

**SELF-LEADERSHIP OF NURSES IN TERTIARY HOSPITALS,
YUNNAN PROVINCE, THE PEOPLE'S
REPUBLIC OF CHINA**



LIU JINYAN

MASTER OF NURSING SCIENCE

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**GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
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YUNNAN PROVINCE, THE PEOPLE'S
REPUBLIC OF CHINA**



LIU JINYAN

**A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF NURSING SCIENCE**

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THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF NURSING SCIENCE

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2 July 2019

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After nearly a year's hard work, the master's graduation thesis is finally finished. Looking back on the process of reading, collecting, collating, writing, thinking, revising and finally completing, I have got a lot of concern and help. If it weren't for everyone's support and help, I couldn't finish my research. Now I would like to take this opportunity to express my sincere thanks to them who sacrificed some of their precious and productive time to participant in this study. I would also like to express my deepest gratitude to the Puer People's Hospital for its support, which gave me the opportunity to further my nursing education in Chiang Mai University and provided financial support for my study in Thailand.

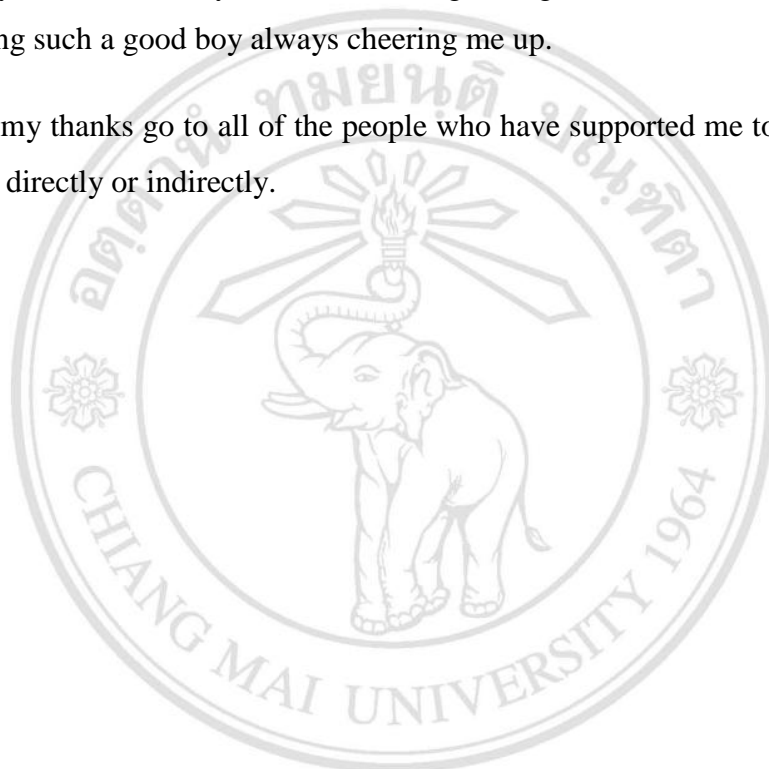
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ABSTRACT

Self-leadership is important in order for nurses to undertake complex roles in changing environments, to improve job performance, and to enhance group leadership, benefiting quality of care. The purposes of this descriptive comparative study were to explore the self-leadership of staff nurses and nurse managers and to compare the differences between these groups. The sample included 406 staff nurses and 316 nurse managers selected using multistage random sampling from five tertiary hospitals in Yunnan Province, the People's Republic of China. Research instruments included the Demographic Data Form and the Revised Self-Leadership Questionnaire (RSLQ). The Cronbach's alpha coefficients of RSLQ were .97 for staff nurses and .91 for nurse managers. Descriptive statistics, Mann-Whitney U test, and independent t-test were used for data analysis.

Results were as follows:

1. For staff nurses, the overall mean score of self-leadership ($\bar{x} = 3.50$, $SD = .59$) and its three dimensions including behavior-focused strategies ($\bar{x} = 3.53$, $SD = .60$), natural reward strategies ($\bar{x} = 3.53$, $SD = .68$), and constructive thought pattern strategies ($\bar{x} = 3.45$, $SD = .65$) were at a moderate level.

2. For nurse managers, the overall mean score of self-leadership ($\bar{x} = 4.02$, $SD = .45$) and its three dimensions including behavior-focused strategies ($\bar{x} = 4.03$, $SD = .46$), natural reward strategies ($\bar{x} = 4.01$, $SD = .54$), and constructive thought pattern strategies ($\bar{x} = 4.00$, $SD = .49$) were at a high level.

3. There was a significant difference between staff nurses and nurse managers in overall mean score of self-leadership ($t = -13.32$, $p < .01$) and its dimensions including behavior-focused strategies ($t = -12.77$, $p < .01$), natural reward strategies ($z = -9.90$, $p < .01$), and constructive thought pattern strategies ($t = -12.80$, $p < .01$).

These results provide baseline information for the nurse administrator to develop the self-leadership skills of nurses to improve job performance, group leadership, and quality of care.

หัวข้อวิทยานิพนธ์	ภาวะผู้นำในตนเองของพยาบาลในโรงพยาบาลระดับตติยภูมิ มณฑลยูนนาน สาธารณรัฐประชาชนจีน	
ผู้เขียน	นางหลิว จินยั้น	
ปริญญา	พยาบาลศาสตรมหาบัณฑิต	
คณะกรรมการที่ปรึกษา	ผู้ช่วยศาสตราจารย์ ดร. บุญพิชชา จิตต์ภักดี	อาจารย์ที่ปรึกษาหลัก
	ผู้ช่วยศาสตราจารย์ ดร. จิตติณัฐ อัครกะเดชอนันต์	อาจารย์ที่ปรึกษาร่วม

บทคัดย่อ

ภาวะผู้นำในตนเองเป็นสิ่งสำคัญสำหรับพยาบาลที่จะดำรงซึ่งบทบาทที่ซับซ้อนในสภาพแวดล้อมที่เปลี่ยนแปลง เพื่อพัฒนาการปฏิบัติงานและปรับปรุงภาวะผู้นำของกลุ่ม ซึ่งเป็นประโยชน์ต่อคุณภาพการดูแล การศึกษาเชิงพรรณนาคั้งนี้มีวัตถุประสงค์เพื่อศึกษาภาวะผู้นำในตนเองของพยาบาลประจำการ และผู้จัดการพยาบาลและเปรียบเทียบความแตกต่างของภาวะผู้นำในตนเองระหว่างทั้งสองกลุ่ม กลุ่มตัวอย่างประกอบด้วยพยาบาลประจำการ 406 คน และผู้จัดการพยาบาล 316 คน ซึ่งถูกคัดเลือกโดยวิธีการสุ่มแบบหลายขั้นตอนจากโรงพยาบาลระดับตติยภูมิ 5 แห่งในมณฑลยูนนาน สาธารณรัฐประชาชนจีน เครื่องมือที่ใช้ในการวิจัยประกอบด้วยแบบฟอร์มข้อมูลส่วนบุคคลและแบบสอบถามภาวะผู้นำในตนเองฉบับแก้ไข (RSLQ) ซึ่งค่าสัมประสิทธิ์อัลฟาของครอนบาค ของ RSLQ ซึ่งทดสอบในพยาบาลประจำการเท่ากับ 0.97 และผู้จัดการพยาบาล เท่ากับ 0.91 วิเคราะห์ข้อมูลโดยใช้สถิติบรรยาย การทดสอบค่าที และสถิติทดสอบแมนวิทนิยู

ผลการศึกษาสรุปได้ดังนี้

1. สำหรับพยาบาลประจำการ คะแนนเฉลี่ยของภาวะผู้นำในตนเองโดยรวม ($\bar{x} = 3.50$, $SD = .59$) และคะแนนรายด้านประกอบด้วย กลยุทธ์การมุ่งเน้นพฤติกรรม ($\bar{x} = 3.53$, $SD = .60$), กลยุทธ์การให้รางวัลตามธรรมชาติ ($\bar{x} = 3.53$, $SD = .68$) และกลยุทธ์ในการสร้างสรรค์แบบแผนความคิด ($\bar{x} = 3.45$, $SD = .65$) อยู่ในระดับปานกลาง

2. สำหรับผู้จัดการการพยาบาล คะแนนเฉลี่ยของภาวะผู้นำในตนเองโดยรวม ($\bar{x} = 4.02$, $SD = .45$) และคะแนนรายด้านประกอบด้วย กลยุทธ์การมุ่งเน้นพฤติกรรม ($\bar{x} = 4.03$, $SD = .46$), กลยุทธ์การให้รางวัลตามธรรมชาติ ($\bar{x} = 4.01$, $SD = .54$) และกลยุทธ์ในการสร้างสรรค์แบบแผนความคิด ($\bar{x} = 4.00$, $SD = .49$) อยู่ในระดับสูง

3. มีความแตกต่างอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 ระหว่างคะแนนภาวะผู้นำในตนเองโดยรวมของพยาบาลประจำการและผู้บริหารการพยาบาล ($t = -13.32$, $p < .01$) และรายด้านได้แก่ กลยุทธ์ที่มุ่งเน้นพฤติกรรม ($t = -12.77$, $p < .01$) กลยุทธ์การให้รางวัลตามธรรมชาติ ($z = -9.90$, $p < .01$) และกลยุทธ์ในการสร้างสรรค์แบบแผนความคิด ($t = -12.80$, $p < .01$)

ผลลัพธ์ที่ได้เป็นข้อมูลพื้นฐานสำหรับผู้บริหารการพยาบาลเพื่อพัฒนาทักษะภาวะผู้นำในตนเองของพยาบาล เพื่อพัฒนาการปฏิบัติงานของพยาบาล ภาวะผู้นำของกลุ่ม และคุณภาพการดูแล



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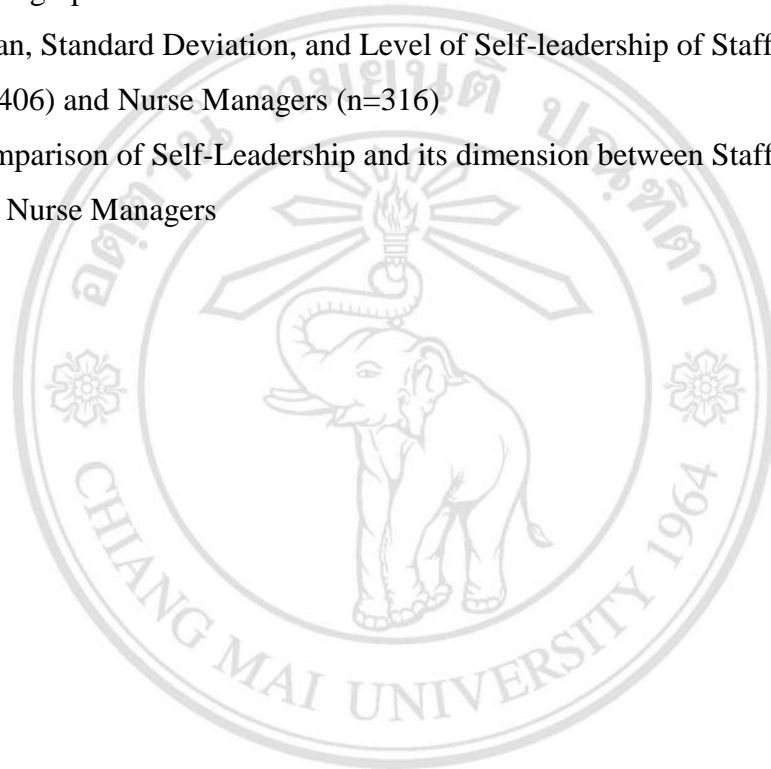
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CHAPTER 1

Introduction

Background and Significance of the Research Problem

Healthcare reform has become a major economic and political focus worldwide as many countries face the pressure to improve or restructure their healthcare delivery system. The aim of this reform is to provide cost-effective service and increase the quality of care (Twaddle, 2002). As hospitals are the major organization of the healthcare delivery system, they are facing several challenges, such as the increase in the development of technology, specialized consumerism, and changing healthcare practices and services (Wynne, 2003). In China, Li and Fu (2017) reported that new health care reform had focused on increasing the satisfaction of patients and improving the quality and safety of health care system.

For nursing organizations, in order to actively respond to the changes and meet the demands, nurses need more than an outstanding level of knowledge or new skill sets. Nursing leaders are required to be capable of assisting their followers to develop professionally by becoming leaders of themselves and sharing responsibility (Arroliga, Huber, Myers, Dieckert & Wesson, 2014). Ugurluoglu, Saygih, Ozer, and Santas (2015) stated that in today's health care conditions, it is appropriate for organizations to encourage leaders to lead others towards self-leadership. Self-leadership is necessary for an enterprise to operate in a changing and dynamic environment. This helps the enterprise constantly adjust its organizational structure and maintain the knowledge and elevate the future potential of its employees. Staff with high levels of capacity and skills in self-leadership such as self-direction and self-influence could respond more effectively to the dynamic changes of organization structures and environments (Ho & Nesbit, 2014). Then, it will improve the job performance of nurses and improve the quality of care.

Self-leadership is a concept that has attracted attention in recent years with regard to changes in leadership trends (Choi & Kim, 2014). According to its definition, self-leadership is a process that is composed of specific sets of designed behavioral and cognitive strategies involving behavior-focused strategies, natural reward strategies and constructive thought pattern strategies to shape individual performance outcomes (Houghton & Neck, 2002). Behavior-focused strategies aim to enhance self-awareness and manage behaviors involving necessary but potentially unpleasant tasks (Manz, 1992; Manz & Neck, 1999; Manz & Sims, 1991). Natural reward strategies emphasize the pleasant aspects of a given task or activity. Natural or intrinsic rewards arise from the task itself, when a person is motivated or rewarded by the task (Manz, 1992; Manz & Neck, 1999). Constructive thought pattern strategies aim to promote the formation of constructive thinking patterns and habitual ways of thinking which can have a positive impact on performance (Manz & Neck, 2004; Neck & Manz, 1992).

Self-leadership is a new type of leadership and it is different from the traditional forms such as the transformational, democratic, transactional, or laissez-faire leadership. Traditional leadership describes forms of leadership where a leader exerts social influence on the employees to accomplish a common task and reach the organizational goal (Ross, 2014). It is demonstrated with directions, orders, controls, compensations, and punishments. On the contrary, self-leadership represents an individual's ability to exercise control (self-efficacy) over his or her choice of situations in which to participate in and to provide intrinsic rewards that are usually associated with achieving goals (Ross, 2014). Avolio (2011) pointed out that self-leadership provides a strong initiative for the development and empowerment of individual and organizational leadership. Nurse leaders who are empowered in the workplace delegate responsibilities related to their followers' particular jobs, duties, and tasks. This means that the leader emphasizes a follower's self-influence, rather than providing him or her with orders and commands (Bimray & Jooste, 2014). Self-leadership can guide nurses to cultivate their sense of solidarity with the organization as well as motivate nurses to participate actively in the work with autonomy and independence (Won & Cho, 2013).

Self-leadership strategies are helping tools (Hauschild & Konradt, 2012) for both nurses and nurse managers by leading and motivating themselves in a changing health-

care environment. Bimray and Jooste (2014) proposed that self-leadership could help nurses from the early stages in their careers. Novice professionals assume responsibility and motivate themselves to become leaders who are responsible for the care they provide in medical settings by behavior-focused strategies and natural reward strategies. In nursing practice, nurses should have personal self-leadership skill, such as a willingness to learn, self-motivation and self-direction. Equipped with self-leadership, individuals become adept at leading and directing themselves, and develop the capacity to self-motivate, to cope, and to generally become more efficient (Lovelace, Manz, & Alves, 2007). According to the concept of self-leadership (Anderson & Prussia, 1997; Manz, 1986; Manz & Neck, 1999; Prussia, Anderson & Manz, 1998), self-leadership can improve nurses' self-awareness by enabling them to correctly understand their work and establish reasonable career expectations. As for nurse managers, self-leadership may help them improve their critical thinking and decision making through constructive thinking pattern strategies and natural reward strategies as Furtner, Hiller, Martini, and Sachse (2012) proposed, self-leadership can also enable leaders to think effectively, behave congruently and relate empathetically to others. Self-leaders who have a drive for autonomy are creative in their decision-making process and persevere in the face of adversity.

Moreover, self-leadership can help to improve the quality of care for patients. These days, it is strongly required that a good nurse should have accurate judgment, willpower, respect for others, and exude professional competence with enthusiasm to help cure diseases (Watson, 2004). Self-leadership strategies could serve as a valuable tool to back up team members' proactive behaviors which benefit patient outcomes in healthcare organizations (Bimray & Jooste, 2014). For example, adequate self-leadership enhances nurses' effort in their job and influences their mental stability, improving job satisfaction by improving productivity and efficiency of nursing practices. It works as a key factor affecting high quality nursing service for patients (Choi & Kim, 2014). Furthermore, in the nursing field, some studies found that self-leading people demonstrate high levels of job performance (Yu & Ko, 2017), job satisfaction, organizational commitment (Choi & Kim, 2014), and organizational citizenship behavior (Park, Yun, & Han, 2009). Finally, it may help to improve organizational effectiveness (Kang, Choi, Park, & Kim, 2010).

Based on the literature review, in other countries, there are numerous studies about self-leadership which use the instrument developed by Houghton and Neck (2002) to conducted studies in different fields. Some of them reported the overall self-leadership (Şahin, 2011; Van Zyl, Mokuoane, & Nel, 2017) and some of them provided results by the dimensions (Carmel, Meitar, & Weisberg, 2006; Megheirkouni, 2018; Moradpour, Abedi, & Bahonar, 2017; Norris, 2008; Ugurluoglu et al., 2015) or subdimensions of self-leadership (Ricketts et al., 2012). The studies of self-leadership in nurse managers and staff nurses are limited. There are only two studies conducted in nurse managers and both of them use the same instrument of Houghton and Neck (2002). Van Zyl et al. (2017) conducted a study in nurse leaders including directors of nursing services, managers of nursing services, senior nursing officers and nursing sisters in charge. The result showed a total score of self-leadership was 135.2784, which demonstrated nurse leaders strongly use self-leadership and at a moderate to high level. Another study conducted by Moradpour et al. (2017) included head nurse and supervisor in their samples. This study showed self-leadership ($\bar{x} = 3.88$, $SD = .54$) and its dimensions, including behavior-focused strategies ($\bar{x} = 3.98$, $SD = .54$), natural reward strategies ($\bar{x} = 3.90$, $SD = .26$) and constructive thought pattern strategies ($\bar{x} = 3.73$, $SD = .60$). Both of them showed the self-leadership among nurse managers were at moderate and close to high level. As for staff nurses, there were three studies identifying self-leadership among staff nurses. In the study of Yu and Ko (2017), the mean score of self-leadership was 3.70 ($SD = .41$) while the overall mean score of self-leadership from the study of Kang et al. (2010) was 3.72 ($SD = .50$). Both were conducted in Korea and used the instrument developed by Kim (2003), based on the theory of Manz (1983). Another study conducted in Turkey by Ugurluoglu et al. (2015) used the instrument of Houghton and Neck (2002). The result showed the mean score of three dimensions of self-leadership among nurses including behavior-focused strategies ($\bar{x} = 3.81$, $SD = .57$), natural reward strategies ($\bar{x} = 4.11$, $SD = .67$), and constructive thought pattern strategies ($\bar{x} = 3.92$, $SD = .66$). By using different instruments, these studies found the mean score of self-leadership among nurses in Turkey was a fraction higher than Korea.

In China, studies about self-leadership were limited. Until now only four studies have been found to use different instruments in different groups. Two studies were conducted in nursing students (Li, Li, Du, Zhang, & Chen, 2016; Yang, Ge, & Yang,

2018); which used an instrument developed by Houghton and Neck (2002). The overall mean score of self-leadership was 3.90 (SD = .90) and 3.70 (SD = .54), respectively. Another two studies were conducted by Ho and Nesbit (2014, 2018) among industries of insurance, engineering, and manufacturing. The mean score of overall self-leadership was 3.47 (SD = .47) and 3.47 (SD = .44), respectively. However, no studies have been conducted among nurses in China.

Moreover, some scholars have identified factors influencing self-leadership. As for personal characteristics, there are some studies attempting to find the correlation between self-leadership and age (Jung & Koh, 2012; Kang et al., 2010; Moradpour et al., 2017; Ugurluoglu et al., 2015), gender (Norris, 2008; Ricketts, Carter, Place, & McCoy, 2012), education level (Jung and Koh, 2012; Kang et al., 2010; Ugurluoglu et al., 2015), and years of work experience (Jung & Koh, 2012; Kang et al., 2010; Moradpour et al., 2017; Ricketts et al., 2012; Ugurluoglu et al., 2015).

Job position is a personal factor that affects self-leadership. Until now, only two studies were found regarding job position and self-leadership; which showed a significant difference between staff nurses and nurse managers. Both studies found the nurse manager had a higher mean score of self-leadership than staff nurse in different countries through the use of a different instrument. Min et al. (2009) conducted a study among nurses in Korea. The nurse managers included the charge nurse, head nurse and supervisor. The instrument used to measure self-leadership was developed by Cho (2003) based on the theory of Manz (1983). Another study was conducted by Jooste and Cairns (2014) among 71 nurse managers and 110 professional nurses working at an academic public hospital in the Gauteng Province of South Africa to investigate the agreement that the items of self-leadership were perceived to be practiced. The instrument was built by the authors of this article, based on the objective of this study, to investigate the perceptions of nurse managers and professional nurses about self-leadership of professional nurses in taking ownership of capacity building during unit management. Both of two studies tried to find the difference of overall mean score of self-leadership between staff nurses and nurse managers. However, there were no studies about self-leadership that compared the difference of self-leadership between staff nurses and nurse managers in China.

In China, the job position of nurses who work in nursing units can be categorized into staff nurse and nurse manager which include head nurse, supervisor, director (Li, Zeng, Yang, & Wang, 2016). In recent years, due to the expansion of departments and the increase of patients in many hospitals in Yunnan province, in order to make the management work better in the unit, some hospitals added an assistant head nurse position to help or delegate, while the head nurse deals with management work in the unit such as in Puer People's hospital (2012a). Based on the job description of staff nurses and nurse managers in hospitals of Yunnan Province such as in Puer People's hospital (2012b), in nursing units, staff nurses and nurse managers have different responsibilities and tasks. The main responsibility of the staff nurse was clinical works under the nurse manager's leadership and to assist the nurse manager to accomplish organization work and to achieve the nursing goals. The nurse manager plays the main role of nursing management, using some organizational forms and methods to conduct, coordinate and control the subordinates to achieve the nursing goal. Because of the different task characteristics, the nurse manager can develop their sense of self-determination and autonomy as well as have high self-awareness as a leader. Thus, it seems that staff nurses have less opportunity to develop their self-leadership than nurse managers.

Yunnan province is located in southwest China with 21 tertiary hospitals located within the region. Under the background of the reform of public hospitals in China, the reform of public hospitals in Yunnan is also imperative. Yunnan Health and Family Planning Commission (2017), stated that in order to improve the quality of care and patient safety, it is necessary to improve the nurses' enthusiasm to promote and develop a patient-centered nursing model. Although, there was no evidence to report the quality of care in Yunnan province. There was some evidence that implied the quality of care in Yunnan province was not high. Fu (2017) found that the satisfaction of patients was lower than 85%, which didn't reach the standard (over 85%) of Ministry of Health (2013). The communication between patients and nurses, and doctors recorded the lowest percentage, only 71.49%. The patients also were not satisfied with the clinical skill of nurses (79.64%), pre and post nursing care for specific medical checkup (76.79%), and psychological needs supported by nurses (81.86%).

Moreover, nurses working in Yunnan province are faced with more challenges. Firstly, the growing health need of people and its relative challenges are brought about by the new requirements of the economic and social development of nursing. Secondly, Yunnan province has been gradually entering the aging society along with the challenges of the extended needs of nursing services. Thirdly, the development of medical and health technology requires more specialized nurses. Fourthly, the transition of nursing management from empirical management to scientific, standardized, and refined management requires high-quality management personnel (Yunnan Health and Family Planning Commission, 2017). In such a changing and stressful environment, managers should also supervise nurses to motivate and lead themselves to face diversity in addition to leading others. For nurses, they not only need solid professional and technical knowledge but also have to meet the psychological needs of patients and care with humanistic concern. All of these require nurses to have job autonomy, the ability of lifelong learning and take more responsibilities at work. To achieve all of these, the nurse manager's duty is to assist staff nurses in developing the skills they need in their roles and in developing their self-leadership as well.

Self-leadership may help nurses to take more responsibility for their own career development and deal with some complex issues during the work. Neck and Manz (1996) conducted an intervention study and the result showed that individuals who received self-leadership training experienced increased mental performance, positive effect (enthusiasm), job satisfaction and decreased negative effect (nervousness) compared to those who did not receive the training. This means that self-leadership also can contribute to the organizational effectiveness. Thus, the use of self-leadership strategies to develop self-motivation and self-direction toward a given task may increase nurses' job performance and benefit the quality of care.

However, there is no evidence regarding self-leadership among nurses in China, especially in Yunnan province. Therefore, this study aimed at identifying self-leadership among nurses in Yunnan province. Moreover, this study was conducted to identify the differences of self-leadership between nurse managers and staff nurses. The result of this study will provide basic knowledge regarding nurses' self-leadership to nurse administrators as well as hospital administrators to develop self-leadership skill among

nurses and as a result improve team performance, group leadership, and job satisfaction and finally, it will enhance the quality of nursing care and organizational effectiveness.

Research Objectives

1. To explore the self-leadership of staff nurses in tertiary hospitals, Yunnan province, the People's Republic of China.
2. To explore the self-leadership of nurse managers in tertiary hospitals, Yunnan province, the People's Republic of China.
3. To compare the self-leadership between staff nurses and nurse managers in tertiary hospitals, Yunnan Province, the People's Republic of China.

Research Questions

1. What is the level of self-leadership among staff nurses in tertiary hospitals, Yunnan province, the People's Republic of China?
2. What is the level of self-leadership among nurse managers in tertiary hospitals, Yunnan province, the People's Republic of China?
3. Is there any difference in self-leadership between staff nurses and nurse managers in tertiary hospitals, Yunnan Province, the People's Republic of China?

Definition of Terms

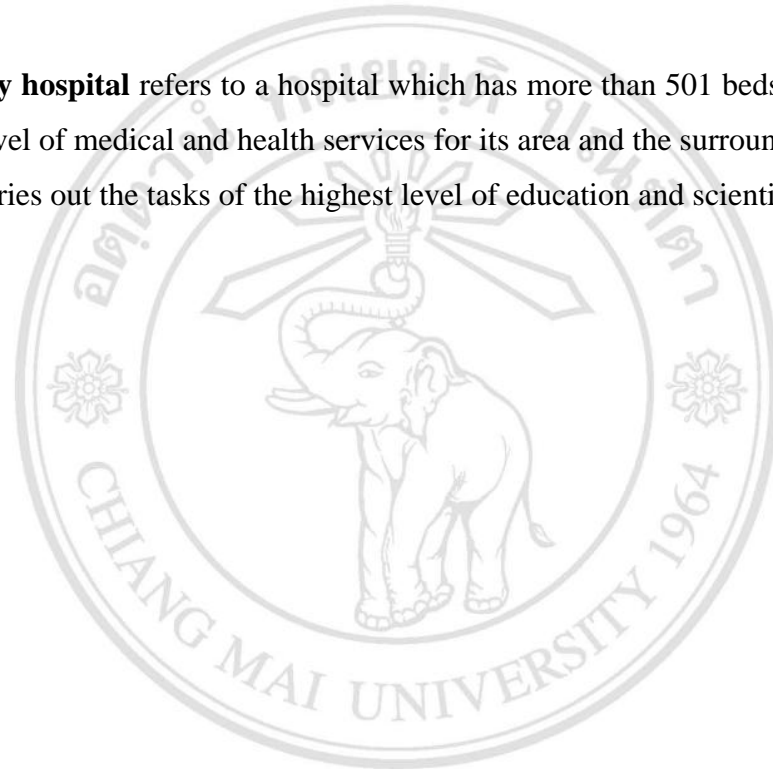
Self-leadership refers to a self-influence process that comprises specific sets of behavioral and cognitive strategies, including behavior-focused strategies, natural reward strategies and constructive thought pattern strategies, which can help nurses to shape individual performance outcomes. In this study, the self-leadership was measured by the Revised Self-leadership Questionnaire (RSLQ) developed by Houghton and Neck (2002) and translated into Chinese by W. Wang (2014).

Nurse refers to a person who graduated from an approved nursing education institution and holds nursing licensure granted by the Ministry of Health, the People's Public of China.

Staff nurse refers to a person who provides nursing care to the patient under the supervision of nursing managers. They do not hold the management position, they assist nursing managers to complete organizational work to achieve some specific nursing goals.

Nurse Manager refers to a person who was appointed by the hospital to be an administrator which included the assistant head nurses, head nurses, supervisors, and directors.

Tertiary hospital refers to a hospital which has more than 501 beds and provides the highest level of medical and health services for its area and the surrounding radiation areas, and carries out the tasks of the highest level of education and scientific research.



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CHAPTER 2

Literature Review

For the purpose of this study, the literature review includes the following contents:

1. Self-leadership
 - 1.1 Definition of self-leadership
 - 1.2 The theory of self-leadership
 - 1.3 Measurement of self-leadership
 - 1.4 Factors related to self-leadership
 - 1.5 Studies related to self-leadership
2. The situation related to self-leadership in Yunnan province, the People's Republic of China
3. Conceptual framework



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Self-leadership

Definition of Self-leadership

According to the literature review, several definitions of self-leadership have been defined. They were listed below.

Self-leadership is a process involving a comprehensive perspective of self-influence. It focuses not only on guiding oneself to accomplish the tasks of natural motivation but also managing oneself to do the work that must be done, but not natural motivation (Manz, 1986).

Self-leadership is an influence-related process through which individuals (and working groups) navigate, motivate, and lead themselves towards achieving desired behaviors and outcomes (Manz, 1992).

Self-leadership is an influence-related process consisting of a series of behavioral strategies and cognitive strategies such as building natural rewards into tasks, focusing thinking on natural rewards and establishment of effective thought patterns for enhancing the personal effectiveness (Manz & Sims, 1991).

The concept of self-leadership is a comprehensive view of self-influence process through the use of specific sets of behavioral and cognitive strategies, involving guiding oneself to accomplish tasks of natural motivation and managing oneself to do tasks that must be done but are not naturally motivated (Manz, 1986; Manz & Neck, 2004).

Self-leadership is a self-influence process that comprises specific sets of behavioral and cognitive strategies, such as behavior-focused strategies, natural reward strategies and constructive thought pattern strategies, designed to shape individual performance outcomes (Houghton & Neck, 2002).

The definitions of self-leadership are similar after concluding all definitions, but Houghton and Neck (2002) elaborated the three primary strategies with more narrowly defined sub-facets. Therefore, it is more comprehensive than other definitions and suitable for this study.

The Theory of Self-leadership

Based on the literature review, only one concept of self-leadership was found. This concept created by Manz and Sims and derived from the self-leadership literature (Manz, 1986, 1992; Manz & Sims, 1991). In the following, the development of the theory of self-leadership and concept was introduced.

The theory of self-leadership first emerged in the mid-1980s (Manz, 1983, 1986). It is expanded from self-management (Manz & Sims, 1980) that was derived from clinical self-control theory (Cautela, 1969). The first pioneering academic work on self-leadership appeared in the *Academic of management review* (Manz, 1986); which established basic theoretical self-leadership and puts forward the basic strategies of self-leadership such as the behavior-focused strategies and natural reward strategies, although the constructive thought pattern strategies were underdeveloped at this point. The constructive thought pattern strategies of self-leadership were more fully developed and expanded under the label “thought self-leadership” (Manz & Neck, 1991; Neck & Manz, 1992), which was derived from the social cognitive theory (Bandura, 1986, 1991).

The self-leadership theory was built upon many classical theories. Self-leadership stems from several relevant theories of self-influence including self-regulation (Carver & Scheier, 1981; Kanfer, 1970), self-control (Cautela, 1969; Mahoney & Arnkoff, 1979; Thoresen & Mahoney, 1974), and self-management (Manz & Sims, 1980). Self-leadership is generally described as a broader concept of self-influence that subsumes the behavior-focused strategies derived from self-regulation, self-control, and self-management (Manz, 1986), and then sets of cognitive-oriented strategies derived from intrinsic motivation theories (Deci, 1975), cognitive evaluation theory (Deci & Ryan, 1985), social learning theory (Bandura, 1978), and social cognitive theory (Bandura, 1986, 1991).

Self-leadership strategies had been divided into three general categories: behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies (Anderson & Prussia, 1997; Manz & Neck, 1999; Prussia et al., 1998).

Behavior-focused strategies. Behavior-focused strategies aim to enhance self-awareness and manage behaviors involving necessary but potentially unpleasant tasks.

(Manz, 1992; Manz & Neck, 1999; Manz & Sims, 1991). These strategies include self-observation, self-goal setting, self-reward, self-correcting feedback, self-cueing, and rehearsal. In short, behavior-focused self-leadership strategies aim to encourage positive, desirable behaviors that lead to successful outcomes, while discouraging negative, undesirable behaviors that lead to unsuccessful outcomes.

Self-observation. Self-observation refers to a person's own actions which can lead to an awareness of when and why a person engages in certain actions. This self-awareness is a necessary first step in changing or eliminating ineffective and unproductive behavior (Manz & Sims, 1980).

Self-goal setting. On the basis of self-assessment, individuals can effectively set personal goals to improve performance (Manz, 1986; Manz & Neck, 1999; Manz & Sims, 1980).

Self-reward. Self-reward refers to something tangible or intangible, such as congratulating oneself spiritually for an important achievement, or something more specific, such as motivating oneself with a special vacation after completing a difficult project, reinforcing the realization of ideal behaviors and goals attainments. Self-set rewards, coupled with self-set goals, can greatly contribute to the efforts needed to achieve the goals (Manz & Sims, 1980).

Self-correcting feedback or self-punishment. It consists of a positively framed and introspective examination of failures and undesirable behaviors; which lead to the reshaping of such behaviors. The overuse of self-punishment involving self-criticism and guilty is harmful and should be avoided (Manz & Sims, 2001).

Self-cueing or external signaling. Specific environmental cues can be used as an effective means of encouraging constructive behaviors and reducing or eliminating destructive ones (Manz & Neck, 2004; Manz & Sims, 2001). Some external cues such as lists, notes, and motivational posters are beneficial to keep attention and effort focused on goal attainment.

Rehearsal. It refers to physical or mental exercises for work activities before they are actually carried out (Manz & Sims, 2001).

Natural reward strategies. Natural reward strategies emphasize the pleasant aspects of a given task or activity. Natural or intrinsic rewards arise from the task itself, when a person is motivated or rewarded by the task (Manz, 1992; Manz & Neck, 1999). Natural reward activities tend to foster a sense of increased capacity, self-determination, and purpose (Manz, 1986, Manz & Neck, 1999, Manz & Sims, 1991). The goal of natural reward strategies is to help to create the sense of self-determination and competence, which can motivate task-related behavior to improve performance.

Natural reward strategies include two aspects. The first aspect is to build more pleasant enjoyable features into given tasks or activities and make the task itself become naturally rewarding. The second aspect is efforts to change perceptions of activities by focusing on the inherently rewarding aspects of the task itself and away from the unpleasant aspects of a task (Manz & Neck, 1999; Manz & Sims, 1991).

Constructive thought pattern strategies. The constructive thought pattern strategies aim to promote the formation of constructive thinking patterns and habitual ways of thinking which can have a positive impact on performance (Manz & Neck, 2004; Neck & Manz, 1992). Identifying and replacing dysfunctional beliefs and assumptions, mental imagery and positive self-talk are included in constructive thought pattern strategies. Constructive thought pattern strategies aim to establish and alter thought patterns in desirable ways by which reduce dysfunctional beliefs and assumptions, reducing negative self-talk and increasing positive self-image.

Identifying and replacing dysfunctional beliefs and assumptions. Individuals should first examine their thought patterns and use more constructive thinking processes to confront and replace dysfunctional irrational beliefs and assumptions (Manz & Neck, 2004; Neck & Manz, 1992).

Self-talk. Self-talk is defined as what we covertly tell ourselves (Neck & Manz, 1992). It involves mental self-evaluations and reactions (Neck & Manz, 1992). By carefully analyzing the mode of self-talk, individuals can restrain or eliminate negative or pessimistic self-talk, and replace it with more optimistic self-dialogues (Seligman, 1991).

Mental imagery. Mental imagery is the symbolic and covert cognitive creation of an experience or task before the actual obvious muscle movement. It is possible to create and symbolically experience behavioral outcomes before actual performance through the use of mental imagery (Neck & Manz, 1992, 1996).

The Measurement Tool of Self-leadership

Under the same self-leadership theory (Manz, 1986, 1992; Manz & Neck, 1991; Manz & Sims, 1991), several tools have been developed to measure self-leadership. Self-leadership questionnaire (SLQ) developed by Anderson and Prussia (1997) was the first published instrument used to measure the self-leadership. It was based on the work of Manz (1992) and Manz and Sims (1991). After that, the revised self-leadership measurement scale (RSLQ) was developed by Houghton and Neck (2002); which was based on two existing measurements of self-leadership (Anderson & Prussia, 1997; Cox, 1993). Ho and Nesbit (2009) modified RSLQ to generalize it in a Chinese context. Houghton, Dawley, and DiLiello (2012) modified the RSLQ again and developed the Abbreviated Self-Leadership Questionnaire (ASLQ) used for a general assessment of self-leadership. All of these instruments are listed in the following specifically.

Self-leadership questionnaire (SLQ) by Anderson and Prussia (1997). The first published Self-Leadership Questionnaire (SLQ) was based on the concept of Manz (1992) and Manz and Sims (1991). It was a five-Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). It consists of three dimensions and ten sub-dimensions with 50 items. These three dimensions are behavior-focused strategies including six sub-dimensions (self-goal setting, self-reward, self-punishment, self-observation, self-cueing, and self-withholding), natural reward strategies, and constructive thought pattern strategies including three sub-dimensions (visualizing successful performance, self-talk, and evaluating beliefs and assumption)). Factor analyze was used to test the validity and reliability. Alpha coefficients ranged from .69 to .91 for each of the ten sub-dimensions.

Revised self-leadership questionnaire (RSLQ) by Houghton and Neck (2002). The revised self-leadership measurement scale was developed by Houghton and Neck (2002); which was created on the basis of the two existing measures of self-leadership (Anderson & Prussia, 1997; Cox, 1993). It consists of three dimensions (behavior focused

strategies, natural reward strategies, constructive thought pattern strategies) and nine sub-dimensions. The behavior- focused strategies include 18 items, natural reward strategies include 5 items, and constructive thought pattern strategies include 12 items. It was a five-Likert scale (1 = *not at all accurate* to 5 = *completely accurate*). Houghton and Neck (2002) used the exploratory factor analysis and confirmatory factor analysis to test the construct validity and reliability. After the exploratory factor analysis, the revised self-leadership questionnaire only nine sub-dimensions. It has very good construct validity (GFI = .94, NNFI = .88, IFI = .91 and CFI = .91) (Bentler & Bonnett, 1980; Hoyle, 1995). Alpha coefficient in the nine sub-dimensions of the RSLQ are as follows: (1) visualizing successful performance ($\alpha = .85$), (2) self-goal setting ($\alpha = .84$), (3) self-talk ($\alpha = .92$), (4) self-reward ($\alpha = .93$), (5) evaluating beliefs and assumptions ($\alpha = .78$), (6) self-punishment ($\alpha = .86$), (7) self-observation ($\alpha = .82$), (8) focusing on natural rewards ($\alpha = .74$), and (9) self-cueing ($\alpha = .91$). The range on these alpha coefficients, from .74 to .93, represents an improvement over previous attempts to develop a reliable instrument. Every scale was over the Nunnally's (Nunnally & Bernstein, 1978) recommended scale reliability threshold of .70. The score of this questionnaire was calculated by the mean score or total score. Houghton and Neck (2002) didn't mention the Cronbach α of each dimension of RSLQ. However, there are several studies had report the Cronbach α of each dimension of RSLQ such as Carmel et al. (2006) reported Cronbach α of the behavior- focused strategies was .85, natural reward strategies was .52, and constructive thought pattern strategies was .83, Norris (2008) reported the Cronbach α was .88, .78, and .83, respectively, and Taştan (2013) reported the Cronbach α was .83, .76, and .84, respectively.

Meanwhile, it was translated to Chinese version by W. Wang (2014). The translated Chinese version of RSLQ was used in nursing students by L. Y. Li et al. (2016). In this study the Cronbach α coefficient for overall self-leadership is .949. The Cronbach α coefficient of 9 sub-dimensions ranges from .673 to .889. Therefore, it was fit for the Chinese sample.

Modified of RSLQ (MRSLQ) by Ho and Nesbit (2009). Ho and Nesbit (2009) further refined and modified the RSLQ to better reflect the social and relations-based features of a collectivist culture. It consists of three dimensions (behavior focused

strategies, natural reward strategies, constructive thought pattern strategies) and eleven sub-dimensions. It has 38 items. The behavior-focused strategies include 17 items, natural reward strategies include 7 items, and constructive thought pattern strategies include 14 items. It was a five-Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). The validity and reliability were tested by exploratory factor analysis and confirmatory factor analysis. The 11-factor hypothesized model provided a much better fit, as indicated by all fit indices (IFI = .9, TLI = .88, CFI = .90, RSMEA = .05). It means that it has good construct validity. The range of 11 factors alpha coefficients, from 0.64 to 0.86. The 11 factors include Visualizing successful performance ($\alpha = .65$), self-goal setting ($\alpha = .76$), self-talk ($\alpha = .81$), self-reward ($\alpha = .88$), self-punishment ($\alpha = .80$), task-based natural rewards ($\alpha = .74$), relation-based natural rewards ($\alpha = .72$), task and relation-based self-observation (0.76), individual-oriented evaluation of beliefs and assumptions ($\alpha = .72$), relation-based evaluation of beliefs and assumption ($\alpha = .64$), self-cueing ($\alpha = .86$). It suffered the problems of reliability based on the Nunnally's (Nunnally & Bernstein, 1978) standard that scale reliability threshold should be 0.70. In the research of Ho and Nesbit (2014), the reliability of the sub-dimension of Social-Oriented Evaluation of Beliefs and Assumptions only .5.

Abbreviated Self-Leadership Questionnaire (ASLQ) by Houghton et al. (2012).

The full RSLQ includes 35 items, which will bring difficulties to some types of research. Consequently, Houghton et al. (2012) developed the Abbreviated Self-Leadership Questionnaire, which has proved useful as a general assessment of the global self-leadership structure. It has three dimensions including behavior Awareness and Volition (3 items), task Motivation (3 items), Constructive Cognition (3 items) and 9 items. All survey variables were measured on a Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). It has good construct validity which identified by EFA and CFA. It has good construct validity (CFI = .99, NFI = .98, NNFI = .98, AGFI = .97, RMSEA = .02). The coefficient alpha for the revised nine-item scale showed an acceptable reliability level of .73 (Nunnally & Bernstein, 1994).

After review of four instruments, MRSLQ was not used much compared with the RSLQ. In addition, this instrument was never used in nursing field until now. However, RSLQ is the most widely used in the world to measure self-leadership. Over the past

decade, the RSLQ has established good reliability and validity across a number of empirical studies (Houghton, Carnes, & Ellison, 2014) and it has been used in the nursing field. This makes it a good fit for the situation of this study. Therefore, in this study the RSLQ was used to identify self-leadership among staff nurses and nurse managers.

The Factors Related to Self-leadership

Based on the literature review, many individual factors including age, gender, marital status, level of education, years of experience, and job position could affect self-leadership. All of these factors will be listed as follows.

Age. The study of Kazan (2000) conducted a study among the members of Ohio Americorps. The result showed that age had a negative correlation with self-leadership ($r = -.244, p < .01$).

Kang et al. (2010) conducted a study among nurses in Korea. The result showed that the overall mean score of self-leadership had a significant difference among different age groups ($F = 5.604, p < .01$). The group ranged from 20 to 29 got the lowest mean score of self-leadership ($\bar{x} = 3.66, SD = .38$). The score of 30-39 group ($\bar{x} = 3.78, SD = .37$), 40-49 group ($\bar{x} = 3.90, SD = .26$), and over 50 age group ($\bar{x} = 4.19, SD = .18$) were higher than the youngest group. As the nurses got older, they better used the self-leadership skill.

Şahin (2011) conducted a study among employees who worked in two public sectors organizations and three private sector in Aegean, the western region of Turkey. The result showed that Age ($r = .19, p < .01$) was slightly correlated with self-leadership.

Jung and Koh (2012) conducted a study among preceptor nurses in Korea. The result showed that the score of self-leadership had a significant difference among the different age groups ($F = 19.43, p < .001$). The group that is aged less than 30 years old got the lowest score of self-leadership ($\bar{x} = 3.34, SD = .38$). The score of 30-39 group ($\bar{x} = 3.58, SD = .25$), 40 and over group ($\bar{x} = 3.67, SD = .26$).

Ricketts et al. (2012) conducted a study among the employees who work in Extension faculty from three states of the USA. The result also explained that within the

constructive thought pattern strategies of self-leadership had a significantly negative correlation between both age and self-talk ($r = -.204, p < .01$) as well as age and evaluating, belief, and assumptions ($r = -.226, p < .01$). However, it did not have any correlation with any sub-dimensions of behavior- focused strategies and natural reward strategies.

Ugurluoglu et al. (2015) conducted a study among 750 medical and administrative personnel working at a state hospital in Kırıkkale of Turkey. It found that the behavior-focused strategies of self-leadership ($F = 3.855, p < .05$) had a statistically significant difference among different age groups. The result showed that the participants above the ages of 41 years have been found to give lower scores ($\bar{x} = 3.68, SD = .53$) in behavior-focused strategies when compared with other groups such as the age group lower than 34 years ($\bar{x} = 3.85, SD = .53$) and 35-40 years age group ($\bar{x} = 3.90, SD = .55$). However, there were no statistically significant differences in age groups with natural reward strategies and constructive thought pattern strategies.

Moradpour et al. (2017) conducted among nurse managers in Iran. The result has shown that there was no significant relationship between age and self-leadership ($P > .05$).

In summary, there are only two studies conducted in nurses and only one study conducted in nurse managers. Some studies looked at relationship of age and overall self-leadership. Some studies looked at the relationship of age and each dimension or sub-dimension of self-leadership. The results of these studies are inconsistent. Three studies showed self-leadership grows with age. Two studies show opposite results. One study showed that before 41 years old, self-leadership increased with age. After 41 years, the self-leadership decreased. The last one showed no relationship between self-leadership and age.

Gender. Norris (2008) conducted a study among 124 graduate students in Liberal Arts University in the Midwest. The findings showed that both overall mean score of self-leadership and its dimension had a significance between females and males. The overall mean score of self-leadership for females was 3.96 ($SD = .43$), and the males was 3.46 ($SD = .59$). In an independent samples t-test, the analysis showed that the mean score of overall self-leadership between males and females had a significant difference $t(80.98)$

($t = 4.99, p < .01$). It also found that the mean score of behavior-focused strategies ($t = 5.04, p < .01$), natural reward strategies, ($t = 4.35, p < .01$), and constructive thought self-leadership strategies, ($t = 3.13, p < .01$) had a significant difference between males and females.

Moradpour et al. (2017) conducted a study among nurse managers. The result showed that there was no significant difference between the overall mean score of self-leadership in male and female managers ($P > .05$).

Ricketts et al. (2012) conducted a study among the employees who work in Extension faculty from three states in the USA. It found that within behavior-focused strategies, female had a weak and positive correlation with self-goal setting ($r = .215, p < .01$) and self-observation ($r = .230, p < .01$). Within the natural reward strategies, female had a low and positive correlation when focusing on natural reward ($r = .171, p < .01$). It seems that when we are discussing personal goal-setting and individual observation, females appear to identify more strongly with these strategies than men.

In summary, from the literature view, the results were inconsistent. Only one study was conducted in nursing field among three studies. One study stated the difference of both gender and self-leadership and its dimensions. One study showed no difference of self-leadership and gender. The last study showed the positive relationship of gender and sub-dimension of self-leadership.

Marital status. Kang et al., (2010) conducted a study among nurses in Korea, the results showed that there was a significant difference in self-leadership between single and married nurses ($F = 11.089, p < .01$). The mean score of the single group was 3.17 ($SD = .54$). The mean score of self-leadership of married group was 3.48 ($SD = .57$).

Level of education. Carmeli et al. (2006) conducted a study among employees working in two public sector organizations and four for-profit organizations in Israel. The result stated that educational level had a positive correlation with self-leadership ($r = .15, p < .05$) and its dimensions such as behavior focused strategies ($r = .17, p < .05$), and natural reward strategies ($r = .17, p < .05$). It had no correlation with constructive thought-focused strategies.

Kang et al. (2010) conducted a study among nurses in Korea. The results showed that the overall mean score of self-leadership had a significant difference among different levels of education groups ($F = 4.641, P < .01$). The diploma nurses got the lowest score ($\bar{x} = 3.65, SD = .35$) compared with bachelor degree ($\bar{x} = 3.75, SD = .39$), master degree ($\bar{x} = 3.89, SD = .37$), and PhD ($\bar{x} = 3.94, SD = .00$).

Şahin (2011) conducted a study among employees who worked in two public sector organizations and three private sector organizations in Aegean, the western region of Turkey. It found that education level had a weak correlation with self-leadership ($r = .17, p < .05$).

Jung and Koh (2012) conducted a study among nurses in Korea. The results showed that the overall mean score of self-leadership had a significant difference among different levels of education groups ($F = 14.43, P < .001$). It found that the college level ($\bar{x} = 3.41, SD = .30$) lower than University ($\bar{x} = 3.60, SD = .26$) and Graduate school ($\bar{x} = 3.70, SD = .26$).

Ugurluoglu et al. (2015) conducted a study among 750 medical and administrative personnel working at a state hospital in Kırıkkale of Turkey. The results showed the difference of each dimension of self-leadership among different educational levels. The results stated that participants' scoring of behavior-focused strategies of self-leadership had a statistical difference among different educational levels ($F = 3.496, p < .05$). But the participants' scoring of natural reward strategies and constructive thought pattern strategies of self-leadership had no significant difference among different educational levels. Among the participants, those who graduated from primary education and high school had the lowest scores ($\bar{x} = 3.68, SD = .61$) of behavior-focused strategies when compared with those who graduated from associate degree programs ($\bar{x} = 3.87, SD = .54$) and undergraduate and postgraduate degree ($\bar{x} = 3.84, SD = .57$).

In summary, these studies in different areas stated the level of education had a positive impact on self-leadership or its dimension. There is no study that looked at the relationship of educational levels and sub-dimension of self-leadership. There were two studies conducted in nursing field where the bachelor degree nurse had a higher mean

score of self-leadership than associate degree. This means that the person who had a higher educational level will have a higher level of self-leadership.

Years of work experience. Carmeli et al. (2006) conducted a study among employees working in two public sector organizations and four for-profit organizations in Israel. It found that there was no correlation between job tenure and self-leadership as well as its dimensions.

Kang et al. (2010) conducted a study among nurses in Korea. The results showed that the overall mean score of self-leadership was significantly different among the different work experience groups ($F = 7.811, p < .01$). The nurses who worked less than 2 years had a lowest score ($\bar{x} = 3.47, SD = .37$) compared with 2-5years group ($\bar{x} = 3.71, SD = .38$), 5-10 years group ($\bar{x} = 3.70, SD = .38$), 10-15years group ($\bar{x} = 3.81, SD = .35$), and 15 years and over group ($\bar{x} = 3.91, SD = .27$).

Ricketts et al. (2012) conducted a study among the employees who work in extension faculty from three states in the USA. The result showed that within constructive thought pattern strategies of self-leadership, length of career in extension had a low and negative correlation with its sub-dimensions such as self-talk ($r = -.164, p < .05$) and evaluating, belief, and assumptions ($r = -.176, p < .01$). However, there is no correlation with the sub-dimensions of behavior-focused strategies and natural reward strategies.

Jung and Koh (2012) conducted a study among nurses in Korea. The results showed that the mean score of self-leadership had a significant difference among the different work experience group ($F = 8.32, P < .001$). The nurses who work less than 5 years group had a lowest score ($\bar{x} = 3.37, SD = .33$) of self-leadership when compared with 6-10 years ($\bar{x} = 3.52, SD = .25$), 11-15years ($\bar{x} = 3.63, SD = .27$), and more than 16 years ($\bar{x} = 3.64, SD = .27$).

Ugurluoglu et al. (2015) conducted a study among 750 medical and administrative personnel who work at a state hospital in Kirikkale of Turkey. It found that participants' scoring of behavior-focused strategies of self-leadership had a statistical difference among the different years of experience groups ($F = 3.754, p < .05$). But there was no difference of natural reward strategies and constructive thought pattern strategies among

the different years of experience groups. The participants with job experience for 19 years and above have been found to have lower scores ($\bar{x} = 3.69$, $SD = .59$) to behavior-focused strategies when compared with other groups such as less than 10 years ($\bar{x} = 3.93$, $SD = .49$) and 11-18 years ($\bar{x} = 3.80$, $SD = .59$).

Moradpour et al. (2017) conducted a study among nursing managers in Iran. It found that there was a significant direct relationship between years of work experience and self-leadership ($r = .158$, $P < .05$). Hence, with an increase in managers' work experience, self-leadership increases as well and vice versa.

In summary, in these studies, five studies found the relationship of overall of self-leadership or dimensions and years of work experience, only one study looked at the relationship of sub-dimensions of self-leadership and years of experience. Three studies in non-nursing field showed different results in the relationship between self-leadership and years of experience. The correlation studies found that years of experience had a negative correlation with self-leadership. The comparative study found, the mean score of self-leadership decreased with the increased years of work experience. The last study found there was no correlation between years of experience and self-leadership. However, all three of these studies in nursing field stated that the years of experience had a positive impact on self-leadership.

Job Position. Based on the literature review, only three studies were found. They are listed below. All of these studies were conducted in the nursing field.

Min et al. (2009) conducted a study among nurses in Korea. The instrument used to measure self-leadership was developed by Cho (2003) based on the theory of Manz (1983). It found that there was a significant difference between staff nurse and charge nurse and over group ($t = 4.68$, $P < .05$). The charge nurse and over group got a higher score ($\bar{x} = 3.71$, $SD = .48$) than the staff nurse group ($\bar{x} = 3.43$, $SD = .46$).

Jooste and Cairns (2014) conducted a study among 71 nurse managers and 110 professional nurses working at an academic public hospital in the Gauteng Province of South Africa to investigate the agreement that the items of self-leadership were perceived to be practiced. The instrument was built by the authors of this article based on the

objective of this study; which is to investigate the perceptions of nurse managers and professional nurses about self-leadership of professional nurses in taking ownership of capacity buildings during unit management. The result showed that nurse managers had a higher average median (5.7) than the professional nurses (5.1). It showed that the self-leadership had a significant difference between nurse managers and professional nurses ($z = 2.403, p = .017$).

Moradpour et al. (2017) conducted a study among nurse managers in Iran. It found that there was no statistically significant difference between self-leadership of head nurses and supervisors ($P < .05$).

In summary, three studies were conducted among nurses. But only two studies were conducted between staff nurses and nurse managers. One study used the instrument developed by Cho (2003) based on the theory of Manz (1983). The second aimed to investigate the perceptions of nurse managers and professional nurses about self-leadership of professional nurses in taking ownership of capacity buildings during unit management; this study didn't use the self-leadership instrument. Both two studies found the nurse manager had a higher mean score of self-leadership than staff nurse in different countries that use different instruments. All of these studies found a difference of self-leadership between staff nurses and nurse managers. However, there were no studies about self-leadership that looked at the difference of self-leadership between staff nurses and nurse managers in China.

Studies Related to Self-leadership

The relevant research about self-leadership. The following sections will introduce the research about self-leadership using the same tool; which was developed by Houghton and Neck (2002), named Revised self-leadership questionnaire (RSLQ). There are eight studies and three of them were conducted in nursing field.

Carmel et al. (2006) conducted a research among 250 employees working in two public sector organizations four for-profit organizations in Israel. The result showed the mean score of overall self-leadership ($\bar{x} = 3.77, SD = .51$) and its dimensions. The mean score and SD of other three dimensions such as behavior-focused strategies ($\bar{x} = 3.70,$

SD = .56), natural reward strategies ($\bar{x} = 3.70$, SD = .56), and constructive thought focused strategies ($\bar{x} = 3.89$, SD = .53) had been shown.

Norris (2008) conducted a research among Graduate students (N = 124) enrolled in a liberal arts university in the Midwest of USA. The results showed the overall mean score of self-leadership and its dimensions. The overall mean score and SD of self-leadership were 3.76 and .56 respectively. The mean score and SD of behavior-focused strategies ($\bar{x} = 3.95$, SD = .60), natural reward strategies ($\bar{x} = 3.91$, SD = .66), and constructive thought focused strategies ($\bar{x} = 3.61$, SD = .72) had been showed. The mean score of general self-leadership was 3.76 (SD = .56). This means that the graduate students were moderately motivated by self-leadership and its dimension.

Şahin (2011) conducted a study among employees in two public sector organizations and three private sector organizations in Aegean, the western region of Turkey, with a sample size of 300. The result showed that the overall mean score and SD of self-leadership were 3.07 and 1.26. This means that self-leadership was at a moderate level.

Ricketts et al., (2012) conducted a study among Extension educators who work in an Extension faculty from three states in the USA. The result showed the mean score of nine sub-dimensions of self-leadership. The nine sub-dimensions included self-goal setting ($\bar{x} = 3.92$, SD = .90), self-reward ($\bar{x} = 2.51$, SD = 1.20), self-punishment ($\bar{x} = 3.50$, SD = 1.17), self-observation ($\bar{x} = 3.88$, SD = .82), self-cueing ($\bar{x} = 4.40$, SD = .80), focusing thoughts on natural reward ($\bar{x} = 3.92$, SD = .88), visualizing successful performance ($\bar{x} = 3.49$, SD = 1.11), self-talk ($\bar{x} = 3.25$, SD = 1.21), and evaluating beliefs and assumptions ($\bar{x} = 3.82$, SD = .90). The sub-dimension of self-cueing got the highest mean score of 4.40 followed by natural rewards ($\bar{x} = 3.92$) and self-goal setting ($\bar{x} = 3.91$). The sub-dimension of self-reward got the lowest mean score ($\bar{x} = 2.51$) in this study.

Ugurluoglu et al. (2015) conducted a study among 750 medical and administrative personnel including 119 (38.6%) nurses working at a state hospital in Kırıkkale, Turkey. The result showed the mean score of three dimensions of self-leadership among nurses. The mean score of behavior-focused strategies was 3.81 (SD = .57), the mean score of

natural reward strategies was 4.11 (SD = .67), and constructive thought pattern strategies was 3.92 (SD = .66)

Moradpour et al. (2017) conducted a study among nursing managers in hospitals affiliated with the Isfahan University of Medical Sciences in Iran. The study population included managers, supervisors, and matrons (nursing managers) working in public hospitals of Isfahan. Two hundred and fifty people made of 156 male and 94 female nurse managers from various hospitals were selected as samples of the study. The results showed the overall mean score of self-leadership, dimensions, and sub-dimensions of self-leadership. The overall mean score of self-leadership was 3.88 (SD = .54). The mean score of behavior-focused strategies was 3.98 (SD = .54). It includes five sub-dimensions such as self-goal setting ($\bar{x} = 4.11$, SD = .61), self-reward ($\bar{x} = 3.58$, SD = .88), self-punishment ($\bar{x} = 3.87$, SD = .69), self-observation ($\bar{x} = 4.25$, SD = .53), and self-curing ($\bar{x} = 3.94$, SD = .94), which were higher than average scores (3). The highest mean score was self-observation ($\bar{x} = 4.25$, SD = .53) and the lowest mean score was self-reward ($\bar{x} = 3.58$, SD = .88). The mean score in natural reward strategies was 3.90 (SD = .61). The mean score of the constructive thought strategies was 3.73 (SD = 0.60) including visualizing successful performance ($\bar{x} = 3.19$, SD = .62), self-talk ($\bar{x} = 3.49$, SD = 1.04), and evaluation beliefs and assumptions ($\bar{x} = 3.85$, SD = .63). The level of self-leadership in nursing managers was above average (3).

Van Zyl et al. (2017) conducted a study among 273 nursing leaders employed at the Lesotho Ministry of Health and Social Welfare in Africa. Positions included director of nursing services, manager of nursing services, senior nursing officers and nursing sisters in charge. The result showed the total score of self-leadership was 135.2784; which indicate strong use of self-leadership strategies.

Megheirkouni (2018) conducted a study among 418 registered individuals in sports organizations in the UK. The results showed the mean score of self-leadership and its dimensions. In this study, the mean score of self-leadership was 3.03 (SD = .504). The behavior-focused strategies were 2.88 (SD = .484). Natural reward strategies were 2.94 (SD = .812) and constructive thought pattern strategies was 3.29 (SD = .812).

In summary, above studies were conducted in various countries and settings and used the same instrument. While some studies showed the overall score of self-leadership others showed the dimensions or sub-dimension of self-leadership. Two studies were studied among nurse managers. One study showed the overall self-leadership. Another study showed the overall, dimensions, and sub-dimension of self-leadership. They showed that nurse managers had moderate and close to high levels of self-leadership. Only one study was conducted among nurses and it showed the mean score of dimensions of self-leadership; except the natural reward strategies were at a high level, the behavior-focused strategies and constructive thought pattern strategies were at a moderate level.

The relevant research about self-leadership in China. The studies about self-leadership in China are very limited. The following section listed several studies about self-leadership, which used different instruments. Two studies conducted in intern nursing students and undergraduate nursing students respectively.

Ho and Nesbit (2014) among the employees who came from four different industries including Engineering, Public Transportation, Insurance, and Manufacturing in Hong Kong and intern mainland of China. The aim of this study was to investigate whether self-leadership impacts work outcomes within Chinese organizational settings. The modified Self-leadership Questionnaire (MSLQ) (Ho & Nesbit, 2009) was used in this study. The result stated the mean score of self-leadership ($\bar{x} = 3.47$, $SD = .47$).

L. Y. Li et al. (2016) conducted a study among undergraduate nursing students in Beijing. The author used the revised self-leadership questionnaire (RSLQ) (Houghton & Neck, 2002). The result showed that the overall mean score of self-leadership ($\bar{x} = 3.70$, $SD = .54$) and its sub-dimensions including self-goal setting ($\bar{x} = 3.79$, $SD = .66$), self-reward ($\bar{x}=3.85$, $SD= .84$), self-punishment ($\bar{x} = 3.43$, $SD = .70$), self-observation ($\bar{x} = 3.59$, $SD= .63$), self-cueing ($\bar{x} = 3.70$, $SD = .89$), focusing on natural reward ($\bar{x} = 3.73$, $SD = .60$), visualizing successful performance ($\bar{x} = 3.75$, $SD = .71$), self-talk ($\bar{x} = 3.71$, $SD = .81$), and evaluation beliefs and assumptions ($\bar{x} = 3.72$, $SD = .62$). The level of self-leadership at a moderate level.

Yang et al. (2018) conducted a study among intern nursing students. The author used the RSLQ (Houghton & Neck, 2002) to measure the self-leadership. The results

showed the overall mean score of self-leadership ($\bar{x} = 3.90$, $SD = .90$) and its sub-dimensions including self-goal setting ($\bar{x} = 3.96$, $SD = .86$), self-reward ($\bar{x} = 3.92$, $SD = .96$), self-punishment ($\bar{x} = 3.57$, $SD = 1.09$), self-observation ($\bar{x} = 3.90$, $SD = .81$), self-cueing ($\bar{x} = 3.80$, $SD = .99$), focusing on natural reward ($\bar{x} = 4.11$, $SD = .82$), visualizing successful performance ($\bar{x} = 3.95$, $SD = .82$), self-talk ($\bar{x} = 4.01$, $SD = .84$), and evaluation beliefs and assumptions ($\bar{x} = 3.82$, $SD = .87$). The level of self-leadership was moderate among intern nursing students. Some sub-dimensions were at a high level such as focusing on natural reward and self-talk.

Ho and Nesbit (2018) conducted a study in Hong Kong and Mainland China. The participants were recruited from the industries of insurance, engineering, and manufacturing in Hong Kong and Mainland China. The objective of this study was to examine the relationship between personality traits (conscientiousness and internal focus of control) and self-leadership. Particularly, it examined the mediating effects of self-leadership on the relationship between personality traits and the work outcomes of job satisfaction and performance. It investigated whether gender moderates the mediating effects of self-leadership. Self-leadership was investigated using the modified Self-leadership Questionnaire (MSLQ) (Ho & Nesbit, 2009). The results showed the overall mean score of self-leadership ($\bar{x} = 3.47$, $SD = .44$).

In summary, all of these studies used different instruments in different groups. The Revised self-leadership questionnaire (RSLQ) was used in nursing students to measure the self-leadership. All of these studies showed a moderate level self-leadership. The modified Self-leadership Questionnaire (MSLQ) was used to measure self-leadership among industries of insurance, engineering, and manufacturing. Additionally, in China, there is no study about self-leadership conducted among nurses and nurse managers.

The Situation Related to Self-leadership in Yunnan Province, the People's Republic of China

Under the background of the reform of public hospitals in China, the reform of public hospitals in Yunnan is also imperative. Tertiary hospitals are the focus of health care reform among all public hospitals. Current healthcare reform policy directions focus on efficiency, quality and patient-centered care (Barber, Borowitz, Bekedam & Ma, 2013). Yunnan health and Family Planning Commission (2017) stated that in order to improve the quality of care and patient safety, it is necessary to improve the nurses' enthusiasm for promoting the development of patient-centered nursing model.

According to the Ministry of Health of China (1989), a tertiary hospital refers to a hospital, which possesses more than 501 beds. The tertiary hospitals undertake the medical treatment, health care, medical education and training, and research in health care system. Tertiary hospitals provide the highest health services to the local city and province, and can even extend to a neighboring city and province. At the end of July 2016, there were 2,175 tertiary hospitals including 1308 tertiary A hospitals, out of 28,341 hospitals in the People's Republic of China (Ministry of Health of China, 2016). In Yunnan province, there are 21 tertiary A hospitals.

From the aspects of technical strength, management level, equipment condition, and scientific research ability of the hospital, tertiary A and B hospitals were assessed according to 1000 points. Tertiary B hospitals scored between 750 and 900. Over 900 points were scored in tertiary A. Tertiary A is the most authoritative hospital (Ministry of Health of China, 1989). Grade A hospitals have stricter requirements on nursing quality.

Job position is similar in tertiary A and tertiary B hospitals. The similar administrative system was used in tertiary hospitals (Ministry of Health, 2013). Job position of nurses can be classified into staff nurse and nurse manager in China including head nurse, supervisor, and director (C. Li et al., 2016). In recent years, due to the expansion of departments and the increase of patients in many hospitals in Yunnan province, in order to make the management work better in the unit, some hospitals added the assistant head nurse position to help or delegate the head nurse to deal with some management work in the unit such as Puer People's Hospital (2012a). Thus, nurse

manager includes assistant head nurse, head nurse, supervisor, and director. Based on the job description of staff nurses and nurse managers in hospitals of Yunnan Province such as Puer People's Hospital (2012b) the nurses in different positions have different responsibilities. All of them are described as follows. Staff nurse needs to be responsible for all clinical operations or individual nursing activities related to medical treatment such as execution of doctor's orders, puncture and infusion, admission education, observation of illness and so on. The nurse manager mainly undertakes nursing management in hospitals. Assistant head nurses and head nurses are the specific leaders and commanders of nursing work in departments. Assistant head nurses undertake part of administrative work such as calculating job performance or arrange the training activities etc. When head nurse out of hospital is free from work, the assistant head nurse needs to delegate the responsibilities of head nurse. The head nurse is responsible for the internal management of the department, the on-site management of the department, the communication with patients and doctors, and the training of nurses and the improvement of the operational ability of nurses. The supervisors are middle-level managers in nursing management system. They play a bridge role in communicating information between upper and lower levels, coordinating the relationship between different wards, taking charge of nursing management in each ward. The supervisor needs to inspect and supervise the work of head nurses in a planned or random way. The director has the utmost responsible person for the quality and safety management and continuous improvement of hospital nursing. According to the plan of the hospital, they are responsible for drawing up the nursing work plan and target of the whole hospital, and organizing and implementing after approval. In the process of implementation, regular assessment and regular summary reports are carried out. However, the situation in tertiary A and B are different. It will be explained in the following section.

Based on Ministry of Health (2013), in Grade A hospitals, the coverage rate of high quality nursing service ward should be 100%. In Grade B hospitals the coverage rate of high quality nursing service ward only needs to reach 50% or above. In Grade A hospitals, the ratio of beds to nurses should be 1:0.5-1:0.6. However, in Grade B hospitals the ratio of beds to nurses only needs to reach 1:0.4. Surmising that in tertiary A hospitals, they need to provide higher quality of care for patients. In addition, compared with tertiary B hospitals, tertiary A hospitals are larger in scale and have more advanced technology and

equipment. They undertake the treatment of the vast majority of severe patients and complex diseases. Based on the Ministry of Health (2013), severe medical beds account for more than 10% of all hospital beds in tertiary A hospitals. However, the tertiary B hospitals only account for 5-8%. This means that nurses and head nurses undertake more responsibilities and bear more pressures.

Compared with tertiary B hospitals, the staff nurses with the same position need to assume more responsibilities and need to deal with more complex situations about the patients under the leadership of managers in tertiary A hospitals (Chen et al., 2014). They require that staff nurses have job autonomy, the ability of lifelong learning and take more responsibility for work. The nurse managers are required to have enough competence to lead the staff nurse and teach the staff nurse to be a self-leader. They required the nurse managers and staff nurses have the highest level of job performance.

Yunnan Health and Family Planning Commission (2017), stated that in order to improve the quality of care and patient safety, it is necessary to improve the nurses' enthusiasm for promoting the development of the patient-centered nursing model. Although, there was no evidence to report the quality of care in Yunnan province, there was some evidence that implied the quality of care in Yunnan province was not high. Fu (2017) found that the satisfaction of patients was lower than 85%; which didn't reach the standard (over 85%) of Ministry of Health (2013). The communication between patients and nurses, and doctors got the lowest percentage, only 71.49%. The patients also were not satisfied with the clinical skill of nurses (79.64%), pre and post nursing care for specific medical checkup (76.79%), and psychological needs supported by nurses (81.86%). In addition, nurses' job satisfaction can affect the nurses' enthusiasm and have a positive impact on the patients' quality of care (Chang, Ma, Chiu, Lin, & Lee, 2009; Mrayyan, 2006). Jin, Fang, Feng, and Dai (2012) and Wu, Teng, and Wu (2017) found the job satisfaction of nurses in Yunnan province at a moderate level.

In the changing and stressful environment, in addition to leading others, managers should also teach nurses to motivate and lead themselves to face diversity. To be a self-leader is necessary for nurses. Being a nurse not only requires solid professional and technical knowledge but also the skills to meet the psychological needs of patients and provide the humanistic concern. As the environment continues to change, patients'

demands for nurses are changing. All of these need nurses to have job autonomy, the ability of lifelong learning and take more responsibility for work. To achieve all of these, the nurse manager's responsibility is to assist the staff nurse in developing the skills they need in their roles and in developing their self-leadership as well.

However, there is no evidence regarding self-leadership among nurses in China especially in Yunnan province. Thus, this study aims to identify self-leadership among nurses in Yunnan province. Moreover, this study intends to identify the differences of self-leadership between nurse manager and staff nurses.

Conceptual Framework

The conceptual framework was based on the self-leadership concept developed by Manz (1986, 1992), Manz and Neck (1991), and Manz and Sims (1991). Self-leadership is a self-influence process that comprises specific sets of behavioral and cognitive strategies designed to shape nurse performance outcomes. Self-leadership strategies can be categorized into three categories: behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies. Behavior-focused strategies aim to enhance self-awareness and manage behaviors involving necessary but potentially unpleasant tasks. Natural reward strategies emphasize the pleasant aspects of a given task or activity. Natural or intrinsic rewards arise from the task itself, when a person is motivated or rewarded by the task itself. The constructive thought pattern strategies aim to promote the formation of constructive thinking patterns and habitual ways of thinking which can have a positive impact on performance. According to job description of staff nurses and nurse managers in China, nurse managers' responsibilities help to develop their self-leadership more than those of staff nurses. Thus, in this study, the comparison of self-leadership between staff nurses and nurse managers was conducted. Until now, there are only two studies conducted between staff nurse and nurse manager in other countries using different instruments rather than RSLQ (Houghton & Neck, 2002). Besides, there has been no research on self-leadership among nurses in China as well as to look at the difference of self-leadership between staff nurse and nurse manager.

CHAPTER 3

Methodology

Research Design

A descriptive comparative design was used to identify the difference of self-leadership between nurses and nurse managers working in five tertiary A general hospitals located in Yunnan Province, the People's Republic of China.

Population and Sample

Research population. Research population of this study is 20,266 staff nurses and 1,223 nurse managers working in 21 tertiary A hospitals in Yunnan province.

Research Sample

The sample of this study is nurses (staff nurses and nurse managers) who are working in tertiary A hospitals located in Yunnan Province, the People's Republic of China and meet the inclusion criteria of this study.

Sampling Criteria

The inclusion criteria of the samples of this study include:

1. Being a registered nurse (staff nurses and nurse managers) from the specified hospitals
2. The nurses must be not work in probation period in hospital;
3. Willing to participate in this study.

The exclusion criteria of the samples of this study include:

1. Nurses who were on maternity leave, sick leave, vacation, and continuing education.

Sample Size of the Study

Due to the population of the staff nurse and nurse manager, there is a big difference in numbers. The sample of staff nurses and nurse managers was calculated separately. The researcher used the Taro Yamane's (1973) formula at the level of significance 0.05 to determine the sample size. The calculating process as following:

$n = N / (1 + N(e)^2)$, the level of precision defined as 5%

N = Total number of populations

n = Sample size

e = the error in the sample defined as 5%

The sample size of staff nurse: $n = 20266 \div (1 + 20266 \times 0.05^2) = 392$

The sample size of nurse managers: $n = 1223 \div (1 + 1233 \times 0.05^2) = 301$

Considering the possible loss of subjects, 10% of the sample size (Burns & Grove, 2005) should be added to the sample. Forty nurses were added to the staff nurse sample. Therefore, the sample size of staff nurse was 432. Thirty nurse managers were added to the nurse manager samples. Therefore, the sample size of nurse manager was 331.

Sampling Procedure

Multi-stage sampling methods was used in this study. The processes of sampling are as follow:

1. There are 21 tertiary A hospitals in Yunnan province. In this study, hospitals was classified into 2 groups: group 1 are those that have number of hospital beds at least 1500 beds and group 2 are the hospitals that have hospital bed less than 1500 beds. There are 8 hospitals in group 1 and 13 in group 2. Thus, the proportion of number of hospitals of group 1: group 2 is 1:1.6. Therefore, researcher randomly selected 2 hospitals from group 1 and 3 hospitals from group 2. The selected hospitals have been shown in table 1. They were The First Affiliated Hospital of KMU (1stAH), The Second Affiliated Hospital

of KMU (2ndAH), The Affiliated Yan'an hospital of KMU (YAH), The First people's hospital of Honghe state (1stHHH), and Puer People's Hospital (PEH)

2. Proportionate simple random sampling was used to selected nurse manager samples from each hospital. For staff nurses, the proportional stratified random sampling was used to select nurses from medical, surgical, ER, OR, ICU, OB-GYN, pediatric, and outpatient departments of each hospital. The number of nurse managers and staff nurses selected from each hospital was presented in table1

Table 1
Population and Sample of Staff Nurse and Nurse Manager

Hospital name	Number of beds	Population(N)		Sample (n)	
		Staff nurse (N=5470)	Nurse manager (N=381)	Staff nurse (n=432)	Nurse manager (n=331)
(1 st AH)	3000	1844	129	143	113
(2 nd AH)	1200	1080	88	86	76
(YAH)	1338	1030	60	82	53
(1 st HHH)	693	538	39	43	33
(PEH)	1500	978	65	78	56

Research Instruments

The research instrument used in this study was a questionnaire consisting of two parts: 1) the demographic data form; 2) the revised self-leadership questionnaire (RSLQ). The details of each part are as follows.

Part I: Demographic Data Form

This form was developed by researcher and used to gather demographic information of each participant. It consisted of the opened and closed end questions regarding gender, age, and marital status, and educational level, present position, years of work experience as an RN, department/section, professional title, and employment type (Appendix A).

Part II: Revised Self-leadership Questionnaire (RSLQ)

The revised self-leadership measurement scale was developed by Houghton and Neck (2002); which was created on the basis of the two existing measures of self-leadership (i.e. Anderson & Prussia, 1997; Cox, 1993) and translated to Chinese language by W. Wang (2014). It has 35-item with a five-point Likert scale (1 = *Not at all accurate*, 2= *Somewhat accurate*, 3= *A little accurate*, 4= *Mostly accurate*, and 5= *Completely accurate*). The RSLQ includes three dimensions and nine sub-dimensions. There are behavior-focused strategies (18 items) including self-goal setting, self-reward, self-punishment self-observation, and self-cueing, Natural reward strategies (5 items) including focusing thoughts on natural rewards, and Constructive thought pattern strategies (12 items) including visualizing successful performance, self-talk, evaluating beliefs and assumptions. The score of this questionnaire was calculated by the mean score. The level of self-leadership can be classified as follows as suggested by Houghton (see Appendix B).

Mean score 2.00 -3.00 = low level

Mean score 3.01-4.00 = moderate level

Mean score 4.01-5.00 = high level

Reliability and Validity

Validity

Houghton and Neck (2002) used the exploratory factor analysis and confirmatory factor analysis to test the construct validity. It has very good construct validity (GFI = 0.94, NNFI = 0.88, IFI = 0.91 and CFI = 0.91) (Bentler & Bonnett, 1980). Moreover, the Chinese version of RSLQ has been translated by W. Wang (2014) using back translation technique. Thus, this study did not identify the validity of this instrument.

Reliability

The reliability of the revised self-leadership questionnaire (RSLQ) was tested in this study before the questionnaire was distributed. The reliability was tested among staff nurse and nurse managers separately. A pilot study was conducted with 10 staff nurses and 10 nurse managers who work in the Qujing First People's Hospital; which is not the sample hospital. All of these subjects were randomly selected and consistent with the sample criteria at the study setting. The Cronbach's alpha coefficient was used to confirm the reliability of the instruments. From pilot study, the reliability of overall scale of RSLQ was .97, and the Cronbach's alpha coefficient of behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies were .95, .87, and .87 among staff nurses, respectively. Among nurse managers, the reliability of overall scale of RSLQ was .91, and its dimension such as behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies were .75, .54, and .85 respectively. The reliability of the instrument was acceptable (Hair, Black, Babin, Anderson, & Tatham, 2006; Hinton, Brownlow, McMurray, & Cozens, 2004). The reliability of the RSLQ was shown in Appendix I.

Protection of Human Subjects

Before the implementation of this study, the approvals from the research ethics and data collection were received from the Research Ethics Review Committee of the Faculty of Nursing, Chiang Mai University, Thailand, as well as the Directors of both hospitals and the Nursing Departments. The subjects who participated in this study were voluntary. At the same time, they had the right to refuse to participate or withdraw from the study at any time. In addition, the subjects were reassured that their responses would remain confidential and their identities will not be revealed on research reports or in the published the study. All subjects received the Information letters that explained the study and were given consent forms. The subjects who agreed to participate in the study were required to sign the consent form. To assure the protection of their human rights, only a code number was used for questionnaires follow-up. Anonymity and confidentiality were guaranteed for each of participants and finally all the information provided by the participants was used for purpose of study only and kept confidential. No incentive or advertisement was used in the research project. All the referenced instruments had the permission of original author. To further ensure the confidentiality of the subjects the questionnaires remained in secure storage.

Data Collection Procedure

Data was collected from 5 tertiary hospitals in Yunnan Province, the People's Republic of China. The following steps have been applied:

1. The researcher submitted the research proposal to the Research Ethics Commitment, the Faculty of Nursing, Chiang Mai University to review.
2. After receiving the approval letter from the Research Ethics Committee of the Faculty of Nursing, Chiang Mai University, the researcher submitted the research proposal, application letter for permission to collect data, and a copy of instruments to the directors of the nursing departments of the 5 tertiary hospitals in Yunnan Province for approval and permission.
3. The researcher met with nurse directors of each hospital to inform them of the purpose, objectives, and benefits of the study.

4. The researcher requested a list of names of nurses in each unit from the nursing departments of each hospital and selected subjects from each unit by using a table of random numbers to get a sample size.

5. The researcher asked for directors of the nursing department to assign research coordinators who are nurses from five tertiary A hospitals. Before the coordinators started to distribute questionnaires, the researcher gave them relevant information included research objectives, questionnaires introduction, participant's right, data collection method, and process in half an hour.

6. The researcher and four research coordinators distributed the questionnaires to all staff nurses and nurse managers. All participants were asked for their cooperation to complete the forms in their available time.

7. The participants were asked to return the questionnaires and consent form in separate sealed envelopes, which had been prepared in the questionnaire packages by researcher, within two weeks to the box; which was placed in each nursing department.

8. The research coordinators collected questionnaires from the boxes and return them to the researcher.

9. The researcher checked and screened the completeness of questionnaires before data analysis. The valid return rate of the completed questionnaire was calculated. For staff nurse, the response rate was 95.37% which were 412 returned questionnaires. Four hundred and six (93.40%) of them were completed and qualified for data analysis. For nurse managers, the response rate was 96.68%; which were 320 returned questionnaires. Three hundred and sixteen (95.47%) of them were completed and qualified for data analysis.

Data Analysis Procedures

The researcher scrutinized data before it was input into the computer. The Statistical Package for the Social Sciences (SPSS13.0) was used for data analysis, and the significance level was set at .05. The data analysis procedure was divided into four sections as follows:

1. Demographic data were analyzed by using frequency, percentage, mean, and standard deviation.
2. The level of self-leadership was analyzed by the mean and standard deviation.
3. The assumption of normal distribution of data was tested by Kolmogorov-Smirnov (KS) test before comparing the difference between staff nurse and nurse managers. At last, the result showed that overall self-leadership, behavior-focused strategies, and constructive thought pattern strategies were of normal distribution. However, the natural reward strategies was unnormal distribution. Thus, two independent t-test was used to analyze the difference of overall self-leadership, behavior-focused strategies, and constructive thought pattern strategies between staff nurses and nurse managers. While the Mann-Whitney U-test was used to analyze the difference of natural reward strategies between staff nurses and nurse managers (Appendix J).

CHAPTER 4

Findings and Discussion

The purposes of this study are to explore the self-leadership of staff nurses and nurse managers as well as to compare the self-leadership between staff nurses and nurse managers in tertiary hospitals, Yunnan province, the people's republic of China. The findings are presented in three parts with tables and descriptions: (1) The demographic data of samples in tertiary hospitals of Yunnan Province, the People's Republic of China; (2) The level of self-leadership of staff nurse and nurse managers; (3) The comparison of the self-leadership between staff nurses and nurse managers in tertiary hospitals, Yunnan Province, the People's Republic of China.



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Findings

This section is presented in three parts: Part I shows the demographic data of samples; Part II shows the level of self-leadership of staff nurses and nurse managers; Part III shows the difference of self-leadership between staff nurses and nurse managers.

Part I: The Demographic Data of Samples in Tertiary Hospitals of Yunnan Province, the People's Republic of China

Sample for this study consisted of 406 staff nurses and 316 nurse managers which included assistant head nurse (125), head nurse (175), supervisor (12), and director (4). The demographic data of staff nurses and nurse managers are presented in table 2.

Table 2

Frequency, Percentage, Mean, Standard Deviation, and Range of Staff Nurses (n=406) and Nurse Managers (n=316) Categorized by Demographic Characteristics

Characteristics	Staff nurses (n=406)		Nurse managers (n=316)	
	n	%	n	%
Hospital name				
1 st AH	138	33.99	113	35.76
2 nd AH	81	19.95	65	20.57
YAH	71	17.49	46	14.56
1 st AH	41	10.10	35	11.08
PEH	75	18.47	57	18.04
Department				
Medical	136	33.50	104	32.91
Surgical	125	30.79	88	27.85
Pediatric	29	7.14	14	4.43
OB-GYN	30	7.39	18	5.70

Table 2 (continued)

Characteristics	Staff nurses (n=406)		Nurse managers (n=316)	
	n	%	n	%
OR	20	4.93	8	2.53
ER	30	7.39	20	6.33
ICU	18	4.43	19	6.01
OPD	18	4.43	11	3.48
Others	0	.00	34	10.76
Gender				
Female	394	97.04	307	97.15
Male	12	2.96	9	2.85
Age (\bar{x}=36.75,SD=7.97,Range=22-57)				
22-30	178	43.84	9	2.85
31-40	156	38.42	156	49.37
41-50	63	15.52	127	40.19
51-57	9	2.22	24	7.95
Marital status				
Single	96	23.65	12	3.80
Married	301	74.14	283	89.56
Separation or Widowed	9	2.22	21	6.65
Educational level				
Diploma degree	3	.74	0	.00
Associate degree	68	16.75	6	1.90
Bachelor degree	324	79.8	293	92.72
Master degree	11	2.71	16	5.06
Doctoral degree	0	.00	1	0.32

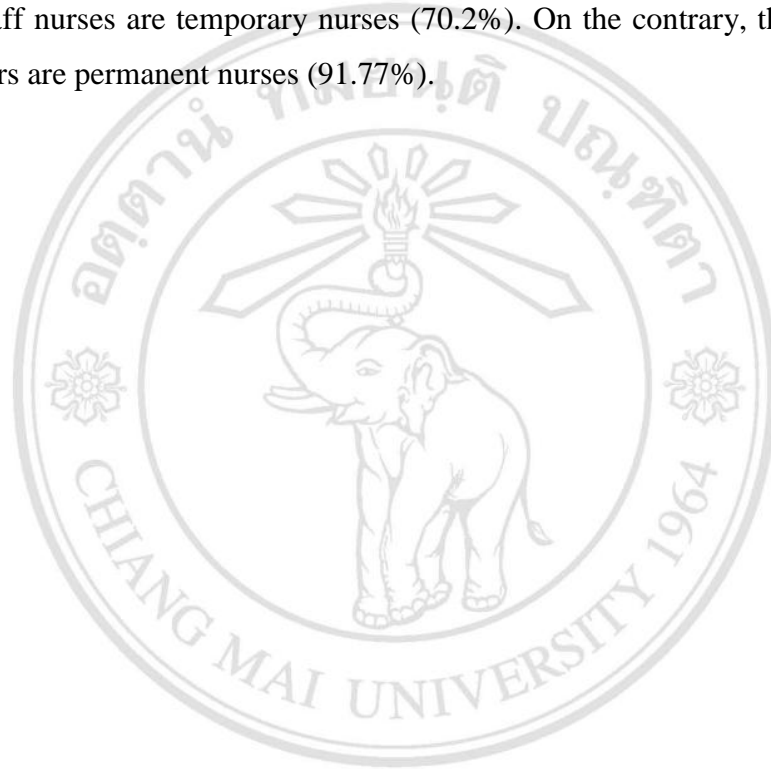
Table 2 (continued)

Characteristics	Staff nurses n=406		Nurse managers n=316	
	n	%	n	%
Professional title				
Junior nurse	70	17.24	0	.00
Senior nurse	208	51.23	20	6.33
Nurse in charge	120	29.56	192	60.76
Assistant professor nurse	6	1.48	89	28.16
Professor nurse	2	.49	15	4.75
Years of work experience				
≤3	57	14.04	2	.63
4-9	158	38.92	15	4.75
10-15	98	24.14	67	21.20
>15	93	22.91	232	73.42
Employment type				
Permanent nurse	121	29.80	290	91.77
Temporary nurse	285	70.20	26	8.23

Table 2 shows that both staff nurses and nurse managers have a similar proportion in some demographic characteristics such as department, gender, and educational level. The largest numbers of subjects work in the medical and surgical department are both staff nurses and nurse managers. For staff nurses, there are 33.5% in the medical department and 30.79% in the surgical department. For nurse managers, there is 32.91% and 27.85% respectively. The vast majority of staff nurses (97.04%) and nurse managers (97.15%) are women. And most of them are married, both staff nurse (74.14%) and nurse managers (89.56%). The proportion of staff nurse (79.8%) and nurse manager (92.72%) who hold a bachelor degree has the biggest percentage.

The staff nurses and nurse managers have a very different demographic data in age, professional title, years of work experience, and employment type. The staff nurses are younger with fewer years of experience compared with nurse managers. The table shows

among the age group, 43.83% of staff nurses are aged in 21-30 years old, followed by 31-40 years old (38.42%). However, 49.37% of nurse managers are aged 31-40 years old, followed by 41-50 years old (40.19%). More than half of the staff nurses (51.23%) are senior nurses in the professional title group. However, for nurse managers, nurses in charge (60.76%) accounted for the largest percentage. In the years of work experience group, the staff nurses who work for 4-9 years (38.92%) have the largest percentage. But for nurse managers, most of them have worked more than 15 years (73.42%). More than half of the staff nurses are temporary nurses (70.2%). On the contrary, the majority of nurse managers are permanent nurses (91.77%).



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Part II: Shows the Level of Self-leadership of Staff Nurse and Nurse Managers

This part describes the mean scores, standard deviation, and level of self-leadership between staff nurses and nurse managers.

Table 3

Mean, Standard Deviation, and Level of Self-leadership of Staff Nurse (n=406) and Nurse Managers (n=316)

	Staff nurses (n=406)			Nurse managers (n=316)		
	\bar{x}	SD	level	\bar{x}	SD	level
Self-leadership	3.50	.59	Moderate	4.02	.45	High
Behavior-focused strategies	3.53	.60	Moderate	4.03	.46	High
Natural reward strategies	3.53	.68	Moderate	4.01	.54	High
Constructive thought pattern strategies	3.45	.65	Moderate	4.00	.49	High

As shown in Table 3, the mean score of self-leadership and its dimensions in staff nurse was lower than nurse managers. For staff nurse, the mean score of self-leadership was 3.50 (SD = .59). Behavior-focused strategies, natural reward strategies and constructive thought pattern strategies were 3.53 (SD = .60), 3.53 (SD = .68) and 3.45 (SD= .65), respectively. Self-leadership and its dimension were at a moderate level. The mean score of self-leadership and its dimension among nurse managers was 4.02 (SD = .45), 4.03 (SD = .46), and 4.01 (SD = .54) and 4.00 (SD = .49) respectively. So, the self-leadership and its dimensions among nurse managers were at a high level.

Part III: To Compare the Self-leadership Between Staff Nurses and Nurse Managers in Tertiary Hospitals, Yunnan Province, the People’s Republic of China

This part compares the mean score and standard deviation of overall and each dimension of self-leadership between staff nurses and nurse managers. The results are shown in Table 4.

Table4

Comparison of Self-Leadership and its dimension between Staff Nurse and Nurse Managers

	Staff nurses (n=406)		Nurse managers (n=316)		t/z	p-value
	\bar{x}	SD	\bar{x}	SD		
	Self-leadership	3.50	.59	4.02		
Behavior-focused strategies	3.53	.60	4.03	.46	-12.77*	.01
Natural reward strategies	3.53	.68	4.01	.54	-9.90**	.01
Constructive thought pattern strategies	3.45	.65	4.00	.49	-12.80*	.01

Note. *independent t-test. **Mann Whitney U-test.

As shown in table 4, the nurse managers had a significantly higher mean score than staff nurse in self-leadership and its dimension. The self-leadership had a significant difference between staff nurses and nurse managers. The behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies had a significant difference between staff nurses and nurse managers. Therefore, self-leadership and its dimension had a significant difference between staff nurses and nurse managers.

Discussion

Part I: Self-leadership of Staff Nurses

Objective1: To explore the self-leadership of staff nurses in tertiary hospitals, Yunnan province, the People's Republic of China. The result of this study showed that the overall mean score of self-leadership among staff nurses was at a moderate level ($\bar{x} = 3.50$, $SD = .59$) (Table 3). This finding was consistent with the results of two previous studies using the same instrument; which was conducted among nursing undergraduates (L. Y. Li et al., 2016) and intern nursing students (Yang et al., 2018), respectively. The results showed a moderate level ($\bar{x} = 3.70$, $SD = 0.54$; $\bar{x} = 136.69$, $SD = 16.99$; respectively). It seems that there are some situational benefits for staff nurses to develop self-leadership in China, and some factors that may interfere with the development. The reasons are as follows.

The market-oriented health system, beginning in the 1980s (Yip et al., 2012) in China may be the first factor that may promote self-leadership development of staff nurses. Under the market-oriented health system, hospitals in China had to adopt a decentralized, organic organizational structure (Sun & Han, 2011); which requires employees to improve the ability of self-motivation and self-direction, and then improve the self-leadership skill to take more responsibilities about their work (Costello, Brunner, & Hasty, 2002). Therefore, staff nurses had more opportunities to develop self-leadership than before. Empowerment management is another possible reason which can help the staff nurses improve the self-leadership skill. Empowerment management has gradually played an important role in the management of nursing human resources in Chinese hospitals; which helps to exert the highest potential of existing personnel and improve the quality of nursing care on the premise of limited medical resources (Cui, Xuan, & Yin, 2010). Amundsen and Martinsen (2015) stated that empowerment behavior of a leader has a positive impact on employee self-leadership.

However, some factors can also hinder staff nurses to develop self-leadership skill. Firstly, both hospitals and staff nurses do not realize the importance of nurses' competence in leadership. Jia (2013) found that both leaders and staff nurses didn't realize leadership as a necessary ability for every nurse, which is a factor that impacts the staff nurses'

development of self-leadership. Besides, based on the investigation of this study, staff nurse scarcely received the leadership training. Thus, the staff nurses work under nurse managers and lack the self-awareness about their work and the ability of self-motivation and self-direction. Secondly, the shortage of nurses, the lack of respect for nurses and nursing professions, were also factors that may hinder the staff nurse to development self-leadership. There were 5.3 nurses per 1,000 people, the highest level in China, but only 1.3 nurses in Yunnan province in 2015 (Wang, 2016). The China Social Welfare Foundation 919 Nurse Care Program (2017) found that 41.2% of nurses suffered from excessive behavior of patients or family members in the past year, 83.3% of nurses could not clearly feel the respect of patients to nurses. Based on Ross (2014), positive experiences have beneficial impacts on the individual's self-esteem and self-concept because success stems from external and internal rewards that reinforce the individual's commitment to improve self-leadership. At the same time, the lack of self-esteem will reduce the individual's commitment to improve self-leadership. Lastly, Chinese traditional culture may be another factor that may hinder the staff nurses to develop the self-leadership skill. Chen (2001) stated that harmony with all others and a lack of self-centeredness is one of the main teachings of Confucianism. Beyond that, China is also a country where collectivism prevails. In this collectivist culture, attention is focused on creating and maintaining harmonious social relations within the group. When personal interests conflict with collective interests, individual interests may be sacrificed for collective interests (Parsons, 1951). These will lead to staff nurses to ignore the task itself and their own thinking about the task and just follow the rules or the thoughts that come from the majority of people or leaders. This means that the staff nurse might lack the capacity of self-motivation, self-direction, and self-control.

Findings regarding the three dimensions of RSLQ as perceived by staff nurses in this study are discussed as follows:

Behavior-focused strategies. The results of this study showed that behavior-focused strategies ($\bar{x} = 3.53$, $SD = .60$) were at a moderate level among staff nurses (Table 3). These results were similar to the study of Ugurluoglu et al. (2015) conducted among 750 medical and administrative personnel including 119 (38.6%) nurse working at a state hospital in

Kırıkkale, Turkey. The result showed that behavior-focused strategies ($\bar{x} = 3.85$, $SD = .57$) of the nurses were at a moderate level.

A possible reason for this finding may be due to the nursing delivery system of China. Nowadays, the total patient care is conducted in the vast majority of tertiary hospitals (Ministry of Health, 2013). One nurse is responsible for providing total care to a group of patients (at least 10 - 14 patients on day shift and more than 30 patients on night shift) such as basic nursing care, patient's condition monitoring, treatment, and health education during the nurses' working shift (Yun, Jie, & Anli, 2010). This means that the staff nurses need to deal with a lot of complex situations by themselves such as nursing assessment, medication administration, examinations, patient education and so on. During this process, staff nurses need to set the specific goals and use self-cueing skills such as lists or notes to remind themselves to make sure they can accomplish their work on time even though they face an inadequate staffing situation. This was supported by the items 'I establish specific goals for my own performance ($\bar{x} = 3.71$, $SD = 0.90$)' and 'I use concrete reminders (e.g., notes and lists) to help me focus on things I need to accomplish ($\bar{x} = 3.62$, $SD = 0.93$). On the other hand, under this high workload environment, nurse would create a higher level of stress. Milutinovic, Moluolubovi, Brkić, and Prokeš (2012) stated that high levels of stress would lead to the individuals lack the confidence to set and accomplish the goals. High levels of work-stress would lead a person to lack the capability to use self-leadership skills such as self-observation and self-goal setting due to high mental strain (Houghton, Wu, Godwin, Neck, & Manz, 2012).

The implementation of nurse career ladder management system (Yunnan Health and Family Planning Committee, 2017) is another factor that may increase the staff nurses' behavior-focused strategies. This system requires staff nurse to navigate, motivate, and lead themselves towards achieving desired outcomes. It also emphasizes that if a staff nurse wants to get a promotion and higher salary, she (he) needs to enhance their capability of nursing service, learn more new technologies, and improve their educational level. This might stimulate nurses' skill of self-observation and self-goal setting for the career development in the long run. This was supported by the item I pay

attention to how well I'm doing in my work $\bar{x} = 3.81$, $SD = 0.86$).and 'I think about the goals I that intend to achieve in the future ($\bar{x} = 3.53$, $SD = 0.95$)'.

The performance appraisal system of staff nurses might be a factor that might be related to the moderate level of self-leadership. Since the Central People's Government of the People's Republic of China (2011) stated the policy of "work more, pay more", most tertiary hospitals use this as one of the most important standards for performance appraisals. This means that the more a nurse does, the higher the technical difficulty, the better their evaluation, promotion and the higher the salary. This may motivate nurses to manage their own behaviors such as use the self-observation do self-analyze to conduct self-goal setting, self-reward involving necessary but unpleasant tasks. They may pay attention to their own performance in their work and track the progress of their work. However, the staff nurses doesn't have a chance to be aware of their negative attitudes or unproductive behavior that influence their personal and professional development in the workplace due to the high workload which prevents staff from having much time to think about their job, just finish it and reach the required from the policy or standards. Thus, the mean score of behavior-focused strategies of staff nurses is at a moderate level.

Natural reward strategies. The result of this study showed that the natural reward strategies among staff nurses were at a moderate level ($\bar{x} = 3.53$, $SD = .68$) (Table 3). This result was inconsistent with the study of Ugurluoglu et al. (2015), the natural reward strategies of the nurse was 4.11 ($SD = .64$) and at a high level.

The natural reward strategies of staff nurses at a moderate level may be due to the Chinese employment system in the hospital. In this system, there are two types of employment nurses called permanent nurses and temporary nurse. It was reported that the proportion of temporary nurse in Chinese public hospitals varied by the hospital from 20% to 54% (Zhao & Zhang, 2010). The permanent nurse is guaranteed by the government and cannot be dismissed by an individual employer. Therefore, the permanent nurses guaranteed continuous wages and benefits such as lifetime employment, steady income, compensation, health insurance, housing, and pension are also guaranteed in their whole work life. They also have more opportunities to receive training and promotions (Shang et al., 2014). Compared with the permanent nurse, the temporary nurse is employed by an individual employer based on current needs and resources and they have

less job-related benefits, lower wages, and fewer opportunities for promotion among employers (Shang et al., 2014). In this study, among staff nurses, the proportion of permanent nurse was only 29.80%. On the contrary, temporary nurses were 70.20% (Table 2). The natural reward is a tool for discovering what motivates individuals and comes from discovering an individual's interest in his or her work (Mokuoane, 2014). In daily work, the permanent nurses and temporary nurses mostly do the same work. This means that the majority of staff nurses in this study do not have many enjoyable aspects of their work and activities such as promotion, salary, benefits, and sense of achievement related to work under the same situation. Thusly, the staff nurses cannot be motivated or reward by the task itself very well.

Another possible reason might be related to the job characteristics of staff nurses. Natural reward strategies also emphasize building more pleasant and enjoyable features into a given activity such as making the work environment more comfortable or feel-determination and competency. However, due to the special professional characteristics, staff nurses have to obey the operational standards and procedure to execute the doctor's order and make sure the quality of care and patient safety. Nurses do the same work day by day in the same workplace; which can make them feel bored and the competency can be not reflected. They have fewer feelings of self-determination and competence in their work (Atefi, Abdullah, Wong, & Mazlom, 2014). Thus, the score of natural reward strategies of staff nurses is not high.

The Implementation of the Personnel Management in public organization (Z. Wang, 2014) is one factor that might have facilitated the nurses' natural reward strategies at a moderate level. This policy requires the public organization cancel the permanent employees, especially in public hospitals. The public hospitals start to pay attention to temporary nurse such as improve salaries, have more opportunities to get promotion and training (Liu, Jiang, Liu, Liu, & Tang, 2016). Nurses can get more enjoyable features from the work.

Constructive thought pattern strategies. The result of this study showed that the constructive thought pattern strategies ($\bar{x} = 3.45$, $SD = .65$) of staff nurses were at a moderate level (Table 3). This result was similar to the study of Ugurluoglu et al. (2015)

showed the constructive thought pattern strategies was 3.92 (SD = .66) and it was at a moderate level.

The difficult or troubling situation with heavy workloads and stress is that they may lead to a moderate level of constructive thought pattern strategies. The difficult or troubling situation can lead to dysfunctional beliefs and assumptions (Houghton, Neck, & Manz, 2003). Under the difficult or troubling situation, the obstacles in thinking will produce and involve a focus on the negative aspects of challenge situations (Houghton et al., 2003). The tendency to think in extreme, black or white categories will emerge (Burns, 1980). Consequently, staff nurses may not identify the dysfunctional beliefs and assumptions and replace them with more rational and realistic ones. The staff nurses also cannot build positive dialogues. The high level stress can also lead to anxiety, depression or frustration which lead to unclear thinking and the lack of using the purposeful use of imagination to picture successful performance of important tasks or reactions to certain pressures (Mokuoane, 2014).

Another possible reason might be related to the implementation of patient-centered nursing care. Yang (2014) emphasized patient-centered nursing care was a means to improve the quality of interactions between patients and healthcare providers, and empower patients in the process. This required nurses to be flexible when they communicated with different patients in different situations and conditions to understand the patients' needs. Manz and Neck (2004) reported that when a person faces a specific situation, they will assess the accuracy of their beliefs about challenging situations they faced. Thus, this may improve nurses' ability to identify and replace dysfunctional beliefs and assumptions.

Part II: Self-leadership of the Nurse Managers

Objective2: To explore the self-leadership of nurse managers in tertiary hospitals, Yunnan province, the People's Republic of China. The result of this study showed that the general self-leadership of nurse managers was at a high level ($\bar{x} = 4.02$, SD = .45) (Table 3). The result of this study got a higher mean score than another study conducted by Moradpour et al. (2017); which used the same instrument in Iran. In this study, the population included managers, supervisors, and matrons (nursing managers).

The results showed the mean score of self-leadership was 3.88 (SD = .54). It indicated the self-leadership was at a moderate level. One possible explanation for this finding may be nurse managers have a strong self-awareness as a leader. A person who has strong self-awareness will find it is easy to regulate their emotional expressions, their fears and impulsive behavior when threatened or rejected (George, 2010). Thus, nurse managers will achieve the self-direction and self-motivation necessary to perform. In addition, practicing nursing experience from the perspective of leadership requires head nurses to be responsible and autonomous in their daily work. In order to perform tasks effectively, the nurse manager has to control personal actions, to be self-aware and to utilize personal strength.

Findings regarding the three dimensions of RSLQ as perceived by nurse managers in this study are discussed as follows:

Behavior-focused strategies. The results of this study showed that behavior-focused strategies ($\bar{x} = 4.03$, $SD = 0.46$) (Table3) at a high level among nurse managers. This result was similar to the previous study. Moradpour et al. (2017) conducted a study among managers, supervisors, and matrons (nursing managers) in Iran. The results showed the behavior-focused strategies ($\bar{x} = 3.98$, $SD = 0.54$) of nurse managers in a moderate to high level.

The possible reason for nurse managers' high level of behavior-focused strategies might be related to the fierce competition to be a nurse manager. New nurse managers are traditionally appointed in a freely competitive environment in Yunnan Province (Zhang, Liu, Liang, Tian, & Yang, 2011). According to the policy, head nurses are elected every two years. Nurse Managers are required to have strong professional abilities, higher skills, communication skills, management skills, higher education level and scientific research ability. During the election period, the nurse managers must make a speech to explain the vision and action to move and win the support from followers and other managers. Besides, most hospitals will select ten excellent head nurses every year. These people will get higher bonuses and more opportunities to get a promotion. This may encourage nurse managers to monitor ineffective behavioral patterns and shape out the desired behaviors for the desired outcomes. During the process, nurse managers may set goals for themselves to develop, enforce, and cultivate constructive behavior to encourage

themselves to do better, maintain competence and competitiveness spontaneously. Thus, they can set a good example for staff nurses. Leadership by example, the role of active leadership is a silent command, but also the power of motivation (Qiu, 2011). Thus, it may lead the nurse managers to have stronger self-awareness, self-esteem and self-confidence about their work and set the goals for themselves to maintain competency. The nurse managers may have more capabilities for self-direction, and self-control.

Another possible reason may be related to the performance appraisal system of nurse managers. In this system, making a plan for the department and evaluating the nursing work such as the quality management were the things that the nurse managers must to do (Puer People's Hospital, 2012a). At the beginning of each year, nursing managers at different levels were required to present work plans for their departments. At the monthly nurse managers' meeting, they were required to present the plan for the following month and evaluate the work of the last month. At the end of the year, the nurse managers were required to state the work summary and evaluate the work of this year. Nurse managers were required to observe and gather information about themselves and their work, including strengths and weaknesses including quality of care. Nursing leaders need to focus on those aspects; which should be developed, while constantly being aware of the strengths. Meanwhile, they were required to control their own behavior by recording the important tasks with a notebook that needs to be completed and set specific personal goals to finish their work. The nurse managers' performance appraisal system boosts nurse managers who can strongly use behavior-focused strategies such as self-cueing and self-goal setting.

Natural reward strategies. The results of this study showed that the natural reward strategies ($\bar{x} = 4.01$, $SD = 0.54$) (Table 3) were at a high level among nurse managers. This result was similar to the previous study. Moradpour et al. (2017) conducted a study among managers, supervisors, and matrons (nursing managers) in Iran. The results showed the natural reward strategies ($\bar{x} = 3.90$, $SD = 0.54$) of nurse managers were at a moderate to close to high level.

An explanation might be related to the nurse managers' job characteristics. Nurse managers play the main role of nursing management, using some organizational forms and methods to conduct, coordinate and control subordinates to achieve the department

and nursing goals. Thus, the nurse managers have high job autonomy. In high-autonomy jobs, individuals have great freedom to decide what behaviors to undertake and greater freedom of decision-making provides individuals with more opportunities and freedom to express their self-leadership orientation (Ho & Nesbit, 2014). The nurse managers can foster feelings of competence and self-determination. Consequently, nurse managers can be better motivated and reward by the task itself. Moreover, one of the nurse managers' responsibilities is to create a comfortable environment for staff nurses as much as possible. This requires nurse managers to build more pleasant and enjoyable features into a given activity such as apply more office facilities; plant green plants in wards and lounges. The behaviors can make the nurse managers have a high level of natural reward strategies.

In addition, nurse managers can get higher pay and more respect from others was also a factor that might have lead to a high level of natural reward strategies. Higher pay may lead the nurse managers to feel valued and get more benefits from their work. More respect from others can increase nurse managers' feelings of self-esteem and self-confidence. They can find more pleasant aspects of their work. This means that nurse managers may get more external and internal rewards from their work.

Constructive thought pattern strategies. The results of this study showed that constructive thought pattern strategies ($\bar{x} = 4.00$, $SD = 0.49$) (Table 3) were at a high level among nurse managers. This result was incongruent with the previous study. Moradpour et al. (2017) conducted a study among managers, supervisors, and matrons (nursing managers) in Iran. The results showed the constructive thought pattern strategies ($\bar{x} = 3.73$, $SD = 0.60$) of nurse managers were at a moderate level.

The explanation for this result may be related to nurse managers' role. Zhao and Cao (2004) stated that nurse managers play 11 roles: leader, contactor, companion, supervisor, disseminators, spokesmen, entrepreneurs, resource allocators, mediators, and coordinators. Multiple roles for nursing managers required nurse managers to be good at communicating with people with different opinions and discerning right and wrong, but also have agile thinking and accurate judgment ability to find problems in a timely manner and make correct decisions to cope it freely and work efficiently (Chen, 2002). It means that in daily work, the nurse managers need to examine the thoughts patterns, confronting

and replacing dysfunctional irrational beliefs and assumptions with a more constructive thought process. Moreover, in China, staff nurses have a tough work environment such as bearing high workload and the job insecurity but low salary and fewer opportunities for promotion. Based on the investigation of China Social Welfare Foundation 919 Nurse Care Program (2017), more than 50% of nurses suffered psychological problem, more than 79% of nurses were injured by sharp tools while working. Nearly 10% of nurses worked more than 60 hours a week. In addition, the income of nurses is seriously low. 76.5% of nurses earn less than 5,000 yuan per month, among which 37.6% earn less than 3,000 yuan per month. Gao (2009) found the quality of life among staff nurses in Yunnan province was lower than the national average level due to low job satisfaction, poor health status, and less respect for occupation. This situation may lead the staff nurses to emerge dysfunctional beliefs and assumptions as well as negative self-talk. The nurse managers have a responsibility to help staff nurses use the opportunity to think with positive self-talk; which focuses on opportunities, worthwhile challenges and constructive ways of dealing with the difficult situations to make sure the performance and quality of care under the high workload workplace. Generally speaking, when facing a tough situation, the nurse managers will openly discuss the beliefs and assumptions with the team members work together and guide them to develop more constructive thought patterns to replace the dysfunctional beliefs and assumptions to solve problems. This can help nurse managers cultivate constructive thought pattern strategy skills.

Part III: To Compare the Self-leadership Between Staff Nurses and Nurse Managers in Tertiary Hospitals, Yunnan Province, the People's Republic of China

Objective3: To compare the self-leadership between staff nurses and nurse managers in tertiary hospitals, Yunnan Province, the People's Republic of China. The results of this study showed that the overall mean score of self-leadership had a significant difference between staff nurses and nurse managers ($t = -13.32, p < .01$) (Table 4). The nurse manager ($\bar{x} = 4.02, SD = .49$) had a higher mean score than staff nurses ($\bar{x} = 3.50, SD = .59$) (Table4). This result was consistent with several previous studies. One study stated that self-leadership had a significant difference between the charge nurse and over group and staff nurse (Min et al., 2009) in Korea. One study stated that there

was a significant difference between professional nurses and nurse managers (Jooste & Cairns, 2014). There are several reasons that can explain this result. They are as follows.

Firstly, compared with staff nurses, nurse managers have a stronger sense of self-awareness as a leader. A person who has strong self-awareness will find it is easy to regulate their emotional expressions, their fears and impulsive behavior when threatened or rejected (George, 2010). Thusly, nurse managers will have a greater ability for self-direction and self-motivation than staff nurses. Consequently, nurse managers will have a higher leadership skill than staff nurses.

Secondly, nurse managers have more opportunities to take part in the leadership training. Nurse managers receive leadership training at least three times a year through seminars inside or outside of the hospital (Puer People's Hospital, 2012a). Due to the leadership training, nurse managers learned from a leadership perspective to accomplish daily work with responsible, accountable, and autonomous; which not only enhances their self-awareness as a leader but also builds positive self-concept, self-esteem, and self-confidence which leads to positive attitude. An individual with a positive attitude is self-motivated and demonstrates self-motivation through personal action oriented behaviors (Ross, 2014). Ugurluoglu et al. (2015) found that the participants trained in leadership are observed to give higher scores of self-leadership.

Lastly, in this study, the demographic data is also a factor that might be related to the difference in level. In the age group, the staff nurses aged from 21 to 30 years old group have the largest percentage (43.84%) (Table 2). However, the nurse managers have the largest percentage (49.37%) (Table 2) in ages from 31 to 40 years old. There are several studies that have stated self-leadership grows with age (Kang et al., 2010; Jung & Koh; 2012; Şahin, 2011). In this study, average work experience of nurse managers is higher than staff nurses, 38.82% of staff nurses work in the hospital for 4 to 9 years and 73.42% of nurse managers work in hospital over than 15 years (Table 2). Several studies have indicated that the self-leadership grows with years of experience (Jung & Koh, 2012; Kang et al., 2010; Moradpour et al. 2017). When the years of experience increase, both staff nurses and nurse managers have more confidence in their work and they will foster the feelings of self-determination, competence, and they take ownership over the task. Positive experiences have beneficial impacts on the individual's self-esteem and self-

concept because success comes from external and internal rewards that reinforce the individual's commitment to improve his or her self-leadership abilities. In this study, 70.2% of staff nurses were temporary nurses. On the contrary, 91.77% of nurse managers were permanent nurses (Table 2). Jooste and Le Roux (2014) stated that compared with the temporary, permanent nurse feel valued, job security, and more, these benefits may increase their motivation and self-leadership in the organization.

Findings regarding the three dimensions of RSLQ as perceived between staff nurses and nurse managers in this study were discussed as follows:

Behavior-focused strategies. The results of this study showed that behavior-focused strategies had a significant difference between staff nurses and nurse managers ($t = -12.77, p < .01$) (Table 4). The behavior-focused strategies of nurse managers ($\bar{x} = 4.03, SD = .46$) had a higher mean score than staff nurses ($\bar{x} = 3.53, SD = .60$) (Table 4).

One possible reason might be due to the different competitive environments of staff nurses and nurse managers. New nurse managers are traditionally appointed from a freely competitive environment in tertiary hospitals of Yunnan province (Zhang et al., 2011). According to the policy, head nurses are elected every two years. All of these were required to set an example for staff nurses. This means that nurse managers are required to have strong professional abilities and skills, communication skills, management skills, a higher education level and scientific research ability (Dong, 2011). The nurse managers have to identify the specific behaviors to enhance or modify and conduct a self-analysis to identify long term goals. The person who observes and gathers more information about themselves and their work can use behavior-focused strategies better (Mokuoane, 2014). In addition, applying motivation rewards and practicing desired behaviors to maintain competence and performance. Self-leadership involves setting personal standards through the use of personal contact goals with intrinsic derivative rewards that are self-motivated (Stewart, Courtright, & Manz, 2011). However, for the staff nurses, the majority of them don't need to face fierce competition. Because of the shortage of nurses, nurses rarely have the opportunity to be fired unless serious nursing errors or medical errors occur. Thus, under the low competition and high-workload environment, the staff nurse may not think much about their work and analyze their behavior of themselves; they will just finish

the daily work as before. Consequently, staff nurses have a lower self-awareness about their work, and then they may lack the ability to manage the desired behaviors.

Another possible reason might be related to job characteristics. Barrick, Mount, and Li (2011) think that job characteristics trigger the individual's motivation through a set of specific personal goals of tasks. This means that the content of the job influences work behavior such as the motivation to set and achieve personal goals. The complex and demanding job of a nurse manager that involves coordinating the work of people with varying skills, education and personalities to provide safe, high-quality patient care (J. Liu et al., 2016). Nurse managers must assume responsibility for staff performance, financial management, resource utilization, and patient outcomes, as well as ensuring that care is delivered according to standards of practice and organizational policy to ensure the unit or department runs smoothly (Jing, 2015). All of these drive the nurse managers improve the self-awareness about their job, set personal goals, trace the progression of their work, and reduce the unpleasant behavior that can hinder the nurse managers to maintain the competence and performance to achieve the desired outcomes. In addition, due to the role model of nurse managers, nurse managers have to cultivate the higher self-awareness with self-punishment and self-observation and manage the behaviors involving necessary but perhaps unpleasant tasks to form the positive impact on staff nurses. Thus, the score of behavior-focused strategies of nurse managers in this study was higher than that of staff nurses.

Natural reward strategies. The results of this study showed that the natural reward strategies had a significant difference between staff nurses and nurse managers ($z = -9.90$, $p < .01$) (Table 4). The natural reward strategies of nurse managers ($\bar{x} = 4.01$, $SD = .54$) showed a higher mean score than the staff nurses ($\bar{x} = 3.53$, $SD = .68$) (Table 4).

One possible explanation of this result might be related to the different task characteristics between staff nurses and nurse managers. Staff nurses need to complete their work under the leadership of nurse manager. At the same time, the majority of clinical nurses' work must comply with the operational norms and standards of a clinical nurse (Puer People's Hospital, 2012b). Besides, the staff nurses follow the doctors' order to implement the nursing care; which causes the nurse to not have any feelings of increased competency, self-control and self-determination. On the contrary, the nurse

manager plays the main role of nursing management, using some organizational forms and methods to conduct, coordinate and control the subordinate to achieve the department goal and nursing goal (Puer People's Hospital, 2012a). Thus, compared with staff nurses, the nurse managers have higher job autonomy. In high-autonomy jobs, individuals have great freedom to decide what behaviors to undertake and greater freedom of decision-making provides individuals with more opportunities and freedom to express their self-leadership orientation (Ho & Nesbit, 2014). All of these stated that the nurse managers could be better motivated and rewarded by the task itself than staff nurses.

Another possible reason might be related to the different pay and respect between staff nurses and nurse managers. It is obvious that the nurse managers have a higher salary, bonuses, compensation, and benefits than the staff nurses. This means that the nurse managers have more enjoyable aspects from their work. In addition, in daily work, nurse managers can get more respect from patients, followers, and doctors. However, for the staff nurse, the China Social Welfare Foundation 919 Nurse Care Program (2017) found that 41.2% of nurses suffered from excessive behavior of patients or family members in the past year, 83.3% of nurses could not obviously feel the respect of patients to nurses. The staff nurse cannot feel the value of their work. This means that the staff nurse cannot get more enjoyable aspects of their work. Thus, the natural rewards of nurse manager seem to be more than that of staff nurses.

Constructive thought pattern strategies. The results of this study showed that the constructive thought pattern strategies had a significant difference between staff nurses and nurse managers ($t = -12.80, p < .01$) (Table 4). The natural reward strategies of nurse managers ($\bar{x} = 4.00, SD = .49$) had a higher mean score than the staff nurses ($\bar{x} = 3.45, SD = .65$) (Table 4).

One possible explanation of this result might be related to the different roles in daily work. The nurse manager is the leader, contactor, companion, supervisor, mediators, and coordinators. They are not only required to be good at communicating with people with different opinions and discerning right and wrong but also have agile thinking and accurate judgment ability to find problems in a timely manner and make correct decisions to cope it freely and work efficiently when in the difficult and challenging situations (Chen, 2002). Nurse managers have to examine the thoughts patterns, confronting and

replacing dysfunctional irrational beliefs and assumptions with a more constructive thought process to solve all kinds of problems and to be a positive thinker. Nurse leaders visualizing specific communication behaviors such as, giving praise, talking to patient's families or negotiating with top management can boost them to use the mental imagery skill (Mokuoane, 2014). Based on the study of Houghton et al. (2003), the difficult or troubling situations can trigger the dysfunctional irrational beliefs and assumptions that occur at both individual and group levels. The obstacle thinkers will emerge and focus on the negative aspects of a challenge situation. The opportunity thinkers, on the other hand, will focus on the opportunities and worthwhile challenges. They regard them as the temporary occurrences that can be overcome if they exert greater effort and stick to it.

For the team, the staff nurses are in a high workload and stressful environment (China Social Welfare Foundation 919 Nurse Care Program, 2017), they can easily become obstacle thinkers. As a team leader, in order to accomplish the target tasks and make sure the team performs, it is necessary to motivate and teach the followers to make the team build the constructive thought patterns with rational beliefs and assumptions and positive self-talk (Houghton et al., 2003). However, compared with nurse managers, the staff nurses' roles were often presented as a practitioner and educator. They are accustomed to abiding by the operating rules and doctors' instructions to carry out nursing activities. The high workload situation reduces the time to care about what they think, and they just make sure they can finish the work. This means that the staff nurses have fewer opportunities to improve the constructive thought pattern strategies compared with the nurse managers.

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CHAPTER 5

Conclusions, Implications, and Recommendations

Conclusions

This chapter presents the conclusions of the study on the basis of the objectives and the findings of the study and the discussions. The implications of the findings and recommendations are also addressed for future research.

The purposes of this descriptive comparative research examined the self-leadership of staff nurses and nurse managers, and compare the self-leadership between the staff nurses and nurse managers in tertiary hospitals, Yunnan province, the People's Republic of China. The multistage random sampling method was used to select samples of 406 staff nurses and 316 nurse managers who worked in the First Affiliated Hospital of KMU, the Second Affiliated Hospital of KMU, The affiliated Yan'an Hospital of KMU, The First People's Hospital of Honghe State, and the Puer People's hospital. The data were collected from February to April of 2019. The instrument was a set of questionnaires consisting of Demographic Data Form and the Revised Self-leadership Questionnaire (RSLQ) developed by Houghton and Neck (2002). The RSLQ consisted of three dimensions. The Cronbach's alpha coefficient of overall RSLQ was .97, and the Cronbach's alpha coefficient of behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies were .95, .87, and .87 among staff nurses, respectively. Among nurse managers, the reliability of RSLQ was .90, and its dimension such as behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies were .75, .54, and .85 respectively. Descriptive statistics, independent t-test, and Mann-Whitney u-test were used for data analysis.

1. In this study, both staff nurses and nurse managers have a similar proportion in some demographic characteristics such as department, gender, and educational level. The largest number of subjects work in the medical department both staff nurses (33.5%) and

nurse managers (30.79%). The vast majority of staff nurses (97.04%) and nurse managers (97.15%) are women. And most of them are married, staff nurse (74.14%) and nurse managers (89.56%). The proportion of staff nurse (79.8%) and nurse manager (92.72%) who hold a bachelor degree has the highest percentage.

2. The staff nurses and nurse managers have a very different demographic data in age, professional title, years of work experience, and employment type. In the age groups, 43.83% of staff nurses are aged between 21-30 years old. However, 49.37% of nurse managers are aged between 31-40 years old. More than half of the staff nurses (51.23%) are senior nurses in the professional title group. For nurse managers, nurses in charge (60.76%) accounted for the largest percentage. In the years of work experience group, staff nurses who have worked for 4-9 years was (38.92%), the largest percentage. But for nurse managers, most of them have worked more than 15 years (73.42%). More than half of the staff nurses are temporary nurses (70.2%). On the contrary, the majority of nurse managers are permanent nurses (9.77%).

3. The mean score of self-leadership and its dimension in staff nurse was lower than nurse managers. For staff nurse, the mean score of overall self-leadership was 3.50 (SD = .59). Behavior-focused strategies, natural reward strategies and constructive thought pattern strategies were 3.53 (SD = .60), 3.53 (SD = .68), 3.45 (SD = .65), respectively. Self-leadership and its dimension were at a moderate level. The mean score of overall self-leadership and its dimension, such as behavior-focused strategies, natural reward strategies and constructive thought pattern strategies among nurse managers were 4.02 (SD = .45), 4.03 (SD = .46), 4.01 (SD = .54) and 4.00 (SD = .49) respectively. Thusly, the self-leadership and its dimension among nurse managers were at a high level.

4. There were significant differences between staff nurse and nurse managers in self-leadership and its dimension. The overall self-leadership had a significant difference between staff nurses and nurse managers ($t = -13.31, p < .01$). The behavior-focused strategies ($t = -12.77, p < .01$), natural reward strategies ($z = -9.90, p < .01$), and constructive thought pattern strategies ($t = -12.80, p < .01$) had a significant difference between staff nurses and nurse managers.

Implications

The findings of this research present the basic information of self-leadership for nursing and hospital administrators under the current situations in five tertiary hospitals of Yunnan Province, the P.R. China.

1. Based on the findings, the staff nurses' self-leadership was at a moderate level while the nurse managers' self-leadership was at a high level. The results of this study indicate that the nurse managers and hospital administrators should pay attention to improve the self-leadership of staff nurses through seminars or workshops. Meanwhile, for the nurse managers, in order to keep the high level of self-leadership, it is necessary to take part in the staff nurses' workshops or seminars as an organizer and share the experience with staff nurses.

2. Nursing and hospital administrators could use the results of this study as basic information to consider the specific strategies to increase the self-leadership skill of staff nurses. The possible strategies could include: 1) guiding staff nurses to set career goals for themselves based on the career ladder of the hospital; 2) cultivating the leadership behavior through a leadership training program to improve staff nurses' self-awareness as a leader; and 3) encourage and openly discuss the beliefs and assumptions by the team to develop and maintain more functional and realistic beliefs and assumptions.

Recommendations

Recommendations for future research studies are as follows:

1. Replicate this study in other types of hospitals or other regions of China.
2. Other personal characteristics such as self-control, self-esteem, emotional balance, and self-determination; which have an impact on self-leadership should be conducted with a correlation study or predictive study.
3. The intervention studies should be conducted among nurses in the future

REFERENCES

- Amundsen, S., & Martinsen, O. L. (2015). Linking empowering leadership to job satisfaction, work effort, and creativity: The role of self-leadership and psychological empowerment. *Journal of Leadership & Organizational Studies*, 22(3), 304-323.
- Anderson, J. S., & Prussia, G. E. (1997). The self-leadership questionnaire: Preliminary assessment of construct validity. *Journal of Leadership Studies*, 4(2), 119-143.
- Arroliga, A. C., Huber, C., Myers, J. D., Dieckert, J. P., & Wesson, D. (2014). Leadership in health care for the 21st century: Challenges and opportunities. *The American Journal of Medicine*, 127(3), 246-249.
- Atefi, N., Abdullah, K. L., Wong, L. P., & Mazlom, R. (2014). Factors influencing registered nurses perception of their overall job satisfaction: A qualitative study. *International Nursing Review*, 61(3), 352-360.
- Avolio, B. J. (2011). *Full range leadership development*. Thousand Oaks, CA: Sage.
- Bandura, A. (1978). Social learning theory of aggression. *Journal of Communication*, 28(3), 12-29.
- Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50(2), 248-287.
- Barber, S. L., Borowitz, M., Bekedam, H., & Ma, J. (2013). The hospital of the future in China: China's reform of public hospitals and trends from industrialized countries. *Health Policy and Planning*, 29(3), 367-378.

- Barrick, M. R., Mount, M. K., & Li, N. (2013). The theory of purposeful work behavior: The role of personality, job characteristics, and experienced meaningfulness. *Academy of Management Review*, 38(1), 132-153.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606.
- Bimray, P. B., & Jooste, K. (2014). A conceptual framework of the resemblance in self-leadership and professional core values of nurses in the South African context. *African Journal for Physical, Health Education, Recreation and Dance*, 1, 197-216
- Burns, D. D. (1980). *Mood therapy: The new approach to feeling good*. New York: Morrow.
- Burns, N., & Grove, S. K. (2005). *The practice of university research: Conduct, critique and utilization*. St. Louis: Elsevier/Saunders.
- Carmeli, A., Meitar, R., & Weisberg, J. (2006). Self-leadership skills and innovative behavior at work. *International Journal of Manpower*, 27(1), 75-90.
- Carver, C. S., & Scheier, M.F. (1981), *Attention and self-regulation: A control theory approach to human behavior*. New York, NY: Springer-Verlag.
- Cautela, J. R. (1969). Behavior therapy and self-control: Techniques and implications. In *Behavior therapy: Appraisal and status* (pp. 323-340). New York: McGraw-Hill.
- Central People's Government of the People's Republic of China. (2011). *Notice on the work arrangement of the pilot reform of public hospitals* [in Chinese]. Retrieved from http://www.gov.cn/zwggk/2011-03/07/content_1818279.htm
- Chang, W. Y., Ma, J. C., Chiu, H. T., Lin, K. C., & Lee, P. H. (2009). Job satisfaction and perceptions of quality of patient care, collaboration and teamwork in acute care hospitals. *Journal of Advanced Nursing*, 65(9), 1946-1955.

- Chen, H., Liu, Y., Wang, J., Chen, X., Liang, M., & Zhang, Z. (2014). Design ideas and characteristics of evaluation standards for tertiary general hospitals, 2011 edition [in Chinese]. *China Health Quality Management*, 21(1), 6-8.
- Chen, J. (2002). Clinical nursing managers in the 21st Century [in Chinese]. *Chinese Journal of Nursing*, 37(3), 204-205.
- Chen, Y. C. (2001). Chinese values, health and nursing. *Journal of Advanced Nursing*, 36(2), 270-273.
- China Social Welfare Foundation 919 Nurse Care Program. (2017). *Investigation on the current situation of nurse group development in China* [in Chinese]. Retrieved from <https://vcbeat.net/OTJkYmVhYWIZOTU0Nzk2ODJkYTZhODc5ZTQwODQzMtA=>
- Cho, K. H. (2003). *The influence of self-leadership about job-satisfaction and outcome of nursing practice* (Unpublished master's thesis). Korea University, Seoul.
- Choi, Y. H., & Kim, H. M. (2014). Effect of self-leadership recognized by newly-employed nurses on job satisfaction: Mediating effect of organizational commitment. *Journal of Korean Academy of Psychiatric and Mental Health Nursing*, 23(4), 242-249.
- Costello, M. L., Brunner, P. W., & Hasty, K. (2002). Preparing students for the empowered workplace: The risks and rewards in a management classroom. *Active Learning in Higher Education*, 3(2), 117-127.
- Cox, J. F. (1993). *The effects of superleadership training on leader behavior, subordinate self-leadership behavior, and subordinate citizenship* (Unpublished doctoral dissertation). University of Maryland, College Park.
- Cui, W., Xuan, M., & Yin, J. (2010). The concept of empowerment and its application in nursing human resource management [in Chinese]. *Chinese Journal of Practical Nursing*, 26(3), 67-70.

- Deci, E. L. (1975). *Intrinsic motivation plenum*. New York: Plenum Press.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Berlin: Springer Science & Business Media.
- Dong, X. (2011). Quality and competence that nursing managers should possess [in Chinese]. *Chinese Medical Guidelines*, 9(28), 191.
- Fu, L. (2017). *Inpatient satisfaction in Z Hospital of Yunnan Province* (Unpublished master's thesis). Yunnan University, China.
- Furtner, M. R., Hiller, L. N., Martini, M., & Sachse, P. (2012). Self-leadership, motivation to lead, transformational leadership and super leadership: A key to organizational success in the 21th Century. *International Journal of Business and Management Tomorrow*, 2(7), 1-8.
- Gao, W. (2009). *Study on the quality of life and its influencing factors of nurses in Kunming tertiary hospital* [in Chinese] (Unpublished doctoral dissertation). Third Military Medical University, China.
- George, B. (2010). *True north: Discover your authentic leadership* (Vol. 143). San Francisco: John Wiley & Sons.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis* (6th ed.). New Jersey: Pearson Educational.
- Hauschildt, K., & Konradt, U. (2012). Self-leadership and team members' work role performance. *Journal of Managerial Psychology*, 27(5), 497-517.
- Hinton, P. R., Brownlow, C., McMurray, I., & Cozens, B. (2004). Using SPSS to analyse questionnaires: Reliability. In *SPSS explained* (pp. 356-366). London: Routledge Taylor & Francis Group.
- Ho, J., & Nesbit, P. L. (2009). A refinement and extension of the self-leadership scale for the Chinese context. *Journal of Managerial Psychology*, 24, 450-476.

- Ho, J., & Nesbit, P. L. (2014). Self-leadership in a Chinese context: Work outcomes and the moderating role of job autonomy. *Group & Organization Management*, 39(4), 389-415.
- Ho, J., & Nesbit, P. L. (2018). Personality and work outcomes: A moderated mediation model of self-leadership and gender. *International Journal of Management Excellence*, 10(2), 1292-1304.
- Houghton, J. D., & Neck, C. P. (2002). The revised self-leadership questionnaire: Testing a hierarchical factor structure for self-leadership. *Journal of Managerial Psychology*, 17(8), 672-691.
- Houghton, J. D., Carnes, A., & Ellison, C. N. (2014). A cross-cultural examination of self-leadership: Testing for measurement invariance across four cultures. *Journal of Leadership & Organizational Studies*, 21(4), 414-430.
- Houghton, J. D., Dawley, D., & DiLiello, T. C. (2012). The Abbreviated Self-Leadership Questionnaire (ASLQ): A more concise measure of self-leadership. *International Journal of Leadership Studies*, 7(2), 216-232.
- Houghton, J. D., Neck, C. P., & Manz, C. C. (2003). We think we can, we think we can, we think we can: The impact of thinking patterns and self-efficacy on work team sustainability. *Team Performance Management: An International Journal*, 9(1/2), 31-41.
- Houghton, J. D., Wu, J., Godwin, J. L., Neck, C. P., & Manz, C. C. (2012). Effective stress management: A model of emotional intelligence, self-leadership, and student stress coping. *Journal of Management Education*, 36(2), 220-238.
- Hoyle, R. H. (1995). *Structural equation modeling: Concepts, issues, and applications*. Thousand Oaks, CA: Sage.
- Jia, J.. (2013). Nurse Leadership and its influencing factors [in Chinese] (Unpublished doctoral dissertation). Hangzhou Normal University.

- Jin, L., Fang, X., Feng, Y., & Dai, Y. (2012). Analysis of job satisfaction of contract nurses in tertiary general hospitals in Yunnan Province and related influencing factors [in Chinese]. *Health Soft Science*, 5, 473-476.
- Jing, Y. (2015). Discussion on the relationship between nursing quality and head nurses' responsibilities [in Chinese]. *Female Health Studies at Home and Abroad*, 3, 42-44.
- Jooste, K., & Cairns, L. (2014). Comparing nurse managers and nurses' perceptions of nurses' self-leadership during capacity building. *Journal of Nursing Management*, 22(4), 532-539.
- Jooste, K., & Le Roux, L. Z. (2014). The practice of self-leadership in personal and professional development of contract nursing staff in the environment of a higher education institution: leadership and management. *African Journal for Physical Health Education, Recreation and Dance*, 20(Suppl. 1), 275-285.
- Jung, M. H., & Koh, M. S. (2012). The effects of preceptor nurses' self-leadership on role recognition and job satisfaction. *Journal of Korean Academy of Nursing Administration*, 18(2), 146-154.
- Kanfer, F. H. (1970). Self-regulation: Research, issues, and speculations. *Behavior Modification in Clinical Psychology*, 74, 178-220.
- Kang, Y. S., Choi, Y. J., Park, D. L., & Kim, I. J. (2010). A study on nurses' self-leadership, self esteem, and organizational effectiveness. *Journal of Korean Academy of Nursing Administration*, 16(2), 143-151.
- Kazan, A. L. (2000). *Exploring the concept of self-leadership: Factors impacting self-leadership of Ohio Americorps members* (Unpublished doctoral dissertation). The Ohio State University.

- Kim, H. S. (2003). *The relationship between self-leadership and job satisfaction of middle school teacher* (Unpublished master's thesis). Soongil University, Seoul, Korea.
- Li, C., Zeng, T., Yang, Y., & Wang, Y. (2016). Challenge and reflect of nursing stratification management in China [in Chinese]. *Nursing Management in China*, 16(10), 1430-1433.
- Li, L., & Fu, H. (2017). China's health care system reform: Progress and prospects. *The International Journal of Health Planning and Management*, 32(3), 240-253.
- Li, L. Y., Li, L., Du, J., Zhang, X., & Chen, L. (2016). The status and influencing factors of self-leadership among undergraduate nursing students in Beijing [in Chinese]. *Chinese Journal of Nursing*, 51(8), 967-970.
- Liu, J., Zhao, B., Li, Y., Wang, H., Tian, S., & Zhang, X. (2016). Research status of competency model for head nurses [in Chinese]. *Chinese Journal of Nursing*, 5, 609-613.
- Liu, Y., Jiang, Y., Liu, W., Liu, Y., & Tang, Y. (2016). The survival status and self-management strategies of contract nurses in hospital [in Chinese]. *Today's Health*, 15(8), 24-27.
- Lovelace, K. J., Manz, C. C., & Alves, J. C. (2007). Work stress and leadership development: The role of self-leadership, shared leadership, physical fitness and flow in managing demands and increasing job control. *Human Resource Management Review*, 17(4), 374-387.
- Mahoney, M. J., & Arnkoff, D. B. (1979). *Self-management: Theory, research and application*. Pennsylvania State University.
- Manz, C. C. (1983). *The art of self-leadership: Strategies for personal effectiveness in your life and work*. Englewood Cliffs, NJ: Prentice-Hall.

- Manz, C. C. (1986). Self-leadership: Toward an expanded theory of self-influence processes in organizations. *Academy of Management Review*, 11(3), 585-600.
- Manz, C. C. (1992), *Mastering Self-leadership: Empowering yourself for personal excellence*. Englewood Cliffs, NJ: Prentice-Hall.
- Manz, C. C., & Neck, C. P. (1991). Inner leadership: Creating productive thought patterns. *Academy of Management Perspectives*, 5(3), 87-95.
- Manz, C. C., & Neck, C. P. (1999). *Mastering self-leadership: Empowering yourself for personal excellence* (2nd ed.). Upper Saddle River, NJ: Prentice-Hall.
- Manz, C. C., & Neck, C. P. (2004), *Mastering self-leadership: Empowering yourself for personal excellence* (3rd ed.). Upper Saddle River, NJ: Pearson Prentice-Hall.
- Manz, C. C., & Sims, H. P., Jr. (1980). Self-management as a substitute for leadership: A social learning theory perspective. *Academy of Management Review*, 5(3), 361-367.
- Manz, C. C., & Sims, H. P., Jr. (1991). Superleadership: Beyond the myth of heroic leadership. *Organizational Dynamics*, 19(4), 18-35.
- Manz, C. C., & Sims, H. P., Jr. (2001). *The new superleadership: Leading others to lead themselves*. San Francisco: Berrett-Koehler.
- Megheirkouni, M. (2018). Self-leadership strategies and career success: insight on sports organizations. *Sport, Business and Management: An International Journal*, 8(4), 393-409.
- Milutinovi, D., Moluolubovi, B., Brkić, N., & Prokeš, B. (2012). Professional stress and health among critical care nurses in Serbia. *Archives of Industrial Hygiene and Toxicology*, 63, 171-180.

- Min, S., Jeong, Y. J., Kim, H. S., Ha, S. Y., Ha, Y. J., & Kim, E. A. (2009). The moderating effect of self-leadership in relationship between self-image and work performance of nurses. *Journal of Korean Academy of Nursing Administration*, 15(3), 355-364.
- Ministry of Health of China. (1989). *The trial draft of hospital classification management standards* [in Chinese]. Retrieved from <http://www.hudong.com/wiki/%E3%80%A%E7%AE>
- Ministry of Health of China. (2016). *Number of national medical and health institutions up to the end of July in 2016 Beijing* [in Chinese]. Retrieved from <http://www.nhfjx.gov.cn/mohwsbwstjxxzx/s7967/201609/f48e957735904485S6a\5c55c8007517.shtml>.
- Ministry of Health. (2013). *Rules for the implementation of assessment standards for Tertiary General Hospitals* (2013 edition) [in Chinese].
- Mokuoane, M. L. (2014). *The effect of work-stress and emotional intelligence on self-leadership amongst nurses in leadership positions in the Ministry of Health and Social Welfare in Lesotho* (Unpublished doctoral dissertation). University of the Free State.
- Moradpour, S., Abedi, H. A., & Bahonar, A. (2017). Investigating the relationship between self-leadership and resistance to organizational changes in the nursing managers of hospitals affiliated with Isfahan University of Medical Sciences, 2015. *Annals of Tropical Medicine and Public Health*, 10(5), 1333-1340.
- Mrayyan, M. T. (2006). Jordanian nurses' job satisfaction, patients' satisfaction and quality of nursing care. *International Nursing Review*, 53(3), 224-230.
- Neck, C. P., & Manz, C. C. (1992). Thought self-leadership: The influence of self-talk and mental imagery on performance. *Journal of Organizational Behavior*, 13(7), 681-699.

- Neck, C. P., & Manz, C. C. (1996). Thought self-leadership: The impact of mental strategies training on employee cognition, behavior, and affect. *Journal of Organizational Behavior*, 17(5), 445-467.
- Norris, S. E. (2008). An examination of self-leadership. *Emerging Leadership Journeys*, 1(2), 43-61.
- Nunnally, J. C., & Bernstein, I. H. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory (McGraw-Hill Series in Psychology)* (Vol. 3). New York: McGraw-Hill.
- Park, J., Yun, E., & Han, S. (2009). Factors influencing nurses' organizational citizenship behavior. *Journal of Korean Academy of Nursing*, 39(4), 499-507.
- Parsons, T. (1951). *The social system*. New York, NY: Free Press.
- Prussia, G. E., Anderson, J. S., & Manz, C. C. (1998). Self-leadership and performance outcomes: The mediating influence of self-efficacy. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 19(5), 523-538.
- Puer People's Hospital. (2012a). *Handbook for nurse managers in Puer People's Hospital* [in Chinese]. China.
- Puer People's Hospital. (2012b). *Handbook for nursing staff in Puer People's Hospital* [in Chinese]. In The department of nursing (pp. 64-69). China.
- Qiu, S. (2011). The application of motivation art in nursing management [in Chinese]. *Chinese Journal of Misdiagnosis*, 11(2), 369-369.
- Ricketts, K., Carter, H., Place, N., & McCoy, T. (2012). A look inside: Self-leadership perceptions of extension educators. *Journal of Extension*, 50(5), 5FEA3.

- Ross, S. (2014). A conceptual model for understanding the process of self-leadership development and action-steps to promote personal leadership development. *Journal of Management Development*, 33(4), 299-323.
- Şahin, F. (2011). The interaction of self-leadership and psychological climate on job performance. *African Journal of Business Management*, 5(5), 1787-1794.
- Seligman, M. E. P. (1991). *Learned optimism*. New York, NY: Alfred Knopf.
- Shang, J., You, L., Ma, C., Altares, D., Sloane, D. M., & Aiken, L. H. (2014). Nurse employment contracts in Chinese hospitals: Impact of inequitable benefit structures on nurse and patient satisfaction. *Human Resources for Health*, 12(1), 2-18.
- Stewart, G. L., Courtright, S. H., & Manz, C. C. (2011). Self-leadership: A multilevel review. *Journal of Management*, 37(1), 185-222.
- Sun, R., & Han, G. (2011). Discussion on the organization structure of medical quality management in tertiary hospitals [in Chinese]. *Jiangsu Health Service Management*, 3, 42-43.
- Taştan, S. B. (2013). The influences of participative organizational climate and self-leadership on innovative behavior and the roles of job involvement and proactive personality: A survey in the context of SMEs in Izmir. *Procedia-Social and Behavioral Sciences*, 75, 407-419.
- Thoresen, C. E., & Mahoney, M. J. (1974). *Behavioral self-control*. New York: Holt, Rinehart and Winston.
- Twaddle, A. C. (Ed.). (2002). *Health care reform around the world*. Westport, CT: Greenwood.
- Ugurluoglu, O., Saygılı, M., Ozer, O., & Santas, F. (2015). Exploring the impacts of personal factors on self-leadership in a hospital setting. *The International Journal of Health Planning and Management*, 30(1), 3-13.

- Van Zyl, E., Mokuoane, M., & Nel, P. (2017). The effect of work stress and emotional intelligence on self-leadership among nurses in leadership positions in the Lesotho Ministry of Health and Social Welfare. *Africa Journal of Nursing and Midwifery*, 19(1), 88-104.
- Wang, J. (2016). *Nurses in China are short of millions due to the low salaries, which makes it impossible to retain them*. Retrieved from <http://politics.people.com.cn/n1/2016/0520/c1001-28365329.html>
- Wang, W. (2014). *Investigation and development strategies of college students' self-leadership in Hui Areas of China* [in Chinese] (Unpublished doctoral dissertation). Central China Normal University, Wuhan, China.
- Wang, Z. (2014). Talking about the impact of the implementation of the Personnel Management on Public Institutions [in Chinese]. *Reform and Opening*, 24, 95-96.
- Watson, L. (2004). Self-leadership: Becoming an exceptional leader. *Radiologic Technology*, 75(6), 457-471.
- Won, H. J., & Cho, S. H. (2013). A review of research on self-leadership in nurses'. *Journal of Korean Academy of Nursing Administration*, 19(3), 382-393.
- Wu, X., Teng, Y., & Wu, L. (2017). The effect of stratified management of nursing personnel on nurses job satisfaction [in Chinese]. *Nursing and Rehabilitation*, 10, 85-87.
- Wynne, R. (2003). Clinical nurses' response to an environment of health care reform and organizational restructuring. *Journal of Nursing Management*, 11(2), 98-106.
- Yamane, T. (1973). *Statistics: An introductory analysis*. New York: Harper & Row.
- Yang, M., Ge, M., & Yang, X. (2018). Correlation between self-leadership and self-efficacy of nursing students [in Chinese]. *Nursing Study*, 11(32), 1753-1754.

- Yang, S. (2014). On the concept of patient-centered nursing service [in Chinese]. *Contemporary Nurses: Academic Edition (Mid-term Journal)*, 1, 188-189.
- Yip, W. C. M., Hsiao, W. C., Chen, W., Hu, S., Ma, J., & Maynard, A. (2012). Early appraisal of China's huge and complex health-care reforms. *The Lancet*, 379(9818), 833-842.
- Yu, S., & Ko, Y. (2017). Communication competency as a mediator in the self-leadership to job performance relationship. *Collegian*, 24(5), 421-425.
- Yun, H., Jie, S., & Anli, J. (2010). Nursing shortage in China: State, causes, and strategy. *Nursing Outlook*, 58(3), 122-128.
- Yunnan Health and Family Planning Commission. (2017). *Circular of Yunnan Health and Family Planning Commission on the issue of Yunnan nursing development plan (2016-2020)* [in Chinese]. Retrieved from <http://www.lcswsjsw.net/a/guihuaxinxi/2017/1225/1204.html>
- Zhang, X., Liu, Y., Liang, G., Tian, Y., & Yang, S. (2011). Discussion on the implementation of the system of appointment of new head nurses for administrative posts in tertiary A hospitals [in Chinese]. *Jilin Medical Science*, 32(17), 3612-3612.
- Zhao, L., & Cao, G. (2004). Head nurse quality and nursing management skill [in Chinese]. *Chinese Nursing Management*, 4(3), 53-55.
- Zhao, M., & Zhang, X. (2010). Analysis of related factors about employed nurses departed from post and new measures for management [in Chinese]. *Nursing Research*, 24, 915-916.



APPENDICES

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APPENDIX A

The Research Instrument

The Research Instrument

Introduction: This questionnaire is used to collect information on self-leadership among nurses in tertiary hospitals in Yunnan Province. The questionnaire consists of two parts, the first part: Demographic Questionnaire; the second part: the Revised Self-leadership Questionnaire. Please fill out the following questionnaire independently, which may take up to 10-20 minutes of your time. Your answer is anonymous and confidential, please try to complete the questionnaire objectively and truthfully.

Part I: Demographic Data Form

Instructions: Please mark “√” in the space or fill the blanks depend on your situation.

1. The name of your working hospital

- The First Affiliated Hospital of KMU The Second Affiliated Hospital of KMU
 The Affiliate Yan’an Hospital of KMU The First people’s hospital of Honghe
 The Puer people’s hospital

2. Working department

- Medical Department Surgical Department
 Pediatric Department Obstetrics and Gynecology (OB-GYN)
 Operating Room (OR) Emergency Room(ER)
 ICU OPD Others Please identify_____

3. Your gender

- Male Female

4. Age: _____

5. Marital status

- Single Married Divorced Separation or Widowed

6. Education level

- Diploma Associate degree Bachelor degree
 Master degree Doctoral degree

7. Professional title

- Junior nurses Senior nurse Nurse in Charge
 Assistant professor nurse Professor nurse

8. Years of work experience

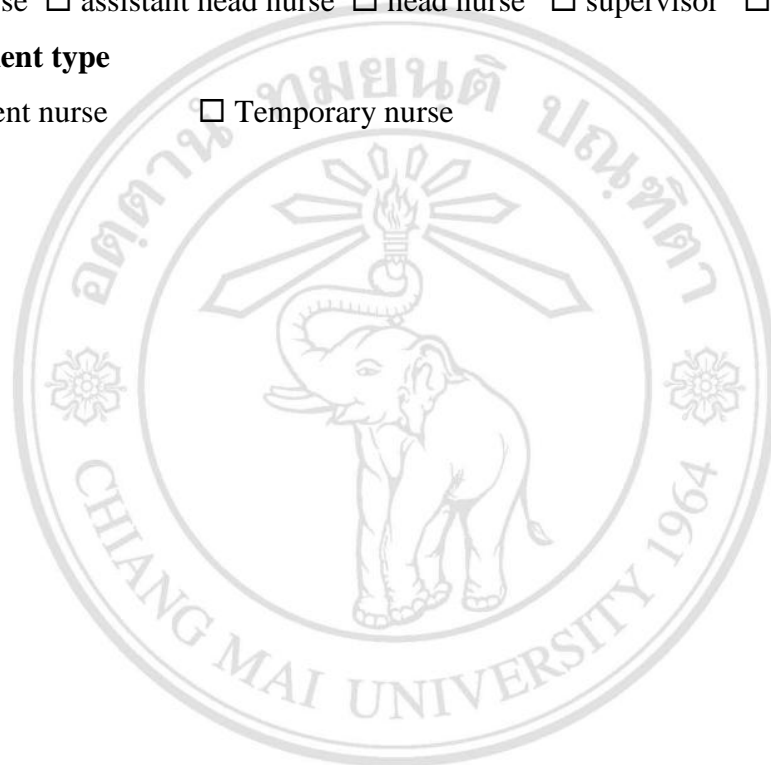
- ≤ 3years 4-9years 10-15 years >15 years

9. Present job position

- staff nurse assistant head nurse head nurse supervisor director

10. Employment type

- Permanent nurse Temporary nurse



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调查问卷

引言：本组问卷用于在云南省三级甲等综合医院的护士群体中收集自我领导相关资料。问卷包括两部分，第一部分：人口统计学问卷，第二部分：自我领导量表。请您独立地完成以下问卷的填写，这可能会占用您10—20分钟的时间。您的回答是匿名并且保密的，请您尽量客观、真实地完成问卷中的问题。

第一部分：人口统计学资料

请在符合您目前情况的描述前打“√”或是在横线处填入相应内容。

1. 工作单位：

- 昆明医科大学第一附属医院 昆明医科大学第二附属医院
昆明医科大学附属延安医院 红河州第一人民医院
普洱市人民医院

2. 工作科室

- 内科 外科 儿科 妇产科 手术室 急诊科 重症监护室
门诊部 其它（请说明）

2. 性别：

- 男 女

3. 年龄：_____岁

4. 婚姻状况：

- 单身 已婚 离异、丧偶或分居

5. 教育程度：

- 中专 大专 本科 硕士 博士

6. 职称：

- 护士 护师 主管护理师 副主任护师 主任护师

7. 工作年限

- ≤3 年 4-9 年 10-15 年 >15 年

8. 目前职位

- 护士 副护士长（科室组长） 护士长 大科护士长 护理部主任

9. 聘用类型

- 编制护士
- 合同护士



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Part II: Revised self-leadership questionnaire (RSLQ)

Instructions: The following 35 items are descriptions of self-leadership for nurses. Please read through each entry carefully and try to decide how true the statement is in describing you.

From left to right are "not at all accuracy = 1"; "somewhat accurate =2 "; "a little accuracy =3 "; "mostly accuracy = 4 "; "completely accuracy = 5 "; please check according to your actual situation

Items	No at all Accuracy	Somewhat Accuracy	A little Accuracy	Mostly Accuracy	Completely accuracy
1. I use my imagination to picture myself performing well on important tasks.					
2. I establish specific goals for my own performance.					
3. Sometimes I find I'm talking to myself (out loud or in my head) to help me deal with difficult problems I face.					
4. When I do an assignment especially well, I like to treat myself to some thing or activity I especially enjoy.					
.					
.					
.					
.					
.					
.					
34. I write specific goals for my own performance					
35. I find my own favorite ways to get things done.					

第二部分

说明：以下35项是对护士自我领导的描述。请仔细阅读每个条目，并尝试确定该陈述对您的情况描述有多正确。从左到右是“完全不准确= 1”；“较为不准确= 2”；“有点准确= 3”；“较为准确= 4”；“完全准确= 5”；请根据您的实际情况勾选或标记。

题目	完全 不 准 确	较 为 不 准 确	有 点 准 确	较 为 准 确	完 全 准 确
1. 我会想象自己在重要任务中表现良好。					
2. 我会为自己的工作制定具体的目标。我会为自己的表现制定具体的目标					
3. 有时我会和自己对话（说出来或在心里）以帮我处理当前面临的难题。					
4. 当我出色地完成一项任务时，我喜欢用一些自己喜欢的东西或活动来奖励自己。					
5. 在面临困境的时候，我总会坚守信念和责任。					
.					
.					
.					
.					
.					
.					
.					
.					
34. 我会为自己的表现制定具体的目标					
35. 我找到了自己喜欢的完成任务的方式					

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APPENDIX B

Permission letter for using the Revised Self-Leadership Questionnaire (RSLQ)

From : Jeff.Houghton@mail.wvu.edu At 15/8/2018 2:59 AM

TO: 1301141130 <1301141130@qq.com>

Dear jinyan Liu,

Thanks for your interest in self-leadership! Your research topic sounds very interesting and you are certainly welcome to use either the Revised Self-Leadership Questionnaire (RSLQ) or the Abbreviated Self-Leadership Questionnaire (ASLQ) in your work. We ask only that you cite our work appropriately and share your results, especially any scale reliability data. I have attached a .pdf file containing a copy of the JMP article (Houghton & Neck, 2002) in which we published the RSLQ and a .pdf file containing a copy of the IJLS article (Houghton et al., 2012) in which we published the ASLQ. I have also attached two MS Word documents containing both scales for your convenience.

As you will see from the papers, you can calculate a score for each of the SL strategy dimensions using the RSLQ (behavior focused, natural reward and constructive thought) or an overall score for self-leadership using either scale. There's no magic scoring formula...you can just use the items the best way they fit within your research design. I usually just total all of the items when I want to get an overall score for self-leadership. But it's a large number...usually somewhere in the 70 to 140 range for the RSLQ or in the 9 to 45 range for the ASLQ. You can also divide by the total number of items to convert the overall SL score back to a 5-point scale. This may be desirable, especially if you measure your other constructs with a similar metric.

Self-leadership item responses tend to be skewed in a positive direction. The average responses tend to be in the 3-4 range on a 5-point scale. Few people choose 1 on any of the items. Based on mean responses and standard deviations for the RSLQ across multiple samples, I think the actual range of overall SL scores would be 70 - 175 with a midpoint of 122.5. Hence you could say that those scoring over 122 would be high in SL while those scoring lower than 122 would be low in SL. Alternately, you could use the following ranges: 70 - 105 low SL, 105 - 140 moderate SL, and 140 - 175 high SL. You might also choose to create ranges based on what you find in your own data: find the actual range of scores and then find the midpoint (halves, high-low) or terciles (thirds, high-med-low).

Finally, it is not appropriate to use the three dimensions of the ASLQ in isolation; the scale should be used only as a global measure of SL. If you are interested in any of the sub-dimensions of SL, the full RSLQ should be used.

I have also attached a file containing an updated list of self-leadership references that may be helpful to you. Please let me know if you have any questions about the RSLQ, the ASLQ, or self-leadership in general. I wish you all the best with your research endeavors.

Kind regards,

Jeff Houghton

Jeffery D. Houghton, Ph.D.

Associate Professor of Management

West Virginia University

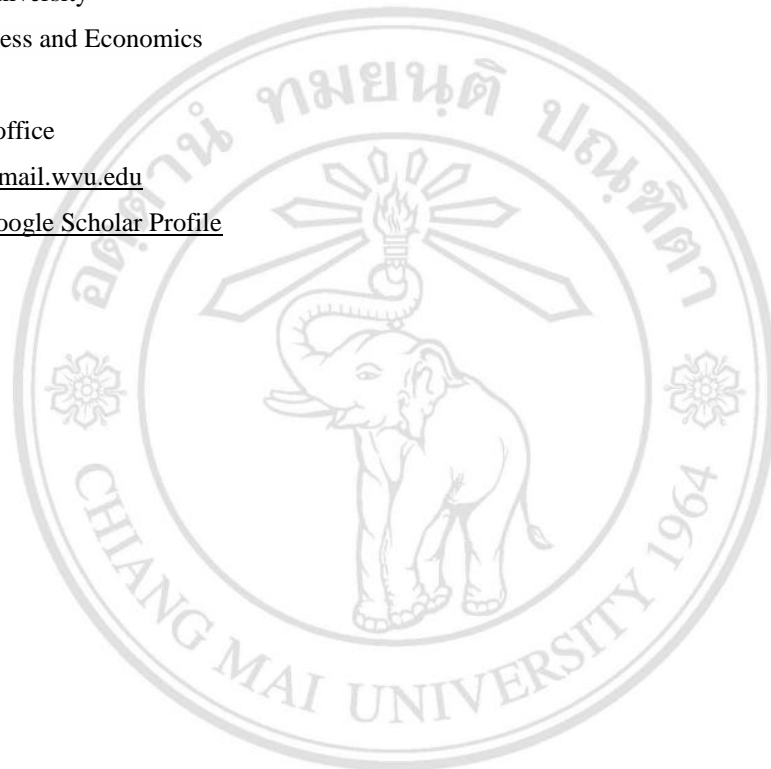
College of Business and Economics

P.O. Box 6025

(304) 293-7933 office

Jeff.Houghton@mail.wvu.edu

Check out my [Google Scholar Profile](#)



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At 2018-8-11 12:52:55, "Jinyan Liu" <1301141130@qq.com > wrote:

TO: To: Jeffery Houghton

Dear Associate Professor Dr.Jeffery D.Houghton :

My name is jinyan Liu. I am Chinese. Now I am a master degree student in Faculty of Nursing, Chiang Mai University. I am very interested in self-leadership. So I want to use self-leadership as one of variables for my thesis. After I did the literature review, I decided to use the revised self-leadership questionnaire (RSLQ) that developed by you and Associate Professor Dr. Christopher P. Neck as the measurement tool. I would like to get your permission to use this questionnaire. May I use this measurement tool?

In addition, I would like to ask you a few questions about RSLQ. Firstly, the reliability of these three dimensions (behavior focused strategies, natural reward strategies and constructive thought pattern strategies) can be combined to the general reliability of self-leadership or not? secondly, based on the literature review, Until now no generalized scoring from previously collected RSLQ data is available, no existing benchmark or standard of "high" or "low" self-leadership as determined by the RSLQ exist. Can this questionnaire be graded into different level? If it can, what standard or criteria should I use?

At last, thank you! Happy every day.

Your loyal reader

Jinyan Liu

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APPENDIX C

Permission Letter for using the Chinese Version of RSLQ

发件人: "kwlu" <kwlu@vip.sina.com>;
发送时间: 2018年11月26日(星期一) 下午5:59
收件人: "1301141130" <1301141130@qq.com>;
主题: 回复: 自我领导中文问卷

刘老师好！

王雯移民国外了。

您写一份正式的签字的申请书给我，我授权。

谢谢。

All best wishes!

恭祝

万事胜意！

鲁卫群/鲁子问 Kwesting Lu

中国民族师范教育研究中心/兴义民族师范学院

Centre for Research on Normal Education for Ethnic Minorities in China

at Xingyi Normal University for Ethnic Minorities

电子信箱(email) : kwlu@vip.sina.com

电话 (Tel) : 86 - 13910175915


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APPENDIX D

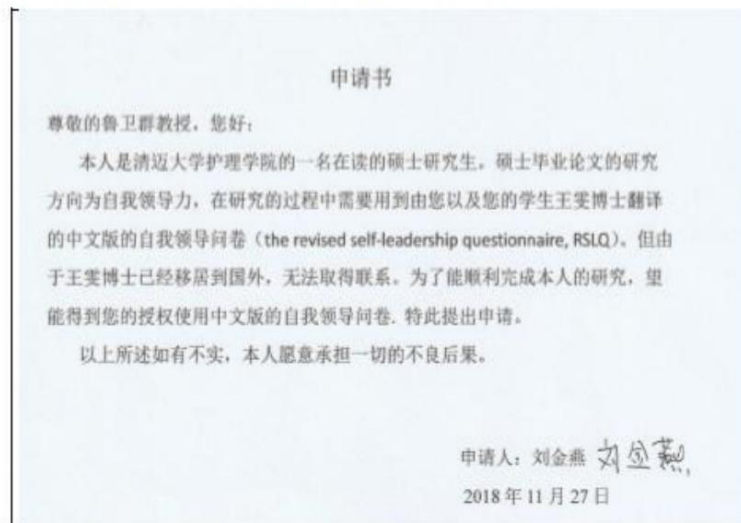
Permission Letter for Testing Reliability

同意书

泰国清迈大学护理学院硕士研究生刘金燕同学：

你的以下申请已经收到，特同意你使用自我领导问卷。

请在使用中注明出处，并将使用成果（学位论文与发表论文）在答辩或发表后一个月交与我存查。若一个月内未交存查，我们将撤销本函赋予你的使用权益。



特此复函。

2018年11月28日

发件人：1301141130
发送时间：2018-11-23 15:12
收件人：kwlu
主题：自我领导中文问卷

鲁卫群教授，您好：

我是清迈大学护理学院在读的一名硕士研究生，我的名字叫刘金燕。我的毕业论文的研究方向为自我领导，在这项研究的过程中需使用您和您的学生翻译的中文版的自我领导问卷revised self-leadership questionnaire(RSLQ),王莹. (2014). 我国回族地区高校学生自我领导力调查与发展策略研究 (Doctoral dissertation, 武汉: 华中师范大学). 我希望能得到您和您学生的帮助同意我使用此问卷，从而继续我的研究。

另外，我通过很多方式找了王莹博士的联系方式，都毫无结果，您能不能给我提供一下她的联系方式，以便我能联系到她，获得她的允许。非常感谢您。

此致
敬礼
刘金燕

APPENDIX E

Permission Letter for Data Collection

<p>Faculty of Nursing Chiang Mai University</p>  <p>คณะพยาบาลศาสตร์ มหาวิทยาลัยเชียงใหม่</p>	<p>Ref.No.6593 (7)/1062</p> <p>Mrs.Meng Yuexian, The First People's Hospital of Qujing The People's Republic of China</p> <p>February 6, 2019</p> <p>Dear Mrs.Meng Yuexian,</p> <p>Mrs.Liu Jinyan, Student Code 601235806, is a student in the master program in Nursing Administration at the Faculty of Nursing, Chiang Mai University. Her thesis entitled "Self-leadership of Nurses in Tertiary Hospitals, Yunnan Province, the People's Republic of China." has been approved by the Faculty of Nursing Graduate Committee. She is conducting her thesis under the guidance of her advisors, Assist. Professor. Dr. Bunpitcha Chitptakdee and Assist. Professor. Dr.Thitinut Akkadechanunt. She would like to collect data from 10-30 staff nurses and 10-30 nurse managers at The First People's Hospital of Qujing in February 2019. Data will be collected using Demographic Data Form and the Revised Self-leadership Questionnaire. The results from this process will be used to test the quality of the instruments.</p> <p>The Faculty of Nursing, Chiang Mai University would like to request permission for student to collect data at your hospital in order to ensure the reliability of the instruments. All data will be collected by the student.</p> <p>Thank you in advance for considering this request.</p> <p>Yours sincerely,</p> <p></p> <p>Assistant Professor Thane Kaewthummanukul, PhD, RN Associate Dean for Graduate Studies and Research Deputy Dean, Faculty of Nursing, Chiang Mai University</p> 		
<p>Address 110 Inthavaroros Road, Sriphum, Muang, Chiang Mai, 50200, Thailand 110 ถนนอินทวารวโรส ตำบลศรีภูมิ อำเภอเมือง จังหวัดเชียงใหม่ 50200</p>	<p>Telephone +66 53 945 012</p>	<p>Fax +66 53 217 145</p>	<p>Website www.nurse.cmu.ac.th</p>

Faculty of Nursing
Chiang Mai University



คณะพยาบาลศาสตร์
มหาวิทยาลัยเชียงใหม่

Ref.No.6593 (7)/1041

Mrs.Mao Hui,
Director of Nursing Department
The Puer People's Hospital
People's Republic of China

February 6, 2019

Dear Mao Hui,

Mrs. Liu Jinyan, Student Code 601235806, is a master degree student in Nursing Administration at the Faculty of Nursing, Chiang Mai University, Thailand. She is ready to begin data collection for her master thesis on "Self-leadership of Nurses in Tertiary Hospitals, Yunnan Province, the People's Republic of China." under the guidance of her advisors, Assistant Professor. Dr. Bunpitcha Chitptakdee and Assistant Professor. Dr.Thitinut Akkadechanunt. Her study has been approved by our Research Ethics Committee.

Mrs. Liu Jinyan will collect data from nurses from several hospitals in Yunnan from February – March 2019. The data collection instruments include: 1. Demographic Data Form; 2. The Revised Self-leadership Questionnaire. Data collected from all hospitals will be analyzed and reported in aggregate. All data will be reported across settings and findings for individual hospitals will not be provided.

The Faculty of Nursing, Chiang Mai University would like to request permission for Mrs. Liu Jinyan to engage in data collection at your hospital. The number of participants from your hospital will be 143 including 89 staff nurses and 54 nurse managers. We believe that her topic is of great interest and the data gained from her study will be valuable to hospitals in Yunnan and throughout China. Your assistance with this project would be greatly appreciated. Thank you for your consideration of this request.

Yours sincerely,

Asst. Prof. Thanee Kaewthummanukul, PhD, RN
Associate Dean for Graduate Studies and Research
Deputy Dean
Faculty of Nursing, Chiang Mai University



Address
110 Inthavaroros Road, Sriphum, Muang, Chiang Mai, 50200, Thailand
110 ถนนอินทวารวโรส อำเภอศรีภูมิ จังหวัดเชียงใหม่ 50200

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Faculty of Nursing
Chiang Mai University

Ref.No.6593 (7)/1045



Mrs.Liu Xuelian,
Director of Nursing Department
The Affiliated Yan'an hospital of Kunming Medical University
People's Republic of China

คณะพยาบาลศาสตร์
มหาวิทยาลัยเชียงใหม่

February 6, 2019

Dear Mrs.Liu Xuelian,

Mrs. Liu Jinyan, Student Code 601235806, is a master degree student in Nursing Administration at the Faculty of Nursing, Chiang Mai University, Thailand. She is ready to begin data collection for her master thesis on "Self-leadership of Nurses in Tertiary Hospitals, Yunnan Province, the People's Republic of China." under the guidance of her advisors, Assistant Professor. Dr. Bunpitcha Chitptakdee and Assistant Professor. Dr.Thitinut Akkadechanunt. Her study has been approved by our Research Ethics Committee.

Mrs. Liu Jinyan will collect data from nurses from several hospitals in Yunnan from February – March 2019. The data collection instruments include: 1. Demographic Data Form; 2. The Revised Self-leadership Questionnaire. Data collected from all hospitals will be analyzed and reported in aggregate. All data will be reported across settings and findings for individual hospitals will not be provided.

The Faculty of Nursing, Chiang Mai University would like to request permission for Mrs. Liu Jinyan to engage in data collection at your hospital. The number of participants from your hospital will be 165 including 85 staff nurses and 80 nurse managers. We believe that her topic is of great interest and the data gained from her study will be valuable to hospitals in Yunnan and throughout China. Your assistance with this project would be greatly appreciated. Thank you for your consideration of this request.

Yours sincerely,

Asst. Prof. Thane Kaewthummanukul, PhD, RN
Associate Dean for Graduate Studies and Research
Deputy Dean
Faculty of Nursing, Chiang Mai University



Address

110 Inthavaroros Road, Sriphum, Muang, Chiang Mai, 50200, Thailand
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Faculty of Nursing
Chiang Mai University

Ref.No.6593 (7)/ 1039



Mrs.Zhang Lihong,
Director of Nursing Department
The First People's Hospital of Honghe State
People's Republic of China

คณะพยาบาลศาสตร์
มหาวิทยาลัยเชียงใหม่

February 6, 2019

Dear Mrs.Zhang Lihong,

Mrs. Liu Jinyan, Student Code 601235806, is a master degree student in Nursing Administration at the Faculty of Nursing, Chiang Mai University, Thailand. She is ready to begin data collection for her master thesis on "Self-leadership of Nurses in Tertiary Hospitals, Yunnan Province, the People's Republic of China." under the guidance of her advisors, Assistant Professor. Dr. Bunpitcha Chitptakdee and Assistant Professor. Dr.Thitinut Akkadechanunt. Her study has been approved by our Research Ethics Committee.

Mrs. Liu Jinyan will collect data from nurses from several hospitals in Yunnan from February – March 2019. The data collection instruments include: 1. Demographic Data Form; 2. The Revised Self-leadership Questionnaire. Data collected from all hospitals will be analyzed and reported in aggregate. All data will be reported across settings and findings for individual hospitals will not be provided.

The Faculty of Nursing, Chiang Mai University would like to request permission for Mrs. Liu Jinyan to engage in data collection at your hospital. The number of participants from your hospital will be 81 including 52 staff nurses and 29 nurse managers. We believe that her topic is of great interest and the data gained from her study will be valuable to hospitals in Yunnan and throughout China. Your assistance with this project would be greatly appreciated. Thank you for your consideration of this request.

Yours sincerely,

Asst. Prof. Thanee Kaewthummanukul, PhD, RN
Associate Dean for Graduate Studies and Research
Deputy Dean
Faculty of Nursing, Chiang Mai University



Address

110 Inthavaroros Road, Sriphum, Muang, Chiang Mai, 50200, Thailand
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Faculty of Nursing
Chiang Mai University

Ref.No.6593 (7)/1043



Mrs. Tian Ying,
Director of Nursing Department
The First Affiliated Hospital of Kunming Medical University
People's Republic of China

คณะพยาบาลศาสตร์
มหาวิทยาลัยเชียงใหม่

February 6, 2019

Dear Mrs. Tian Ying,

Mrs. Liu Jinyan, Student Code 601235806, is a master degree student in Nursing Administration at the Faculty of Nursing, Chiang Mai University, Thailand. She is ready to begin data collection for her master thesis on "Self-leadership of Nurses in Tertiary Hospitals, Yunnan Province, the People's Republic of China." under the guidance of her advisors, Assistant Professor. Dr. Bunpitcha Chitptakdee and Assistant Professor. Dr.Thitinut Akkadechanunt. Her study has been approved by our Research Ethics Committee.

Mrs. Liu Jinyan will collect data from nurses from several hospitals in Yunnan from February – March 2019. The data collection instruments include: 1. Demographic Data Form; 2. The Revised Self-leadership Questionnaire. Data collected from all hospitals will be analyzed and reported in aggregate. All data will be reported across settings and findings for individual hospitals will not be provided.

The Faculty of Nursing, Chiang Mai University would like to request permission for Mrs. Liu Jinyan to engage in data collection at your hospital. The number of participants from your hospital will be 272 including 150 staff nurses and 122 nurse managers. We believe that her topic is of great interest and the data gained from her study will be valuable to hospitals in Yunnan and throughout China. Your assistance with this project would be greatly appreciated. Thank you for your consideration of this request.

Yours sincerely,

Asst. Prof. Thane Kaewthummanukul, PhD, RN
Associate Dean for Graduate Studies and Research
Deputy Dean
Faculty of Nursing, Chiang Mai University



Address

110 Inthavaroros Road, Sripum, Muang, Chiang Mai, 50200, Thailand
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Faculty of Nursing
Chiang Mai University



คณะพยาบาลศาสตร์
มหาวิทยาลัยเชียงใหม่

Ref.No.6593 (7)/ 1036

Mrs. Yang Mingying,
Director of Nursing Department
The Second Affiliated Hospital of Kunming Medical University
People's Republic of China

February 6, 2019

Dear Mrs. Yang Mingying,

Mrs. Liu Jinyan, Student Code 601235806, is a master degree student in Nursing Administration at the Faculty of Nursing, Chiang Mai University, Thailand. She is ready to begin data collection for her master thesis on "Self-leadership of Nurses in Tertiary Hospitals, Yunnan Province, the People's Republic of China." under the guidance of her advisors, Assistant Professor. Dr. Bunpitcha Chitptakdee and Assistant Professor. Dr. Thititnut Akkadechanunt. Her study has been approved by our Research Ethics Committee.

Mrs. Liu Jinyan will collect data from nurses from several hospitals in Yunnan from February – March 2019. The data collection instruments include: 1. Demographic Data Form; 2. The Revised Self-leadership Questionnaire. Data collected from all hospitals will be analyzed and reported in aggregate. All data will be reported across settings and findings for individual hospitals will not be provided.

The Faculty of Nursing, Chiang Mai University would like to request permission for Mrs. Liu Jinyan to engage in data collection at your hospital. The number of participants from your hospital will be 170 including 94 staff nurses and 76 nurse managers. We believe that her topic is of great interest and the data gained from her study will be valuable to hospitals in Yunnan and throughout China. Your assistance with this project would be greatly appreciated. Thank you for your consideration of this request.

Yours sincerely,

Asst. Prof. Thane Kaewthummanukul, PhD, RN
Associate Dean for Graduate Studies and Research
Deputy Dean
Faculty of Nursing, Chiang Mai University



Address

110 Inthavaroros Road, Sriphum, Muang, Chiang Mai, 50200, Thailand
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APPENDIX F

Certificate of Ethical Clearance


	Research Ethics Office Faculty of Nursing, Chiang Mai University	AF 04-021
		No. 015/2019
<u>Certificate of Approval</u>		
Name of Committee : Research Ethics Committee, Faculty of Nursing, Chiang Mai University		
Address of Committee: 110/406 Intavaroros Rd., Amphoe Muang, Chiang Mai, Thailand 50200		
Principal Investigator : Mrs.Jinyan Liu Master of Nursing Science (International Program) Faculty of Nursing, Chiang Mai University		
Protocol Title : Self-leadership of Nurses in Tertiary Hospitals, Yunnan Province, the People's Republic of China		
Research ID: 2019 – 013 ; Study Code : 2019 – EXP009		
Sponsor : -		
Documents filed	Document reference	
Research protocol	Version 1 Date January 9, 2019	
Informed consent documents	Version 2 Date January 25, 2019	
Patient information sheet	Version 1 Date January 9, 2019	
Instrument	Version 1 Date January 9, 2019	
Principal Investigator Curriculum vitae	Version 1 Date January, 2019	
Advertisements : (if any)	-	
Opinion of the Ethics Committee/Institutional Review Board: Expedited Review in January 2019		
The Ethics Committee has reviewed the protocol and documents above and give the favorable opinion		
Date of Approval : January 28, 2019 Expiration Date : January 27, 2020		




Progress report is required to be submitted to the Ethics Committee for continuing review

- at 3 month interval
- at 6 month interval
- annually (in this case please submit at least 60 days prior to expiration date)

This Ethics Committee is organized and operates according to GCPs and relevant international ethical guidelines, the applicable laws and regulations.

Signed : 
(Professor Emerita Dr. Wichit Srisuphan)
Chairperson, Faculty of Nursing, Chiang Mai University

Signed : 
(Professor Dr. Wipada Kunaviktikul)
Dean, Faculty of Nursing, Chiang Mai University

GENERAL CONDITION OF APPROVAL:

1. Research Ethics Committee approval is required before implementing any changes in the consent documents or protocol unless those changes are required urgently for the safety of subjects.
2. Any event or new information that may affect the benefit/risk ratio of the study must be reported to the REC promptly.
3. Any protocol deviation/violation must be reported to the REC.
4. Review of close study report is required to be submitted to the REC.
5. Review of progress report to the REC before expiration date at 2 months.

APPENDIX G

Information Sheet for Research Participants

Information Sheet for Research Participants

Research Project: Self-leadership of Nurses in Tertiary Hospitals, Yunnan Province, the People's Republic of China.

Research Project: Self-leadership of Nurses in Tertiary Hospitals, Yunnan Province, the People's Republic of China.

Research Team: Mrs. Jinyan Liu, Assistant Professor. Dr. Bunpitcha Chitptakdee, Assistant Professor. Dr. Thitinut Akkadechanunt

Institute: Faculty of Nursing, Chiang Mai University.

Research Funding: None

You are being invited to take part in this study because you are **a staff nurse or nurse managers who is** being a registered nurse, not working in probation period hospital, willing to participate in this study, and **working at five tertiary hospitals of Yunnan Province**. Proportionate simple random sampling will be used to selected nurse manager samples from each hospital. For staff nurses, the proportional stratified random sampling will be use to select nurses from medical, surgical, ER, OR, ICU, OB-GYN, pediatric, and outpatient department of each hospital. Finally, the **470** staff nurses and 361 nurse managers whom have qualities and characteristics needed for this study will be selected from **the First Affiliated Hospital of KMU, the Second Affiliated Hospital of KMU, the Affiliated Yan'an hospital of KMU, the First people's hospital of Honghe, and the Puer People's Hospital**.

Before you decide to take part in this study, please take time in reading this information sheet to make sure that you understand what you will be asked to do as part of this study. If you have any question regarding this study, please feel free to ask the

research staff. You are also welcome to discuss this study with someone that you know and trust before you make decision.

Again, your decision making to participate this study **is voluntary (Frame 1)**. If you decide not to be in this study, your rights and benefits will not be affected.

Frame 1 Participation of this study is voluntary

- You **can refuse** to participate in this study
- You can **withdraw** from this study at any time without any penalty.

Information related to this study

Self-leadership is necessary for an enterprise to operate in a changing and dynamic environment. It can help the enterprise constantly adjust its organizational structure and maintain the knowledge and potential of its employees in the changing and dynamic environment. It can brings innovative behavior, job satisfaction, self-efficacy, critical thinking skills, and team members' work role performance. In nursing area, self-leadership was positively related to the quality of care, patient outcomes, nursing innovation, and hospital success. Companying the changing healthcare environment and the increase of high standard requirement of nurses, hospital nurses are required to be a self-leader to face the challenges and stress. There are many personal characteristics influence nurses' self-leadership, one of them is job position. However, there is no evidence regarding self-leadership among nurses in China especially in Yunnan province.

The objectives of this study are to explore the self-leadership of nurses and to compare the self-leadership between staff nurses and nurse managers in tertiary hospitals, Yunnan province, the People's Republic of China.

The benefits of this study is to identify the level of self-leadership and each dimension among nurses in these five tertiary hospitals. The specific results can provide the basic information to the administrator to develop self-leadership skill among nurses.

While improving self-leadership skills, nurses should be encouraged to become self-leaders. Nurses can actively take on complex nurse roles in changing environments to improve team performance and group leadership. Finally, it can help improve the quality of care and patient safety.

Frame 2 Possible adverse events from this study

There will be no any adverse events from this study.

Frame 3 Study design

A descriptive comparative research design will be used in this study

Frame 4 participant responsibilities

The study will last two weeks from February to March, 2019. It means that the participants will stay in this study in two weeks.

If you agree to take part in this study, you will be asked to do something as the following:

You will be asked to complete a consent form and questionnaire consisted of Demographic data form and the revised self-leadership questionnaire. This questionnaire will take about 15-20 minutes to complete. We hope that you will be comfortable answering all questions openly and honestly in a relax environment.

After completing questionnaire, please separate questionnaire and consent form into two envelopes respectively and return them within two weeks. For nurses and nurse managers working in The First Affiliated Hospital of KMU, The Second Affiliated Hospital of KMU, The Affiliated Yan'an hospital of KMU, The First people's hospital of Honghe State, and the Puer People's Hospital, please return questionnaire and consent form to the two boxes that placed in the nursing department. The two boxes in each place are with lock and separating consent form and questionnaire.

The investigator summarizes risks and benefits to study participants in **Frame 5**.

Frame 5 Anticipated risks and benefits to study participants	
Risks and means to minimize or avoid risks	Benefits
<p>-Risks: some questions may be sensitive to the participants.</p> <p>-Means to minimize or avoid risks: participants have the right to skip in answering the questions or withdraw from the study at any time during the study.</p>	<p>-Direct/indirect benefits: there may be no direct benefits to participants but results of this study will provide basic knowledge regarding nurse self-leadership to nurse administrators as well as hospital administrators to develop self-leadership skill among nurses in tertiary hospitals in Yunnan province.</p>

The investigator summarizes the practical guideline or the care of various situations that may happen during the study in **Frame 6**

Frame 6 Situations may happen during the study	
Situations	Practical guideline
If you want to withdraw consent during the study.	The participant is not required to complete the questionnaires and his/her rights and benefits will not be affected.
When have a new and significant information, which are possible effects to your decision making.	The researcher will inform you soon and you are able to decide whether to continue or discontinue participating in this study.

Your information related to this study will be kept confidentially by not identifying the name and separate placement questionnaire and consent form. Information provided by participants will be used only for the purpose of this study. The results of study will be used in general. Research consent form will be given to the participants. The presentation of the study findings in any conference or publication will not use your name.

However, the Research Ethics Committee, the persons who have the authority to control the study, and the personnel from Thai FDA will be able to access your information to review information and research process.

If you have any questions before or during participating in this study, you can contact persons in **Frame 7**.

Frame 7 Research contact person (s) for further information

1. Jinyan Liu: Geriatric Department, the Puer People's Hospital, phone number: (+86) 18087738183. 2. Assistant Professor. Dr. Bunpitcha Chitptakdee: Faculty of Nursing, Chiang Mai University, phone number 66-53949116 (official time)

If you have any questions about your rights before or during participating in this study, please contact the Research Ethics Committee, Faculty of Nursing, Chiang Mai University. Tel. 66-53-936080 (Office hours) or Fax. 66-53-894170

There are no conflicts of interest associated with this study.

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
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研究参与者信息单 (Chinese)

提案名称：中国云南省三级医院护士自我领导力的研究

研究者团队：刘金燕女士，Assistant Professor. Dr. Bunpitcha Chitptakdee, 和 Assistant Professor Dr. Thitinut Akkadechanunt 学院：清迈大学护理学院

科研基金：无

您被邀请参加这项研究是因为您是一名护士或护理管理者并且满足是一名注册护士，没有在试用期，愿意参加这项研究以及在云南省的五家三级医院工作等要求。护理管理者样本将以按比例随机抽样的方法从每个医院抽取获得。护士样本将按比例分层随机抽样将用于从每个医院的内科，外科，急诊科，手术室，ICU，妇产科，儿科和门诊部门抽取获得。最终，具备本研究所要求的特质和特征的 470 个护士和 361 个护理管理者将从昆明医科大学第一附属医院，昆明医科大学第二附属医院，昆明医科大学附属延安医院，红河州第一人民医院，普洱市人民医院。

在你决定是否参与本研究之前，请你花时间阅读信息单以确保你明白你将被要求参与本研究。如果你有关于本研究的任何问题，请问研究者或咨询和你关系好的人。再者，你决定参与本研究是自愿的（表 1）。如果你决定不参与本研究，你的权利和利益将不会被影响。

表 1：参与本研究是自愿的

- 你可以拒绝参与本研究。
- 你可以在任何时候没有任何处罚从本研究退出。

有关本研究的信息

自我领导是企业在不断变化和变化的环境中运作的必要条件。它可以帮助企业不断调整组织结构，保持员工在不断变化和动态环境中的知识和潜能。它可以带来创新行为、工作满意度、自我效能感、批判性思维能力和团队成员的工作角色表现。在护理领域，自我领导与护理质量、患者结局、护理创新以及医院成功呈正相关，伴随着医疗环境的变化和护士高标准要求的提高，医院护士需要成为一个自我领导者来面对挑战和压力。影响护士自我领导力的个人特征有很多，其

其中之一就是工作岗位。然而，在中国，尤其是云南省，没有证据表明护士的自我领导能力。

本研究将包括在云南省三甲医院工作的 470 个护士和 361 个护理管理者。本研究将运用自填式问卷包括：1) 个人基本信息表，2) 修订的自我领导调查问卷。研究者本人以及每一个医院的研究协调员将发放问卷包给所有的参与者，所有参与者在两周内利用私人时间完成问卷并返回固定在各医院带锁的盒子里。

本研究的目的是探索云南省三甲医院护士的自我领导力以及比较自我领导力在护士和护理管理者中的差异。

这项研究的好处是确定这五所三级综合医院护士的自我领导水平和各个方面。具体结果可为管理者提供基本信息，培养护士自我领导能力。在提高自我领导能力的同时，应该鼓励护士成为自我领导者。护士可以在不断变化的环境中积极承担复杂的护士角色，以提高团队绩效和团队领导能力。最后，它可以帮助提高护理质量和患者安全。

表 2：来自本研究可能的不良事件 本项研究没有任何的不良事件。

表 3：研究设计 描述性比较性研究。

表 4：研究计划

本研究的持续的持续时间为两周，从 2019 年的 2 月到 3 月，如果你同意参与本次研究，你就被研究者要求依照研究计划去做。

您将被要求填写一份同意书和 调查问卷，其中包括个人信息表，修订的自我领导调查问卷。此问卷需要大约 15-20 分钟才能完成。我们希望您在舒适的环境中，能够坦诚地回答所有问题。

完成调查问卷后，请将调查问卷和同意书分别放入两个信封中，并在两周内返还。所有医院的护士可以将返还的信封放入置于护理部的两个信箱。两个信箱已经上锁，一个放同意书，一个放调查问卷。

研究者总结对研究参与者的风险和利益见表 5。

表 5: 研究参与者参与的风险和利益	
风险和降低或者避免风险的方式:	利益
<ul style="list-style-type: none"> - 风险: 一些问题对参与者可能敏感。 - 降低或者避免风险的方式: 在研究过程中参与者在任何时候都有权跳过回答问题或者退出本研究。 	<ul style="list-style-type: none"> - 直接/间接利益: 本研究对参与者没有直接的利益但是研究结果将为云南省三级医院的护士管理者和医院管理者提供有关护士自我领导的基础知识，以提高护士的自我领导技能和能力。

研究者总结实用性指南或者在研究中可能发生的情况见表 6。

表 6: 在研究中可能发生的情况	
情况	实用性指南
在研究中如果你同意退出。	参与者不能被要求完成问卷并且他/她的权利和利益将不被影响。
当有新的和有意义的可能影响你决定的信息	研究者将很快通知你，你能够决定是否继续或停止参与本次研究。

你有关本研究的信息将通过不标识姓名和分开放置问卷和志愿研究同意表被保密。参与者提供的信息仅仅用于本研究的目的。研究结果可以通用。志愿研究同意表将被给予研究者。在任何会议或者出版物陈述研究结果将不会使用你的名字。然而，研究伦理委员会有掌控本研究的权威，并且来自泰国食品及药物管理局全体人员将会为了审查信息和研究程序而评估你的信息。

如果在参与本研究之前或者过程中你有任何问题，你可以联系表 7 中的人。

表 7: 研究联系人的更多信息
1.刘金燕：普洱市人民医院, 电话号码：18087738183
2. Assistant Professor. Dr. Bunpitcha Chitptakdee: 清迈大学护理学院, 电话号码: 66-53949116 (工作时间)

如果在参与本研究前或者过程中你有关于权利的任何问题，请联系清迈大学护理学院研究伦理委员会。电话号码：66-53-936080 (工作时间) 或者传真：66-53-894170。关于本研究没有利益冲突。



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APPENDIX H

Volunteer Research Agreement Form

Volunteer Research Agreement Form	
<p>I have already read the above information thoroughly and have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate in this study by signing my signature in this form as an evidence of my decision making (However, this signature does not mean that I waive any right provided by law).</p>	<p>I certify that the study participant has been given an opportunity to have any questions and has been received answers clearly. The study participant voluntarily agrees to participate in this study.</p>
_____	_____
Name of study participant	Name of a person who requests agreement from study participants (or the investigator)
_____	_____
Signature of study participant	Signature of a person who requests agreement from study participants (or the investigator)
_____	_____
Day/Month/Year	Day/Month/Year
_____	_____
Signature of lawful representative	Signature of a person who requests agreement from study participants (or the investigator)
_____	_____
Day/Month/Year	Day/Month/Year

志愿研究协议表 (Chinese)

我已经仔细阅读上面的信息，并且被给与机会提问关于这个研究的任何问题，同时对回答也满意。我同意参与这个研究并以签字作为我决定的证据（然而，这个签字并不意味着我放弃法律提供的任何权利）。

研究参与者的姓名

研究参与者的签名

日/月/年

合法代表签名

日/月/年

我保证研究参与者已经得到机会提问任何问题并且得到清楚的回答。研究参与者自愿同意参与本次研究。

研究者名字

研究者签名

日/月/年

APPENDIX I

Cronbach's Alpha of Overall RSLQ and Each Dimension

Table I

Cronbach's Alpha of overall RSLQ and each dimension (n=10)

Dimension of self-leadership	No. of items	Cronbach's Alpha	
		Staff nurse	Nurse manager
Overall RSLQ	35	.97	.91
Behavior-focused strategies	18	.95	.75
Natural reward strategies	5	.85	.54
Constructive thought pattern strategies	12	.87	.85

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APPENDIX J

One-Sample Kolmogorov-Smirnov Test

Table J1

One-Sample Kolmogorov-Smirnov Test for Data Distribution of Overall Self-leadership and Its Dimensions of Staff Nurses (n=406) and Nurse Managers (n=316).

	Staff Nurse (N=406)		Nurse Manager(N=316)	
	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
Overall Self-Leadership	0.98	0.30	0.67	0.75
Behavior-focused strategies	1.11	0.17	0.98	0.29
Natural reward strategies	1.75	0.00	1.68	0.01
Constructive thought pattern strategies	1.18	0.12	0.98	0.29

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APPENDIX K

Mean and Standard Deviation of Self-Leadership by Each Item

Table K1

Mean and Standard Deviation of Self-Leadership by Each Item (Staff Nurses=406, Nurse Managers=316)

Self-leadership	Staff nurse		Nurse manager	
	Mean	SD	Mean	SD
Behavior-focused strategies				
<i>Self-goal setting</i>				
2. I establish specific goals for my own performance.	3.71	0.90	4.28	0.68
11. I consciously have goals in mind for my work efforts.	3.54	0.90	4.18	0.73
20. I work toward specific goals I have set for myself.	3.64	0.89	4.23	0.72
28. I think about the goals I that intend to achieve in the future.	3.53	0.95	4.13	0.71
34. I write specific goals for my own performance	3.49	0.95	4.04	0.77
<i>Self-reward</i>				
4. When I do an assignment especially well, I like to treat myself to some thing or activity I especially enjoy.	3.74	1.08	4.08	0.95
13. When I do something well, I reward myself with a special event such as a good dinner, movie, shopping trip, etc.	3.80	1.08	4.18	0.96
22. When I have successfully completed a task, I often reward myself with something I like.	3.67	1.05	4.05	0.94

Table K1 (continued)

Self-leadership	Staff nurse		Nurse manager	
	Mean	SD	Mean	SD
<i>Self-punishment</i>				
6. I tend to get down on myself in my mind when I have performed poorly.	2.96	1.11	3.31	1.14
15. I tend to be tough on myself in my thinking when I have not done well on a task.	3.56	0.91	3.98	0.79
24. I feel guilt when I perform a task poorly.	3.74	1.08	4.18	0.78
30. I sometimes openly express displeasure with myself when I have not done well.	3.22	1.01	3.70	1.00
<i>Self-observation</i>				
7. I make a point to keep track of how well I'm doing at work (school).	2.90	1.02	3.49	0.96
16. I usually am aware of how well I'm doing as I perform an activity.	3.49	0.88	4.02	0.80
25. I pay attention to how well I'm doing in my work.	3.81	0.86	4.37	0.61
31. I keep track of my progress on projects I'm working on.	3.52	0.90	4.07	0.73
<i>Self-cueing</i>				
9. I use written notes to remind myself of what I need to accomplish.	3.60	1.07	4.14	0.93
18. I use concrete reminders (e.g., notes and lists) to help me focus on things I need to accomplish.	3.62	0.93	4.16	0.78

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Table K1 (continued)

Self-leadership	Staff nurse		Nurse manager	
	Mean	SD	Mean	SD
Natural reward strategies				
<i>Focusing thoughts on natural reward</i>				
8. I focus my thinking on the pleasant rather than the unpleasant aspects of my job (school) activities.	3.58	0.98	3.96	0.91
17. I try to surround myself with objects and people that bring out my desirable behaviors.	3.25	1.03	3.74	0.92
26. When I have a choice, I try to do my work in ways that I enjoy rather than just trying to get it over with.	3.89	0.92	4.30	0.72
32. I seek out activities in my work that I enjoy doing.	3.63	0.94	4.12	0.74
35. I find my own favorite ways to get things done.	3.31	1.07	3.95	0.811
Constructive thought pattern strategies				
<i>Visualizing successful performance</i>				
1. I use my imagination to picture myself performing well on important tasks.	3.56	0.97	4.13	0.75
10. I visualize myself successfully performing a task before I do it.	3.51	1.02	4.10	0.79
19. Sometimes I picture in my mind a successful performance before I actually do a task.	3.21	1.01	3.63	1.03
27. I purposefully visualize myself overcoming the challenges I face.	3.26	0.99	3.82	0.90
33. I often mentally rehearse the way I plan to deal with a challenge before I actually face the challenge.	3.35	0.98	3.97	0.84

Table K1 (continued)

Self-leadership	Staff nurse		Nurse manager	
	Mean	SD	Mean	SD
<i>Self-talk</i>				
3. Sometimes I find I'm talking to myself (out loud or in my head) to help me deal with difficult problems I face.	3.33	1.03	3.85	0.92
12. Sometimes I talk to myself (out loud or in my head) to work through difficult situations.	3.65	0.94	4.22	0.69
21. When I'm in difficult situations I will sometimes talk to myself (out loud or in my head) to help me get through it.	3.41	0.99	4.00	0.82
<i>Evaluation beliefs and assumptions</i>				
5. I think about my own beliefs and assumptions whenever I encounter a difficult situation.	3.81	0.95	4.29	0.71
14. I try to mentally evaluate the accuracy of my own beliefs about situations I am having problems with.	3.49	0.87	3.99	0.74
23. I openly articulate and evaluate my own assumptions when I have a disagreement with someone else.	3.26	1.07	3.82	0.96
29. I think about and evaluate the beliefs and assumptions I hold.	3.60	0.87	4.15	0.74

APPENDIX L

Frequency and Percentage of Each Item of Self-Leadership

Table L1

Frequency and Percentage of Each Item of Self-Leadership (Staff Nurses=406, Nurse Managers=316)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
1. I use my imagination to picture myself performing well on important tasks.	13 (3.20)	1 (0.32)	33 (8.13)	6 (1.90)	141 (34.73)	46 (14.56)	151 (37.19)	162 (51.27)	68 (16.75)	101 (31.95)
2. I establish specific goals for my own performance.	6 (1.48)	1 (0.32)	27 (6.65)	1 (0.32)	124 (30.54)	33 (10.44)	170 (41.87)	156 (49.37)	79 (19.46)	125 (39.55)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
3. Sometimes I find I'm talking to myself (out loud or in my head) to help me deal with difficult problems I face.	23 (5.67)	3 (0.95)	56 (13.79)	21 (6.65)	140 (34.48)	79 (25.00)	140 (34.48)	129 (40.82)	47 (11.58)	84 (26.58)
4. When I do an assignment especially well, I like to treat myself to some thing or activity I especially enjoy.	17 (4.19)	3 (0.95)	39 (9.16)	24 (7.59)	85 (20.94)	41 (12.97)	156 (38.42)	125 (39.56)	109 (26.84)	123 (38.93)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
5. I think about my own beliefs and assumptions whenever I encounter a difficult situation.	7 (1.72)	0 (0.00)	26 (6.40)	3 (0.95)	110 (27.09)	38 (12.03)	159 (39.16)	137 (43.35)	104 (25.62)	138 (43.67)
6. I tend to get down on myself in my mind when I have performed poorly.	37 (9.11)	18 (5.70)	108 (26.60)	58 (18.35)	135 (33.25)	105 (33.23)	87 (21.43)	77 (24.37)	39 (9.61)	58 (18.35)
7. I make a point to keep track of how well I'm doing at work (school).	31 (7.64)	8 (2.53)	122 (30.05)	33 (10.44)	130 (32.02)	120 (37.97)	102 (25.12)	107 (33.86)	21 (5.17)	48 (15.20)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
8. I focus my thinking on the pleasant rather than the unpleasant aspects of my job (school) activities.	8 (1.97)	4 (1.27)	44 (10.84)	18 (5.70)	138 (33.99)	60 (18.99)	138 (33.99)	140 (44.30)	78 (19.21)	94 (29.74)
9. I use written notes to remind myself of what I need to accomplish.	14 (3.45)	5 (1.58)	53 (13.05)	12 (3.80)	102 (25.13)	51 (16.14)	151 (37.19)	113 (35.76)	86 (21.18)	135 (42.72)
10. I visualize myself successfully performing a task before I do it.	14 (3.45)	0 (0.00)	48 (11.82)	11 (3.48)	130 (32.02)	50 (15.82)	144 (35.47)	152 (48.10)	70 (17.24)	103 (32.60)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
11. I consciously have goals in mind for my work efforts.	6 (1.48)	0 (0.00)	42 (10.34)	5 (1.58)	140 (34.48)	45 (14.24)	163 (40.15)	153 (48.42)	55 (13.55)	113 (35.76)
12. Sometimes I talk to myself (out loud or in my head) to work through difficult situations.	7 (1.72)	0 (0.00)	37 (9.11)	3 (0.95)	121 (29.80)	39 (12.34)	167 (41.13)	158 (50.00)	74 (18.23)	116 (36.71)
13. When I do something well, I reward myself with a special event such as a good dinner, movie, shopping trip, etc.	18 (4.43)	5 (1.58)	29 (7.14)	14 (4.43)	87 (21.43)	51 (16.14)	153 (37.68)	95 (30.06)	117 (29.32)	151 (47.79)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
14. I try to mentally evaluate the accuracy of my own beliefs about situations I am having problems with.	6 (1.48)	1 (0.32)	36 (8.87)	8 (2.53)	165 (40.64)	57 (18.04)	151 (37.19)	176 (55.70)	48 (11.82)	74 (23.41)
15. I tend to be tough on myself in my thinking when I have not done well on a task.	9 (2.22)	1 (0.32)	37 (9.11)	11 (3.48)	134 (33.00)	61 (19.30)	171 (42.12)	162 (51.27)	55 (13.55)	81 (25.63)
16. I usually am aware of how well I'm doing as I perform an activity.	6 (1.48)	4 (1.27)	44 (10.84)	6 (1.90)	146 (35.96)	56 (17.72)	167 (41.13)	163 (51.58)	43 (10.59)	87 (27.53)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
17. I try to surround myself with objects and people that bring out my desirable behaviors.	17 (4.19)	8 (2.53)	80 (19.70)	20 (6.33)	140 (34.48)	76 (24.05)	124 (30.54)	153 (48.42)	45 (11.09)	59 (18.67)
18. I use concrete reminders (e.g., notes and lists) to help me focus on things I need to accomplish.	7 (1.72)	2 (0.63)	38 (9.36)	4 (1.27)	126 (31.03)	50 (15.82)	168 (41.38)	144 (45.57)	67 (16.51)	116 (36.71)
19. Sometimes I picture in my mind a successful performance before I actually do a task.	17 (4.19)	10 (3.16)	81 (19.95)	29 (9.18)	145 (35.71)	101 (31.96)	124 (30.54)	105 (33.23)	39 (9.61)	71 (22.47)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
20. I work toward specific goals I have set for myself.	7 (1.72)	0 (0.00)	24 (5.91)	2 (0.63)	147 (36.21)	47 (14.87)	158 (38.92)	144 (45.57)	70 (17.24)	123 (38.93)
21. When I'm in difficult situations I will sometimes talk to myself (out loud or in my head) to help me get through it.	11 (2.71)	3 (0.95)	56 (13.79)	8 (2.53)	153 (37.68)	63 (19.94)	126 (31.03)	154 (48.73)	60 (14.79)	88 (27.85)
22. When I have successfully completed a task, I often reward myself with something I like.	15 (3.69)	4 (1.27)	38 (9.36)	17 (5.38)	108 (26.60)	58 (18.35)	152 (37.44)	118 (37.34)	93 (22.91)	119 (37.66)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
23. I openly articulate and evaluate my own assumptions when I have a disagreement with someone else.	20 (4.93)	7 (2.22)	77 (18.97)	22 (6.96)	140 (34.48)	72 (22.78)	115 (28.33)	135 (42.72)	54 (13.30)	80 (25.32)
24. I feel guilt when I perform a task poorly.	12 (2.96)	0 (0.00)	40 (9.85)	7 (2.22)	113 (27.83)	51 (16.14)	119 (29.31)	137 (43.35)	122 (30.05)	121 (38.29)
25. I pay attention to how well I'm doing in my work.	3 (0.74)	0 (0.00)	21 (5.17)	1 (0.32)	115 (28.33)	19 (6.01)	178 (43.84)	157 (49.68)	89 (21.92)	139 (43.99)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
26. When I have a choice, I try to do my work in ways that I enjoy rather than just trying to get it over with.	7 (1.72)	1 (0.32)	19 (4.68)	5 (1.58)	98 (24.14)	28 (8.86)	168 (41.38)	146 (46.20)	114 (28.08)	136 (43.04)
27. I purposefully visualize myself overcoming the challenges I face.	18 (4.43)	2 (0.63)	65 (16.01)	23 (7.28)	158 (38.92)	81 (25.63)	125 (30.79)	135 (42.72)	40 (9.85)	75 (23.74)
28. I think about the goals I that intend to achieve in the future.	10 (2.46)	0 (0.00)	40 (9.85)	7 (2.22)	141 (34.73)	40 (12.66)	153 (37.68)	174 (55.06)	62 (15.28)	95 (30.06)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
29. I think about and evaluate the beliefs and assumptions I hold.	4 (1.00)	1 (0.32)	30 (7.39)	4 (1.27)	153 (37.68)	48 (15.19)	157 (38.67)	158 (50.00)	62 (15.27)	105 (33.23)
30. I sometimes openly express displeasure with myself when I have not done well.	13 (3.20)	7 (2.22)	95 (23.40)	29 (9.18)	128 (31.53)	92 (29.11)	131 (32.27)	113 (35.76)	39 (9.60)	75 (23.73)
31. I keep track of my progress on projects I'm working on.	10 (2.46)	0 (0.00)	35 (8.62)	6 (1.90)	144 (35.47)	55 (17.41)	169 (41.63)	165 (52.22)	48 (11.82)	90 (28.47)

Table L1 (continued)

Self-leadership	1		2		3		4		5	
	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager	Staff nurse	Nurse manager
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
32. I seek out activities in my work that I enjoy doing.	12 (2.96)	1 (0.32)	29 (7.14)	6 (1.90)	125 (30.79)	45 (14.24)	173 (42.61)	165 (52.22)	67 (16.50)	99 (31.32)
33. I often mentally rehearse the way I plan to deal with a challenge before I actually face the challenge.	13 (3.20)	3 (0.95)	67 (16.50)	9 (2.85)	135 (33.25)	72 (22.78)	147 (36.21)	144 (45.57)	44 (10.84)	88 (27.85)
34. I write specific goals for my own performance	9 (2.22)	0 (0.00)	49 (12.07)	8 (2.53)	139 (34.24)	64 (20.25)	153 (37.68)	152 (48.10)	56 (13.79)	92 (29.12)
35. I find my own favorite ways to get things done.	17 (4.19)	0 (0.00)	77 (18.97)	16 (5.06)	135 (33.25)	63 (19.94)	118 (29.06)	156 (49.37)	59 (14.53)	81 (25.63)

CURRICULUM VITAE

Name Mrs. Liu Jinyan

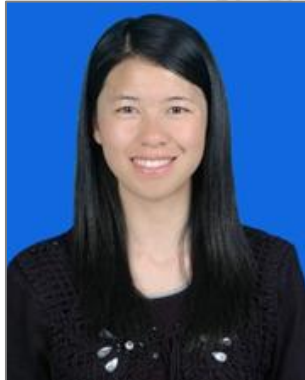
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