help nurses with menial tasks (Zhang, Chen, & Zhen, 2008). All jobs must be completed by themselves. Thus, this adds to the nurses' workload and reduces their job satisfaction. A little less than half (45%) of nurses were dissatisfied with their current job, and 5% of nurses reported an intention to leave among 9,698 nurses from 181 hospitals in China (Zhang et al., 2014). In Kunming of Yunnan Province the overall job satisfaction was at a low level (Duan, 2016). These results offer further proof of Judge et al.'s theory (1999) of the linkage of job satisfaction to subjective job success of nurses.

Nursing has not been perceived as a professional job by Chinese society, and the social status of nurses is lower than physicians' (Fang, 2008). People consider nurses to only provide injections and medicine, and do daily life care chores for patients without special training. They think anyone can do it. The patients or their family members always prefer to vent their dissatisfaction to the nurses rather than the doctors, especially when the treatment effect on the patient is poor. This phenomenon seriously interferes with the establishment of a good care relationship between the nurse and patient. The majority of medical institutions pay more attention to the development of physicians than nurses (Shangguan, Liu, & Zhang, 2006). Chinese hospital administrators favour hiring

physicians over nurses because physicians are considered as a protagonist and sources of income of hospital (Xie, Liu, & Xu, 2005). Managers of hospitals provide less support to nurses' professional goals and less opportunity of promotion to some nurses than physicians, even though some nurses are highly educated and have a lot of skills. The self-identity and job involvement of nurses are reduced (Wang, 2007). Individuals who obtain subjective career success have higher levels of job involvement according to Ballout (2009). Thus, nurses' subjective career success are reduced.

Yunnan, is an economically developing province located in the southwest of China. It is the most impoverished province in the western region of China. Sixteen prefectures divided into twenty-nine ethnic autonomous counties are under the jurisdiction of the province. According to the Bureau of Health of Yunnan (2015), at the end of 2014, there were 110,000 registered nurses, and the nurse to population ratio was 2.05:1,000 which was lower than the country's standard of 2.20:1,000 (Ministry of Health of China, 2015). The total number of registered nurses is 110,000, but in hospitals in Yunnan Province less than 30% of nurses have a bachelor's degree or higher degree (Liao, 2015). The shortage and low education level problems are much more serious in Yunnan Province than anywhere else in China.

According to the function, facilities, technical strength and other indicators of hospital quality assessment, hospitals were classified by the Ministry of Health (1989) into three ranks: 1) Primary hospitals serve the community, have less than 100 beds, and provide disease prevention, basic medical services and rehabilitation services. 2) Secondary hospitals serve multiple communities, have from 101 to 500 beds, and offer health care services, teaching and scientific research. 3) Tertiary hospitals serve the whole country, have more than 501 beds and provide advanced special medical services, medical education and scientific research. By scope of treatment, these hospitals can be grouped into general hospitals and specialized hospitals (Ministry of Health, 1994). According to the hospital property, these hospitals also can be named university hospitals, autonomous prefecture hospitals and people's hospitals. People's hospitals were originally set up in small towns by the government and the country. Thus, there are People's hospitals all over China that are different levels such as tertiary, secondary, and university hospitals. Even some People's Hospitals could be the affiliated hospital of a university together with

a tertiary hospital or secondary hospital. Tertiary or secondary and primary is the level of a hospital, which could be changed when a hospital passes the inspection of the Health Ministry of China.

The People's Hospitals of Dali are secondary government hospitals and has received the certification of upper second-class hospital from the Ministry of Health, P.R. China. It provides the following services: medical, surgical, pediatric, obstetrics and gynecology, as well as some training for healthcare professionals from the lower level hospitals such as primary hospitals. Also, it conducts clinical practice and scientific research.

The shortage problem is more serious in Dali, the nurse to population ratio is only 1.82: 1,000 which is much lower than the country's average of 2.20: 1,000 (Ministry of Health of China, 2015).

Chinese registered nurses believe that for their career to advance they must take the position of management. While the traditional mode of the nursing organization structure severely limits the number of head nurses or nursing department managers most of the nurses cannot achieve their goal to be promoted (Hu, 2015). Registered nurses are divided into five levels: director of the nursing department, associate director of the nursing department, supervisor, head nurse, and staff nurse. However, in the People's hospitals of Dali, there is a lack of nurses with the administrative title of supervisor of nurses. So that means the administrative titles under the supervisor of nurses, the head nurse or nursing department managers is more limited therefore nurses have less opportunity to be promoted which make future subjective career success less likely. According to professional technical titles, Registered Nurses are divided into three levels (primary, middle, and advanced levels) and five classes (junior nurse, senior nurse, nurse-in-charge, assistant chief senior nurse and chief senior nurse). The primary level includes the junior nurse and the senior nurse; the middle level includes the nurse-in-charge; and the advanced level includes are the assistant chief senior nurse and the chief senior nurse (Ministry of Health, 2011). If nurses apply to promote from the lower level to the higher level, follow Chinese current protection professional title promotion standards and each hospital policy, nurse must obtain some qualifications to be promoted. These qualifications can include the nurses' educational levels, the number of years of work

experience, the number of published articles in qualified journals, and their examination outcomes (Ministry of Health, 2011). The higher the level, the more limited the quota. Until November 2016 (Hospitals Report, 2016), there was no a chief senior nurse in these two People's Hospitals of Dali, and the proportion of assistant chief senior nurses, nurse-in-charge, senior nurse, junior nurses was 2.59%, 18.31%, 31.65%, 47.37%, respectively. Therefore, most is of the nurses have serious a very small opportunity to be promoted (career plateau), there the "career plateau" phenomenon in the People's Hospitals of Dali.

For a long time, an important barrier impeding subjective career success is the low-level of educational attainments among nursing professions (Wei & Lee, 2016). Deng (2015) pointed out that there are five educational levels among nurses in China, including: (1) diploma program; (2) associate degree program; (3) bachelor's degree program; (4) master's degree program and (5) doctor degree program. According to the Chinese nursing career development plan (2011-2015) (Ministry of Health, 2011), at the end of 2015, in the national nursing team, associate's degree or above shall not be less than 60%. But actually, Liao (2015) pointed out only 51% nurses have an associate's degree, and 10% nurses have a bachelor's degree or above out of the total number of Registered Nurses in China; in Yunnan Province, less than 30% nurses have a bachelor's degree or above. According to Hospitals Report (2016) until November, 2016, the bachelor's degree is the highest education level among nurses in the People's Hospitals of Dali with 24.37% nurses holding a diploma, 52.14% nurses holding an associate's degree and only 23.49% holding a bachelor's degree. So nurses with a low-level education may lack self-esteem (Li, Zhang, Zhong, & Beam, 2013), with a low level self-efficacy (Yuan & Zhao, 2010), but may have high anxiety, and high depression (Yu, Wang, Hong, & Hu, 2011). Based on the literature review, the nurses' core self-evaluation level is not high (Wu et al., 2014).

Since the regional development of Dali is developing's, the economy, healthcare system, information system of the city are lower than any other places in Yunnan Province. There is limited information about the city's healthcare system. In Dali, there are 15 ethnic minorities so most patients come from different minority nationalities with different languages and different habits. Therefore, communication between nurses and patients is difficult. This seriously influences nurses' inter-personal success.

In summary, the nurses in the hospitals of Dali are facing a lot of difficult circumstances, which indicates that there may be some problems on the nurses' core self-evaluation and to achieve subjective career success. According to the literature review, there were a number of studies that showed that the correlation between core self-evaluation and subjective career success among different settings and different countries, but there has been no published study to examine the relationship between core self-evaluation and subjective career success among nurses in China. It is significant to conduct this study to examine these two variables among nurses in Dali, the People's Republic of China.

### **Conceptual Framework**

The conceptual framework of this study was based on Judge et al.'s core self-evaluation theory (1997) and Gattiker and Larwood's subjective career success concept (1986). Core self-evaluation refers to a basic assessment that a person makes about her/his ability, overall value and competence (Judge et al., 1997). It has four dimensions: self-esteem, generalized self-efficacy, neuroticism and locus of control. Subjective career success was defined by Gattiker and Larwood (1986) as the individual's evaluation of achievements in his/her work experiences. Subjective career success was categorized into five dimensions, including job success, inter-personal success, financial success, hierarchical success and life success. Gattiker and Larwood (1986) suggested that job features and occupational self-concept (self-esteem and self-evaluated job qualifications) were positively correlated with subjective career success. Individuals with high occupational self-concept will have positive attitude and beliefs about themselves, which make future subjective career success more likely.