PROFESSIONAL VALUES, SELF-EFFICACY, AND JOB SATISFACTION: EXPLORING CHINESE OBSTETRIC NURSES' EXPERIENCE OF CURRENT CHALLENGES

BY

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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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ABSTRACT

Previous studies highlighted that in the process of nursing, nurses' self-efficacy and professional values directly or indirectly affect nurses' job satisfaction. Career switching and turnover of obstetric nurses are related to nurse self-efficacy and professional values, especially job satisfaction. The recent years witnessed an increase in obstetric nurses in China who transferred departments or resigned. Accordingly, this study investigated past experience, current situation, and associated factors of obstetric nurses' job satisfaction, followed by an exploration of the obstetric nurses' perspectives of nursing work and the strategies to improve their job satisfaction. A two-phase study using a sequential explanatory mixed-method was conducted, starting with phase I where a cross-sectional design was used. Through an online survey of the General Self-Efficacy Scale, Nurses' Professional Values Scale, and Nurses' Job Satisfaction Scale, data were collected from 218 obstetric nurses who had been identified using purposive sampling. Subsequently, the collected data were analysed using IBM SPSS Statistics 27. The statistical results demonstrated that the levels of obstetric nurses' professional value (M = 2.898, SD = 0.258), self-efficacy (M = 3.016, SD = 0.188) and job satisfaction (M = 2.506, SD = 0.127) were lower than the average level, indicating the necessity for further investigation. In Phase II, a generic qualitative design was employed. An in-depth interview was conducted with 25 obstetric nurses who had participated in phase I. This was followed by managing and analysing the in-depth interview transcripts using NVivo software, in which the nurses described their inability to balance work and life, job-related stress, exhaustion and isolation, helplessness at work, cold relationships with colleagues, and sensitive and fragile patient relationships. Despite these negative experiences, they received no professional help or support, making their work more challenging. It was indicated from their descriptions that their job satisfaction was highly influenced by the public perceptions, workload, doctor-nurse, and patient-nurse relationships, opportunities to further their education, academic training, and salary. Hence, this study offers insights into social and psychological determinants from obstetric nurses' perspective. While the nurses are required to respond to work in a timely and active manner, hospital management should empower the staff based on factors including the nurses' age, educational background, and professional positions to improve their job satisfaction.

Keywords: Professional values, self-efficacy, job satisfaction, challenges, obstetric nurses

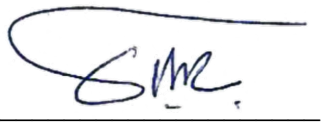
ملخص البحث

أدت عوامل مثل القاعدة السكانية الكبيرة، وتزايد شيخوخة السكان، وتحرير سياسة الأطفال الثلاثة، وعدم الفصل بين طب التوليد وأمراض النساء، وضعف المؤهلات في مستشفيات التوليد وأمراض النساء، إلى زيادة حادة في الطلب على ممرضات التوليد في المجتمع الصيني. في السنوات الأخيرة، قام المزيد والمزيد من ممرضات التوليد في الصين بتغيير أقسامهن أو تغيير مهنتهن أو استقالتهن. أظهرت الدراسات النوعية والكمية ذات الصلة أن التحول الوظيفي ودوران ممرضات التوليد مرتبطان بالكفاءة الذاتية للممرضة، والقيم المهنية، وخاصة الرضا الوظيفي. الغرض من هذه الدراسة هو التحقيق في الخبرة السابقة والوضع الحالي والعوامل المرتبطة بالرضا الوظيفي لممرضات التوليد. بالإضافة إلى استكشاف آراء ومشاعر ممرضات التوليد في العمل التمريضي .واستراتيجيات تحسين الرضا الوظيفي للممرضات. في هذه الدراسة، تم تطبيق طريقة مختلطة تفسيرية متسلسلة في المرحلة الأولى، تم استخدام التصميم المقطعي. تم جمع البيانات من خلال استبيان مقياس الكفاءة الذاتية العام ومقياس القيم المهنية للممرضات ومقياس الرضا الوظيفي للممرضات من 218 ممرضة توليد تم تحديدها .SPSS باستخدام طريقة أخذ العينات العشوائية المنهجية. تم تحليل البيانات المجمعة باستخدام برنامج = SD ، 3.016 = M) كشفت النتائج الكمية أن الكفاءة الذاتية لممرضات التوليد على مستوى جيد ، الرضا الوظيفي (SD = 0.258 ، M = 2.898) ، القيمة المهنية عند مستوى منخفض (0.188 في المرحلة الثانية، تم استخدام .، على التوالي (SD = 0.127 ، M = 2.506) عند مستوى منخفض التصميم النوعي العام. وأجريت مقابلة متعمقة بين 25 ممرضة التوليد الذين شاركوا في المرحلة الأولى. تم تحليل كشفت ممرضات التوليد عن تصورهم لمهنة التمريض والرضا .NVivo نص المقابلة المتعمقة مع تطبيق

الوظيفي. وصف معظمهم تجربة الأحداث المجهدة من عملهم وحياتهم، وقبولهم السيئ والمشاركة غير الكافية في أنشطة الحياة الاجتماعية. أظهرت هذه النتيجة الوضع الحالي لممرضات التوليد والقضايا والتحديات المتعلقة بالعمل. بالنظر إلى تحسين الإستراتيجية، وصف معظمهم توقعاتهم على المجتمع ، وخاصة الدعم الإداري، وكذلك على أنفسهم. تقدم هذه الدراسة فهمًا ثاقبًا للمحددات الاجتماعية والنفسية من منظور ممرضات التوليد. في الختام، أشارت نتائج هذه الدراسة إلى أن الرضا الوظيفي للممرضات يتأثر بالتصورات العامة، والضغوط المرتبطة بالعمل والمشاكل مثل المكافأة، وعبء العمل، وظروف العمل، والعلاقات بين الطبيب والممرض والمريض والممرضة، ومبادئ الإدارة.

APPROVAL PAGE

The thesis of LI CHANGHONG has been approved by the following:



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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at International Islamic University Malaysia or other institutions.

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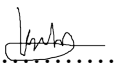

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Signature Date

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CHAPTER ONE

INTRODUCTION

1.1 CHAPTER INTRODUCTION

In China, the vast majority of midwives choose to work in maternal and child health hospitals rather than general government hospitals. In large parts of hospitals, the gynaecology and obstetrics departments are merged, indicating the ward nurses' responsibility to manage and serve more patients. Besides, nurses are the sole nursing staff who provide prenatal, gynaecological, preconception, pregnancy, antenatal, delivery, and postpartum care to obstetric patients. Specifically, obstetrical nurses are required to provide gynaecological and obstetrical patient care. While they undertake family and multiple social-related roles, they frequently face pressures from medical incidents, work overload, nurse-patient relationships, and other issues.

Nurses with higher professional titles possess higher initiative, dominance at work, a sense of accomplishment, and self-efficacy (Lu, 2017). In China, nurses hold five professional titles under three categories. Specifically, the primary titles include registered and junior nurses, intermediate titles comprise supervisor nurses, and senior titles consist of deputy chief nurses and chief nurses. It takes three years and one year for college graduate and undergraduate, respectively, to qualify to be a junior nurse, considering that the different years and standards are associated with different academic qualifications. After the completion of the number of study years, preparation for the junior nurse exam will start. In line with regulations, the technical secondary, junior college, undergraduate, and master nurses are required to be junior nurses for seven years, six years, four years, and two years, respectively, before they are eligible to apply for the competent nurse exam. However, this limitation of professional position does not apply to doctoral nursing graduates.

According to Xu (2019), nursing work comprises occupational characteristics, such as high intensity, heavy workload, and circadian rhythm reversal, with most nurses consisting of women of childbearing age who need to devote more energy to their families. However, people's limited time and energy have led to work stress among nurses. Berkman (2015) highlighted that high levels of work-family conflict can lead to nurse burnout, lower job satisfaction, absenteeism, and even turnover. Considering the particularity of obstetric nursing work, irregular work and rest time, fewer holidays, heavy workloads, and the implementation of the current "three-child" policy, the contradiction between work and family has become increasingly prominent. Accordingly, previous studies demonstrated that frequent work-family conflicts led to higher stress among nurses, low job satisfaction, poor physical health, and work and life burnout. These conditions would cause issues in nurses' adaptation and endurance in facing adversity, trauma, or stress. Ultimately, the overall ability of nurses would be weakened, leading to a negative impact on nursing quality.

When the needs of the work and home spheres are incompatible, negative spillover effects would exacerbate role conflict. Specifically, the low income, heavy workload, numerous social opportunities, and night shift experience in China are the key factors that lead to job dissatisfaction among Chinese nurses. Similar findings were recorded in the study by Zhang (2019), in which factor analysis indicated that age, professional position, work pressure, personal development, work relationship, welfare benefits, occupation, work-family balance, and hospital management affected nurses' job satisfaction. These efforts were in line with a study by Wallin (2012), which recorded that nurse assistants with positive and caring work atmospheres and attitudes toward leadership exhibited higher job satisfaction while receiving institutional and environmental support.

Ou (2019) concluded that salary is a crucial factor influencing nurses' job satisfaction in China. She added that nurses feel underpaid considering their work contribution and fulfilment. Apart from that, Wu (2018) demonstrated that Chinese nurses were generally under physical and emotional negative experiences, indicating that excessive job stress may reduce job satisfaction. Moreover, increasing the frequency of deep acting and inner competency may improve job satisfaction among Chinese nurses.

This study investigated the working status of obstetric nurses in China, nurses' cognition of the nursing profession, their physical and mental experiences, feelings in nursing work and life, and the challenges they face at work. Discussion was also made on the influencing factors and improvement strategies for nurses' job satisfaction through in-depth interviews of nurses' professional values and self-efficacy. To gain an understanding of the nurses' daily experiences and emotions at work, their past coping strategies upon facing challenges and problems were examined, their expectations and needs were recorded, the factors influencing job satisfaction among obstetric nurses were explored, and the feasible and effective measures for improvement were identified.

This thesis consists of six chapters, namely the introduction chapter (Chapter One), a literature review chapter (Chapter Two), a methodology chapter (Chapter Three), a quantitative study chapter (Chapter Four), a qualitative study chapter (Chapter Five), and a discussion and conclusion chapter (Chapter Six). This research employed a mixed method approach that integrates quantitative surveys and qualitative interviews to build a comprehensive understanding of the obstetric nurses' current situation and issues related to their job satisfaction.

Chapter One presents the basis for understanding the issue under investigation, the problem definition, recent challenges, the existing research gap, and the rationality of the study. This is followed by the background of the research, which demonstrates the nursing challenges in China, such as nursing shortage, long shifts, workload, and baby boom. The research variables, namely self-efficacy, professional values, and job satisfaction are also presented.

Chapter Two presents the topics focused by relevant studies. It discusses the evaluation of the recent and relevant studies on the concept of professional values, specifically the effects of professional values on nursing, the concept of nurses' self-efficacy, nurses' self-efficacy effects on nursing, research theoretical foundation, the concept of job satisfaction, job satisfaction effects on nursing, and the current challenges faced by nurses in clinical practice. It also presents the research gap identification and proposes a baseline for initiating an engagement with existing research findings, which is critical for identifying the existing literature and preventing similarity in reporting. After

conducting a critical review of nurses' professional values, self-efficacy, and job satisfaction, this chapter builds a cognizant understanding of the current level of knowledge by relating this review to this study topics. This chapter ends with an empirical review and synthesis and an ongoing process to provide the current scientific and societal developments in the subject area.

Chapter Three elaborates on the methods employed in this research. Specifically, it illustrates the selected research paradigm, study setting, selection of target hospitals, recruitment of participants, study phases, and justification for the selection of the adopted methods to meet the research objectives. This is followed by an explanation of the procedures applied to answer the research questions. The selected mixed-method research design is presented, followed by an explanation of the rationale for selecting this methodology. This chapter clarifies the study participants' study settings, sampling technique, and inclusion process. It also discusses the data collection procedures, the used screening tools, and data collection instruments, the data analysis process, and general ethical-related issues. Subsequently, the study results are reported in Chapter Four, Chapter Five, and Chapter Six.

Chapter Four presents the analysis of the quantitative phase findings from Phase I of the study, which were collected through questionnaire instruments and divided into four sections. Specifically, the first section comprises four questions regarding the participants' demographic information (age, educational background, professional position, and years of working experience). The second section employed the 10-item index scale to measure obstetric nurses' self-efficacy, followed by the third section that featured 26-item index scales related to the level of obstetric nurses' professional values. The last section included a 38-item index scale related to the job satisfaction of obstetric nurses. The results presented in this phase became the baseline for developing the qualitative interview guides to further explore obstetric nurses' professional values, self-efficacy, and job satisfaction, which will be presented in the Chapter Five.

Chapter Five utilises an in-depth interview to explore obstetric nurses' perceptions of their experience in their jobs. This chapter presents the results by reporting three emerging themes and six sub-themes regarding obstetric nurses' low-level job satisfaction.

The themes emerging from the common events experienced by the study participants include complaints over stressful job-life events, reduced participation in family-social activities, concern over community acceptance, hopelessness, and depression and anxiety. Overall, this chapter thoroughly illustrates several variables that are not adequately demonstrated in the quantitative phrase.

Chapter Six concludes the quantitative and qualitative findings, followed by a comparison between the existing theories and literature. It also highlights the interpretation of findings, critical discussion with the study implications, scholarly contributions, the study limitations, recommendations for future research, and strategic and managemental policy-related recommendations.

1.2 STUDY BACKGROUND

Under special national conditions, the study background section discusses China's healthcare system. The issues for obstetric nurses in China’s health system include the scarcity of midwives in general government hospitals, large population base, ageing population, extended retirement age, three-child policy, multiple births, tube babies, and legalisation of unmarried births. These issues and pressures faced by the existing obstetric nurses, and perceptions and feelings of nursing work. Obstetric nurses in China play multiple roles, carrying out the tasks of gynaecology, obstetrics, and midwifery under the system setting. Moreover, China's hospital setting is explored, focusing on the hospital's grading standards, assessment standards, and proper software, hardware configuration, and staffing. In this section there are also highlights the existing issues and potential challenges in the nursing practice.

1.2.1 Introduction of the Healthcare System in China

As described in Figure 1.1, Healthcare in China includes public and private providers and insurance plans. More comprehensive and holistic healthcare was adjusted in 2009 when the Chinese government increased the funding for healthcare system reform, focusing on five areas: service delivery, essential medicines, public health, insurance, and public hospital reform. The medical insurance provided by the Chinese government is based on the type of disease, the classification of drugs, and the patient's insurance level. The medical reimbursement is detailed and standardised while the process is simplified. It commonly covers approximately 80% of hospitalisation medical expenses. However, consultation with doctors is challenging due to the high cost incurred.

Despite the availability of public and private hospitals throughout China, the levels of care and quality of service vary across the hospitals. Notably, the highest quality of care can often be found in province- or city-level hospitals, followed by smaller district- and county-level or community-level hospitals. In addition, traditional Chinese medicine hospitals are spread nationwide (Zhou, 2018).

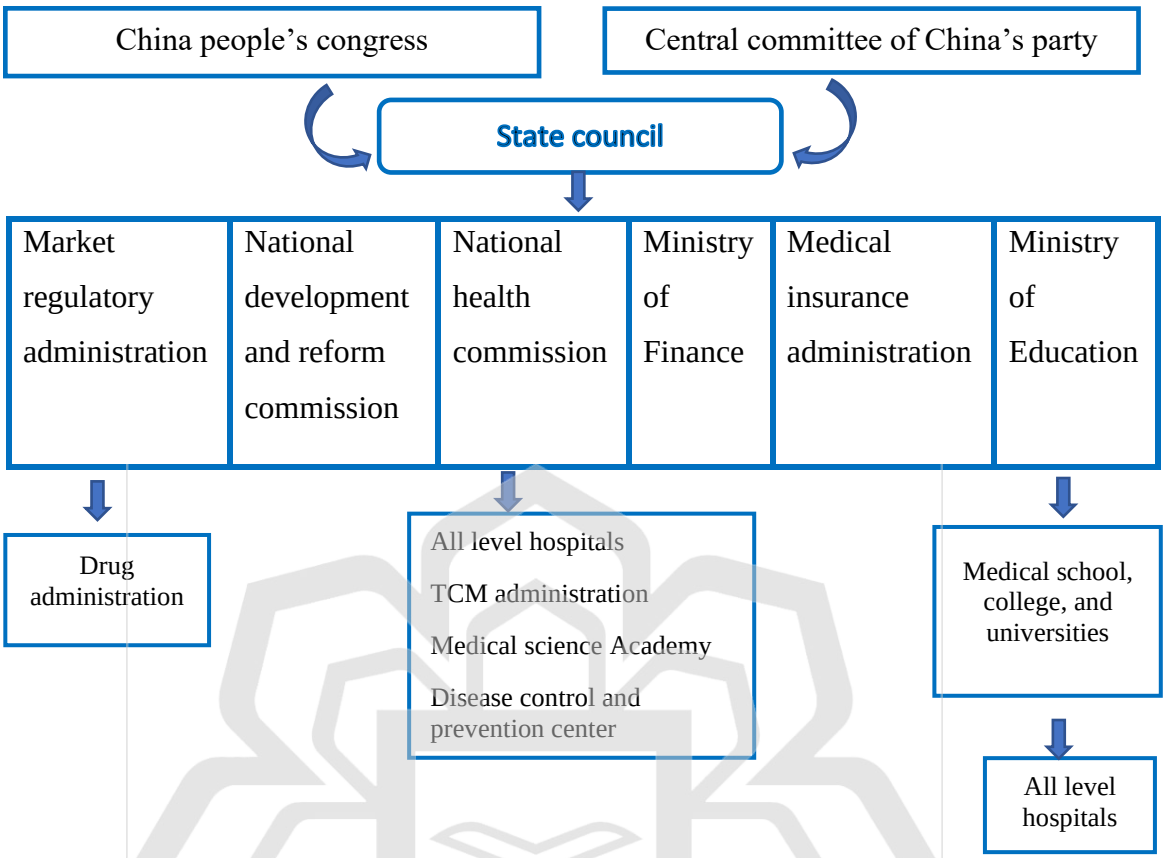

Figure 1.1 Organisation of the health system in China

1.2.2 Nursing and Midwifery in China

In China, the nursing major is divided into primary qualifications (bachelor's level and teacher level), intermediate qualifications (six sub-specialties of nursing, internal medicine nursing, surgical nursing, obstetrics and gynaecology nursing, pediatric nursing, and community nursing), and advanced qualifications.

While the nurse qualification examination does not require computer and English tests, these tests are required for the professional position with deputy chief nurse and chief nurse examinations. The scores for each subject of junior nursing (bachelor's degree) in 2012 are valid for 2012 and will no longer be subject to rolling management. This condition leads to further difficulties in the nurse qualification examination. Therefore, passing two

exams at once with a large amount of authoritative exam coaching materials and knowledge point summaries is required. Similar to other countries, one of the graduation requirements for nursing students in China is to pass the national registered nurse license examination before working at hospitals, clinics, or community hospitals.

Private clinics and hospitals are not common in China. Nevertheless, community hospitals serve as specific government-designed social units to provide basic medical services for society's public health. Community hospitals are community health service institutions, which are health and medical service institutions belonging to the community. Currently, China is actively developing a community medical service system to allow the treatment of minor illnesses at home. This aspect substantially alleviates the pressure on medical treatment and the medical service capacity of large hospitals.

In China, nurses are required to carry out nursing projects based on the relevant legal provisions and standards of the National Health Commission and nursing industry standards. They also need to observe the patients' body weight, understand the patient's condition, cooperate with the doctor's treatment, handle medical disputes in a timely manner, and prevent medical accidents. Considering the physiological, psychological, social, cultural and spiritual aspects, daily activities, medication and safety issues, the nursing major is divided into primary qualifications and intermediate qualifications, which include six sub-specialties of nursing: internal medicine nursing, surgical nursing, obstetrics and gynaecology nursing, pediatric nursing, and community nursing.

Nurses engage in all medical-related clinical operations or single specialised nursing activities, such as mechanical expectoration, puncture infusion, admission education, discharge guidance, execution of doctor's orders, bed making and quilt change, safety tips, administration of medications, and data entry and recording. This is followed by the collection of specimens, handover of responsibilities, observation of disease conditions, destruction and disinfection of medical waste, classification of medical waste management, collection suggestions, learning and training, submission of bids and inspections, the guidance of patients, night rounds, and equipment inspection and cleaning. Other responsibilities include housekeeping, discharge accounting, medical record sorting, dissemination of medical orders, nursing teaching, first aid, on-time inspections,

abnormality reports, item distribution, computer registration, repair and maintenance, temperature measurement, skill assessment, patient classification, and patient comments among other daily care activities.

In line with the "nursing regulations", graduates (including fresh graduates) may register for the Nurse Practicing Qualification Examination if they fulfil one of the following conditions: (1) obtain a degree in nursing and midwifery from an ordinary full-time secondary school recognised by the education and health authorities at the provincial level or higher, and have served as a nurse for more than five years; (2) obtain a nursing or midwifery degree from an ordinary full-time institution of higher learning recognised by the education and health authorities at the provincial level higher, and have been engaged in this profession for a minimum of three years; (3) obtain a Bachelor's degree or higher education level in nursing or midwifery from an ordinary full-time institution of higher learning recognised by the education department of the State Council and have been engaged in this profession for a minimum of one year. They are also required to have completed more than eight months of nursing clinical internship in teaching or general hospitals. Following that, the registration qualifications of candidates will be reviewed by the provincial health administration department. The individuals who pass the examination will be issued a certificate by the Talent Exchange Service Center of the Ministry of Health, which will serve as a valid certificate used for nurse practitioner registration.

Although nursing work is an important factor of medical and health work, it also comes with its respective relative independence and particularity. The moral level of nursing staff is related to their ability to coordinate the relationship between doctors, nurses, and patients, which directly affects the quality of medical care. The quality of nursing work is directly related to the patient's medical safety, treatment effect and physical recovery, professional quality, service attitude, and the nurse's speech and behaviour that also directly affects the patient's psychological feelings and harmony in the doctor-patient relationship.

In this study, nurses were referred to as individuals who have obtained a nurse practice certificate after their registration, engage in nursing activities in line with the regulations, perform the duties of protecting human life, alleviate the pain of patients, and

promote health. Furthermore, a nurse may carry out the midwife role by obtaining the national midwife qualification certificate, while a midwife can perform the nurse role by passing the national registered nurse qualification examination. Hence, some midwifery students switch to general practice nurses to find more options for their future careers. In the education curriculum, similarity is present in several nursing and midwifery subjects. Specifically, midwifery students go through some programs and clinical training courses. Table 1.1 illustrates the nursing and midwifery education system in China, in which the duration for nursing is 3-5 years, whereas the duration for midwifery is 3-4 years.

Table 1.1 China's nursing and midwifery education system

Duration	Trainee	Programme	Degree
5 years university study	Nursing student	Anesthesia and ICU	Bachelor
4 years university study	Nursing and midwifery student	Medical science nursing	Bachelor
3 years college plus 2 years university study	Nursing and midwifery student	Medical science nursing	Diploma and bachelor
3 years college study	Nursing and midwifery student	Medical science nursing; Nursing in （Japanese and English）	Diploma

Maternal and child health nursing in China is provided by midwives, obstetric nurses, and nurses. A separate pathway for being midwives in China is present for those who have undergone a specific syllabus and clinical training in their field for 3-5 years. On the other hand, the obstetric nurses comprise the nursing staff who provide nursing services in both clinics and wards for women and prenatal, intrapartum, and postpartum care for pregnant women and newborns. Maternal and child health nurses consist of people who have received formal midwifery courses, possess equivalent abilities, and can independently deliver babies and care for pregnant women.

In general, for further professional development, the majority of midwives work in maternal and child health hospitals instead of general hospitals. Compared to general hospitals, maternal and child health hospitals create more opportunities for midwives to work in the delivery room. Furthermore, it is common for obstetric nurses to undertake most of the midwives' tasks. Since the 1980s, China's national fertility policy has endorsed a model of hospital care provided by obstetricians and funded by private individual health insurance policies covering antenatal, intrapartum, and postpartum care for women (Zhang et al., 2015 . In this study, the term obstetric nurse was applied as it was the major part of the nursing caregiver in the obstetric ward.

1.2.3 Hospital Setting in China

In mainland China, general governmental hospitals are classified into three different levels. The classification of hospitals in China is the evaluation system of the health administrative department of China for medical institutions within its administrative jurisdiction, which includes the evaluation criteria for hospital qualifications. In line with "Hospital Hierarchical Management Standards", hospitals have been assessed and classified into three grades. Each grade is divided into three levels: Jia, Yi, and Bing. Given that special grades are added to the third-grade hospitals, hospitals are divided into three grades and 10

sub-levels. The subjects of this study originated from the grade three level (Jia) hospitals affiliated with level-two government universities or higher.

Jia hospital features the highest qualification level for hospitals in mainland China. High-quality medical resources are commonly available in big cities, such as the municipalities directly under the central government, provincial capitals, and large prefecture-level cities. Furthermore, a remarkably small number of county-level hospitals can reach the level of tertiary hospitals. Based on the "Statistical Bulletin on the Development of My Country's Health Care in 2019", a total of 2,749 tertiary hospitals in China (including 1,516 tertiary A hospitals), 9,687 second-level hospitals, 11,264 first-level hospitals, and 10,654 first-class hospitals were available in China by the end of 2019.

Being the primary healthcare institutions, grade one hospitals are the most common township health centres that directly offer comprehensive services of medical treatment, prevention, rehabilitation, and healthcare to the community. The main functions of these hospitals are to directly provide primary prevention to the population, manage frequently-occurring and common disease patients in the community, make correct referrals for difficult and severe diseases, assist high-level hospitals in providing intermediate or post-hospital services.

The most common grade two hospitals include the county hospital, which is a regional hospital that provides medical and health services across several communities. It is also a technical centre for regional medical prevention. This hospital is mainly involved in monitoring high-risk groups, accepting first-level referrals, providing professional and technical guidance to first-level hospitals, and conducting a certain degree of teaching and scientific research. Additionally, the total number of inpatient beds at this hospital should be between 100 and 499.

Most grade-three hospitals are located in prefecture-level cities, provincial capitals, or large cities. Besides, individual counties with tertiary hospitals are also present. These hospitals provide medical and health services across regions, provinces, and cities nationwide. They are also capable of providing comprehensive medical treatment, teaching, and scientific research. The main function of grade-three hospitals is to provide specialised and comprehensive medical services, solve critical and complex diseases, accept second-

level referrals, provide business technical guidance and training personnel for lower-level hospitals, and complete the teaching and undertaking of training various senior medical professionals. The aforementioned tasks involve scientific research projects involving educational participation and guidance for primary and secondary prevention work. Moreover, the total number of inpatient beds in these hospitals is over 500. Overall, grade three hospitals, especially those affiliated with China Medical University, are considered the best government hospitals.

1.2.4 Nursing Challenges

Nursing staff shortage is one of the common healthcare issues worldwide. Specifically, China constantly faces a shortage of medical staff, especially nurses. In China, midwives share similar responsibilities and obligations with midwives and assist in the delivery room after completing their educational requirements and obtaining a license. A midwife who has worked for many years may be able to provide better assistance to the mothers compared to an obstetrician. To illustrate this point, this midwife combines delivery and care. Additionally, considering that the midwife spends more time with the mother during delivery than an obstetrician, she is also able to provide more detailed information and care.

The increasing ageing population and the ongoing baby boom have resulted in high demands for nurses. However, the number of nurses who attempt to quit their jobs has increased. It is common that junior nurses require a longer time to manage the difficulties in a new work setting and adjust to their jobs. Moreover, an adequate number of required tests and exams are available for new nurses, such as monthly practical exams, weekly viva, and professional license exams (Zhang, 2018). Limited staff leads to nurses' burnout due to the higher pressure and more difficulties in their obligation to serve more patients. In addition, nurses who work at places with a shortage of nursing staff are struggling to fulfil challenging tasks.

To compensate for nursing shortages, nurses are frequently required to work long shifts, which causes fatigue that may be followed by medical errors. Furthermore, nurses

are not able to rest properly due to extended working hours and work overload. Without sufficient rest and sleep, nurses suffer from daytime sleepiness, fatigue, impaired mental function, and difficulties in making proper decisions, which ultimately place the patients' safety at risk. In many hospitals, nurses are often forced to fulfill their assigned activities and tasks during their rest time despite their fatigue work (Lu, 2015).

In addition to the aforementioned challenges, the Chinese government's move from a one-child policy into a three-child policy in 2015 could lead to a heavier workload for nurses, especially those in obstetrics. The introduction of the three-child policy may indicate that obstetric nurses would receive more patients associated with childbearing in their healthcare services. Given this new policy, the workload of the obstetric nurse is not only expected to be burdensome, the nurses would undergo higher pressure due to conflict with their family planning. As a result, nurses do not have enough time to spend with their families, leading to frustration and low self-efficacy (Zheng, 2008).

Self-efficacy denotes the belief determining how people feel, think, motivate, and behave (Bandura, 1986). In general, it positively correlates with job satisfaction (Han, 2014), in which low self-efficacy could lead to low job satisfaction (Han, 2014). Specifically, nurses' self-efficacy refers to a strong belief in enhancing nurses' accomplishment and personal well-being through various approaches. It is noteworthy that nurses with high self-efficacy commonly possess high assurance in their capabilities to achieve difficult tasks (Cai, 2011). Nurses' job satisfaction is an expectation of their work, which is significantly related to nurses' job retention (Cowin et al., 2008), intention to leave (Huang, 2012), burnout, and job performance (Pan et al., 2013). It also significantly affects patients' outcomes, such as quality of care (Mohr et al., 2011) and patients' satisfaction (Szecsenyi et al., 2011). For this reason, self-efficacy is essential for clinical nursing practice.

In China, nurses are mostly required to work under high pressure, which results in low job satisfaction and self-efficacy due to excessive workload, long-term shifts, and the heavy burden of manually writing nursing records and documents (Zhang et al., 2011). Subsequently, nurses may experience doubt about whether they should continue their careers or vice versa. Accordingly, a study by Yang (2017) found that nurses with low self-

efficacy were more likely to leave their jobs rather than stay. Similarly, Han (2014) highlighted that self-efficacy is an important predictor of nurses' professional functioning. According to Mohsen (2016), self-efficacy contributes to the success of academic performance and professional values in clinical practice, which offers a framework for decision-making and ethical practice. Subsequently, this aspect contributes to an individual's professional commitment and improves healthcare outcomes. Cara (2015) concluded that professional values form the basis for nurses' attitudes and behaviours and guide their clinical practice decisions.

In carrying out appropriate strategies to adjust to challenging situations and provide proper care to patients, nurses need to improve their knowledge of professional values, which are developed through socialisation into nursing from codes of ethics and nursing experiences (Al-Banna, 2017). Nurses are also required to enhance their knowledge of self-efficacy that determines their perceptions, thinking, and actions and affects their capabilities of healthcare service (Caza et al., 2016) and knowledge of job satisfaction. This aspect also includes attitudes toward work, work ethic, professional development, the development of work, and, to a certain extent, the perceptions of the meaning of life (Hair, 2010).

Provided that psychological constructs of nurses' professional values could predict job satisfaction, structural equation modeling was used to test the prediction of nurses' professional values and self-efficacy of job satisfaction. Nurses' professional commitment is a variable that mediates between the predictor (self-efficacy) and a criterion variable (job satisfaction). As a mediator, it explains the effect of self-efficacy on job satisfacion, considering the significant correlations among all variables (Ivana, 2018).

Any professional group holds primary standards known as professional values. These values are considered the guideline and motivation of professional behaviour among the members of a certain profession (Lai, 2012). Belonging to the largest healthcare group, nurses possess well-known and important professional values. The implementation of these values in nursing practice increases the quality of patient care, nurses’ occupational satisfaction, retention in nursing, and commitment to the organisation (Dehghani, 2015; Bang, 2011). Professional values are also a source for promoting nurses' ethical

competencies in clinical settings and addressing ethical concerns in the current era (Kim, 2015).

Despite the awareness of ethical issues, the nurses do not utilise it in their clinical practice. Thus, professional values have become a solution to the current problems in the nursing profession. Furthermore, the complex issues in the current times include globalisation, migration, nursing shortage, new diseases, an ageing population, and demand for high-quality care, which also cause ethical problems for nurses. Therefore, nurses are expected to be aware of professional values and apply them to their decision-making upon addressing ethical issues (Borhani, 2015; Poorchangizi, 2017).

1.3 PROBLEM STATEMENT

The nursing shortage is one of the classical healthcare issues worldwide. The rapid growth of the population, particularly the ageing population, and the ongoing baby boom have led to higher demand for nurses. Compared to other countries, the nursing shortage is significant in China due to its large population.

To control the rapid growth of the population and solve the severe poverty issue in China that had been caused by decades of economic mismanagement, the one-child policy was introduced in 1979. In 2013, couples were allowed to have two children. The introduction of this new policy has brought a major change in the nursing workforce, where the number of pregnant nurses has increased. Besides, the six-month maternity leave led to a critical nursing shortage in China, which deteriorated when the government introduced a three-child policy in 2020.

Obstetric nurses are receiving more patients in their delivery suites and antenatal and postnatal services. Given that all obstetrics nurses are female, they are more likely to take advantage of the three-child policy and expand their family, spend six months of maternity leave, and need more time to care for their family and children. Therefore, many obstetric nurses are burdened with high workloads, long-term shifts, and imbalance between family and work matters.

A study by Ghiyasvandian (2014) reported that nurses with high self-efficacy were satisfied with their jobs and showed good communication skills with patients and other medical staff, which improved job retention and patient-nurse relationships. However, obstetric nurses in China are more likely to have low self-efficacy due to the high workload, long-hour shifts, and heavy burden of manually writing nursing records and documents (Zhang et al., 2011). In recent years, more obstetric nurses in China have changed departments or resigned (Zhang et al., 2011). However, it remains unclear whether these transfers and resignations are caused by low levels of self-efficacy, professional values, and job satisfaction.

Job satisfaction is influenced by self-efficacy and professional values. It is critical in nursing as it influences nurses' productivity and patient care quality. Previous studies reported that in nursing careers, nurses' self-efficacy and professional values directly or indirectly affected their job satisfaction, which ultimately affects healthcare quality (Zhang, 2019). Moreover, career switching and turnover of obstetric nurses are mainly related to inadequate job satisfaction. However, these studies were more focused on statistical value rather than expanding the results for exploring the obstetric nurses' experiences.

Nurses' professional values consist of human dignity, equality, prevention of suffering, honesty, and responsibility, which develop the basis for nurses' duties and rights and help them achieve professional goals (Rassin, 2008; Kangasniemi et al., 2015). It was reported that the level of nursing professional values among obstetric nurses in the target hospitals was lower compared to hospitals in big cities (Wei, 2022). According to Kavanough (2006), professional experience is one of the demographic variables most substantially associated with job satisfaction. A higher perception of self-efficacy increases an individual's motivation to act and improves performance (Kalandyk, 2016).

Considering the relationship between self-efficacy, professional values, and job satisfaction, this study aims to determine the levels of self-efficacy, professional values, and job satisfaction among obstetric nurses in China. Therefore, the impact of obstetric nurses' self-efficacy on their job satisfaction and the impact of professional value levels on job satisfaction were investigated. Apart from these objectives, this study also aims to investigate and explore all potential factors influencing obstetric nurses' job satisfaction,

including the potential strategies that can promote and improve obstetric nurses' job satisfaction.

1.4 RESEARCH OBJECTIVES

This study aims to determine the level of obstetric nurses' self-efficacy, professional values, and job satisfaction affecting the factors of job satisfaction and the relationship between obstetric nurses' self-efficacy, professional values, and job satisfaction. It also aims to explore the perceptions of obstetric nurses on their self-efficacy, professional values, and job satisfaction. These general research objectives were followed by the development of five specific research objectives in relation to obstetric nurses' self-efficacy, professional values, and job satisfaction. The following Table 1.2 illustrates the objectives identified in this study.

Table 1.2 Research Objectives of the Study

Research objectives
1. To determine the level of obstetric nurses' self-efficacy, professional values, and job satisfaction 2. To identify the factors influencing obstetric nurses' job satisfaction 3. To explore the perception of obstetric nurses on self-efficacy, professional values, and job satisfaction 4. To explore the perception of obstetric nurses on factors affecting their self-efficacy, professional values, and job satisfaction 5. To explore potential strategies provided by obstetric nurses for the improvement of job satisfaction

1.5 RESEARCH QUESTIONS

This study comprises two phases. Specifically, two research questions are present in phase I, and three questions are present in phase II.

1. What are the levels of self-efficacy, professional values, and job satisfaction of obstetric nurses?
2. What are the factors affecting obstetric nurses' job satisfaction in terms of demographic profile, self-efficacy, and professional values?
3. What are the perceptions of obstetric nurses on self-efficacy, professional values, and job satisfaction?
4. What are the perceptions of obstetric nurses on the factors affecting their self-efficacy, professional values, and job satisfaction?
5. What are the potential strategies for the improvement of job satisfaction, as perceived by obstetric nurses?

1.6 CONCEPTUAL FRAMEWORK

As shown in Figure 1.2, nursing professional values and self-efficacy are the independent variables in phase I of this study, while nurses' job satisfaction is the dependent variable. In this case, the mediator helped explain why the high level of nursing professional values and self-efficacy increased nurses' job satisfaction. Additionally, obstetric nurses' age, educational background, professional position, and years of working experience affected job satisfaction.

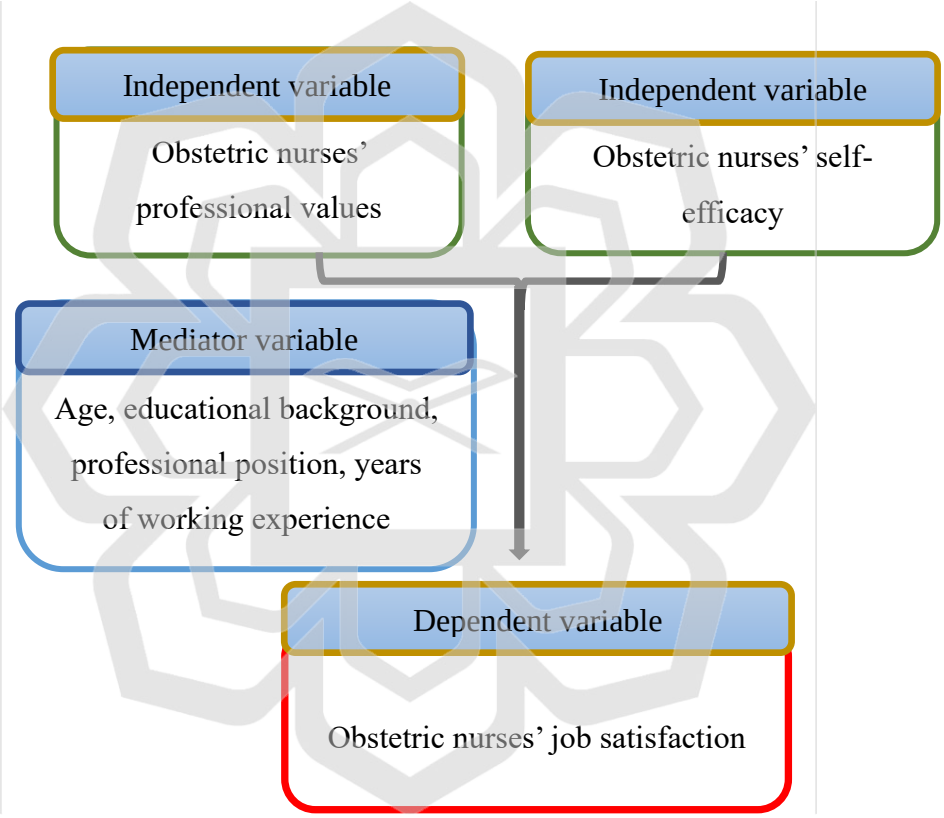

Figure 1.2 Conceptual framework of the study

1.7 HYPOTHESIS FOR STUDY PHASE I

Two hypotheses were established in the quantitative phase (phase I), which are as follows.

1. The obstetric nurses' demographic profile in terms of age, educational background, years of working experience, and professional position influences obstetric nurses' job satisfaction.
2. The level of obstetric nurses' self-efficacy and professionalism has a positive effect on their job satisfaction.

1.8 SIGNIFICANCE OF THE STUDY

Neither quantitative research nor qualitative research is able to obtain comprehensive and real data in elaborating on the actual work status and job satisfaction status of Chinese obstetric nurses, including the influencing factors and improvement strategies. Therefore, only mixed research is the most suitable and effective research method for this study. Furthermore, to answer all five research problems and achieve all five objectives of this study, a mixed-method research was implemented. Through quantitative research, data were collected to investigate the current level of professional values, self-efficacy, and job satisfaction among obstetric nurses, including the influencing factors of nurses' job satisfaction. To enhance the understanding of the real working status and job satisfaction status of obstetric nurses, more data are required, which can be collected through future qualitative research.

Previous studies had been conducted on nurses' professional values, self-efficacy, and job satisfaction. However, the research on obstetric nurses, particularly the in-depth perceptions and associations of obstetric nurses' professional values, self-efficacy, and job satisfaction was inadequate. Therefore, this study conducted a general investigation and in-depth exploration of nurses' job satisfaction through the current working status of obstetric nurses in the field. As a result, it has improved the understanding of obstetric nurses, hospital management, and society, allowing obstetric nurses to provide better nursing services.

1.8.1 Nursing Practice

Through the investigation of the obstetric nurses' job satisfaction and its connection with self-efficacy, and nursing professional values, the nursing staff may be able to improve their services for maternal and child healthcare. Essentially, nurses should be heard and supported to seek their professional development and formulate better nursing plans. Thus, the investigation into the factors influencing obstetric nurses' job satisfaction may contribute to better results regarding the strategies for improving nursing care service.

The qualitative phase of this study may increase the body knowledge and improve the understanding of the obstetric nurses' experiences, feelings, and the factors leading to their attempt to quit the job. In general, it is important for nurses and administrators to understand that nursing work requires them to be physically and psychologically prepared at all times. This study may address the reticence of nurses to stay in their profession.

1.8.2 Patients' Satisfaction

Patient satisfaction is a measurement of a patient's expectations and assessment of the quality of care they receive. This measure also enables nurses to analyse quality improvement initiatives to ensure that the care is patient-centred, effective, and ultimately enhances the overall representation of the healthcare facility. To investigate obstetric nurses' self-efficacy, professional values, and job satisfaction, the patients' expectations of the care team will be fulfilled, while the nursing care plans will be properly formulated. In addition, effective communication between patients and providers will also be achieved. Ultimately, an improved nursing care process contributes to higher quality of nursing care.

1.8.3 Nursing Research

This study has contributed to the research works related to obstetric nurses' perception of their job, life experience, and profession, particularly their sentiments and thoughts about their job. The results of this study may complement the existing evidence-based literature on obstetric nurses' job satisfaction and may provide a basis or reference point for other researchers to conduct related studies. It will also serve as a basis and a reference for researchers who attempt to expand the study and improve nursing practices. Moreover, this study will not only assist the administrators of different institutions in employing detailed and planned strategies to improve nurses' self-efficacy, professional values, and job satisfaction, but it will also contribute to proper leadership and management.

1.8.4 China's Healthcare Organisation

This study has the potential to make an effective contribution to facilitate nursing education and nursing management leaders in policy-making, strategic planning, healthcare development, adaptation, and implementation of any new technology and strategy. This information can guide leaders in understanding the professional development opportunities available to obstetric nurses. It also allows opinions to be voiced out in nurses' practice and the changes of this practice through the impact of organisational pressure. Moreover, the research may help the nurses overcome challenges they may face at work. Essentially, society has high expectations of nurses who are educated to provide safe and quality care. However, the quality of care may be affected in high-risk environments where nurses are physically and mentally exhausted, anxious, depressed, and dissatisfied with their jobs.

The study may also contribute to the body of knowledge related to the impact of technological or pedagogical innovations on clinical care and the development of the nursing profession. It also supports hospital management in developing a better work environment and providing effective and timely support for the nurses and trainee nurses. Therefore, this study may influence future policies in nursing management, nursing education, and nurses' job satisfaction.

1.9 OPERATIONAL DEFINITIONS

Maternal and Child Nurse

Maternal and child nursing fall under the speciality that focuses on women's pregnancy and birth processes, including the care for their newborn. This major involves prenatal care, perinatal care, postpartum maternal, and newborn care. In China, maternal and child nurses mainly work in maternal and child health hospitals.

Midwife

Midwives refer to nurses who have studied in formal midwifery college or university programmes. They are able to independently assist the delivery process and provide care for pregnant women. To achieve the success in a midwifery programme, a midwifery nurse practising certificate after the registration is obtained. This is followed by participation in nursing activities based on the provisions of these regulations, fulfilment of the duties of protecting human life, alleviation of patient pain, and promotion of health.

Obstetric Nurse

Obstetric nurses work in both obstetric wards and clinics. In China, obstetrics is a highly technical and high-risk department that involves extremely challenging tasks. Obstetric nurses should have a strong sense of responsibility, solid professional knowledge, and outstanding professional skills. They are also required to observe the labour involved in the work process and should not allow any negligence to ensure a successful delivery.

Self-efficacy

Self-efficacy refers to an individual's belief in his or her capacity to execute the behaviours required for specific performance attainments (Bandura, 1977; 1986; 1997). It also reflects an individual’s confidence in their ability to exert control over their motivation, behaviour, and social environment.

Professional Values

Professional values denote the standards of behaviour accepted by professional groups and individuals. It acts as the guideline and basic standard of motivation for professional

members' professional behaviour. Thus, strengthening individuals' professional identity and performance is crucial.

Job satisfaction

Job satisfaction refers to an individual's emotional state at work, which includes the degree of joy, happiness, or satisfaction felt.

1.10 CHAPTER SUMMARY

This chapter briefly describes China's health system setup: hospital classification, hospital configuration, and categories of nursing staff (general nurses, midwives, obstetric nurses). This is followed by an overview of the topic studied, the challenges faced by nurses, and the current status of their work. Based on past research, the research questions derived from the hypotheses were proposed, followed by the development of a set of objectives to guide the research. This study has also made a unique and applicable contribution that improves the mismatch between the number of nurses, health needs, and the needs of nurses by identifying the latest information that complements the evidence-based knowledge on nurse self-efficacy, nurse professional values, and nurse job satisfaction. The inputs and results recorded in this study may assist public health practitioners and policymakers in developing strategies to improve nurses' job satisfaction.

CHAPTER TWO

LITERATURE REVIEW

2.1 CHAPTER INTRODUCTION

This literature review comprises several sections: the concept of professional values; the effects of professional values on nursing; the concept of nurses' self-efficacy; the effects of nurses' self-efficacy on nursing; research theoretical foundation; the concept of job satisfaction; job satisfaction impacts on nursing; current challenges faced by nurses in clinical practice, and; summary of literature review. In this chapter, a comparison is made between the research questions, design, and methodology applied in related articles, followed by an illustration of the methods and findings. The knowledge gaps in this study and the limitations of empirical studies on professional values, self-efficacy, and job satisfaction among nurses were identified. However, the scarcity of research was present in the simultaneously included professional values, self-efficacy, and job satisfaction as research variables.

Midwives, obstetric nurses, and maternal and child healthcare specialist nurses in China have been serving in maternal and child healthcare. However, in most situations, midwives are only assigned to the labour room at public hospitals. Currently, antenatal, intrapartum, and postnatal care for women and newborns are commonly only provided by obstetric nurses, leading to the country’s encouragement for childbirth although there is a shortage of obstetric nurses. Despite the high demand for nurses, the resignation rate of nurses remains high. For this reason, this research aims to investigate obstetric nurses' job burnout.

2.2 SEARCH STRATEGIES

Reviewed articles were selected based on the inclusion and exclusion criteria (Table 2.1) through online databases. The eligibility of the studies was assessed in three different stages: screening titles, abstracts, and full text (Figure 2.1). The inclusion criteria are as follows: articles have been published from 2008 to 2022; the studies report professional values, self-efficacy, job satisfaction, nurses' job retention, and/or nursing challenges; studies have been conducted among nurses; full text is available, and; the publications are in English/Chinese.

The studies dated between 2008 and 2022 were included due to the higher likeliness of reflecting the current state of professional values, self-efficacy, and job satisfaction among nurses. However, the studies were limited to the English/Chinese language due to the lack of translation resources. Apart from that, the studies that were not focused on the nurses, were not peer-reviewed, and were not published in English/Chinese were excluded. The search based on inclusion criteria (Table 2.1) subsequently identified 127 studies that provided information related to research objectives. This review was conducted with a scoping review on the methodology issue from Joanna Briggs Institute Reviewers' Manual 2015 Methodology for Joanna Briggs Institute Scoping Review.

Table 2.1 The search strategies for professional values, self-efficacy, and job satisfaction

	Reviews (2008-2022)
Databases	Ebsco, PubMed, PsycARTICLES, Wiley online library
Keywords	Professional values, ethical values, professional ethics; nurses' self-efficacy, nurses' self-effectivity; general self-efficacy, evidence-based nursing self-efficacy; nurses' job satisfaction; job retention; job encouragement; nursing challenges; challenges for nurses in China; job burnout; stress; depression
Inclusion criteria	Articles published from 2008 to 2022; studies that report professional values, self-efficacy, job satisfaction, nurses' job retention, and/or nursing challenges; studies conducted among nurses; nurses' job burnout; challenges faced by nurses; nurses' stress; full text available; English/ Chinese language publications
Exclusion criteria	Nurses were not the focus of the study, not peer-reviewed studies, and not published in English/Chinese.

A search was conducted on the following online databases: EBSCO, PubMed, PsycARTICLES, and Wiley online library. The keywords used in various combinations included professional values, ethical values, and professional ethics; nurses' self-efficacy, nurses' self-effectivity; general self-efficacy, evidence-based nursing self-efficacy; nurses' job satisfaction; job retention; job encouragement, and challenges for nurses in China. The reference lists of included studies were inspected to record the relevant references. The

assessment for eligibility of the studies was conducted in three different stages, namely screening titles, abstracts, and full text (Figure 2.1).

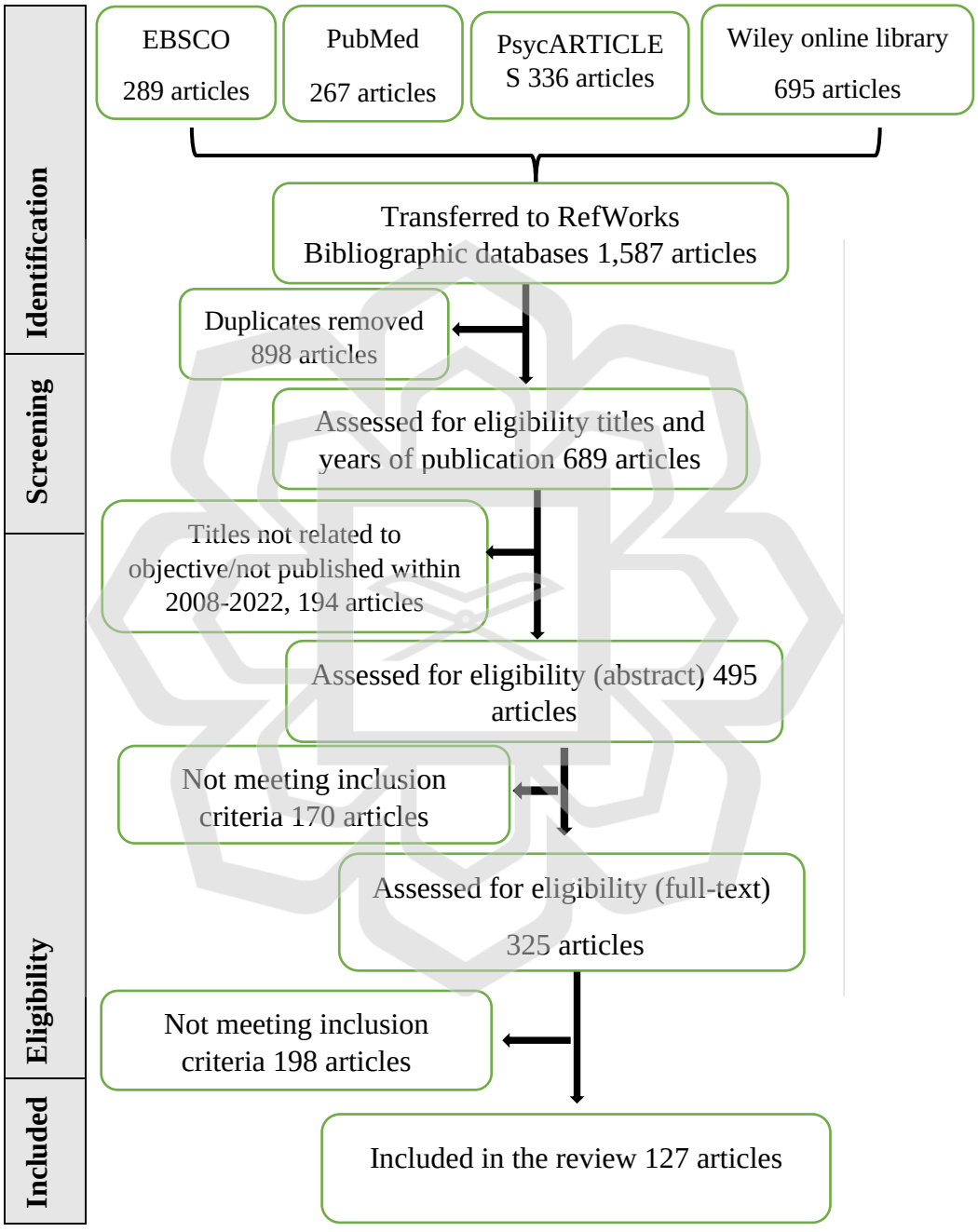

Figure 2.1 Flow diagram of the search strategy for nurses' professional values, self-efficacy, and job satisfaction

As seen in Figure 2.1, a total of 1,587 journal articles were identified and transferred to a bibliographic database RefWorks, followed by the exclusion of 898 articles that were duplicates. The remaining 689 articles were screened for the title and year of publication (2008-2022). Apart from that, 194 articles that were not published from 2008 to 2002 presented titles unrelated to the professional values, self-efficacy, and job satisfaction of nurses. The other 495 articles were also screened. At the final stage, 198 articles were discarded, while 127 papers were included. Subsequently, 127 articles were included based on the previously highlighted inclusion and exclusion criteria.

Further examination was conducted to confirm the focus on nurses' professional values, self-efficacy, and job satisfaction. The selected articles were included in the review. Specifically, papers were assessed using the Critical Appraisal Skills Programme (CASP) (Public Health Resource Unit 2006). It is noteworthy that the use of CASP was to assess the quality of the papers and provide insights into the methods and methodology used in the primary studies.

2.3 NURSES' PROFESSIONAL VALUE

This section discusses the concept of nurses' professional values, which begins with values and ethics. This is followed by a discussion on the effects of the values gained by nurses from their profession. The factors that may bring or cause a direct or indirect impact on nurses' professional values are also highlighted.

2.3.1 Concept of Nurses' Professional Value

Professional nursing values were defined as important principles of human dignity, integrity, altruism, and justice that serve as a framework for standards, professional

practice, and evaluation (Bonnie, 2017). Values represent basic convictions determining what is right, good, or desirable, and motivate social and professional behaviour. Thus, values denote active standards defining social and professional behaviour and affecting moral judgment. Nursing is a discipline that is rich in values, in which the nurses are required to base their professional activities on certain acknowledged values.

Core values of nursing include altruism, autonomy, human dignity, integrity, honesty, and social justice. Nursing is a profession rooted in professional ethics and ethical values, in which nursing performance is based on these values. Furthermore, the core ethical values are generally shared within the global community and reflect the human and spiritual approach to the nursing profession. However, the values in the care of patients are affected by cultural, social, economic, and religious conditions dominating the community, indicating the importance of identifying these values in each country (Shahriari, 2012).

Professional values are presented through ethical codes that clarify nursing professional practices, the quality of professional care, and professional norms. Advances in technology and expanding nursing roles have created complex ethical dilemmas for nurses. However, not properly addressing these dilemmas would negatively affect the ability of novice nurses to make clinical decisions. Moreover, promoting professional values has become crucial in nursing education following the continuously increasing number and complexity of ethical dilemmas in care settings. The acquisition and internalisation of values are central to promoting the nursing profession. The internalised values would become the standards in practice and guide behaviour. Values can also be taught, modified, and promoted directly or indirectly through education (Seada, 2012; Farag, 2016; Karami, 2017).

Research regarding values can provide ways to understand nurses' reactions to different clinical situations (Rassin, 2015). Hence, professional values are acquired through socialisation into nursing from the codes of ethics, nursing experiences, teachers, and peers (Al-Banna, 2017). According to Kim (2015), professional values fall under a source of the promotion of nurses' ethical competencies in clinical settings and the management of ethical concerns in the present area. Cara (2015) concluded that professional values form the basis for nurse attitudes and behaviours and guide their clinical practice decisions.

Weis (2009) described nurses' professional values as the standards for the actions adopted in nursing practice to evaluate the integrity of the individual and the organisation. Nurses' professional development is related to the acquirement and internalisation of values practised by nurses, offering a framework for developing and improving nursing quality and standards. To increase nurses' awareness of specific professional duties and improve their professional performance in all areas besides their care duties (Bijani, 2019). Therefore, it is crucial to carry out a purposeful integration of professional values in nursing education through value-based behaviours that are rooted in the care concept and guarantee the future of nursing (Parandeh, 2015).

2.3.2 Effects of Nurses' Professional Value on Nursing

Kaya (2017) stated that in clinical decision-making, the nurses reflect upon what they have learned and believed to be true. Thus, these values are the foundation for nursing practice and the guidelines for nurses' interaction with patients, colleagues, other professions, and the public. Professional values are associated with individuals' beliefs and mostly lead to the development of personal values in professional members in terms of the appropriateness and desirability of a subject. This condition motivates and rewards nurses (Hendel, 2014; Balis, 2015; Feito, 2019). Accordingly, studies recorded a significant relationship between personal and professional values. In this case, individuals who desire to help others commonly choose the catering profession (Bang, 2011; Donmez, 2016).

Balis (2015) highlighted that nursing professional values act as a guide in exhibiting ethical behaviours towards safe care and addressing ethical dilemmas. These values can predict care quality, job satisfaction, motivation, organisational attachment, and work commitment (Erkus, 2018). In this case, nurses are expected to reflect professional values in their decisions. Considering the nurses' role in patient care, they are constantly faced with conditions that require them to make ethical decisions. Thus, they should be adequately prepared to identify and respond to these conditions (Kim, 2015). Ethical dilemmas and professional nursing values play an important role in nurses' degree of

burnout and their decision upon staying in or leaving their jobs or professions. For this reason, ethical dilemmas and these values affect the quality of nurses' professional lives.

If nurses rely on values that contradict those adopted by the profession, the profession's image and identity may be at risk (Posluzny, 2017). In contrast, nurses' professional lives would improve if their actions followed the set values and beliefs in facing ethical dilemmas and building positive professional values, such as freedom, human dignity, justice, and truth. Therefore, nurses should be aware of their beliefs, values, cultural differences, and biases to avoid ineffective communication in stressful situations (Kim, 2015).

Dehghani (2015) argued that the nurses who fall under the largest healthcare group hold well-known and important professional values. The use of these values in nursing practice increases the quality of patient care, nurses' occupational satisfaction, retention in nursing, and commitment to the organisation. It is emphasised in the American Nursing Association's (2015) codes of ethics that regardless of the practice setting, the nurses' professional values influence nursing activity and the development of nursing as a profession (Epstein, 2015).

According to Mohsen (2013), nurses' professional values offer a framework for behaviour assessment and influence nurses' goals, strategies and actions, decision-making, and ethical practice, which contribute to a better outcome in healthcare. To develop the nursing workforce across all practice contexts, nurses with high professional values could be properly committed to teaching, supervising, and assessing. Nurses are also able to recognise the vital role of research in informing as in demonstrating the healthcare and policy development, ethically conducting the research, and supporting the decision-making of people who participate in the research (Mohsen, 2013).

A study by Kaya (2019) highlighted that holding high professional values in nursing increases nurses' job satisfaction, which improves patient care and satisfaction and reduces nurses' job burnout. Apart from that, individual characteristics effectively determine individual needs, priorities, and values. According to Kaya (2019), individuals' satisfaction with the service and nurses' job satisfaction will be enhanced, increasing the quality of nursing care and contributing to other beneficial outcomes such as relieving occupational

stress and patient-nurse relationships. Notably, nurses can make proper decisions, particularly regarding ethical dilemmas and take ethical actions when these values are considered in providing care.

2.3.3 Factors Affecting Nurses' Professional Value

Several empirical studies presented a range of factors influencing nurses' professional values, such as professional development (professional education and training), professional attitude, and professional experience. To illustrate, a study by Terzioglu (2016) highlighted that a professional attitude is essential for professional standard development and the provision of quality care. Furthermore, Flinkman et al. (2013) reported that nurses' resignation from their jobs might be attributed to their professional identities; improvements in professionalism may play a major role in nurses' commitment to their profession. Dehghani (2015) concluded that nurses' professional values are affected by internal factors, including communication skills, individual character, and responsibility, while external factors are focused on organisational preconditions, educational and cultural development, and support systems. Given that professional values in nurses' workplaces are influenced by factors such as culture and support at work place, the professional values may change based on the years of the working experience.

Through professional socialisation that leads to the complete acquisition and internalisation of values, nurses should be equipped with the necessary skills and knowledge in cognitive, emotional, and practical dimensions. However, less emphasis is placed on the emotional dimension involved in forming values compared to the other two dimensions(Bang, 2011). Sibandze (2017) stated that nurses' professional values are globally acknowledged as the foundation of daily nursing care practices. Therefore, the understanding of how nurses identify, comprehend, and apply their professional values is important in improving nursing care quality. Sibandze (2017) added that nurses' professional values are cultivated during academic education, indicating that registered nurses pursuing a Bachelor of Science in nursing or a higher academic level have higher

awareness and application of professional values compared to nurses with lower levels of academic education. Additionally, nurses with higher education also regard professional values as fundamental for quality nursing care practice. Subsequently, Roaa (2022) reached a conclusion that nursing professional values effectively influence nursing practices, considering that nurses' values can ensure high-quality care and strengthen the professional brand.

In China's hospital system, college nursing graduates easily secure jobs with poor salaries and levels of welfare compared to those with stronger educational backgrounds. As a result, the professional values gained by nurses through nursing education programmes may differ after employment. The changes in values are attributed to imposition rather than free choice, lower importance of some values, lack of sufficient approval in the clinical setting, lack of motivation, work pressure, lack of organisational support for the nursing profession, organisational culture, colleagues' values, situations faced in caring for patients (Feito, 2019), insufficient education on professional values, and lack of opportunity to participate in professional associations and nursing research activities (Sibandze, 2018).

Values can be described as innate and flexible; they may change over time depending on the daily events that affect people's thoughts and behaviours (Shammari, 2017). Poorchangizi (2019) found that a nurse's age had a positively significant relationship with the scores of professional values; older nurses had more experience that reinforced their professional values. Therefore, it can be stated that time and experience are factors facilitating the movement throughout the transformation continuum. After graduation, the assimilation of the values is influenced by continuous education or participation in workshops (Blais, 2015). In this case, continuous education has a prominent role in learning and instilling professional values.

Individuals with stronger inclination toward professional values have a higher frequency of caring behaviours (Boozaripour, 2018). Consequently, training nurses' commitment to ethical values is crucial for decent nursing care and patient recovery (Knecht, 2019). Many factors, including education, attitude, and culture, affect the development of professional values and ethical decisions. Thus, educational centres should

use various educational methods to familiarise the students with professional values based on their features (Bijani, 2019).

2.4 SELF-EFFICACY

This section explores the concept of nurses' self-efficacy and its development. The impact of nurses' self-efficacy level on nursing work determines the influencing factors of nurses' self-efficacy.

2.4.1 Concept of Self-efficacy

Self-efficacy is commonly defined as the belief in one's capability to succeed. One may be intrinsically motivated by being prepared for challenges and difficult tasks (Bandura, 1997; Zeldin, 2008). According to Bandura's (1977) social learning theory, self-efficacy refers to an individual's belief in their ability to learn and perform actions at a predetermined level of performance. It is a cognitive factor affecting the ongoing performance of activities and related behaviours. Self-efficacy also represents the ability of nurses to believe that they are capable on their own through the acquisition of knowledge and clinical skills, communication with patients, and maintaining nursing ethics.

Self-efficacy plays an important role it affects not only employees' behaviour, but also other determinants, such as the perception of barriers and opportunities in the social environment, emotional tendencies, goals, and expectations in employment (Bandura, 2006). Similarly, Kadir (2017) described self-efficacy as a self-assessment of the beliefs and attitudes of the staff working towards the accumulation of abilities and knowledge compared to the expectations of them. Essentially, self-efficacy denotes the belief in the

competence of individuals to fulfil certain tasks. It represents the sense of control over one's environment and behaviour (Schwarzer, 2013).

Based on numerous studies, self-efficacy predicts success in professional practice. However, several authors highlighted the importance for new nurses to adapt to their role and environment change and face challenging work and life missions as new staff members. Hence, new nurses' self-efficacy is low in general (Li, 2010; Liu, 2012), as recorded by a study by Li (2010) on newly employed nurses. Similarly, a study by Stajkovic (1998) revealed that professional self-efficacy positively affected job-related performance, while people with low professional self-efficacy had low motivation to confront problems.

The study by Soudaga (2015) highlighted that self-efficacy is an important predictor of nurses' professional functioning. Melnikov (2013) also demonstrated that self-efficacy contributes to the success of academic performance, mathematics, and professional practice in the clinical. Apart from that, Azam (2017) argued that self-efficacy is the most influential factor in nurses' performance. It empowers nurses to show the highest performance possible. Moreover, nurses with high self-efficacy are more internally motivated than perceiving outside pressures for their careers, which allows them to carry out practical tasks. Caza (2016) added that the nurses' perception of themselves involves important personal and professional implications.

Self-efficacy theory is a subset of Bandura's (1986) social cognitive theory. Based on this approach, the two key determinants of behaviour are perceived self-efficacy and outcome expectancies. A version of this model incorporates risk perceptions, behavioural intention, and components of the action phase of behaviour change (Schwarzer, 1996; Fuchs, 1996). Self-efficacy theory elaborates on the development and alteration of self-efficacy, including its impacts on behavioural change, performance accomplishments, and personal well-being.

Self-efficacy significantly influences a person's success in activities and tasks, determining whether the dynamic process is favourable or vice versa as the individual's self-efficacy restricts their motivation, actions, and psychological state (Bandura, 1997). As a response to the research by Dew et al. (2005), self-efficacy was introduced as a moderator based on the social cognitive theory (Bandura, 1997) and Johns' integrated

framework (Johns, 2010) to examine the acting mechanism of presenteeism on its outcomes. Self-efficacy can predict individuals' behaviours in different situations (Schwarzer, 1997). Furthermore, individuals with high self-efficacy commonly possess a positive self-image and a high level of confidence. This aspect empowers them to cope with the pressures in their professions and maintain good health and high work performance (Bandura, 1997). Lu et al. (2005) found that self-efficacy regulated the negative impact of stress on individual health. Following that, Feng et al. (2008) examined the moderation effect of general self-efficacy on the relationship between job insecurity and individual job performance.

2.4.2 Self-efficacy Theory

The concept of self-efficacy is applied in self-regulation, self-care, self-monitoring, and self-management in the nursing context. Self-efficacy is one of the key components that drive health-promoting practices, behaviour, and self-care management. Specifically, it plays a vital role in nursing education as it increases students' competence, motivation, and clinical performance, which subsequently influences job satisfaction and the quality of patient care provided. Thus, effective clinical training should establish a sense of self-efficacy among nursing students, which is a key component for acting independently and competently in the nursing profession (Abdal, 2015). However, Bandura (1994) also highlighted that students with low self-efficacy would avoid situations that lead to failure. Therefore, a strong sense of self-efficacy and job satisfaction is crucial in improving job burnout in the nursing profession (Zhang, 2015). Overall, clinical self-efficacy and competence are essential for future healthcare practitioners in providing quality healthcare and ensuring patient safety (Mohamadirizi, 2015).

Education and social support through informational, emotional, formal, and informal means are the primary factors contributing to self-efficacy (Shorey, 2021). Self-efficacy is related to a person's perception of his or her ability to feel, think, motivate, and act to change particular behaviours. The person also processes, weighs, and integrates

diverse sources of information related to his or her capability, followed by the integration of choice behaviour and effort expenditure accordingly (Bandura, 1997).

Bandura (1994) highlighted four main sources of self-efficacy. First, the mastery experience of overcoming obstacles develops coping skills and exercises control over potential threats. The second source is the variety of experiences provided by social models and perceiving people as similar to oneself, which creates similar behaviours. These experiences are considered the most influential sources of efficacy. The third source is their belief that they have what it takes to succeed, while the fourth source involves making changes to one's negative emotions and misunderstanding their physiological state.

Self-efficacy has been demonstrated as having vital and precursor influences on positive consequences. Some studies suggested that nurses with high self-efficacy have higher professional commitment and invest more effort into their jobs, which helps improve the quality of nursing care and increase nursing performance (Eller et al., 2018; Kim et al., 2021). As the main personal resource, self-efficacy explains intrinsic motivational processes, which can efficiently achieve a desired balance between work attitude and behaviour (Wallin et al., 2021; Lopez-Garrido, 2020).

2.4.3 Effects of Self-efficacy on Nursing

Nurses' engagement in advance care planning practices is mainly associated with their self-efficacy rather than their knowledge (Joni, 2020). Alavi (2017) considered self-efficacy the most influential factor affecting nurses' performance and their core competency. Azmoude (2017) added that most healthcare professionals do not possess an adequate level of self-efficacy in implementing Evidence-Based Practice.

Notably, self-efficacy plays an essential role in different aspects. The study by Kadir (2016) found that staff working with high self-efficacy were less concerned about the adverse situation and their ability of effectively making decisions in difficult conditions. A study by Caza (2016) found that nurses with low self-efficacy had low job satisfaction and

poor job retention in the past. Therefore, an organisation employs staff with high self-efficacy to solve role stress. Another study highlighted that high self-efficacy improved clinical nursing care (Yi, 2015). Furthermore, the study by Farokhzadian (2016) demonstrated that improving the nurse's self-efficacy could prevent nurses from low effort at work and strengthen their knowledge and skills, contributing to better nursing care. Overall, it was demonstrated in past studies that self-efficacy positively affected individual nurses and the care they provided, subsequently affecting the nursing unit as a whole.

Nurses' self-efficacy is correlated with mental health, resilience, and job burnout. Which contributes to improved outcomes for patients and the healthcare system (Manojlovich, 2005). Self-efficacy may be summarised as the belief in one's ability to cope with all types of environmental challenges or the extent of general confidence to gain adequate ability to complete an activity or achieve a goal. Specialised self-efficacy is concerned with particular areas of behaviour and function. With the current increased awareness and expectations to receive good healthcare, nurses' self-efficacy requires further attention.

Pediatric nurses' professional self-efficacy has been considered an influencing factor in providing quality nursing care. Self-efficacy is an individual's belief in being able to perform the required actions to achieve the desired outcome. It also refers to an individual's confidence that they can perform qualitative outcomes for the professional tasks assigned to the specific occupation. To illustrate, those with high professional self-efficacy would successfully achieve the outcome of their professional work and gain high job satisfaction. Besides the ability to manage the tasks required in special circumstances, these professionals also present high-quality decision-making. Therefore, nurses with high self-efficacy can improve their professional nursing practical ability, ultimately improving the quality of nursing care (Bargsted, 2019; Caruso, 2016; Lu, 2020).

Self-efficacy also contributes to the success of professional values in clinical practice offering a model for decision-making and ethical practice. This aspect supports an individual's professional values, leading to better healthcare outcomes and job satisfaction (Mohsen, 2016; Ivana, 2018). However, nurses may be faced with confusion regarding whether they should proceed with their careers when they have experienced unfair

treatment, unreasonable work arrangements, and unscientific self-regulation challenges. A study by Yang (2017) recorded that nurses with low self-efficacy were more likely to quit their jobs.

2.4.4 Factors Affecting Nurses' Self-efficacy

According to Lunenburg (2011), workers' self-efficacy is frequently influenced by their performance. However, nurses struggle in setting clear numerical values of past achievements as these achievements cannot be measured monetarily in contrast to business outcomes. Several previous studies demonstrated that factors including years of working experience, professional education, and development influenced nurses' self-efficacy. A study by Soudagar (2015) highlighted that the possible predictor variables of nurses' self-efficacy are interest in the nursing field, years of experience in the nursing field, work setting, working hours per week, marital status, and educational level. However, self-efficacy was predicted by years of experience and interest in the nursing field.

Significant relationships were recorded in the study by Azmoude (2017) between proficiency in the English language and the use of databases with evidence-based practice knowledge in professional education and development, self-efficacy, and practice. Stress is related to nurses' self-efficacy (Kim, 2012), which may be low among psychiatric nurses. Aside from self-efficacy, stress is also an important factor affecting mental health (Fida, 2018). Based on a study of general nurses (Toshiko, 2017), the nurses with more positive work experiences were recorded with high self-efficacy.

2.5 NURSES' JOB SATISFACTION

This section explores the impact of nurses' job satisfaction level on nursing work to determine the influencing factors of job satisfaction. In this case, the understanding of the concept of nurses' job satisfaction and its development is built.

2.5.1 Concept of Nurses' Job Satisfaction

Job satisfaction is a psychological construct that evaluates an affective reaction to a job (Locke, 1976). It is described in terms of psychological concepts, including attitudes towards work, work ethic, professional development, the development of work, and to a certain extent, perceptions of the meaning of life (Hair, 2010). Based on the reviewed literature, the components of job satisfaction include promotion and individual growth (Yang et al., 2012), recognition and praise (Mrayyan, 2006), responsibility and control (Moumtzoglou, 2010), remuneration (Sriratanaprapat al., 2012), work conditions (Hu, 2007), the work (Stamps& Piedmonte, 1986), administration and organisational policies (Cao, 1998), interaction (Hu & Liu, 2004), and family and work balance (Mueller and McCloskey, 1990).

2.5.2 Effects of Nurses' Job Satisfaction on Nursing

National research demonstrated that 45% of Chinese nurses were dissatisfied with their jobs (You et al., 2013). However, nurses' job satisfaction is significantly related to nurse outcomes, such as nurses' job retention (Cowin et al., 2008), intention to leave (Huang, 2012), burnout (Kalliath & Morris, 2002), job performance (Pan et al., 2013), and the significant influence on patient outcomes, such as quality of care (Mohr et al., 2011) and patient satisfaction (Szecsenyi et al., 2011). Therefore, nurses' job satisfaction and maintaining it are crucial for clinical nursing practice.

Job satisfaction is an emotional state experienced from achieving the targeted results. One element of job satisfaction is the positive experience of being a part of a well-functioning work group (Huang, 2012; Liu, 2015). Recruiting new staff while maintaining a strong commitment to the organisation among current staff is a significant challenge for the healthcare sector. In the future, it would be crucial to prioritise job satisfaction in healthcare if hospitals ensure adequate staffing by maintaining high levels of commitment

amongst the existing employees while recruiting new staff (Mohr, 2011). However, dissatisfaction with the job leads to medical and nursing errors and other undesirable conditions.

An important predictor of job satisfaction is the quality of collaboration between nursing staff members, nursing staff, and nurse managers (Sriratanaprapat, 2012). In addition, job satisfaction positively affects the quality of care and patient outcomes. To illustrate, hospitals with high job satisfaction scores contribute to high-quality care and favourable patient outcomes (Liu, 2015; You, 2013).

2.5.3 Factors Affecting Nurses' Job Satisfaction

Job satisfaction among nurses is an important topic of research. Considering the many factors contributing to job satisfaction, continuous examination should be conducted on it. One study by Kuru (2016) found that job satisfaction of clinical nurses was significantly correlated with one's selection of working department, affinity with one's job, and sufficient salary from the nurses' point of view. However, no significant relationship was found between the mean scores of participants' job satisfaction, age, gender, education, and working time (Kuru, 2016). Meanwhile, Barac (2018) highlighted the importance of developing programmes for permanent professional training, such as supervising the work processes in hospital departments and workshops on professional self-empowerment to increase job satisfaction.

According to Moos (2008), the work environment affects job-related outcomes, such as employees' job satisfaction and the satisfaction of patients. A phenomenological study found that family-friendly schedules and the identification of resources for nurses contributed to job satisfaction (Smith et al., 2009). Ma (2009) also opined that day-shift nurses experienced higher job satisfaction compared to night-shift and evening-shift nurses. The regular hours, non-weekends, and holiday schedules may improve the integration of work and personal life.

2.6 CHALLENGES FOR NURSES IN CHINA

In this section, a conclusion is reached regarding the challenges faced by nurses in China by exploring and understanding China's social-cultural background and how the challenges are created. Through this discussion, its impact on the level of nurses' professional values and self-efficacy, especially on obstetric nurses' job satisfaction can be determined.

2.6.1 The Effects of China's Three-Child Policy

The one-child policy was introduced in 1979 by the Chinese government, which considered population containment essential to lift China out of severe poverty caused by decades of economic mismanagement. It is clear that the fear of the ageing population has been the most influential factor in the decision to lift the one-child policy. In November 2013, a policy was established to allow couples in which at least one of the marital partners was an only child to have two children. Zheng (2016) identified the baby boom as one of the major nursing workforce issues. The implementation of the government's new child policy would lead to an increase in the number of pregnant nurses who would be on six-month maternity leave, which would lead to a critical nursing shortage in China.

Zheng (2016) stated that some local health authorities are currently considering options for the employment of part-time nursing staff. While this approach may promote a better lifestyle for nurses, it may not solve the issues of nursing workforce shortage. Besides, the government's implementation of the three-child policy may deteriorate the staff shortage issue. Therefore, any increase in the birth rate resulting from the two-child policy will exacerbate pressures on an already stressed healthcare system (Zeng, 2016).

2.6.2 Excessive Workload and Overtime

Excessive workload and long-term shifts affect nurses' self-efficacy and job satisfaction. In China, nurses are mostly required to work under high pressure, long-term shifts, and carry the burden of manually writing nursing records and documents, which leads to low self-efficacy (Zhang et al., 2011). A study by Ghiyasvandian (2014) reported that nurses with high self-efficacy were satisfied with their jobs and practised good communication skills with patients and other medical staff, contributing to job retention and patient-nurse relationships. However, in recent years, Chinese nurses with low self-efficacy have the tendency to leave their jobs. Subsequently, more nurses face job-related distress due to work overload and complex relationships with patients (Zhang et al., 2011).

2.6.3 Nurses' Pressure

Depression, which is the most common type of mental disorder, is characterised by intense and prolonged sadness, inferiority, pessimism, and thoughts of suicide. There are some cases where somatic symptoms may also occur. In China, the prevalence of depressive symptoms among nurses is higher among other medical staff. In contrast to depression, psychological well-being positively affects employment outcomes, including job satisfaction. Considering that better psychological well-being of employees would reduce their turnover intention, more attention should be paid to nurses' mental health due to their important role in medical services.

China faces two major challenges: increased childbirth and population ageing, which will significantly increase the demand for nurses. The rapid increase in nursing demand and gradual increase in qualified nurses have caused a critical shortage of nurses in China. This issue may deteriorate with the accelerated growth of the ageing population and newborns. Additionally, shifts are only announced a week beforehand, preventing nurses from having a meaningful social life. Ultimately, the excessively long hours and the

intense pressure of the work where nurses are responsible for the life of their patients has driven them to their breaking point.

New staff are vulnerable due to their fear of making mistakes in a high-pressure working environment. Besides, different hospitals may vary in terms of work hours, meal subsidies, overtime, and work benefits among others. Nevertheless, long hours and a highly stressful working environment are the norms throughout the medical industry, especially in major cities such as Shandong where staff shortages are always present.

The heavy workload is exacerbated by the so-called "additional tasks" imposed on medical staff after work, such as study sessions, training, and essay writing among others. While these "additional tasks" are not considered overtime, all staff must fulfil the yearly quota of additional tasks to continue practising. Research by Cheung (2017) found that the nature of nursing care, workplace hazards, workplace violence, and employment pressure were the main sources of pressure. Büssing (2017) concluded that the stressors related to hospital settings, failure to balance family and work, limited interpersonal relationships, and discrimination increased the pressure on nurses.

2.7 DEMONSTRATED CONNECTIONS AMONG THE NURSES' PROFESSIONAL VALUES, SELF-EFFICACY, AND JOB SATISFACTION

Addressing self-efficacy based on the perspective of Bandura's (1977) social learning theory, occupational self-efficacy applies to career choice and development issues (Wei, 2022). Individuals with significant levels of self-efficacy are more confident in their ability to achieve specific goals and take the necessary steps to achieve the goals. In terms of career development, self-efficacy refers to making career choices and solving future career problems. Mao et al. (2017) described career self-efficacy as a precursor to individuals' lower anxiety and higher career advancement. Individuals who have strong opinions are more motivated to engage in professional development activities and achieve greater success (Bandura, 1977).

In mainland China, nursing turnover has recently increased from 6.5% to 30% (He, 2020). The nursing intention to stay in the job is influenced by many factors, such as job satisfaction, burnout, relationship, workload, work-life balance, professional development, professional identity, and recognition (Lee, 2020). Aside from professional values and self-efficacy, job satisfaction has become a supportive factor in work engagement (Zhang, 2023). However, nurses who are assigned to the obstetric unit struggle with various issues, such as job features, workload, and high levels of physical, mental, and emotional stress in the workplace, which may affect their job satisfaction. While nurses generally view professionalism as a key issue in providing care, it is not evident in their performance in some cases (Zhang, 2023; Cheng, 2020).

Professional identity is an individual's cognition of occupation, including goals, values, and other factors consistent with society's evaluation and occupation expectations. Professional identity is strongly related to nurses' thoughts and feelings about themselves. To illustrate, nurses with a stronger professional identity demonstrate more effort and motivation, which contributes to career fulfilment and increases job satisfaction (Kristoffersen, 2021; Coetzee & van Dyk, 2018; Seo & Kim, 2017). Therefore, professional identity is essential in increasing job satisfaction and strengthening nurses' intention to stay, which ultimately helps alleviate the global nursing shortage (Kristoffersen, 2021; Zhang et al., 2021).

Effective communication and focus on professional and ethical values in providing care for patients may partly reflect their professional performance (Somayeh, 2019). Job satisfaction is not a single supportive factor; rather, it is the product of factors including the conditions and relationships that govern the workplace, the organisational system of employment, and social, cultural, and economic factors. Hence, previous studies found that job satisfaction positively impacted organisational commitment, career identity, and job performance while negatively impacting turnover intention.

2.8 SYNTHESIS

Currently, there is no literature that simultaneously addresses three variables of nurses' professional values, self-efficacy, and job satisfaction. In China, no relevant study has been conducted on the professional values, self-efficacy, and job satisfaction of obstetric nurses. Most studies are solely focused on general nurses or specific departments including craniothoracic surgery and orthopaedics, particularly emergency departments and surgery rooms. Previous studies also demonstrated the significant influence of age and years of working experience on job satisfaction. Furthermore, based on previous research literature, it was concluded that a correlation is present between the independent variables (nurse professional values and nurse self-efficacy) and the dependent variable (nurse job satisfaction). At the same time, nurses' factors, such as age, education, work experience, and professional positions among others also had an impact on nurses' job satisfaction.

Dilek (2017) stated that hospital management should structure jobs with higher skill diversity, higher autonomy, and fewer workweeks (e.g., shorter shifts and less overtime), leading to higher job satisfaction degrees, less burnout, and lower turnover intentions. Moreover, general self-efficacy and nurses' professional ethics positively affect nurses' satisfaction with $p < 0.01$ (Delik, Alavi, 2017). At the same time, job satisfaction was a significant predictor of physical and mental health, including subjective well-being (Zhang, 2021). Weakness in professional performance was recorded from the analysis of interviews with participants, which included weak professional interactions.

Self-efficacy evaluates the capability to perform a certain task and the expectation of successfully carrying out certain behaviours (Cheng, 2020). Several studies evaluated the effect of self-efficacy in maintaining an optimistic attitude, increasing positive emotion, and reliving job burnout. Therefore, general self-efficacy is considered one of the most influential parameters affecting the quality of clinical practice and nurses' job satisfaction.

2.9 CHAPTER SUMMARY

The rapid development of healthcare and the ageing of the population increases the demand for quality care, which brings critical challenges to nursing work. However, the World

Health Organization predicted a shortage of 5.7 million nurses to have occurred by 2030 worldwide. Currently in China, the number of registered nurses per 1,000 people is 2.73, which is significantly lower compared to their number in developed countries. Notably, nurses who are under high pressure for the long term are prone to job burnout, which affects the health outcomes of patients.

Previous research focused on one or two variables within nurses' professional values, self-efficacy, or job satisfaction. However, based on a literature review in China, limited studies were conducted on professional values, self-efficacy, and job satisfaction among obstetrics nurses. As a result, more clients would demand healthcare services with the three-child policy development. To address these challenges, more focus should be placed on clinical nurses, especially obstetric nurses, to improve the level of nurses' professional values, self-efficacy, and job satisfaction. Therefore, this study aims to determine the main factors impacting nurses' self-efficacy, professional values, job satisfaction, and potential improvement strategies to help nurses face the challenges that could lead to heavy psychological pressure. Besides training nurses with the required knowledge, skills, attitude, and spiritual and psychological support, encouraging them to continue their careers is also crucial for improving obstetric nurses' burnout and job satisfaction. This study may also assist future researchers in conducting a comprehensive discussion on effective and practical interventions to improve nurses' self-efficacy, professional values, and job satisfaction.

CHAPTER THREE

METHODOLOGY

3.1 CHAPTER INTRODUCTION

This chapter presents the selected research paradigm, study setting, selection of target hospitals, recruitment of participants, study phases, and justification for selecting the adopted methods to fulfil the research objectives. In this case, the rationale for adopting the mixed method approach is stated, followed by several details of the study setting and the sampling strategy. An explanation is also provided on the recruitment of participants, data collection process, data analysis, and management. Subsequently, this chapter illustrates the method through which this study addressed the issues of ethics and reflexivity in the research process. The validity and reliability of all scales used in Phase I of this study were tested and validated.

3.2 PRINCIPLES UNDERPINNING

After outlining the research aims, questions, and objectives, the most suitable research methodology is identified to guide the procedures of the study. Pragmatism is one of the research paradigms that has been identified as the philosophy to underpin this study that is associated with action, intervention, and construction of knowledge. Furthermore, pragmatism emphasises the situations, actions, and outcomes rather than facing previous situations characterised by an emphasis on “effective” action. Pragmatism focuses on research questions and specifically considers nearly all methods of identifying these hypothetical issues (Scott & Briggs, 2009; Morgan, 2007). However, pragmatism provides

researchers with a basis for freedom to determine the methods adopted in their research based on their expertise and understanding based on different perspectives.

Pragmatism and the mixed methods approach provide the most appropriate theoretical framework to emphasise the research objectives. Pragmatists support both objective and subjective views and do not believe that cause-and-effect relationships can be proven in real-world settings. Therefore, pragmatism provides flexibility for the researcher to select the methods and techniques of research that fulfil the research objectives (Teddlie, 2003; Creswell, 2014).

It can be observed that quantitative research is employed to investigate the affecting factors of obstetric nurses' job satisfaction and relationship among obstetric nurses' self-efficacy, professional values, and job satisfaction. The research aims to gain an understanding of obstetric nurses' perceptions of their self-efficacy, professional values, and job satisfaction, which definitely can provide a subjective understanding of the situation. For example, the quantitative results of the first and second research questions may not assist in determining the affecting factors, particularly obstetric nurses' perceptions of self-efficacy, professional values, and job satisfaction. Thus, the qualitative phase allows the identification of possible relations to why and how the factors can influence job satisfaction.

Marshall (1995) stated that the 'what' and 'how' research questions lie in the qualitative paradigm, which investigates the slightly understood phenomena and aims to understand the prominent patterns and links between these phenomena. The choice of mixed methods is often complemented by the adoption of specific paradigms. Notably, pragmatism and critical realism are the most common and widely cited by mixed methods researchers. Pragmatism is a paradigm associated with action, intervention, and construction of knowledge. Specifically, pragmatism emphasises circumstances, actions of 'what works', and results rather than addressing previous situations. In this case, researchers have a free ground for deciding their approach (Scott & Briggs, 2009). Meanwhile, critical realism observes reality as multi-coated, which requires the engagement of the researcher's experience to identify the contributing factors (Bhaskar,

1997). Therefore, it highlights the existing challenges in health systems by explaining the mechanisms to identify the difficulties.

Provided that this study established the foundation for investigating the job satisfaction of obstetric nurses by understanding their experiences and perceptions, it contributes to the nursing profession and the quality of nursing services by finding the most authentic data information. Hence, the impact of nursing professional values and self-efficacy on the job satisfaction of obstetric nurses in the face of challenges was further investigated. This study also aims to investigate obstetric nurses' challenge, which is an outcome of an interrelated and complex association of biological, psycho-social, and other factors leading to stress or emotional disturbance that adversely impacts individuals' health.

Critical realism is grounded in the researcher's experience and perceptions of the surrounding reality, including the issues influenced by sociocultural, psychological, and social contexts. This philosophy is relevant in considering the investigation of cultural and socio-demographic elements to establish a real and natural investigation (Lincoln & Guba, 1985). Based on these justifications, this study was conducted on the status quo of obstetric nurses' professional values, self-efficacy, job satisfaction, and the influencing factors of nurses' job satisfaction.

In the first phase, a quantitative study was implicitly applied, which provided statistical data that measured the levels and relationships between the obstetric nurses' perspectives of self-efficacy, professional values, and job satisfaction. In the second phase, qualitative data were collected through the interview to explore the perceptions and their influence in terms of self-efficacy, professional values, and job satisfaction. This phase allowed the exploration of the relevance of the answers presented in the first phase and the explanation of the quantitative results. Through these approaches, both objective and subjective values informed by the participants were integrated into one context.

Following the aforementioned discussion, Creswell (2007) stated that the pragmatic underlies the mixed methods study, focusing on the practice and works for the participants. In this sense, a qualitative approach to this study would provide a thorough description of the perspectives of individuals or small groups of Chinese obstetric nurses. Furthermore, the use of qualitative research methodology in this study was in line with the aims and

objectives, allowing the development of understanding regarding the meanings and experiences of individuals of the phenomenon being investigated. The qualitative research approach allowed a detailed description of the phenomena, which strengthened the understanding of the issues under study.

3.3 OVERVIEW OF METHODOLOGICAL APPROACHES

In this section, the concept and types of mixed methods design are introduced, followed by the explanation of the selection of sequential explanatory mixed-method design in this study.

3.3.1 Mixed Methods Design

In the first stage of this study (quantitative research), the second research question was not properly explained and answered, while the results of the first phase of data analysis were different from previous studies. The second phase (qualitative research) was planned and designed through project-based correlation testing and literature review.

Mixed-methods research is defined as the class of research where the researcher combines quantitative and qualitative research techniques, approaches, concepts or language in a single study (Johnson, 2004). On the other hand, Creswell (2007, p:21) defined mixed methods as an "approach to an inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data and using distinct designs that may involve philosophical assumptions and theoretical frameworks". The core assumption of this form of inquiry is that the combination of the qualitative and quantitative approaches offers a complete understanding of a research problem rather than one of the approaches. It is used to expand the scope of inquiry and access a broader range of data, providing

knowledge and insights that are otherwise unavailable in either quantitative or qualitative approaches.

Mixed-method design as a product should possess sufficient quality to achieve the legitimation of multiple validities. This condition refers to the mixed methods research that fulfils the relevant combination or set of quantitative, qualitative, and mixed methods validities in each study (Johnson, 2017). The quantitative and qualitative paradigms in one study are combined, followed by the development of understanding to create meaning from both results or consider both paradigms in terms of continuation rather than dualism. Additionally, mixed methods can expand the impact and increase the flexibility of a research design to triangulate, complement, or expand the contribution of a single approach.

A mixed-method design was employed in this study due to three main reasons. The first reason is its consistency with the pragmatist approach, in which different research questions are formulated based on the knowledge gaps identified in a literature review. In this case, determining the relationships among variables is required to explore the perceptions, affecting factors, and potential improvement strategy. Therefore, mixed-methods research is applied to provide a more holistic approach that reflects the various dimensions of the research problem. Second, quantitative data may not be able to provide adequate answers to the research questions. Additional qualitative research can produce rich data that improves the understanding of the processes behind the numbers. Third, the research objectives of this study cannot be achieved solely through a quantitative approach.

Qualitative methods provide better explanations of the associations observed. Thus, this thesis presents a mixed-methods approach that seeks complementarities (Sale et al., 2002; Johnson, 2004). For example, possible explanations of quantitative results are obtained through the in-depth data produced in the qualitative component. Another purpose to expand the research using different methods to investigate different dimensions of the research questions (Johnson, 2004). Overall, the quantitative and qualitative elements in this research aim to gain better descriptions and insights into Chinese obstetric nurses' self-efficacy, professional values, and job satisfaction.

The four major types of mixed methods designs are the triangulation design, the embedded design, the explanatory design, and the exploratory design. Among these

designs, the triangulation design is the most common and well-known (Creswell, Plano Clark, et al., 2011). Specifically, the triangulation design aims to "obtain different but complementary data on the same topic" (Morse, 1991) and gain an accurate understanding of the research problems. This design also aims to combine the differing strengths without overlapping the weaknesses of quantitative methods with those of qualitative methods (Patton, 1990). When a researcher intends to comprehensively compare the quantitative statistical results with those of qualitative findings or validate or expand quantitative results with qualitative data, this design will be used.

The embedded design is a mixed methods design that provides a supportive secondary contribution in a study that is mainly based on other types of data. Researchers employ this design when they need to include qualitative or quantitative data to answer a research question within a quantitative or qualitative study. This design is remarkably useful in embedding a qualitative component within a quantitative design, as shown in the case of an experimental or correlational design.

In regards to the explanatory design, the two-phase exploratory design aims for the results of the qualitative method, which is suitable for exploring a phenomenon and developing informing the quantitative method. This design is notably useful when a researcher needs to develop and test an instrument due to its unavailability (Greene et al., 1989; Creswell, Plano Clark, et al., 2011; Creswell et al., 2004) or identify important variables to perform a quantitative study when the variables are unknown. It is also acceptable for a researcher to generalise results to different groups (Morse, 1991), test the aspects of an emergent theory or classification (Morgan, 1998), or explore a phenomenon in depth and measure its prevalence.

The explanatory design is also a mixed methods design with two phases. Using this design, the qualitative data facilitates the explanation or building upon the quantitative results (Creswell, Plano Clark, et al., 2011). To illustrate, this result is suitable for a study where qualitative data are required to explain the significant, nonsignificant, outlier, or unpredictable results (Morse, 1991). This design can also be used when a researcher attempts to form groups based on quantitative results and follow up with the groups through subsequent qualitative research (Morgan, 1998; Tashakkori & Teddlie, 1998) or apply the

quantitative participant characteristics to guide purposeful sampling for a qualitative phase (Creswell, Plano Clark, et al., 2011).

3.3.2 Sequential Explanatory Mixed Methods

According to Creswell (2014), the sequential explanatory mixed methods approach appeals to individuals with a strong quantitative background or fields that are relatively new to qualitative approaches. It involves a two-phase project in which quantitative data was collected in Phase 1 of this study, followed by an analysis of the results and their application to be built for the qualitative phase. This action enhances the understanding of a phenomenon that would otherwise be inaccessible with one approach (Plano, 2010; Creswell, 2009; Morse & Niehaus, 2009).

Based on the results in Phase 1, the factors affecting obstetric nurses' job satisfaction and perceptions of their jobs require further investigation. Furthermore, this design was described as interactive due to the integration of quantitative and qualitative methods before the final interpretation of the findings. The research design requires an advanced plan to select the results from the quantitative stage, which would be further explored in the qualitative stage (Creswell, 2015).

Apart from that, this study aims to determine whether the level of self-efficacy and professional values predict the level of job satisfaction of obstetric nurses. Specifically, the qualitative research questions aim to gain an in-depth understanding of the factors affecting self-efficacy, professional values, and job satisfaction of obstetric nurses, the perceptions of obstetrics nurses on self-efficacy, professional values, job satisfaction, potential strategies for improvement of obstetric nurses' self-efficacy, professional values, and job satisfaction. These questions determined the factors affecting obstetric nurses' job satisfaction.

To address all the questions raised in the study and achieve its objectives, a mixed-method research approach was selected. Through quantitative research, data were collected

to investigate the current level of professional values, self-efficacy, and job satisfaction of obstetric nurses. The quantitative phase also investigated the influencing factors of nurses' job satisfaction, particularly the impact of nurses' demographic profile, professional values, and self-efficacy on nurses' job satisfaction.

The results of the quantitative phase (phase I) were applied as a guide to develop research questions in the qualitative phase (phase II). In this case, the items for each research variable with a lower mean than the average mean were identified and selected as a reference to develop the interview questions. Several results derived from the quantitative phase indicated the participants' low level of professional value and job satisfaction. For instance, the results from Phase I are not in line with related literature works and the results in the qualitative phase, considering the participants' reports of the struggles in their work, life situations, and their perceptions and feelings about their jobs. However, considering the vagueness of the explanation behind these results, further exploration was conducted in the qualitative phase (phase II). To enhance the understanding of the real working status and job satisfaction status of obstetric nurses, including their influencing factors and improvement strategies, more data are required through further qualitative research.

3.4 STUDY SETTING

The study site is located within Shandong province, which exhibits the largest population among the top five provinces in Northeast China. The hospitals in the sample comprised university-affiliated hospitals with more than 1000 beds integrating medical service, education, research, prevention, healthcare, and recovery.

Being under the main branch of grade three level Jia hospitals, the aforementioned hospitals are highly unified in terms of hospital settings and configurations and have a highly representative influence in the medical industry. The hospitals are also easier to approach based on the location with affordable cost, leading to a high number of patients. However, considering that the obstetrics and gynaecology departments and delivery rooms belong to the same department, obstetric nurses carry a heavy workload. In addition,

medical universities are governmental universities of grade two and above, indicating the relatively high hospital and medical levels, quality control standards, department settings, hospital staffing, and other aspects of the hospital overall similarity.

To access the other three hospitals by fast train, Taian City was selected as the research centre for this study. According to the Chinese health ministry, any Jia hospital has a minimum of 500 beds and above, with every 10 beds being managed by a minimum of four nurses. Table 3.1 presents the hospital selection criteria in this study.

Table 3.1 Pre-set Criteria for Hospitals' Selection

Terms	Selection criteria
Inclusive criteria	Governmental general hospitals grade three Jia hospitals
	The main branch of hospitals
	Attached hospitals of medical universities
	Governmental medical universities of level two and above
Exclusive criteria	Specialised hospitals
	Private hospitals
	The hospital ranked below 100 at the provincial level
	Level-three medical universities and medical college

Purposive sampling techniques were employed to select the hospitals. Out of 2,615 hospitals (total number of government general hospitals all over China), 39 hospitals (total number of Jia in Shandong) were selected for purposive sampling. The four hospitals involved in this research comprised the main affiliated hospitals of four medical universities in Shandong province, which are nearly the same in terms of medical level, hospital configuration, and social recognition and are well represented.

Based on the related literature, the attached hospital of a government university exhibited a higher percentage of job-hopping, low self-efficacy, low job satisfaction due to work-related pressure, workload, and lack of supportive action from the government compared to other hospitals (He, 2019). Four hospitals were selected based on the pre-set selection criteria, followed by conducting the research phases accordingly. A brief introduction of the selected hospitals is presented in the following Table 3.2. After comprehensive consideration of research funding, research duration, and research feasibility among others, Taian city was stationed by the researcher.

Table 3.2 Basic Information of the Selected Hospitals

Hospitals	Hospital name	Attached university	Obstetric nurses' number (ward)
H1	The Second Affiliated Hospital of Shandong First Medical University	Shandong's first medical university	86
H2	Qilu Hospital of Shandong University	Shandong university	155
H3	The Affiliated Hospital of Ji ning Medical University	Jining medical university	160
H4	The Affiliated Hospital of Qingdao University	Qingdao medical university	79

In 2018, a total of 45 Jia hospitals in Shandong province were officially listed

among the most qualified standard government hospitals by the Chinese Ministry of Health. Seven of these hospitals are the first attached hospitals of medical universities that also serve for healthcare education of medical students. Although plenty of specialists and experts in the attached hospitals commonly attract more patients, the medical staff are not able to balance the roles of the caregiver and teacher.

The medical staff have limited opportunities for professional development due to inadequate government support and overloading patients. To illustrate, the staff will be selected for academic teaching or training at a medical university based on their professional position. Accordingly, four hospitals were purposely selected for this study: the Second Affiliated Hospital of Shandong First Medical University, the Qilu Hospital of Shandong University, the Affiliated Hospital of Jining Medical College, and the affiliated hospital of Qingdao Medical University.

The second affiliated hospital of Shandong First Medical University is the Grade three level Jia government general hospital, which integrates medical service, teaching, scientific research, emergency treatment, disease prevention, healthcare, and rehabilitation. Currently, the hospital exhibits a floor area of 115,000 square meters with 1,800 opened beds. Furthermore, the hospital is equipped with 48 clinical departments and eight medical departments. Since 1974, the hospital has constantly adhered to the nature of public welfare, continuously deepened reforms, refined management, paid close attention to connotation construction, and strived to provide the masses with high-quality, efficient, convenient, and inexpensive medical services.

Qilu Hospital of Shandong University has gone through 130 years of glory with 5,000 beds. In recent years, hospitals have adhered to Shandong and are committed to building a national first-class, internationally renowned high-level research hospital. Currently, the hospital is the first batch of construction units and the main construction unit of the national and regional medical centre (comprehensive) treatment capacity improvement project (intensive medical direction). Moreover, 68 clinical medical technology rooms are present, which include six medicine disciplines (emergency, rehabilitation, obstetrics and gynaecology, neurosurgery, haematology, and inspection). This is followed by 5,863 employees, including 5,270 health technicians, 162 doctoral tutors, and 239 master tutors.

Founded in 1951, the Affiliated Hospital of Jining Medical College is a regional medical centre in Shandong Province. The hospital comprises two areas: the main hospital and Taibai Lake Hospital. This is followed by 82 clinical departments, nine Intensive Care Units (ICUs), 3,028 beds, and 4,869 employees, with 1,493 of them holding Master's degrees or higher academic levels. It also oversees the medical care task for more than 20 million people in the southwest of Shandong. After passing the review of the National Jia Hospital in 2018, the hospital continues to maintain its first-class level of medical quality, safety, service, and management.

The Affiliated Hospital of Qingdao University was founded in 1898. It is a comprehensive three-level hospital that provides medical, teaching, scientific research, prevention, healthcare, rehabilitation, and other functions. The hospital is ranked 40th in China's science and technology quantity value list. Notably, the hospital has been awarded the honorary title of advanced collective and Shandong civilised units in the national medical and health system.

3.5 IMPLEMENTATION OF MIXED METHODS

To achieve these research objectives, two phases of the study were conducted. Specifically, phase I was a quantitative study involving 218 respondents to answer the first two research questions. Phase II was a qualitative study involving 25 respondents to determine the last three research questions. This study also presents different research objectives, data collection, and data analysis procedures. The application of both the quantitative and qualitative methods allowed the validation and expansion of the findings from the quantitative results with the qualitative data.

Phase I collected quantitative data from obstetric nurses based on pre-set inclusive and exclusive sampling criteria at four selected hospitals. Considering the need to further prove and understand the participants' responses in phase I, referencing was made to the statistical results and secondary information from literature reviews in developing interview guide questions in phase II. The questions (for the interview) were validated by

a mixed-method research expert, a statistician, a qualitative research expert, and a nurse academician.

3.5.1 Phase I: Quantitative Study

The quantitative approach was applied to build a more comprehensive description of self-efficacy, professional values, and job satisfaction, including the research variables relationship. This step determined the level of obstetric nurses' self-efficacy, professional values, and job satisfaction. The descriptions also allowed the emphasis on obstetric nurses' self-efficacy, professional values, and job satisfaction, and assisted in the development of questions for phase II (qualitative study) and interpretation of the participants' experiences.

3.5.1.1 Survey Instruments

A total of four instruments were used to collect data in Phase 1: Part A, Part B, Part C, and Part D. Ordinal scales were highlighted in Part B, part C, and Part D, in which the nurses' professional values scale, general self-efficacy scale, and job satisfaction scale were used to measure the professional values, self-efficacy, and job satisfaction levels of obstetric nurses. The questionnaire stated in Part A was designed to measure categorical data, such as age, educational level, professional position, and years of working experience. This study also used the Chinese versions of all scales. Both the English and Chinese versions were statistically tested to confirm their validity and reliability, with their instruments presented in the following Table 3.3.

Table 3.3 Validity and Reliability of Instruments

Scales/author	Items	Dimensions	Reliability	Validity
Nurses Professional Values Scale-3 Weis (2017)	28	General sense of nurses' professional values Ordinal scale	English version Internal Consistency α=0.944 Chinese version Internal Consistency α = .0.9	Construct, content, discriminant and convergent validity established.
General Self-Efficacy Scale Schwarzer (1995)	10	General sense of nurses' self-efficacy Ordinal scale	English version Internal Consistency α = 0.76-0.90 Chinese version Internal Consistency α = 0.87-0.91	
McCloskey/Mueller Satisfaction Scale Mueller/McCloskey (1990)	31	General sense of nurses' job satisfaction Ordinal scale	English version Internal Consistency α = 0.95 Chinese version Internal Consistency α = 0.82	

Part A: General Demographics Questionnaire was self-designed with an aim to collect demographic data in terms of age, educational background, professional position, and years of working experience.

Part B: Nurses Professional Values Scale was utilised to measure nurses' professional values. It is a 28-item instrument with a 5-point Likert-scale format ranging from 1 (not important) to 5 (most important). The mean was tested for the level of nurses' professional values. In this case, a higher mean score strengthened the nurses' professional value orientation.

Part C: The General Self-efficacy Scale was used to measure nurses' self-efficacy. The scale comprised 10 items, which were anchored with a 4-point Likert scale ranging from 1, (not at all true) to 4 (exactly true). The mean was tested for the level of self-efficacy, in which a higher mean score indicates a higher level of self-efficacy.

Part D: The Job Satisfaction Scale was used to measure the level of nurses' job satisfaction. Items were anchored with a 5-point Likert scale ranging from 1 to 5 for each item, with the developed scale comprising 38 items. The mean was tested for the level of job satisfaction, in which a higher mean indicates a higher level of job satisfaction.

3.5.1.2 Participants' Recruitment

Considering that the selected population comprised obstetric nurses with email and internet access at their professional facilities, the internet served as an appropriate medium for this study. Currently, citations on clinical nurses in the nursing field are made by the online survey widely used all over China, which is more convenient for the researcher and nurses compared to hand-to-hand paper questionnaires. Accordingly, the surveys in this study were distributed to the participants through the online software "wenjuanxing", which is web-based and password-protected. Besides, there was no limitation to the online survey link approach as the participants were allowed to access it at any time through the provided link.

An introduction was sent through email, which included the applicant profile, study purpose, duration, and method of study. An invitation letter to the management of the academic research unit and the nursing department was attached to seek permission and support for conducting the study. A request was also made to nominate a relevant person

to cooperate as a gatekeeper between the researcher and participants to send the survey link and forward the reminders. This was followed by phone calls made to contact the chairperson and head of the nursing department using the details obtained from the institution's official websites for the recruitment process in the study. Repeated visits were also made to the hospital institutions, including meeting with the gatekeepers.

3.5.1.3 Selection of the Participants

In the selection of participants within selected hospitals (as stated in the first section), convenience sampling was applied in Phase I. Convenience sampling is a type of non-random sampling where members of the target population fulfil the specific practical criteria (Dornyei, 2007). It is also described as research subjects of the population that are easily accessible to the researcher (Given, 2008). Furthermore, convenience sampling techniques have been applied in terms of accessibility to convenience, geographical proximity, availability at a given time, or willingness to participate in the study. This technique is also affordable and easy, having subjects that are readily available. The selection criteria of participants are presented in Table 3.4.

In China, nursing is an unpopular profession. With the low social recognition, unsatisfactory salary, limited holidays, heavy workload, and high occupational risks around it, it is not a preferred profession among many male students. This condition leads to a shortage of male nurses. Similarly, male nurses in obstetrics and gynaecology are uncommon. Besides, obstetrics involved more intimate procedures and legal issues, leading to a higher number of female nurses compared to male nurses. Therefore, the female obstetric nurses were the only participants in this study.

Table 3.4 The Selection Criteria of Participants for Phase I

Terms	Selection criteria
Inclusive criteria	• Aged 20 years old and above • Local Chinese female nurse • Valid working contract for one year and longer • Registered with the Health Ministry of China • Nurses assigned to the obstetric ward
Exclusion criteria	• External academic training nurses • Nurses on maternal/academic/ medical leave

Based on the Chinese education system, a student typically enters elementary school at the age of seven. Considering the five-year undergraduate course duration, it is expected for a student pursuing a bachelor's degree in nursing to graduate at approximately 24 years old. On the other hand, the nursing students who pursue diploma would graduate at approximately 20 years old. In China, the working hours and workload for male workers are longer and heavier compared to other professions.

3.5.1.4 Estimated Sample Size

As shown in Table3.2, 480 eligible obstetric nurses were present, and the official number of the target population from four selected hospitals was approximately 480. Slovin's

formula (Cochran, 1997; Blair, 2015) was applied to calculate the sample size, which is compared as $n = N/1+N*e^2$ ($N = 480$; $e = 0.05$; whereas "n" refers to the number of samples, while "N" refers to total population, and "e" refers to error margin or margin of error. Therefore, it was estimated that the researcher needed access to 218 possible participants from the selected hospitals in Shandong province to participate in Phase I. The online survey was open and available to all eligible candidates comprising 480 obstetric nurses.

3.5.1.5 Data Collection

In the mixed-methods study, a rigorous procedural strategy was employed, as recommended by Creswell and Clark (2011). The data collection strategy incorporated the elements of sequential data collection of the quantitative and qualitative data phases, which analysed the data separately and merged the two data phases.

In the first phase of the study, all data were collected online through a strictly secured site. After the data collection, participants were informed about the purpose of the study phases. The subject line of the email was "Invitation to Participate in Research". In the body of the email, the researcher provided a brief biographical introduction, which included her current role as a postgraduate student at International Islamic University Malaysia and brief information about this study. The invitation email included a link to the questionnaire site, where Phase I of the study could be carried out.

The online survey platform in China, which was used in this study, was known as Wenjuanxing. The first page of the Wenjuanxing site (a Chinese web-based application accessible on the website or phone application) included the study's title and its purpose. The participants were required to indicate their consent for participation by visiting the web page for the survey and submitting completed questionnaires (Figure 3.1). In this step, voluntary consent for the study was obtained from the participants through their selection of the 'Yes' toggle at the end of the consent form embedded on the survey site. However, with the participants' 'No' toggle, they would be unable to complete the survey and would be directed to the 'Thank You' page.

Figure 3.1 The Outlines of the Wenjuanxing Site

3.5.1.6 Overview of Data Analysis

The online surveys were closed on 1 April 2019 when no more participants were answering the survey and the minimum sample size was achieved. Subsequently, the data were coded and entered into Microsoft Excel 2019 on a personal laptop for analysis. The interpretation and presentation of the results were enhanced by generating a series of graphs using the Statistical Package for Social Sciences version 27 for descriptive and inferential analysis. Correspondingly, the data was examined for any errors. The demographic variables were at the nominal (age, educational background, professional position, and years of working experience) and ordinal/ratio levels (responses on the Likert scale, self-identified level of expertise, educational level, years in nursing, and years as an educator and age).

Cronbach's coefficient alpha is widely used to assess the internal consistency reliability of tools (Kimberlin, 2008). Before performing statistical analysis, the reliability of each instrument in this study was assessed. In this procedure, it was verified that the assumptions of the chosen statistical analyses were not violated. This was followed by an examination

of the statistical assumptions, such as normality, homogeneity, and linearity of variance before any inferential statistics were performed. Therefore, demographic data was recorded numerically and analysed using descriptive statistics, including frequency distributions and percentages. Interval data were analysed using descriptive statistics, including central tendency and frequency distribution.

To answer the research questions, inferential statistics including Pearson correlation, multiple regressions, and analysis of variance were used. Pearson correlation methods were used to determine whether a correlation was present between nurses' professional values and job satisfaction and between nurses' self-efficacy and professional values. Subsequently, multiple regression was used to determine whether the level of obstetric nurses' self-efficacy and professional values predicted the level of obstetric nurses' job satisfaction. The analysis of variance was used to determine the effects of demographic data on job satisfaction. All data computation was carried out through the Statistical Package for the Social Sciences. The proposed methods of statistical data analysis in terms of objectives are presented in Table 3.5.

Table 3.5 Methods of Statistical Data Analysis in Relation to the Research Objectives

Research objective(s)	Independent variable(s)	Dependent variable	Statistical test
To determine the level of obstetric nurses' self-efficacy, professional values, and job satisfaction			Descriptive tests
To identify the factors influencing obstetric nurses' job satisfaction	Self-efficacy, professional values, age, educational background, professional position, years of working experience	Job satisfaction	Pearson correlation, multiple regression, Analysis of Variance

3.5.2 Phase II: Qualitative Study

Phase I aims to answer research questions one and two to determine the level of obstetric nurses' self-efficacy, professional values, and job satisfaction, and identify the factors influencing obstetric nurses' job satisfaction. To answer research objectives three to five, a qualitative study design was applied, which assisted in highlighting and determining the affecting factors of items that were significant factors such as age, educational background, and job-related factors among others. Therefore, participants in this phase were recruited based on their willingness and involvement in phase I.

The main affecting factors, perceptions of obstetrics nurses on self-efficacy, professional values, job satisfaction, and potential strategies were explored to improve obstetric nurses' self-efficacy, professional values, and job satisfaction. To gain insights into the individual participant perspective, semi-structured interviews were selected as the method for data collection. Given the interview's aim to understand the worldview of each participant and the ability to explore or confirm data, the topics were explored in depth. It can be conducted in different forms: in person or over a video call.

3.5.2.1 Participants Recruitment

In Phase II, the target population in the qualitative study comprised the same nurses who had participated in the quantitative study. The nurses who agreed to join phase II filled in the contact information on the web-based survey. Interviews were conducted during Phase II, which subsequently collected the questionnaire administered to participants in phase I. However, the nurses with poor accessibility were excluded from the semi-structured interview. Respondents of phase I were provided with an option at the end before clicking the submit button in the online survey to fill in their phone numbers. This action allowed them to be contacted if they agreed to participate in the interview session after reading the invitation and explanation.

According to Latham (2013), 15 participants are suitable as the minimum size for most qualitative interview studies when the participants are homogeneous. On the other hand, Creswell (1998) suggested 5-25 participants for an interview in phenomenological studies. Ultimately, the required number of participants should depend on whether the saturation is reached or vice versa. The individuals who left the contact number in the online survey were potential participants for phase II. However, considering the limited availability in the study duration, nine obstetric nurses were excluded from the interview session. Overall, 25 obstetric nurses were involved in phase II, with details presented accordingly in Table3.6.

Table 3.6 Summary of Participants in Phase II

Hospital name	Respondent number
The Second Affiliated Hospital of Shandong First Medical University	5
The Affiliated Hospital of Jining Medical College	8
Qilu Hospital of Shandong University	7
The Affiliated Hospital of Qingdao Medical University	5

3.5.2.2 Semi-structured Interviews

Considering the key idea that interview questions of qualitative phase builds on the quantitative results, semi-structured interviews were conducted with participants in phase II. The topic guide for the interview was developed from the statistical results of phase I. The literature review is presented in the following Table 3.7.

Table 3.7 Formulation Process of Interview Questions

Items	Codes	Interview questions
*Engage in ongoing self-evaluation *Responsible for meeting the health needs of different cultural groups *Recognise the role of professional nursing associations in shaping health policy *Advance the profession through active involvement in health-related activities *Initiate actions to improve environments of practice *Engage in decision-making on resource allocation *Seek additional education to update knowledge and skills to maintain competency *Promote and maintain standards to plan learning activities for training *Refuse to participate in care that is against the ethics of the professional values *Seek consultation / collaborative partnership for meeting patients' health need *Protect the rights of research participants	Different culture Nursing research Professional development Activities	Each question took 5-10 mins. One participant spent 30-60 mins for the interview. 1. How do you feel about your job, and why? 2. Does your department arrange any supportive resources (academic training or activities)? 3. How is the relationship with your

* Promote fair mechanisms for nursing care and healthcare *Establish standards as a guide for nursing practice *Participate in activities of professional care organisations *Confront practitioners with questionable or inappropriate practice *Participate in nursing research and/or implement research findings appropriate to practice *Advocate for patients *Participate in peer review		colleague? And why? 4. Can you balance your job with your personal life? And how? 5. What will you do if you across patients with transcultural care needs?
*When I am confronted with a problem, I can usually find several solutions *Thanks to my resourcefulness, I know how to handle unforeseen situations. *I am confident that I could deal efficiently with unexpected events. *It is easy for me to stick to my aims and accomplish my goals. *If I am in trouble, I can usually think of a solution. *I can usually handle whatever comes my way.	Problem Trouble Unexpected situations	6. What do you usually do when you have trouble or a problem with your job?
*You cannot get along well with colleagues.	Overtime work Over workload	

*You have received less notice of temporary overtime work. *Work shifts affect your life slightly. *You can handle the current workload.	Long shifts Relationship

The interview session took 30-60 minutes for each participant. Six questions were used with several explanations below:

1. How do you feel about your job? And why?
2. Does management arrange academic training or activities within your department? And how?
3. How is the relationship with your colleague? And why?
4. How do you feel when you try to balance your job with your personal life? And why?
5. How do you feel when you have to serve patients with transcultural care? And why?
6. What do you usually do when you have troubles or problems with your job? How does it help you to regulate yourself?

3.5.2.3 Data Analysis

The qualitative data were analysed using NVivo 12. Thematic analysis was selected for the data analysis in phase II (Figure 3.2), which was appropriate for identifying the main factors and their influence on obstetric nurses' job satisfaction. Thematic analysis was developed as a method of qualitative research that provides a rigorous and conscientious means of interpreting data or text. This step allowed the search for the emerging themes instead of

distilling them, involving “careful reading and re-reading of the data”. The thematic analysis involved several steps from raw qualitative data to identification of codes and themes (Fereday & Muir-Cochrane, 2008).

In the step of familiarisation, an examination was conducted on all transcripts for accuracy by repeatedly reading the transcripts and listening to the recordings to improve the quality of the transcription process. All types of data records were thoroughly reviewed and corrected when required, especially when all participants became enthusiastic and began to talk simultaneously.

The second step focused on generating initial code, which is a process of coding interesting features of the data in a systematic process across the entire data set and collating relevant data to each code. In this study, NVivo software was employed to facilitate the data encoding process. Notably, all transcripts were imported into NVivo software to facilitate data management and an audit trail of the development process analysis based on initial notes. This was followed by the coding of any themes that may be beneficial or stimulating for further stages.

The third step focused on searching for themes, which involved collating the codes into potential themes and gathering all data relevant to each potential theme. After coding all transcripts, topics were developed by examining participants' responses to the guiding questions and literature review. Accordingly, topics were identified based on participants' responses that contain significant information related to the data relevant to the research question. (Braun, 2013). Based on the response patterns in NVivo, potential themes from the code were searched, identified, and selected, followed by their classification into nodes.

In the fourth step, the themes were reviewed. To refine the themes, it was determined whether the themes were related to the coded extracts and the entire dataset to generate a thematic map for the analysis. Subsequently, the major subject areas were categorised as major themes, while the concepts emerging from the data were placed based on these themes. In contrast, more specific themes were identified as sub-themes. With the use of NVivo, transcripts with similar structures can be automatically coded based on similar titles. The view of how topics are related and the topics that need to be broken down into subtopics can be obtained (Braun & Clarke, 2013).

The fifth step involved defining and naming themes that generated clear definitions and names for each theme when the researcher had a good outline of the topics for the data. After the encoding process, the data was classified into clustered items with similar attributes. Subsequently, the researcher refined and unpacked all themes to detect discrepancies in the data with detailed analysis for each specific theme. Notably, this process is essential for the researcher as one needs to start considering the names of topics and subtopics in preparation for the final analysis, allowing the reader to promptly understand the outline of the topic (Braun & Clarke, 2006).

The sixth step was the production of the report taken place when a complete set of formulated themes was present. The themes and sub-themes were presented clearly. In this study, each step of thematic analysis was followed by academic supervisors who facilitated and guided the subsequent stages of analysis and final report writing. This process involved reviewing topics and making recommendations on those that were the most logical in the analysis context. The final topic analysis sheet was generated under the supervision of an academic supervisor to confirm that the final analysis represented the most important topics and was properly justified in the report.

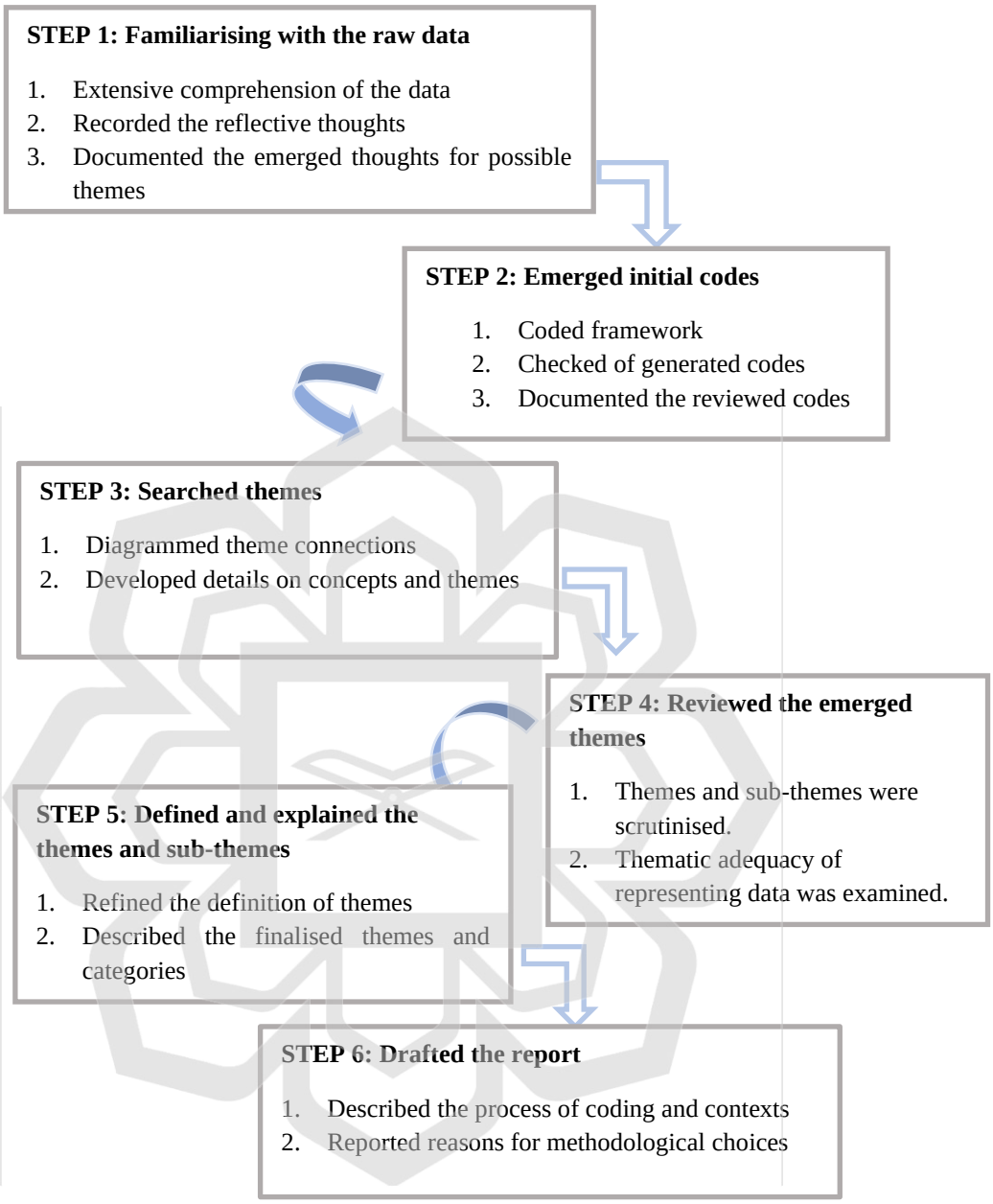

Figure 3.2 The process of thematic analysis

Figure 3.2 above illustrates the process of the thematic analysis summarising the steps of analysing the interview transcripts through the NVivo software. Thus, this thematic analysis was carried out by filtering the transcript, which could be coded with a significant statement that represented the information recorded by participants. Folders were created

under the respective main themes to facilitate the arrangement in this study. Correspondingly, nodes were created while the source material was scrutinised and coded in the inductive approach. To establish relationship among the categories, the development of the tree node or the parent node was represented by the development of main themes and all the sub-themes clustered under the respective main themes.

All the interview manuscripts were examined for precision by listening to the audio recordings and reading the transcripts repeatedly. Each data transcript was reviewed thoroughly, with corrections being performed where required. At the same time, notes were made in the page margins and used to develop initial codes. In this case, insights were developed into the perceptions and the meaning intended by the participants through texts that covered the identified factors influencing obstetric job satisfaction levels. This was followed by further data analysis. Most codes were considered redundant and should be refined into better-defined themes.

The initial themes were constructed based on the issues presented through the research objectives. The labelled transcripts were reexamined to achieve consistency in labelling. Recordings that had been securely password-protected were stored in safety-guarded laptops and online cloud storage. Meanwhile, computer files containing personal or identifiable data were required to be password-protected and only accessed upon the researcher's consent. To ensure that anonymised or personal data were accessible only to those who had provided consent, additional security systems were set up. Different data files stored separately could only be purposely linked by the researcher who held the authorisation for it.

It was also crucial to ensure that the data would not be removed from secure systems in ways that could compromise data security. In this case, all types of raw data, such as questionnaires and transcripts, should be protected to ensure that they can be accessed at any time and place during the study. All the printed questionnaires, scales, notes, and hard copies related to this research were securely stored in a locked filing cabinet that was accessible solely upon agreement by the researcher.

3.6 METHODOLOGICAL RIGOUR

To ensure trustworthiness, Lincoln and Guba's (1985) criterion was applied. At the beginning of the study, all the researcher's prior information and personal beliefs regarding maintaining dignity in the care setting were bracketed to avoid the influence and interference of personal beliefs in investigating this phenomenon. This information included credibility (internal validity), transferability (external validity/generalisation), dependability (reliability), confirmability (objectivity), and reflexivity.

Several techniques were employed to increase the reliability and validity of findings, which included the combination of a review of data sources (semi-structured interviews and field notes), prolonged engagement with the data, member checking, and peer checking. In this case, the extracted concepts and themes were submitted to four participants who stated that the findings were in line with their understandings and interpretations. The limitation was placed on the textual reviews to reduce bias in collecting, analysing, and coding the interviews to increase the validity of the data. Finally, confirmability was acquired through the actual recording of participant narratives and detailed reporting of the study to indicate the possibility of follow-up for other researchers.

3.6.1 Credibility

Credibility denotes the accuracy of findings and the researcher's attempt of demonstrating the true picture of the phenomenon under investigation (Lincoln & Guba,1985). Some strategies that were assumed by the researcher to increase the study's credibility included intensive and extended interactions with the study participants. Notably, the researcher was fully involved in the interview with the communication regarding the participants and was continuously present in the selected hospitals. Other methods were also applied, such as the recruitment of participants using purposive sampling; assurance of the authenticity in the participants' descriptions and responses; confirmation of the researcher's initial impressions before and after each interview; comparing and contrasting the responses with

the participant's transcript, and; consultation with supervisory team analysis to confirm the code and themes.

Contact with potential participants was initially established through phone calls and a final face-to-face meeting. Participants of Phase II in this study were recruited through purposive sampling. To ensure the credibility and reliability of the data, only individuals who were willing to contribute were included. An explanation of the participant's right to refuse or participate was provided to ensure the honesty in their statements and responses. Potential participants were also told that they did not need to reveal their reasons for refusal.

Emerging themes were identified as important data for credibility, which were also highlighted and flagged with tentative themes, subthemes, and categories. In the following analysis, all topics were cross-checked by supervisory experts to reach a final consensus and verify the findings for credibility and verifiability. As a result, all four supervisors supported the analysis by participating in the process from the beginning and discussing the analysis from the start to the end of the process.

All codes were created based on the research objectives to ensure the participants' validity. All transcribed files were shared with the study participants who had received the endorsement and omitted several portions that were not included in the transcript. Subsequently, the interview followed a broad range of validation as the supervisory team verified all codes and themes. Training sessions were acquired through workshops and online courses to enhance qualitative study skills throughout the whole interview, analysis, and report editing process.

3.6.2 Transferability

Transferability represents the suitability of the findings with the same findings presented by the study when repeated in the same context (Lincoln & Guba, 1985; Marshall & Rossman, 2014; Noble & Smith, 2015). Specifically, it is more focused on the richness and depth of data and the assurance that the findings are transferable and relevant to other applicable contexts, situations, or individuals (Houghton et al., 2013).

The researcher recorded initial impressions before each interview and compared these impressions with the results of this study and past studies to assess their consistency. Regardless of the difference in the participant's expressions, all of the responses were recorded. Moreover, consistency was maintained in all aspects of the study, which ranged from the philosophical assumptions to the research objectives, methodological approaches, and findings (Ritchie et al., 2013). As a result, generalisation was achieved at different levels to thoroughly understand the phenomenon under study. By summarising an analysis, the validity of findings can be tested against theories surrounding the phenomenon and research question (Yin, 2015).

3.6.3 Dependability

Reliability refers to the stability of the findings and the appropriateness of any variation in the phenomenon that the researcher seeks to include in the study, design, or methodology (Lincoln & Guba, 1985; Houghton et al., 2013). To ensure reliability, researchers should provide the readers with sufficient information to determine the study and researcher's reliability (Ryan et al., 2007). Furthermore, audit trials were established during the recording of raw data including audio recordings, interview notes, data curation, and analysis products. To ensure the dependability, steps include coding and classification documentation, data reconstruction, comprehensive products such as category descriptions, findings, and final reports with intent, and disposition-related material.

3.6.4 Confirmability

Confirmability refers to the tendency of researchers to take steps to prove that discovery originates from the data rather than themselves (Anney, 2014). To ensure the verifiability of the study, a detailed description of the study process should be provided, allowing the research report reader to determine whether the data analysis was conducted appropriately

(Creswell, 2007). Furthermore, to ensure that the reader gains a thorough understanding of the selected methodology and its validity, the study design and its conduct should be explained. Evidence for decision cues at each stage of the research process should also be recorded and produced to provide the reader with evidence of the decisions and choices made on theoretical and methodological issues throughout the research (Koch, 2006; Ryan, 2007).

3.6.5 Reflexivity

Reflexivity is related to the researcher's ability to make and communicate nuanced and ethical decisions in the complex work of generating real-world data that reflect the chaos of participants' experiences and social practices (Finlay, 2002a). Qualitative research relies on fine-grained judgments that require researchers to be reflexive, while reflexivity is superficially addressed or completely overlooked during the research process. Reflexive analysis was applied during the pre-research phase, data collection, and data analysis in this research.

At the beginning of this research, a summary was made of the researcher's understanding of and connection with the topic of this research. The researcher's motivations and interests were reconsidered to eliminate as many distractions and obstacles as possible. This was followed by the reconsideration placed on the process of determining this research and the original intention of raising research questions. This step was associated with the researcher's profession as a nurse, granting her a complete understanding of the pressure, challenges, and opportunities of the nursing profession. It was also attributed to the complaints and appeals from her nurse colleagues regarding the nursing work.

At the beginning of the participant recruitment, an introduction to the researcher was made, who was also a postgraduate student at the International Islamic University Malaysia. Based on the interaction with the participants throughout the study, it was also revealed that despite the researcher's nursing profession obstetric department, her recent

scope of work was more focused on teaching and research instead of clinical practice. As previously mentioned, field hand notes were written promptly during the interview, which also included a conclusion for each interview session. Moreover, the notes contained the participants' nonverbal communication, verbal conversations, and narration of events during the interview, including the researcher's insights. These events were recorded in notes to ensure that all important data was included in data analysis, in line with the researcher's aim to support the credibility of this study.

Despite the challenges present in terms of the researcher's thinking during the data collection process, her thinking improved after data analysis. Throughout the data analysis process, reflective notes were used to record the researcher's personal feelings and thoughts about the participants' narratives and themes. The notes did not only help her identify her challenges to gain growth in the research process, but also provided transparency in the development of the research. Nevertheless, the reflective practices would encourage the voices of the participants to be heard without involving any personal and professional biases in the analysis and interpretation of the data. Despite the researcher's acknowledgement that their personal experience would influence their interpretation of the participants' experiences, it was believed that the experiences increased the researcher's interest and enthusiasm rather than imposing unwanted influence on data collection and analysis.

3.7 ETHICAL CONSIDERATIONS

In this section, a discussion is made on the concern of human dignity, justice, and ethical considerations. It should be noted that before each interview, an explanation regarding the study aims, reasons for recording interviews, voluntary participation, and confidentiality of data and interviewees were made to the participants, followed by the acquirement of written informed consent. Subsequently, the time and place of the interviews were arranged, while the researcher's details and a method of access to the research results were provided. They

were also informed that they were allowed to withdraw from the study whenever they wished.

3.7.1 Respect for Human Dignity and Justice

This study was conducted based on the willingness of the participants who held the right to ask questions regarding the nature of the study and refrain from participating and providing information. Besides, the participants' privacy was maintained throughout the study. Ethical approval for this research was obtained from the Research Ethics Committee of the International Islamic University, Kulliyyah of Nursing Postgraduate Research Committee, and the Chinese Hospital Union Ethics Committee.

The participants were approached and received an explanation of the study procedures, the purpose of the study, and the data collection process. They were provided with appropriate time to ask questions and address any concerns. Given that their participation was voluntary, refusal to participate or withdraw from the ongoing study would not affect their work in the respective wards.

3.7.2 Informed Consent

In this study, informed consent was obtained from all participants who participated in the interview process. This consent form included a brief introduction to the study objectives, the participants' voluntary participation in the entire study, and their right to withdraw at any time. Participants were also informed about all possible procedures in the consent form.

In phase I, nurses were invited to participate in the study. At the beginning of the general demographic questionnaire, the purpose and procedure of the research, potential risks and benefits of participation, and the researcher's phone number and email address were outlined. The participant information sheet included the participants' right to decline,

participate, or withdraw at any time without consequences. For example, the survey data of the participants who have withdrawn from the study will be erased. Each of the participants was indicated with a numerical identifier for the research process. Notably, participants who were interested in participating in the interview were required to write down their phone number and/or email address in the column provided at the end of the general demographic questionnaire.

In phase II, the letter of information that consists of the interview purpose and duration, the study risks and benefits, expectations of participants, and the data usage was included in the research purpose and consent form. The information letter and consent form were emailed to the volunteer participants, which explained the participants' permission for allowing the researcher to audio-record the session for discussion purposes in the subsequent data analysis. After reviewing and completing the informed consent, participants were encouraged to ask questions and seek clarification on any issues related to the interview phase of the study.

The researcher signed a confidentiality agreement to protect the participants' verbal input. They were asked to sign an informed consent form before the interview to indicate their consent for participation in the study. This signature was previously confirmed in the interview session. Subsequently, consent was collected from all participants before the interviews. Overall, each participant had received a copy of the plain Chinese statement and their consent form.

3.7.3 Anonymity and Confidentiality

The anonymity and confidentiality of participants were protected by the non-disclosure of their names and identities during the data collection, analysis, and reporting. Provided that eligible participants were contacted by telephone and email to determine whether they agreed to participate in the interview, appropriate safeguards were applied. Each interview was conducted in a quiet private room, allowing only the researcher to match the participants' identities and recordings. Written consent forms or any documents containing

the personal details of participants were stored in a locked cabinet to prevent access by any other individuals.

Similar to the hand notes, audio-reordered data transcription was performed using headphones in a private room to avoid the possibility of the recording being heard by others. Participants' identifiable information, including their names or any significant aspects of their identities, was omitted during data transcription. Data analysis was performed concurrently with data collection. The researcher transcribed and analysed the data independently under the supervision of a supervisory team. Their pseudonym code names representing them in the verbatim quotes are presented in Chapter Five.

3.8 CHAPTER SUMMARY

This chapter presented a review of the research methodology. This mixed-methods study aims to determine the relationships among the research variables, affecting factors, and potential improvement strategies for obstetric nurses' job satisfaction. This was followed by the research approach, designs, methods, and strategies for the respective study phases based on the research objectives. In line with this, this chapter highlighted the procedures and applications of the mixed-method design applied in this study. It also methodically discussed the approaches to the study's credibility, trustworthiness, and reflexivity from different perspectives. Overall, the research flow is presented in Appendix V.

CHAPTER FOUR

QUANTITATIVE FINDINGS

4.1 CHAPTER INTRODUCTION

This chapter presents the quantitative findings from phase I of this study, which were collected using questionnaire instruments that were divided into four sections. The first section comprised four questions for the participants' demographic information (age, educational background, professional position, and years of working experience), while the second section used the 10-item index scale to measure obstetric nurses' self-efficacy. The third section consisted of 26-item index scales related to the level of obstetric nurses' professional values. This was followed by the final section that included a 38-item index scale related to the job satisfaction of obstetric nurses.

Two phases of the study were conducted to answer the research objectives. A quantitative study approach was applied in phase I, which involved 218 respondents and aimed to answer the first two research objectives. Meanwhile, the qualitative study methods in phase II involved 25 respondents with the aim of answering the last three research objectives.

4.2 RESPONSE RATE

In this section, the calculation response rate is illustrated based on the study duration and setting. The quantitative data collection was conducted through an online survey for a

period of six months between March and September 2019. Invitation emails were distributed to the nursing department director to gain approval for conducting the study. The link to the online survey form was provided to the respected director of nursing. Nursing directors were required to nominate the head nurse in the obstetric ward to work as a gatekeeper between the researcher and the obstetric nurses and to distribute the questionnaire link. This was followed by follow-up emails being sent to the non-responders every three days after the initial email.

The total number of obstetric nurses responding to the surveys after the follow-up amounted to 218, resulting in a 45.4% response rate from 480 eligible participants. Following that, no participants answered the online survey for over two weeks. Therefore, the survey was open and visible to participants on Wenjuanxing (an online survey platform in China) from 1 March 2019 to 1 April 2019.

4.3 DEMOGRAPHIC DATA

Demographic data were recorded numerically and analysed using descriptive statistics, including the frequency distribution and percentage. Of the overall 218 respondents, 104 of them aged 25 years old and younger (47.7%), 84 of them aged 26 to 35 years old (38.5%), and 11 of them aged over 45 years old (5%). In terms of gender, all of the participants were female. Most respondents were licensed nurses (n = 105, 48.2%), while 75 of them (34.4%) were licensed practitioners. As for educational background, the majority of respondents (n = 178, 81.7%) indicated that they hold undergraduate degrees (Bachelor's degree or diploma), while 25 of them (11.5%) hold Master's degrees.

The participants were required to indicate their experience in the obstetric ward, which ranged from less than one year to 10 years. Most respondents stated that they had been working for a full two years (n = 83, 38.1%) at the obstetric ward, while 45 of them (20.6%) stated that they had gained three to four years of experience at this ward. Apart from that, 41.1% of participants had four years of working experience or longer at the same

obstetric ward. Accordingly, the demographic characteristics of all of the respondents are demonstrated in Table 4.1.

Table 4.1 Frequency distribution of demographic respondents' characteristics（n = 218）

Description	Frequency	Percentage (%)
Age (years)		
<= 25	104	47.7
26-35	84	38.5
36-45	19	8.7
>= 46	11	5
Educational Background		
Diploma	15	6.9
Bachelor	178	81.7
Master	25	11.5
Professional Position		
Licensed Nurse	105	48.2
Licensed Practitioner	75	34.4
Intermediate Charge Nurse	17	7.8
Deputy Charge Nurse	21	9.6
Years of Working Experience(years)		
<= 2	83	38.1
3-4	45	20.6
5-6	35	16.1
7-8	23	10.6
9-10	32	14.7

4.4 RELIABILITY TEST

4.4.1 Nurses Professional Values Scale-3

The Cronbach's coefficient alpha of the English version scale amounted to 0.944. However, it amounted to 0.90 on the Chinese version of the scale. The author of the Chinese version of nurses' professional values scale, which comprises 26 items, has adjusted the English version scale based on the Chinese clinical situation through a study on the Chinses nurses. Essentially, a higher score (total score or mean) increases the strength of the nurse's professional value orientation.

4.4.2 General Self-Efficacy Scale

The Cronbach's coefficient alpha of the Chinese version scale (Zhang & Schwarzer, 1995) amounted to 0.87-0.91. For the English version scale, it amounted to 0.76-0.90. The questionnaire part of the scale comprised 10 items, which were anchored with a 4-point Likert scale ranging from 1 (not at all true) to 4 (exactly true). Considering that the scale score range was from 10 to 40 points, all responses to a total score or a mean score were included. Moreover, the items were combined to provide a total self-efficacy score. Generally, higher scores indicate a higher level of self-efficacy and perceived general self-efficacy, while lower scores indicate lower perceived general self-efficacy.

4.4.3 Job Satisfaction Scale

The Cronbach's alpha of the Chinese version scale that was reformed by Tao (2009) amounted to 0.82. Each of these items was anchored with a 5-point Likert scale ranging from 1 to 5. The developed Chinese version scale comprises 38 items. In the assessment of the level of internal consistency and reliability for the survey items in this study, Cronbach's alphas were calculated, leading to values higher than the threshold of 0.7. Accordingly, Table 4.2 summarises the reliability test of the general self-efficacy scale, nursing professional values scale, and nursing job satisfaction scale.

Table 4.2 Reliability test of survey instruments

Instruments	Variables	Cronbach's a	Items
General Self-efficacy Scale	Self-efficacy	0.809	10
Nursing Professional Values Scale	Professional values	0.879	26
Nursing Job Satisfaction Scale	Job satisfaction	0.798	38

4.5 FINDINGS OF RESEARCH QUESTION ONE

The first research question is to examine the levels of obstetric nurses' self-efficacy, professional values, and job satisfaction. Respondents were required to rate on a 4-point Likert scale that ranged from 1 (not at all true) and 4 (exactly true) in terms of self-efficacy. On the other hand, a 5-point Likert scale may range from 1 (not important) to 5 (most important) and from 1 (not agree) to 5 (most agree) in terms of professional value and job satisfaction.

Statistical tests were conducted to examine the normality of research variables. Table 4.3 presents the mean score and standard deviation of each research variable. The

obstetric nurses' self-efficacy level was determined by 10 items and a total score of 40 (M = 3.016, SD = 0.188), with a maximum mean score of 3.17. The second scale detected obstetric nurses' professional value level by 26 items and a total score of 130 (M = 2.898, SD = 0.258, maximum mean = 3.46). The obstetric nurses' job satisfaction level was indicated through 38 items and a total score of 190 (M = 2.506, SD = 0.127).

Table 4.3 Mean and Standard Deviation of Obstetric Nurses' Self-Efficacy, Professional Values, and Job Satisfaction

Items	Mean	SD
Self-Efficacy	3.016	0.188
Professional Value	2.898	0.258
Job Satisfaction	2.506	0.127

Table 4.4 presents the mean and standard deviation of each item in the general self-efficacy scale. The mean of item "I can always manage to solve difficult problems if I try hard enough." exceeded the means for other items (mean = 3.17, SD = 0.612). On the other hand, the mean of the item "I can usually handle whatever comes my way." was the lowest (mean = 2.82, SD = 0.615). The common effects of "thanks to my resourcefulness, I know how to handle unforeseen situations." on self-efficacy were also recorded (mean = 2.62; SD = 0.817).

Table 4.4 Mean of the Total Score and Standard Deviation of Each Item in the General Self-Efficacy Scale

Items of the scale	Mean (SD)
I can always manage to solve difficult problems if I try hard enough.	3.17(0.612)
I can remain calm when facing difficulties because I can rely on my coping abilities.	3.14(0.546)
I can solve most problems if I invest the necessary effort.	3.12(0.550)
When I am confronted with a problem, I can usually find several solutions.	3.01(0.512)
If someone opposes me, I can find the means and the ways to get what I want.	3.00(0.662)
If I am in trouble, I can usually think of a solution.	3.00(0.503)
*I am confident that I can deal with unexpected events efficiently.	2.98(0.547)
*It is easy for me to stick to my aims and accomplish my goals.	2.94(0.564)
*I can usually handle whatever comes my way.	2.82(0.615)
*Thanks to my resourcefulness, I know how to handle unforeseen situations.	2.62(0.817)

Note: 1 = Not at all true, 4 = Exactly true

Items marked with "*" indicated mean scores below 3.02 and referral basis.

Table 4.5 presents the mean and standard deviation of each item in the nurses' professional values scale. Hence, the mean of the item "protect patient's health and safety." was higher compared to other items (Mean = 3.46, SD = 0.756). Meanwhile, the mean of the item "participate in peer review." was the lowest (Mean = 2.4, SD = 0.639).

Table 4.5 Mean of the Total Score and Standard Deviation of Each Item of Nurses' Professional Value Scale

Items	Mean (SD)
Protect patients' health and safety.	3.46(0.756)

Protect patients' moral and legal rights.	3.37(0.537)
Maintain patients' privacy.	3.31(0.653)
Provide care without bias or prejudice to patients and populations.	3.23(0.453)
Accept responsibility and accountability for own practice.	3.20(0.453)
Safeguard patients' privacy.	3.11(0.373)
Maintain the ability for the nursing field practice.	3.10(0.331)
Practice with fidelity and respect principles.	3.00(0.117)
Engage in ongoing self-evaluation.	2.90(0.740)
*Advance the profession through active involvement in health-related activities.	2.87(0.452)
*Recognise the role of professional nursing associations in shaping health policy.	2.86(0.502)
*Responsible for meeting the health needs of different cultural groups.	2.84(0.554)
*Promote fair mechanisms for nursing care and health care.	2.80(0.662)
*Refuse to participate in care that is against the ethics of professional values.	2.79(0.469)
*Promote and maintain standards that have planned learning activities for training.	2.79(0.498)
*Engage decision-making on resource allocation.	2.79(0.509)
*Pursue further education to update knowledge and skills to maintain competency.	2.78(0.440)
*Initiate actions to improve environments of practice.	2.77(0.501)
*Seek consultation / collaborative partnership for meeting patients' health needs.	2.75(0.594)
*Protect the rights of research participants.	2.71(0.493)
*Establish standards as a guide for nursing practice.	2.68(0.524)
*Participate in nursing research and/or implement research findings appropriate to practice.	2.67(0.470)
*Confront practitioners with questionable or inappropriate practices.	2.67(0.491)
*Participate in activities of professional care organisations.	2.64(0.490)
*Advocate for patients.	2.44(0.574)
*Participate in peer review.	2.40(0.639)

Note: Likert Scale 1 = Not important, 5 = Most important
Items marked with "*" indicated a mean score below 2.89 and identified as problematic areas that required further exploration by selecting an interview referral basis.

Table 4.6 illustrates the mean and standard deviation of each item in the nurses' job satisfaction scale. In this case, the mean of the item "the importance of nursing hasn't been widely recognised by society." was higher than other items (Mean = 3.33, SD = 0.7), while the mean of the item "you can handle the current workload." was the lowest (Mean = 1.89, SD = 0.703).

Table 4.6 Mean and Standard Deviation of Each Item in the Nurses' Job Satisfaction Scale

Items	Mean (SD)
The importance of nursing has not been widely recognised by society.	3.33(0.770)
Believing in nursing is important.	3.32(0.841)
You can keep a balance between work and family.	3.29(0.857)
You feel that the work environment is noisy.	3.15(0.851)
Fewer chances of promotion.	3.06(0.911)
High risk during work.	3.05(0.808)
If you get more time, you will be able to provide better quality nursing care.	2.97(0.845)
Disappointed by the programmatic work.	2.89(0.768)
Patients, families, and society do not recognise your work.	2.84(0.982)
Patients and their families are satisfied with your care.	2.78(0.692)
Managers can work with you to discuss common problems and working methods.	2.72(0.712)
You can arrange your own work plan.	2.66(0.538)
You are satisfied with the management (reasonable, fair, etc.)	2.64(0.608)
You often discuss work plans with colleagues.	2.58(0.548)
You can meet the ever-increasing requirements of nursing documentation.	2.56(0.657)

You can gain support from your employer to build up and improve professional competence.	2.55(0.584)
*Professionalism and professional level are recognised by doctors.	2.48(0.694)
*You can achieve good teamwork with the doctor.	2.46(0.615)
*Salary needs to be increased.	2.45(0.803)
*Colleagues help each other.	2.39(0.629)
*Satisfied with current salary and welfare.	2.38(0.532)
*Same salary and welfare as other hospitals.	2.30(0.576)
*You can keep a balance between work and family.	2.28(0.700)
*When management schedules work shifts, they will consider your personal needs.	2.28(0.679)
*Current position enables you to make full use of your abilities.	2.28(0.566)
*Many opportunities for further education and training.	2.27(0.648)
*Have more flexibility in your work than your peers	2.27(0.639)
*Your family understands and supports your work.	2.26(0.706)
*Crowded working environment and poor ventilation.	2.25(0.720)
*Managers consider your comments on management.	2.24(0.650)
*You face less conflict between work and family/lover.	2.24(0.664)
*Salary is reasonable.	2.11(0.646)
*You cannot get along well with colleagues.	2.09(0.774)
*Managers can give understanding and guidance to your occasional mistakes.	2.06(0.605)
*Many opportunities to do research.	2.03(0.708)
*You have received less notice of temporary overtime work.	1.95(0.664)
*Work shifts affect your life slightly.	1.90(0.678)
*You can handle the current workload.	1.89(0.703)

Note:1 = Not agree, 5 = Most agree

Items marked with "*" indicated mean scores below 2.5 and were identified as problematic areas. Further exploration was required in selecting an interview referral basis.

4.6 FINDINGS OF RESEARCH QUESTION TWO

Research question two was developed to determine the factors affecting obstetric nurses' job satisfaction. In this case, the relationship between professional values and job satisfaction, the relationship between self-efficacy and job satisfaction, and the relationship between professional values, self-efficacy, and job satisfaction were tested.

4.6.1 Findings of the Relationship Among Professional Values, Self-Efficacy, and Job Satisfaction of Obstetric Nurse

Table 4.7 presents multiple regression statistic results of professional values, self-efficacy, and job satisfaction of obstetric nurses. The results indicated that no significance was present in the research variables (P = 0.986, P = 0.742). Therefore, the Pearson correlation test was employed to determine whether any relationship was present between each of the independent variables and dependent variables.

Table 4.7 Regression Statistic Results of Professional Value, Self-Efficacy, and Job Satisfaction

	B	Std. Error	Beta	T Stat	p-value
Self-efficacy	.003	.175	.001	.017	.986
Professional value	.019	.057	.022	.330	.742

* Dependent Variable: Job satisfaction; Correlation is significant at 0.05 level (2-tailed)

4.6.2 Findings of the Relationship between Professional Values and Job Satisfaction of Obstetric Nurse

Table 4.8 presents the Pearson correlation of professional value with job satisfaction. The P-value indicated a significant relationship between "improve working environment" and job satisfaction, between "recognise the role of nursing in health care" and job satisfaction, and between "practice with fidelity and respect principles" and job satisfaction.

Table 4.8 Pearson Correlation between Each Item of Professional Value and Job Satisfaction

Item	Pearson Correlation	P
Self-evaluation	-.0.050	0.231
Partnership	0.102	0.066

Protect	-0.048	0.242
Engage decision making	-0.071	-0.148
Peer review	-0.015	0.413
Establish standards	-0.004	0.475
Promote and maintain standards	0.074	0.138
Improve environment	0.104	0.042*
Seek additional education	-0.063	0.176
Advance the profession	0.056	0.205
Recognise the role	-0.096	0.049*
Promote fair mechanism	0.071	0.148
Responsible for meeting the health needs	0.031	0.324
Accept responsibility and accountability	-0.064	0.175
Maintain the ability	0.028	0.304
Protect patients' rights	-0.016	0.407
Refuse to violate ethics	0.087	0.101
Advocate for patients	0.072	0.146
Nursing research	0.002	0.489
Provide fair care	0.061	0.185
Safeguard patients' privacy	0.005	0.470
Confront practitioners	0.018	0.397
Protect the rights of research participants	0.000	0.500
Practice with fidelity and respect principles	0.136	0.023*

Maintain patients' privacy	-0.063	0.178
Participate in organisations	0.040	0.278

* Correlation is significant at the 0.05 level (1-tailed).

4.6.3 Findings of the Relationship Between Self-Efficacy and Job Satisfaction of Obstetric Nurse

Table 4.9 presents the Pearson correlation between self-efficacy and job satisfaction. It was found that the p-value exceeded 0.05, which indicated no significant relationship. Therefore, correlation tests were conducted for each self-efficacy item with job satisfaction, as shown through the results in Table 4.10. Moreover, the items marked with * showed a p-value of lower than 0.05, such as the item "I can always manage to solve difficult problems if I try hard enough". This result indicated the obstetric nurse's incapability of solving job-related problems and her low job satisfaction compared to the nurses who can solve the problems.

Table 4.9 Pearson correlation between self-efficacy and job satisfaction

Item	Pearson Correlation	P
Self-efficacy		
Job satisfaction	0.001	0.984

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

Table 4.10 Pearson correlation between each item of self-efficacy and job satisfaction

Item	Pearson	P
*1. I can always manage to solve difficult problems if I try hard enough.	0.146	0.031*
2. If someone opposes me, I can find the means and ways to get what I want.	-0.012	0.862
3. It is easy for me to stick to my aims and accomplish my goals.	0.024	0.722
4. I am confident that I can deal with unexpected events efficiently.	-0.041	0.543
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	0.050	0.462
6. I can solve most problems if I invest the necessary effort.	0.058	0.393
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	-0.07	0.300
8. When I am confronted with a problem, I can usually find several solutions.	-.0.128	0.060
9. If I am in trouble, I can usually think of a solution.	-0.054	0.424
10. I can usually handle whatever comes my way.	0.002	0.976

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

Statistic results indicated that the correlation coefficient between independent variables (professional values and self-efficacy) and dependent variable (job satisfaction) was significantly weak. Several other factors, such as age, educational background, professional position, and years of working experience, may be required to be considered the relevant factors (Kieft, 2014). Hence, the statistical tests for demographic profile (age, educational background, professional position, and years of working experience) with job satisfaction were conducted as shown in the next section.

4.6.4 Findings of the Relationship between Demographic Data and Job Satisfaction of Obstetric Nurse

Table 4.11 presents the ANOVA test the effects of obstetric nurses' age, educational background, professional position, and years of working experience on job satisfaction. Statistic results indicated no significant influence on obstetric nurses' job satisfaction based on the demographic data.

Table 4.11 ANOVA Tests of Demographic Data With Job Satisfaction

Item	P-value
Age	0.174
Educational background	0.287
Professional position	0.546
Years of working experience	0.775

4.7 CHAPTER SUMMARY

The descriptive results shown in this chapter were obtained from research questions one and two. It was found that the obstetric nurses' self-efficacy level was good (M = 3.016, SD = 0.188), while their professional value (M = 2.898, SD = 0.258) and job satisfaction level were slightly low (M = 2.506, SD = 0.127). Furthermore, no significance was present in the correlation tests. Among all the assumed factors, one item fell under self-efficacy ("I can always manage to solve difficult problems if I try hard enough."). This result may indicate that if the obstetric nurse is incapable of solving job-related problems, her job satisfaction would be low compared to nurses who are able to solve problems. Notably, the

items from professional values such as “improve the working environment,” “recognise the role of nursing in health care”, and “practise with fidelity and respect principles” had a significant relationship with job satisfaction.

The statistical results from the quantitative phase (phase I) were used as guidance for the study methodology and formulation of research questions in the qualitative phase (phase II), including the interview questions to collect data. Specifically, the statistical results in Phase I were inconsistent with previous studies, with no correlation being found between the study variables. When the variables were itemised and correlation analysis was performed, statistically significant results were produced. These items also provided references for interview questions in qualitative research. For example, the items with a mean below the average mean for each research variable were identified and selected as a reference for developing interview questions. Several results from the quantitative phase indicated that participants had low levels of career value and job satisfaction.

The results from the quantitative phase were not supported by relevant literature. Apart from that, the results from the qualitative phase indicated the participants’ reports on their struggles in work and life, their perceptions, and feelings about their work. However, given the unclear explanation of these results, further exploration was conducted in the qualitative phase (phase II). To enhance the understanding of the real work status and job satisfaction status of obstetric nurses and their influencing factors and improvement strategies, more and richer data is required, which can be collected through qualitative research.

The quantitative findings presented the answers to research questions one and two. Further exploration of obstetric nurses’ perception, affecting factors, and improvement strategy was conducted in phase II. However, many other potential factors might correlate with job satisfaction. The qualitative phases started with raising several questions, which are as follows: what are the perceptions of obstetric nurses on self-efficacy, professional values, and job satisfaction? What are obstetric nurses' perceptions of factors affecting their self-efficacy, professional values, or job satisfaction? What are potential strategies, as perceived by obstetric nurses, for the improvement of self-efficacy, professional values, and job satisfaction?

CHAPTER FIVE

QUALITATIVE FINDINGS

5.1 INTRODUCTION

No significance was found in the tests of the correlation between self-efficacy and job satisfaction and between professional values and job satisfaction from the quantitative phase. Among all the assumed factors, one item from self-efficacy was "I can always manage to solve difficult problems if I try hard enough". It is noteworthy that the items from professional values including "improve the working environment", "recognise the role of nursing in health care", and "practice with fidelity and respect principles" had a significant relationship with job satisfaction. Considering the possibility that many other potential factors may correlate with job satisfaction, the main purpose of the interview session is to thoroughly explore the influential factors of job satisfaction and obstetric nurses' perceptions of their self-efficacy, professional values, and job satisfaction.

This chapter presents the analysis of findings from the interviews with obstetric nurses working in four selected hospitals in Shandong, China. Data were analysed using NVivo. Subsequently, the data presented in this chapter reflected the obstetric nurses' knowledge regarding job satisfaction, their views on the job and personal life, their explanations of their adjustment to the job, and strategies that they considered may help improve their job performance. A total of 25 female obstetric nurses participated in the face-to-face individual interview from May to July 2019. Accordingly, Table 5.1 presents the demographic characteristics of obstetric nurses. This is followed by Table 5.2 and Table 5.3 that present brief information on the interview, the selected hospital, and the interview schedule.

Table 5.1 The Demographic Characteristics of the Healthcare Practitioners

Demographic characteristics	Frequency	Percentage (%)
Age (years)		
<= 25	5	20
26-35	19	76
36-45	1	4
>=46	0	0
Educational Background		
Diploma	8	32
Bachelor	15	60
Master	2	8
Professional Position		
Licensed Nurse	13	52
Licensed Practitioner	9	36
Associate Charge Nurse	2	8
Deputy Charge Nurse	1	4
Working Experience (Years)		
0.6-2	0	0
3-4	9	36
5-6	8	32
7-8	5	20
9-10	3	12

Table5.2 Brief Information Based on the Selected Hospitals

Hospital Code	Hospital name	Provincial ranking of hospitals	Location	Number of Phase II Participants
H1	The Second Affiliated Hospital of Shandong First Medical University	6	Taian	5
H2	The Affiliated Hospital of Jining Medical College	4	Jining	8
H3	Qilu Hospital of Shandong University	1	Jinan	7
H4	The Affiliated Hospital of Qingdao Medical University	3	Qingdao	5

5.2 THEMES FOR QUALITATIVE FINDINGS

After a complete analysis of the transcripts from the interview, the emerging themes were grouped into the main themes, subthemes, and categories. The participants' views were based on their experiences and personal values. This was followed by an analysis of the findings through a thematic analysis based on the research question by producing a chart presenting the summary of findings for each theme. To improve the credibility of the data analysis process in deriving the themes, examples were presented to demonstrate the participants' voices in the findings (Graneheim, Lindgren & Lundman, 2017). Notably, the selected quotes showed the most comprehensive reflection of all the themes. Therefore, not all participants were represented through quotes. The subsequent section presents themes that were inductively derived through interview manuscripts.

The data analysis from 25 obstetric nurses identified three sub-themes: conceptualisation of the nursing profession, job-related challenges, and coping and motivation strategy. During the interviews, obstetric nurses were enquired about general understandings and perceptions of their jobs and the adjustments made to improve their performance. Each of the aforementioned three themes (conceptualisation of the nursing profession; job-related challenge; coping and motivation strategy) comprised two sub-themes (public image; nursing concept; occupational risk; work stress; management support; self-regulation approach), each divided into two categories (disciplinary basis; invisible continuum; individual point; others' view; insufficient resource; medical deficiency; imperfection at work; personal life balance; academic arrangement; workplace expectation and contribution; positive resistance; professional performance). Table 5.3 outlines the main themes, sub-themes, and categories that emerged from the data.

Table 5.3 Themes, Subthemes, and Categories of Phase II Findings

Theme	Sub-theme	Category
Conceptualisation of the nursing profession	Public image	Disciplinary basis
		Invisible continuum
	Nursing concept	Individual point
		Others' view
Job-related challenge	Occupational risk	Insufficient resource
		Medical deficiency
	Work stress	Imperfection at work
		Personal life balance
Coping and motivation strategy	Management support	Academic arrangement
		Workplace expectation and contribution
		Positive resistance

	Self-regulation approach	Professional performance

5.3 THEME 1: CONCEPTUALISATION OF THE NURSING PROFESSION

The conceptualisation of nursing facilitates nurses' understanding of the abstract and complex ideas and perspectives related to the health and disease of individuals and groups. This conceptualisation is crucial in ensuring that ideas can be communicated, relayed, and applied to nursing in effective and feasible methods and offering patients higher-quality service. Addressing the participants' perceptions of their careers, participants were more likely to discuss how they pursued nursing and their thoughts about it. Their views and opinions were classified under the sub-theme of public image and concept in nursing.

5.3.1 Public Image

Nursing has been influenced by public stereotyping for the long term. Historically, it has been viewed as a female profession as a care worker under doctors' orders without nursing professional field of competence. Public image refers to the participants' ideas and opinions about nurses. This sub-theme is discussed through two categories: the nature of nursing and the invisible continuum. Participants' choice of being a nurse and continuing the profession is influenced by their surroundings. Based on the interview where the nurses recalled the factors leading to their choice of nurse as their profession, it was found that the effect of disciplinary basis and invisible continuum contributed to their choice.

5.3.1.1 The Nature of Nursing

Nurses need to be equipped with sufficient traditional nursing knowledge and practical skills to meet the health needs of patients and their families. According to Deng, nurses are required to face many challenges and responsibilities in meeting their patients' health needs. Patients and their families with various backgrounds and conditions may request nursing care.

> *"Nurses may face a lot of disgusting things, which requires nurses to have a value that embraces all filth and believes that all filth is a part of life and experiences the other side of life. Many recent occurred cases that the patient put the blame on the nurse for unsure reasons or even make personal attacks by violence."-Deng, H1P3*

In nursing practice, the nurse is required to make every effort to maintain and elevate the standard of the nursing profession. In line with this, Song highlighted that a qualified nurse should be caring, attentive, and responsible and strengthen their nursing ability to provide holistic patient care. She also believed that caring for patients is the essence of good nursing practices.

> *"Responsible for the safety and rehabilitation of sick and injured patients, as well as the work of health education to take care of patients, the nurse's value must be a person who knows how to take care of himself, a caring person. So, I guess the first value is self-awareness as a caring person."-Song, H1P2*

Many participants highlighted the factor of flexibility and holistic care of patients with different cultural, religious, and lifestyle backgrounds. They identified a range of environmental, cultural, cognitive, and socially relevant factors influencing or interfering with the nursing practice. Specifically, Li stated that while the nursing profession is challenging and trivial, the realisation of self-worth holds a high significance.

> *"I decided to be a nurse because the essence of nursing is to respect human rights, including the right to life, the right to enjoy personal dignity, and to be respected. Care is not limited by age, colour, religion, culture, disability or condition, gender, national origin, politics, race, or social status. Nurses provide health services to*

individuals, families, and communities, and work collaboratively with related groups."-Li, H3P3

According to Hao, a referral working basis for disciplining the working process is crucial. Considering the special nature of nursing work, nurses need to receive love, care, responsibility, and patience. Regardless of the time and place, it is necessary to consider and plan for the patient, followed by adjusting and improving the nursing plan in time based on the situation.

"At work, I must do my work well and actively complete everything with full enthusiasm. I also need to be effective at work. Everything you do must be preset, arranged, and designed in advance; through serious efforts, practical results can be achieved. I have to remember to do anything as planned and documented. I must be agile and remember never to procrastinate."-Hao, H4P1

Based on a discussion on job satisfaction, many participants viewed that nurses need to develop and maintain self-awareness of discipline to strengthen the sense of responsibility among the personnel at all levels. Following that, Zhang highlighted her responsibility to make the utmost effort in strengthening her capability to improve the quality of nursing. Addressing nursing care, she believed that nurses require sufficient professional academic training to increase their sense of responsibility and reliability. She added that a proper implementation of the medical system is also important.

"Medicine is a highly specialised field. We must strengthen the sense of responsibility of all types of personnel at all levels. Nurses should also treat anxious patients with kindness and patience. It is necessary to develop and build up communication, mutual understanding, and trust with patients and their families."-Zhang, H4P4

Other nurses determined that the nursing profession values high focus and hardwork in many aspects, such as skills of relaxation and technology communication. According to Lin, the nursing process would improve the outcome of care:

"Nurses need good psychological skills but must be flexible and adaptable. Nursing work depends on persistence, insisting on paying for patients' health, escorting their

lives, and using their own technology to provide better support and care for patients. This is the ultimate goal of nursing work."- Lin, H2P1

5.3.1.2 Invisible Continuum

An invisible continuum refers to the interaction and effect occurring from the change process. Participants discussed nursing professional values, ethics, and concepts, the influence of society on them and their interest in it, and their previous experiences. The following statements indicated the interaction of this effect among mentioned factors. For example, some nurses enrolled in nursing as their career due the influence from family, friends, and people around them. To illustrate, Zhao stated that she became a nurse due to the influence of her mother. Considering her mother's contentment and comfort with the job, she became motivated to pursue this profession.

"My mother is a nurse, and she is satisfied with her job. She feels very much happy every day by helping people in her job, which inspired my own interest in the field. I knew from the time that I was very young that nursing was something I wanted to do with my life."-Zhao, H1P1

According to Luo, she feels pressured by the heavy workload. There are times when she does not understand why she remains a nurse. Nevertheless, she continues her profession due to the happiness gained from helping individuals.

"Sometimes, I have to admire myself for being able to persist for so long. Because helping others while bringing convenience to others will bring happiness to oneself, I know this is what I want to do. I have been a nurse since I was 22 years old. I know this is the right career if you enjoy and want to help others!"-Luo, H1P2

Hao shared her views: "When you are on duty, you need to work effectively, then you can manage your responsibility better and effectively while balancing with other roles."

"When you go to work, you should work wholeheartedly, devote all your energy to

work, and complete the work on the same day; try not to bring the work from work home and affect the life at home. On the other hand, try to do a good job of lubricating at home, handle conflicts between family members, and make everyone's face show a bright smile."-Hao, H4P1

When Zuo pursued a nursing profession after graduation, she realised that the profession was different from what she had imagined. Despite the challenges, Zuo believed that a good attitude and actions would help nurses earn the clients' respect and satisfaction. Her statements are as follows:

"In fact, I need to do a lot of tiring and trivial work. Honestly, I have pressure with my job. Because no matter what situation I face, I always need to be careful, patient, and loving and serve with a smile. But every time I see a patient I have cared for healthy and discharged from the hospital, I feel a sense of accomplishment. I think it is not just a title but more of everyone's respect and understanding of this profession. Maybe some people do not respect us, but we believe that we will use our actions to influence them."-Zuo, H1P5

According to Liu, she was confused and felt lost when selecting their field in the profession. For this reason, she had to seek others' opinions on this matter.

"I had no idea of choosing the major when I passed the admission exam of university, so I explored others' interests and asked my teacher's opinion."-Liu, H2P5

According to Zheng, nurses need to use the effective methods in their focus and struggling. She stated that nurses with the correct career orientation would find a way to develop and maintain a positive attitude and thinking. Therefore, nurses are willing to improve their qualifications by exploring it by any means.

"Nurses are, of course, tired. It is both physical and mental work. Most nurses who work hard and constantly charge themselves are doing well, and if you get a nurse qualification certificate, a senior nurse qualification certificate, etc., the corresponding treatment will be improved, and you may see the leaders treat them

well. Moreover, the nurses who are in their 40s are, of course, excellent, and those with complete documents are preferred. The hospital will no longer arrange night shifts. The hospital also cherishes talents. Since you choose this profession, you must be responsible for yourself and the patients. An excellent nurse has strong professional ability and theoretical knowledge. Nurses who have all kinds of certificates and are still working hard to improve their education will not be mistreated anywhere. If you are not valued, you are probably not good enough. Learn from great people."- Zheng, H4P5

5.3.2 Nursing Concept

Under the nursing concept, individual opinions and others' views are considered. The nursing concept is dynamic and constantly evolving based on patients' needs. In this study, the participants stated that they had decided to be a nurse and continue their profession with the effect of concept on nursing. The participants also frequently expressed their views and sentiments about their journey as nurses.

5.3.2.1 Individual Opinion

Individual opinion refers to personal thinking about nurses based on self-understanding and self-imagination. According to Liao, nursing work is an ordinary and glorious work, with the relationship between nurses and patients being akin to fish and water.

"Nursing ethics is to provide patients with good conditions with a revolutionary humanitarian spirit, high sense of responsibility, high-level nursing technology, and high-quality services, so as to promote the early recovery of patients."-Liao, H2P8

According to Wei, she identified the challenges in the nursing profession before pursuing it. Subsequently, she chose nursing as a career due to her values and sense of

accomplishment that comes from her willingness to help other individuals. She believed that through her efforts, she would be more capable of providing help.

> *"I like the feeling of caring and helping others. In the whole process, you will definitely pay full attention and focus. No matter what the result will be, that's no doubt that with your care, the patient and their family will not suffer alone. You must have your belief in your doing. I think I will continue this job for the next 10 years."-Wei, H3P5*

According to He, nursing has become a challenging career in the serious situations of medical disputes. Provided that misunderstandings, blame, and verbal and violent attacks by the patients and their families can occur at any time, it is common for this profession to be challenging. He stated that a nurse needs to constantly display a good attitude to handle the work task and face various challenges.

> *"Nursing is a relatively hard profession, but the salary is actually relatively average. However, many jobs are like this. Nursing is a relatively tough job anyway. No job is easy to support a family. As long as you work hard and keep a good attitude."-He, H4P4*

Zhou mentioned that she was eager to fulfil her self-achievement. She chose nursing as a career to earn a living while achieving her career aspirations.

> *"I imagined that I could realise my self-worth after working and also make money. When I started working, I was still full of enthusiasm. Every day my work was full of a sense of mission and responsibility. However, as time went on, the content of the work became more and more repetitive, with endless night shifts and exams, the original passion has long since been exhausted."-Zhou, H2P6*

5.3.2.2 Others' View

Some participants stated that their decision to be a nurse and their attitude towards their career were influenced by other individuals' views. Apart from that, the strength that determines whether to quit or continue was affected by the words and actions of the team,

clients, and patients. The nurse's involvement in a circle with positive energy would improve the service outcomes. Wu highlighted the necessity of seeing the positive aspects and appeals in the nursing profession.

> *"Because one of my cousins works as a nurse, and according to her, being a nurse is a good choice as a career."-Wu, H2P3*

As stated by some participants, being a nurse is a journey of learning to care for people in need. An individual will be able to focus and improve when he or she has a clear direction. Wei expressed her ambition to achieve the goal of being a good nurse. One of her mother's friends is a nurse with over 20 years of experience in the same paediatric ward. She also added that nursing requires love, care, responsibility, and patience.

> *"An excellent nurse not only needs to understand the routine of diagnosis and treatment and be proficient in the three-level nursing skills, but also must have strong affinity and communication skills. Have a high sense of responsibility, good professional ethics, rigorous work attitude, strong comprehensive analysis ability, and keen insight."-Wei, H3P5*

5.3.3 Summary of Theme One

Overall, the findings highlighted in theme one addressed the third research question, "What are obstetric nurses' perceptions of self-efficacy, professional values, and job satisfaction?". It was indicated from the analysis of participants' quotes that they were required to ensure that doctors' orders were followed and carried out in a timely manner. However, given their limited professional freedom, they were unable to focus on their area of expertise. Thus, qualitative research was made possible by obtaining information that was not available through the first phase of quantitative research. Interview data demonstrated that the nurses' cognition and identification of the profession were affected by the inherent concepts of the nursing profession, social factors, and human factors among others, which also included other people's opinions, society's definition and evaluation of the nursing industry, external

support, and access to information among others. Nurses' job satisfaction was also affected by these factors.

From the participants' perspective, having a positive and flexible professional identity is important for nurses' multiple roles in providing quality care to patients and reducing workplace stress, enhancing nurses' confidence, and improving in their clinical performance, and job satisfaction. Therefore, improving nurses' professional identity can effectively improve their job satisfaction.

5.4 THEME 2: JOB-RELATED CHALLENGE

Theme two involves any sources of challenges that nurses gain from their jobs. For example, some participants in this study revealed that nurses' perceptions of the nursing profession affected their attitudes and capability of coping with issues and challenges in their work and life.

5.4.1 Work Stress

When the participants were asked about their job performance and whether they were satisfied with the job or vice versa, most of the participants stated that they were not satisfied and struggling to show a good job performance. In the Chinese culture, women are commonly expected to take on the main household responsibilities and bear the pressures of work and family. The effects of work stress among nurses were explored through interviews. Based on interviewed obstetric nurses, stress among nurses has been perceived as a combination of physical labour, work hours, staffing, and interpersonal relationships, with the exception of physical disease. Moreover, work stress in nursing is not only related to patient care, decision-making and taking responsibility; some other types

of pressure may emerge from the combined responsibilities of work, marriage, and children.

5.4.1.1 Work-life Balance

According to all the participants, they did not prefer to be constantly occupied with work, considering their need to spend more time with their family, meet friends, and do the activities they like. Some of the common reasons that lead to a poor work-life balance include increased workload, working longer hours, and increased family expectations. Zhang stated that her working shift was challenging and irregular compared to other jobs, which led to her unbalanced life and embarrassment for her absence from accompanying her family:

> *"Due to work, I spend very little time with my child and even miss some important moments in the child's growth. My husband will help me to smooth things out, but the child is very disappointed and sad. Whenever I think of my husband's hard work and sacrifice and my children's complaints and disappointments, my heart is full of mixed feelings. As my child grows up day by day, I am glad that he is willing to try to understand and appreciate my situation."-Zhang, H4P3*

Zhou expressed her inability to have time and holidays to spend with her family, leading to the perception that she could not be a good mother due to her extremely busy schedule. Besides, she did not have time to develop friendships with others.

> *"…, only my child is left, holding the gate pitifully and waiting for you. The nurse's child also suffers. Moreover, I am not sure about others, but I do expect a friend in my personal life. That's true; it is difficult to keep or make a friend because of our tough and rushed working schedule." – Zhou, H1P1*

Liu mentioned her fear of working the night shift. To illustrate, excessively frequent night shifts and additional work would disrupt the body's biological clock. After every night

shift, she experienced headaches and backaches due to lack of sleep, making it challenging for her.

> *"...I rarely can spend time with my husband, my children, friends and relatives. Moreover, my memory decreases dramatically when I lack sleep, am blamed by leaders, have sick children at home, work excessive overtime, etc."-Liu, H2P5*

Zhou mentioned whenever she reminded that her regret to her parents were caused by her job as a nurse, she regrets becoming a nurse. Despite her wish to go home to see her parents when she was off work, she regretted that there was either no vacation or a short vacation. Besides, more people do not wish to marry nurses as they are known for their busy careers, leading to her concern that she would remain single for a long period.

> *"Now, so many people are reluctant to marry nurses as wives, mainly because those nurses are too busy. And it is difficult to have time to accompany them to build relationships. Like me, I can't go home to visit my parents during the short holidays, and I may go to work or need to be on duty at any time during the holidays."-Zhou, H2P6*

Zuo expressed her opinions of the job, stating that she had long holidays including during festivals. According to Zuo, dying and death as a stimulus not only cause direct psychological pressure on nurses, but also lead to secondary effects that would create a sense of tension among the nurses. In addition, nurses might experience negative emotional reactions when providing care for critically ill patients, which results in ideological extremes. The tense relationship between nurses and patients, the busy work of nurses, and misunderstanding among clients leads to a psychological imbalance in nurses, which consists of the display of impatience, short temper, irritability, abnormal language, and behaviour.

> *"I have long been burdened with intense and overloaded front-line work, with no holidays, constant rotation of day and night shifts, irregular life, and daily life and psychological problems. Nervous, causing psychological pressure on nurses, patients and their families have a stronger awareness of self-rights protection, and*

the requirements for nursing quality are increasing day by day. Nurses are faced with the dual pressure of work."-Zuo, H2P7

The development of technology has increased the patients and their families' awareness of their rights, which leads to higher demands on the quality of nursing care. Liao revealed that she felt pressure from her work, especially in terms of her relationship with patients.

"The psychological imbalance of nurses aggravates the incomprehension and dissatisfaction of patients and their families; therefore, pressure is increasing, and it is easy to form a phenomenon of occupational exhaustion over time."-Liao, H2P8

Wei stated her parents' strong concern about her due to her extremely busy schedule, with no time to make friends, particularly her partner. She was not able to have more opportunities to arrange shopping or meet with friends. For this reason, her parents constantly called her to remind her to go outside for leisure. The parents also made calls to the hospital management to request help, such as blind dates among the staff.

"I live with my parents now, and it feels like they are still taking care of me, and I haven't done enough for them. At present, their biggest wish is to marry me. It is hoped that the hospital can organise internal blind dates so that they can find people nearby, and it is easier to understand each other if they go together, to support each other in the future."-Wei, H3P5

According to Huo, nurses carry the multiple roles of wife, daughter, mother and daughter-in-law. To improve her professional knowledge, she had to use her spare time for her studies. This situation could easily cause conflicts, which required self-psychological balance adjustment or might lead to poor mental health.

"I have to take care of both family and work. I now want to find ways to decompress myself. I feel ashamed because I can't balance my work with my family. I could not manage to visit my parents. I don't have time to see my friends. Also, I can't complete my training course. All these pities and regrets happened due to busy shifts and over workloads. Even for the part-time training, I have to spend my spare

time catching up with self-study. Because I don't have many holidays. We have to wait in the queue to get a holiday."-Huo, H3P6

Most of the participants mentioned the main challenges faced by nurses in the past, which included psychological challenges and staying up late as the working time imposed the obligation for them to be adjusted to staying up late. According to Hao:

"I need to take full responsibility. Sometimes, especially for the night shift, I will be the only charge nurse to take care of more than thirty patients. It is really quite challenging. Sometimes, I feel lost and confused about why I have chosen this job. And how will I carry on? Then, I feel stressed."-Hao, H4P1

5.4.1.2 Imperfection at Work

People desire to be "perfect" and recognised for their perfection due to many reasons, including fear of failure, not being good enough, and comparing themselves to others. As for the nurses, they fear making mistakes, not being recognised by society, not achieving patient satisfaction, and not being supported by the team among others. On the other hand, imperfection at work refers to an inadequate management supportive arrangement, indifference among colleagues, and complaints and misunderstandings from patients. This condition leads to self-doubt and negative emotions among nurses.

Zhao described the nurses' work as trivial and busy. In this case, various treatments, nursing care, and nursing records cannot be completed and work leave is delayed. She also added that support and interaction from the workplace are inadequate.

"When there is not enough interaction, the relationship is just like that. I mean, people don't really care about others. It is some kind of indifferent feeling. Some kind of working friend or even just a working partner. One more thing, I don't have enough time to go for my training course. Even for the part-time training, I have to use my daily sleeping time to catch up with self-study. Because I don't have many holidays."-Zhao, H1P1

Some participants highlighted that it is impossible to satisfy every patient in the tasks of treating critically ill patients, accepting new patients, and addressing questions from inpatients and their families; a nurse becomes weak and unprepared when they encounter unexpected situations. To illustrate, Li stated that she had been engaged in nursing work for many years, which prevented her from having any rest before she left the work.

> *"Every day at the beginning of work, it's like fighting a war. The patient's condition changes rapidly, and there will be danger at any time. When family members call 'nurse,' they have to rush over to see what's going on. There are many patients, a heavy workload, and a nurse is overloaded, which is a kind of damage to the physical and mental health of the nurse; the irregular life, the inability to sleep, and the negative emotions such as hunger, loneliness, helplessness, exhaustion, and trouble."-Li, H3P3*

Most participants expressed their hope for an easy and flourishing team relationship. Good relationships among team members at the workplace will encourage them to increase their performance. According to Huo, people would not have the opportunity to help and comfort each other if they were occupied with their matters.

> *"Well, I think I have no problem with my team. But we don't have time to help others' work due to the workload. We could not interact with each other well. So, you know, when there is lacking interaction, the relationship can't get well in the long term."-Huo, H3P6*

Nursing is commonly teamwork-based. In particular, there would be two nurses on duty at maximum for the night shift, which affects the obstetric nurses' working efficiency and quality. Lin the team relationship affects her working efficiency and quality.

> *"Not everyone is friendly. When I got a turn to work with the responsible and kind one, I felt it much easier to complete the tasks and achieve nursing goals. Unfortunately, I share the same night shift with the one who doesn't like to work in a team. I definitely will be so stressed and exhausted."-Lin, H2P1*

Nurses have expectations of gaining support from the management and department. Accordingly, Ou stated that the nurse is the middleman between the doctor and the patient. One of the most common clinical practices among nurses is that conflict would not occur between some patients and the doctor; rather, the patients direct their anger towards the nurses more often.

> *"Faced with the head nurse's finding fault, colleagues' meanness and indifference, the patient's tricky, and the warmth of humanity. I hope hospital leaders can swear less, have more emotional intelligence, and be sympathetic to the hardships of others. The most common clinical practice is that some patients with poor efficacy will not conflict with the doctor (for fear of offending the doctor, of course, some people are not afraid of it now), and more often, they are angry with the nurse and get angry at the nurse."-Ou, H3P7*

Hao stated that support from management and colleagues to the nurses could be a positive facilitator to avoid mistakes and improve service quality.

> *"When everything is fine, so does the relationship. But if someone makes a mistake, everybody will try to make it a personal issue. I hope the management and colleagues can really help each other to avoid the incident and protect the innocent staff. When there is a doctor-patient dispute, it is unfair to just accuse the relevant medical staff of a lack of morality and humanity. After all, this is by no means their intention."-Hao, H4P1*

Nurses should be understood and supported in their work and life. Nurses themselves should accept imperfections in life and work. As nurses, they should be more confident, acknowledge and accept their own shortcomings, and face and deal with them with a calm mind. Only on the premise of doing a good job can the relationship between nurses and patients and their families be actively developed and maintained. When every nurse takes their duties seriously, everyone can care and help each other, and the relationship between nurses and colleagues will also be improved.

5.4.2 Occupational Risk

Occupational risk refers to chemical, biological, physical, and psychosocial hazards that may be caused by medical deficiency or insufficient resources. Under this subtheme, medical deficiencies and insufficient resources are involved.

5.4.2.1 Medical Deficiencies

Medical deficiency in nursing refers to the low level of prejudice against nursing, unreasonable division of nursing, and inappropriate assignment of nurses' tasks. Patients always expect to receive courtesy and the best care quality from nurses during hospitalisation. Accordingly, Yang said:

> *"The poor professional quality and skills of nursing staff are mostly caused by nurses who haven't gained enough training or without enough support. The communication between nurses and patients is not in place. However, insufficient nursing staff and heavy workload contribute irregular life of nurses. They often in a busy status, unable to effectively communicate with patients and their families, and inevitably conflicts with patients' families."-Yang, H3P1*

Nurses need the opportunity and time to focus on developing and improving their profession. However, Ou highlighted the excessive frequency of exams and tests of nurses, resulting in the nurses merely wanting to pass without considering any related practical applications.

> *"Be prepared to be confiscated during rest time. The reason is very simple, do you need to practice for the exams and tests? You have to listen to various lectures; do you need to get credits? You can't get off work on time; you expect to do these things when you go to work? Don't be naive, okay? There will never be holidays. Only if*

you are scheduled to rest you will rest. And if you are scheduled to go to work, you will have to work in anyhow."-Ou, H3P7

Gu described medical malpractice, which may occur due to the lack of nurses or nursing facilities. Subsequently, nurses suffer from abuses and accusations.

"The scapegoat is always the nurse and the social status of the nurse is always lower than that of the doctor. Of course, today's patients are relatively sloppy. As long as there is a problem, they will come to you anyway. Now that there are mortgages, car loans, pensions, children's education, etc., that need sTablewages to support, I really don't dare to change careers."-Gu, H4P2

He also highlighted external supportive resources and management to the nurses, indicating that social support for the nursing profession, hospital management, and family support is insufficient.

"Every year, among the various positions in the hospital, the nurses who request resignation and transfer the most are nurses. So, I have to take responsibility for serving more numbers of patients."-He, H1P4

5.4.2.2 Insufficient Resources

Insufficient resources denote the lack of knowledge, personnel, or supplies needed to fulfil their ethical, professional, and organisational responsibilities due to a shortage of the required resources for patient care and task implementation. In this case, short educational sessions and well-crafted lessons may bring a significant change to professional development. However, one of the educational challenges raised by this study is poor planning and inadequate external support of educational programmes. According to Hao:

"I need to take full responsibility. Sometimes, especially for the night shift, I will be the only charge nurse to take care of more than thirty patients. Most of the time, when you get off from work, you feel very exhausted. Of course, the training of medical staff is also essential. In today's pursuit of refined management, paying

attention to the mental health of medical staff and relieving job burnout so as to improve the quality of medical services and better serve customers should be an important task of hospital management and cannot be delayed."-Hao, H4P1

Participants highlighted the growing conflict between the surge in nursing demand and inadequate nursing resources. Following the relaxation of the national fertility policy, people are encouraged to have children. Deng stated that the investment in nursing is not sufficient for promoting the development of the nursing industry.

"Faced with the rapid growth of nursing demand and the long-term shortage of nursing investment, it is not only the call of a group but also the needs of the society to break through the practical difficulties as soon as possible and build a diversified and clear career development path for nurses."-Deng, H1P3

5.4.3 Summary of Theme Two

The findings highlighted in theme two addressed the fourth research question: "What are obstetric nurses' perceptions of factors that influence self-efficacy, professional values, and job satisfaction?". In the quantitative phase, no significant correlation was found between demographic profile (nurse's age, educational background, professional title, and working years) and the obstetric nurse's job satisfaction. This result was a complete contrast to the qualitative phase results. The interviewees stated that academic qualifications and professional positions had the most significant impact on their work, followed by age and years of working experience. Work-related challenges can also be summarised as work stress and occupational risks, as seen in the participants' discussions in which they also shared their feelings and powerlessness upon facing challenges and the measures they took to overcome these challenges.

Based on the interview, nurses experienced an off-balance of their limit or were at the edge of burnout. Participants described organisational resources as workplace facilitators that increase motivation and satisfaction. They added that insufficient organisational resources, such as lack of recreational facilities, qualitative and quantitative

inefficiency of human resources, and lack of proper equipment affected their job satisfaction. Notably, having sufficient human resources with rich clinical experience and expertise is important for job satisfaction.

The availability of modern and appropriate equipment is one of the essential material conditions for delivering proper quality nursing care. On the other hand, lack of equipment may lead to work interruptions, delays, inadequate care, and emotional exhaustion. According to interviewed obstetric nurses, different management practices had a direct impact on obstetric nurses' job satisfaction. Managers who improved team communication and promoted positive emotions in the workplace increased the effectiveness of the employees' activity and job satisfaction. Participants also stated that obtaining appropriate feedback from the organisation was a factor affecting their satisfaction. They highlighted that one of the important factors of management inefficiency included the lack of knowledge and skills in management and clinical fields.

The concept of job satisfaction in nursing is associated with job stress as stressors are common and unavoidable in the nursing workplace. This theme was extracted from categories of excessive stress, the stressful nature of the nurses' work, unbalanced workload and personal life, and inadequate external support. From the participants' perspective, nursing is one of the most stressful jobs due to the inherent stress of working with patients.

5.5 THEME 3: COPING AND MOTIVATION STRATEGY

All participants stated that upon facing challenges, problems, and stress among others, they constantly strive to find a solution and achieve a better situation either on their own or using external resources. Under coping and motivation strategy, self-regulation approach and management support are highlighted in the next sections.

5.5.1 Self-regulation Approach

Participants stated that upon facing problems, they would adjust themselves beforehand to relieve or avoid the negative feelings. In this case, they also highlighted their coping and motivation strategies, as shown in the following sections.

5.5.1.1 Positive Resistance

Resistance is based on a self-protection mechanism where an individual opposes the change or struggles against the desired behaviour modification. Positive resistance refers to an individual's agreement with problems to make a positive, enriching, and constructive change, which indicates that the individual is highly motivated by the best intentions.

Participants were found to believe that self-regulating skills and positive coping measures are important. Huo described self-regulating skills through which a nurse is able to gain a correct understanding and analysis of the current situation. She also highlighted that nurses should participate in physical exercises that relax the body and mind and release stress. According to Huo, positive coping measures and frequent self-evaluation of mental health are important in maintaining and improving work efficiency, particularly in the face of pressure.

> *"If I have time, I go home to see my parents, visit my friends, or do housework and cook. Communicate more with people those are close to you, like family members, to gain support and understanding, so that they can understand that nurses are ordinary and hardworking."-Huo, H3P6*

According to Liao, it is necessary for nurses to seek self-balancing methods, identify the best method through the balancing fulcrum when they encounter unpleasant matters, and adjust their psychological conditions. Upon facing anxiety and stress, the nurse may promptly identify and respond to the negative emotions.

"Learn to actively participate in physical activities beyond eight hours. Appropriate exercise can relax the body and mind, release inner pressure, and reduce tension. Participating in continuing education, self-confidence increases an individual's resistance to stress. At the same time, be diligent in learning, participate in the study and training of various new technologies, new projects, new methods, and new concepts, enhance knowledge in psychology, sociology, interpersonal communication and management, computer networks, etc., and constantly enrich yourself."-Liao, H2P8

Describing her practice, Qian stated that she gained benefits by enriching her spare time and developing a healthy leisure lifestyle. She emphasised the importance of bravely facing the challenges in life and work, recognising one's strengths and weaknesses, strengthening the study of one's professional level, learning relevant laws and regulations, strengthening the concept of the legal system, acting according to the rules, humane care, and provide patients with safe, efficient, and high-quality nursing services. These actions may not only reduce the contradiction between nurses and patients, but also promote the development of nursing careers.

"After busy working, during your free time, you can go shopping, buy some clothes you like, etc. In addition, you can also listen to music, read books, make a pot of herbal tea and cook some dishes you like while resting. In short, in the face of heavy pressure, we should deal with a positive attitude, learn to self-regulate, and try our best to find suitable ways to relax, decompress, and balance our bodies and minds. You will be able to relieve stress in time, maintain physical and mental health, and make yourself feel happy every day!"-Qian, H3P2

Li mentioned the benefits of developing self-regulation methods and supporting systems to face stressful situations. At the same time, it is also important to enhance one's professional study.

"…, I sometimes practice yoga, write a diary, and adjust my mental state; I like to get along with my family, talk, and have dinner together. Strengthen the study of basic and business knowledge, and focus on the relevant knowledge, such as the

pathogenesis, pathology, physiological mechanism, treatment and preventive care of common diseases in the undergraduate department."-Li, H3P3

Wang mentioned the importance of sincerely communicating and interacting with family members. She also highlighted the necessity of providing people with a sense of practicality and willingness to show good job performance and friendliness when they are capable. She also believed that happiness depends one's efforts of self-management, such as maintaining a healthy psychology, cheerful and positive emotions, a tolerant and open-minded mind, a strong physique, attention paid to civility and courtesy, standard language, amiable attitude, dignity, neat clothes, and generous appearance.

"Even if you can't meet, you can send WeChat through your mobile phone. It's just a question of whether you want to or not. Talk less and do more, ask for advice with an open mind, have a sincere attitude, and give people a sense of practicality and willingness to do your job well, don't make trouble, learn to be patient, and become stable to have a better temper. The work style is rigorous and subtle, proactive, decisive, agile, and realistic."-Wang, H3P4

According to Ou, finding self-entertainment is an effective way to motivate oneself and reduce stress.

"I am the type of person who prefers to entertain myself, that is, a person who can have a good time playing alone. The first one is to avoid making mistakes and keep yourself as energetic as possible. Go to bed early, try not to stay up late, and don't go to work with emotions. When confiscated, let's make a date with colleagues in the department. I also play mobile phones, games, read books, watch movies, practice calligraphy, etc., when I have time."-Ou, H3P7

Most nurses are required to work unavoidable night shifts 1-2 times a week. In some cases, their colleagues suffer from circadian reversal syndrome, insomnia at night, and absentmindedness during the day. Therefore, good health management is crucial. Gua also highlighted the methods of balancing life and work, such as regular life routines and learning to coordinate and arrange for work and life with full enthusiasm and energy.

"The most important thing in interpersonal relationship is to communicate and interact, find out what the other party needs in time so that the other party can make sure that you intend to care and help wholeheartedly. Besides, change your work and rest habits, go to bed early and get up early on days when you do not have night shifts. Change the diet structure and eat more vegetables and fruits such as cucumbers, tomatoes, carrots, etc., which can supplement vitamins and improve sleep. Develop the entertainment activities, choose more outdoor activities, such as aerobic exercises such as jogging and swimming, or static leisure such as practising yoga and listening to concerts."-Gu, H4P2

5.5.1.2 Professional Performance

In terms of self-regulation for coping and motivation, professional performance is related to the work-related actions and efforts that nurses have made, are making, and will make. To illustrate, Shang mentioned the professional discipline where nurses are able to gain work-related references. It is optional for every nurse to apply nursing procedures for implementing patient-centred holistic nursing, conducting a nursing assessment, formulating nursing plans, implementing nursing measures, conducting effect evaluation, implementing basic and specialised nursing routines, technical operating procedures, and related rules and regulations, and performing oral administration and injection as prescribed by doctors. Other methods of drug administration and the treatment and collection of test specimens include patrolling, observing the changes in the condition, participating in and recording the treatment of serious illnesses, and providing health education and rehabilitation guidance to patients and their family members.

"Have good medical ethics and discipline. To maintain the reputation of the profession by refraining from unlawful operations or disloyal work that violates moral conscience. Have honest character, high moral accomplishment and noble ideological sentiment. Possess certain cultural accomplishments, knowledge of nursing theory and humanities, and basic knowledge of participating in nursing education and nursing research. Be competent in nursing work, and have the

courage to study business technology to maintain a high level of nursing. Have strong nursing skills and be able to apply the working methods of nursing procedures to solve existing or potential health problems of patients."-Shang, H3P4

According to Li, if nurses want to improve their professional ability, they should be capable of exploiting strengths and avoiding weaknesses.

"At work, we must learn to avoid weaknesses, turn our weaknesses into strengths, and maximize our strengths. If you are successful in self-management, you will be able to do better in your work. Nurses want to improve their professional ability; it is recommended to actively set goals. It is not easy to always have great achievements in work, as expected. It is still necessary to quote a saying. It is said that one who suffers in hardship is a superior person."-Li, H3P3

To show a good performance in nursing and meet every reasonable request of a patient, it is important to carry a loving, patient, and careful attitude. When patients visit the hospital for treatment, they need the sympathy and care of the medical staff. A good nurse should have good communication skills. Accordingly, Wei highlighted that nurses should have a strong sense of responsibility and fully grasp the patient's condition, care, and treatment by improving their professional level. They should also be aware that the service involves the entire process from the first visit until the end of the treatment. The service should be attentive and full of sincere sympathy where the patients' needs are catered to and their lives and reliefs are prioritised. When a patient is discharged, the nurse must inform the patient of the matters that require attention before returning home.

"Nurses must carefully and continuously observe the symptoms and signs of the patient, timely and accurately detect the changes in the condition, also need to communicate with patients to understand the patient's needs, solve the patient's existing problems in a timely manner, give necessary education and explanation."-Wei, H3P5

According to Huo, stress management is mainly carried out through education and training, mobilisation of personal coping resources, effective coping skills, and improvement in an individual's coping ability.

> *"I think I am doing well with my job. Assist doctors in counselling, receiving and treating patients and their families. Have a high degree of sympathy for the patient, be considerate and caring, take the initiative to be enthusiastic, have a friendly expression, speak softly, work patiently and meticulously, answer any questions, and never quarrel with the patient."-Huo, H3P6*

Qin highlighted that love and smiles fall under the value orientation of nurses. She stated that developing into an excellent nurse does not only involve possessing nursing skills and a high sense of responsibility, but also the demonstration of genuine love for the patient. These outcomes are achieved through hard work and a compassionate heart, maintaining the revered image of the "angel in white" and treating the patient as a family member with a friendly attitude.

> *"Have a high sense of responsibility, compassion and love for patients. Have honest character, high moral accomplishment and noble ideological sentiment. Possess a certain degree of cultural accomplishment, nursing theory and humanities knowledge, as well as the basic knowledge to participate in nursing education and nursing research."-Qin, H2P2*

The enthusiasm of nurses to study is cultivated to improve the nursing level and quality of nurses. Shao described her methods applied in the self-balancing system, which included strengthening the professional qualification. She also emphasised the importance of nurses' appropriate cooperation with work incentives and achievement rewards in their professional roles. These factors may lead to practical and challenging work goals, allowing nurses to be genuinely motivated and maintaining an optimal state of diligent work.

> *"To provide high-quality nursing care for patients, I still need to update my professional capability. As a nursing staff of all kinds, you must first have good professional ethics and dedication, also a sense of competition to adapt to social and medical reforms."-Shao, H2P4*

5.5.2 Management Support

Management support refers to the nursing staff's work-related expectations towards the leader and management system. The direct superior of the nurse is the head nurse. In this case, the nurses hope for fair treatment in terms of scheduling, taking off work, overtime, further education, reward, and promotion among others. Nurses also hope that the hospital can establish a sound protection system and service quality feedback system to improve their service to patients. They expect that special positions and responsibilities would be set up, allowing people to receive a full range of nursing services.

5.5.2.1 Academic Arrangement

Participants expressed their need for hospital support, in which the nurses participate and provide opportunities for continuing education, academic conferences, fellowships, and other academic activities. However, Zhao stated that the availability of opportunities is highly limited for nurses due to qualifications or time.

> *"I am not a member of any nursing organisation. I don't have enough time to go for my training course, so I cannot fulfil the qualification to apply. Even for the part-time training, I have to use my daily sleeping time to catch up with self-study. Therefore, I must work harder and keep struggling for my professional development. Many good opportunities are easily available to the nurse with higher position and qualification."-Zhao, H1P1*

Huo discussed the requirements for attending academic activities, stating that the opportunity is easily available to nurses with a higher position and those with high qualifications, such as a degree or higher education level.

> *"Well, honestly, when you don't have good enough qualifications, you are not capable of applying, such as the first degree must be a Bachelor's or Master's*

degree holder. Sometimes it is unfair; my first degree is college level, and I have missed many good and valuable chances to access academic and professional activities. Helpless smile…"-Huo, H3P6

"I am not a member of any nursing organisation. I do hope that the managers make some arrangements for the staff to attend and achieve. The opportunity is available to the nurse with higher qualifications, such as higher degree, higher position."-Ou, H3P7

Most of the participants addressed the limited opportunity, an incomplete management system in terms of professional development, such as clinical skills training, academic workshop, conference, and course work. There were also complain that hospital management couldn't pay enough attention to obstetric nurses' expectations of professional development in workplace.

5.5.2.2 Workplace Expectation and Contribution

Workplace expectation and contribution refer to non-work-related expectations of nursing staff towards the leader and management system, such as arranging opportunities for dating and dining, affiliated schools, and other fluent systems for their family members' medical needs. According to the participants, they do not have time to spend with family and friends. Ou emphasised that the management may also provide nurses with life support by organising activities for nurses and their families.

"I hope that the hospital or department can organize more activities with family members, more academic training, conferences, forums and some entertainment of spare life activities. One more thing when you have expectations of others, it is better to think at first about what you can do to yourself as well as to others. You have to understand your own situation thoroughly regarding your job and your family."-Ou, H3P7

Hao described her job expectations regarding the physical environment and extra activity at her workplace. Therefore, it is common for the area to be full of patients, which causes noise and an unclean environment.

> *"... I hope that the hospital will increase some extracurricular activities with a comfortable working atmosphere, which includes decoration, furnishings and any other necessary arrangements. I hope the management and colleagues can really help each other to avoid the incident and protect the innocent staff. Sometimes, punishment will increase the psychological pressure, further enhance the sense of job burnout, and even backfire."-Hao, H4P1*

Some participants stated that the nurses have a harmonious relationship with their colleagues and assist one another at work, which creates a sense of achievement and belonging for the nurse. This positive experience would increase their confidence to actively provide services.

Zheng stated that nursing profession in recent years, has become a high-risk profession under China's special national conditions. Therefore, one may also help their colleagues when they have the ability to perform their tasks. If they think they are running out of time and energy, they need to stabilise themselves, allowing themselves to focus on their responsibilities.

> *"Sometimes we seek teamwork, but most of the time, you have to work well as an individual. When everybody focuses on their own part, the responsibilities will be taken. The conflict and dissatisfaction will be relieved. But, of course, I do hope everyone can share work experience with each other to help improve resilience and coping skills."-Zheng, H4P5*

Nurses are the backbone of the health system, and their importance should not be overstated. However, the personal lives of nurses become occupied and disrupted due to the particularity of nursing work. Aside from being extremely busy, they also do not have enough opportunities, as per Zuo's statement below:

> *"Further strengthen and improve the management of full-life-cycle nursing services, promote the integration of medical, nursing and elderly care services, improve the*

long-term training mechanism for nursing teams, improve nursing service experience and increase the supply of nursing services, and expand the coverage and benefit of high-quality nursing services."-Zuo, H1P5

Despite the high pressure experienced by all individuals, a sense of mutual support and assistance was present among colleagues, in which they reminded one another of the schedules, tasks, and goals. Moreover, interviewees stated that having a colleague who teaches and provides advice and guidance makes a significant difference to a nurse. Despite a nurse's contemplation of quitting and changing her job multiple times, having a teammate working alongside her brings her hope and confidence to overcome problems and face challenges. Li added that nurses should be provided with clear workflow and updated work instructions by the department.

"There is no nursing assistant in the ward. So, the nurse needs to do plenty of extra work. The nurses might work well if the hospital can prepare a clear and comprehensive workflow and link introduction, such as admission and discharge, visit, payment, large-scale examination, the introduction of department orientation, daily diagnosis and nursing work, special precautions, etc.."-Li, H3P3

The nursing rules and regulations, job responsibilities, and evaluation points among others have been emphasised to promote the professional level of the nursing industry. Nevertheless, scientifically coordinating human resources and managing the nurse team at different levels are the challenges present in the nursing industry. Creating a harmonious atmosphere and ensuring personal safety for nurses comes with issues to be considered by managers and society.

Some participants talked about the basic requirements for nursing managers. They hoped they would be able to choose their leader by themselves to a certain degree, as per the following Liao's statement:

"Nursing managers should be fair to people and things; should have good moral qualities; should be fair to people and things; should have good moral qualities: efforts to promote the realisation of group goals and mobilise the enthusiasm of nurses. The manager needs to have a pioneering and innovative spirit and be a

leader in the discipline, have healthy mental and physical qualities, and be a good physical manager. In the hospital, the nursing manager is responsible for the management of the quality of nursing in the ward, the management of patients, the management of goods, and the management of economic income and expenditure of the department."-Liao, H2P8

Nursing managers should also consider actively carrying out job rotation or psychological interventions for medical staff in the hospital to ensure their physical and mental happiness and health. Apart from that, the training of medical staff is also essential. In today's pursuit of refined management, paying attention to the mental health of medical staff and relieving job burnout to improve the quality of medical services and improve customer service is an important task of hospital management that should not be delayed.

5.5.3 Summary of Theme Three

Theme three highlights the results that address research question five: "What are potential strategies, as perceived by obstetric nurses, for the improvement of job satisfaction?". The obstetric nurses in the interview reviewed the difficulties, issues, and other challenges they faced in their past work, demonstrated how they addressed the issues, and expressed their thoughts and expectations. This is followed by an in-depth discussion on how nurses should standardise their professional operations to improve work efficiency.

The participants also shared their expectations for management support and what they gained from hospital management. They emphasised that under the current situation, they hoped to maintain their jobs and receive professional development opportunities, which requires the support and understanding of the country, society, and individuals. Regardless of any conditions, they had an urgent need of continuing and completing the job.

5.6 CHAPTER SUMMARY

The five objectives in this study could not be achieved merely through quantitative or qualitative research. A mixed-methods design presented answers to all five research questions, allowing for a comprehensive and in-depth investigation of obstetric nurses' job satisfaction. This design also facilitated the understanding of the findings. Furthermore, the findings highlighted in themes one, two, and three have addressed research questions three, four, and five, namely "What are the perceptions of obstetric nurses on self-efficacy, professional values, and job satisfaction?", "What are the perceptions of obstetric nurses on factors affecting their self-efficacy, professional values, and job satisfaction?", and "What are potential strategies, as perceived by obstetric nurses, for the improvement of job satisfaction?".

Interviewed nurses were dissatisfied with their jobs due to numerous reasons, such as workload, work shifts, environment and human relationship, which is in line with the study by Zhang (2019). Phase II of the study determined the factors affecting nurses' job satisfaction, including coping and motivation strategies. This chapter aims to highlight the nurses' perception of the nursing profession, their challenges, and their adjustment to address the challenges. Moreover, the results in this chapter have presented various nurse-oriented perceptions that potentially affect job satisfaction and the quality of nursing care.

The perceived stand and beliefs of their reported stressful experience, internalised perception of social interactions, concerns over public acceptance, and their management of emotional suffering are presented. This factor indicated that the reflection of self-efficacy theory is a practical support to nurses' motivation and coping strategy. Most participants commonly expressed their knowledge and understanding of the nursing profession. They also expressed the challenges that they might face in their job to show their perception of their job, which may lead to the challenge. The challenges included their concern about their job and family balance, which particularly occurred when they were required to work overtime for the night shift.

This chapter highlighted the struggles of nurses in balancing family life and job matters. To illustrate, the participants described their feelings as nurses by stating their current status, challenges, problems and achievements. The majority of the participants

described the complexity of living with multiple roles and expressed the challenges of going through lives without external support. Their languages also indicated their exhaustion from the excessive workload leading to their physical and psychological suffering. The expressions and descriptions used were considered in this study to encompass the common feelings presented by the majority of the participants.

Discussion was made on the nurses' perception of their survivorship experience, which determined the extent of their capability and self-regulation. To illustrate, the level of stress in their job and lives was related to their perception of themselves and their career, particularly in terms of self-efficacy and job satisfaction. The degree of influence of various factors on nurses' job satisfaction and the countermeasures are further discussed in the next chapter.

This chapter highlighted the voices and perspectives of Chinese obstetric nurses regarding their demographic profile, professional values, self-efficacy, job satisfaction, and improvement strategy. The findings from this study to develop knowledge, which would present the strategies to support obstetric nurses in China within the context of nursing education, practice, and hospital policy in China.

CHAPTER SIX

DISCUSSION AND CONCLUSION

6.1 CHAPTER INTRODUCTION

This chapter provides an overall discussion of the research and a summary of the study conducted for the whole thesis. This study aims to perceive the novelty of the research works, followed by its contributions to draw inferences by integrating the findings from two phases of this study. This study was summarised based on the important findings perceived as the novelty of the research works, followed by the contributions of the study, limitations of the study, and future recommendations made based on the study results.

This study is motivated by inadequate evidence of obstetric nurses' perceptions of professional values, self-efficacy and job satisfaction, their correlation, and the potential affecting factors of job satisfaction in the context of job-related challenges. When nurses gain a sense of achievement from their jobs, they may achieve a sense of job satisfaction, which could address the current shortage of nurses and ensure an adequate nursing workforce (Lu, 2019). Moreover, there was an inadequacy of research on how nurses perceive, identify, and adjust to job-related challenges. To illustrate, a study by Tan (2021) revealed that nurses in China frequently complained about the high difficulty of their work, extreme work pressure, and dissatisfaction with their work and life.

Based on previous studies, obstetric nurses' job satisfaction was influenced by demographic factors, nurses' self-efficacy, and professional values, which did not go through adequate quantitative testing in this study. Thus, the employment of qualitative study brought a further exploration of inquiry upon the emergence of complex research problems. Accordingly, more perspectives and comprehensive descriptions should be explored based on the interview with obstetric nurses, especially their positions on public acceptance, support expectations, and social participation. This approach would provide a

basis for the selection of a mixed-methods design for integrating the quantitative and qualitative phases.

The quantitative phase (Chapter Four) of this study determined and identified the level of nurses' professional values, nurses' self-efficacy, and nurses' job satisfaction and their associations. Statistic results indicated no significant relationship between the independent and dependent variables, which was not in line with previous studies. Therefore, correlation tests were conducted between itemised independent and dependent variables for further explanation.

Based on previous research and literature, many other factors were associated with nurses' job satisfaction, such as age, educational background, professional position, and working experience. During the qualitative phase (Chapter Five), participants discussed the 'how, what, and why' related to the nursing profession. Detailed descriptions and explanations were presented to express their feelings and opinions on their work, such as pressures, problems, the treatment they received, their concerns about job-family balance, and their distress due to working overtime and excessive night shifts.

The following section summarises and discusses the main findings of the previous works with previously established relevant literature on obstetric nurses' job satisfaction, professional values, and self-efficacy. The results are followed by the discussion and implications of the findings, which propose the study design integrations. Notably, this study has answered all five research questions (Chapter One). Five key findings of this study are summarised as follows:

i. Statistics results demonstrated that the levels of obstetric nurses' professional value (M = 2.898, SD = 0.258), self-efficacy (M = 3.016, SD = 0.188), and job satisfaction (M = 2.506, SD =0.127) were low. Therefore, further actions are required to identify the affecting factors of each variable and the relationship between the variables.
ii. Obstetric nurses' perceptions of work-related problems included similar causal explanations despite originating from different event experiences. Nurses were dissatisfied with their working conditions in terms of facility equipment and hygiene. They reported job-related stress, exhaustion, isolation, helplessness at work, and the tendency of making and repeating mistakes due to the lack of rest.

Despite these negative experiences, they received no professional help or support, which increased the challenges in their work.

iii. Chinese nurses' stresses are primarily caused by their high workload, the tense relationship between nurses and patients, continuous night shifts, inadequate income, and other social factors including low social acceptance. The participants stated that when nurses are exposed to abuse for the long term, their work enthusiasm and values would weaken. The hostility of their colleagues and tense relationship between nurses and patients commonly lead to nervousness among the nurses. Besides, the relationship between nurses and patients is sensitive and fragile; nurses face different types of stress as they need to take certain risks in caring for patients. Upon receiving frequent abuse, the nurses would spend more energy to manage their stress. Ultimately, their self-efficacy in nursing professional development may be negatively impacted.

iv. The inability to balance their work and family affects nurses' personal private lives. To illustrate, more than half of the participants were recorded with remarkably limited social interaction with their family members due to physical and mental exhaustion. The nurses stated that they were still required to work even when they were on vacation, which reduced the opportunity and time to see their parents and friends.

v. The nurses' dissatisfaction with their current job was linked to continuous academic development chances developed from their professional position. By sharing their work experiences, the interviewees indirectly expressed their cognition and feelings about their nursing job, how to face and manage the problems and challenges they faced in the job, and how to gain achievements and job satisfaction. Furthermore, nurses' age determined whether they could employed, while their education and working years provided comprehensive and detailed feedback on their job satisfaction. Upon expressing job dissatisfaction, the interviewees stated that their opportunity for advanced education, academic training, and salary was significantly affected by their professional position. Additionally, the promotion of professional positions was strongly attributed to their educational background and working

years. Clear restrictions on the age of nurses were imposed on the recruitment at hospitals.

The subsequent sections discuss the results in relation to the existing literature regarding the experience and understanding of obstetric nurses. These are followed by a discussion of the implications of this study, which calls for the establishment of a set of referral strategies and the development of appropriate managemental support. The limitations of this study are subsequently discussed.

6.2 THE CONTRIBUTIONS OF SELF-EFFICACY THEORY TO UNDERSTAND OBSTETRIC NURSES' PROFESSIONAL VALUES AND JOB SATISFACTION

Self-efficacy denotes "people's judgments of their capabilities to organise and execute the courses of action required to attain designated types of performances" (Bandura, 1986). Obstetric nurses face many challenges and problems in their work, which would affect and weaken their professional values and self-efficacy. This situation may eventually intensify the pressure experienced by the nurses, followed by job burnout and dissatisfaction with their jobs. Therefore, the effects of self-efficacy theory on obstetric nurses' professional values and job satisfaction were applied to gain an understanding of this situation.

The descriptive results of the quantitative phase were obtained to determine the level of obstetric nurses' self-efficacy, professional values, and job satisfaction. The qualitative phase explored factors affecting obstetric nurses' job satisfaction. The significant effects of demographic data recorded by age, educational background, professional position, and years of working experience were reiterated by the obstetric nurses to thoroughly explore the data.

As an important personal resource, self-efficacy was presented as having vital and precursor influences on positive consequences. Several studies suggested that nurses with high self-efficacy showed higher professional commitment and invested more effort into their jobs, which could improve the quality of nursing care and increase nursing performance (Eller et al., 2018; Kim et al., 2021). Wallin et al. (2021) also claimed that self-efficacy as the main personal resource demonstrated intrinsic motivational processes,

such as work engagement. Essentially, higher self-efficacy of the nurses increases the possibility of their autonomous engagement in the nursing professional practice.

In the nursing process, self-efficacy can efficiently regulate the predicament of nursing quality to achieve the desired balance between work attitude and behaviour (Lopez-Garrido, 2020). In addition, high self-efficacy also presents numerous benefits to daily life, such as resilience to adversity and stress, a healthy lifestyle, improved employee performance, and educational achievement.

Bandura (1977) described self-efficacy as a person's belief in their ability to succeed in a particular situation, which is developed by four main sources of influence, including (i) performance outcomes, (ii) vicarious experiences, (iii) social persuasion, and (iv) physiological feedback. High self-efficacy offers numerous benefits to daily life, such as resilience to adversity and stress, healthy lifestyle habits, improved employee performance, and educational achievement.

i. Performance Outcomes

The most influential source is the interpreted result of one's previous performance or mastery experience. This source denotes the experiences gained by an individual when they take on a new challenge and eventually overcome it. This positive way of thinking where one believes in their capability of fulfilling the tasks, they set for themselves is beneficial. Besides, a part of the struggles in improving at any matter is to ensure that the person believes in their capability of carrying out a task with success.

ii. Vicarious Experiences

Bandura (1977) stated that a person's observation of other people's success through sustained effort raises the belief that they are also capable of mastering comparable activities to succeed. Participation encourages the person to be active and engaged, great qualities in someone that are usually influential in a person's levels of self-efficacy. Whether the outcome is positive or negative, making one's own decisions allows one to feel responsible.

iii. Social Persuasion

Positive verbal feedback made upon undertaking a complex task encourages a person to believe that they have the skills and capabilities to succeed. Self-

efficacy is influenced by encouragement and discouragement about an individual's performance or ability to perform (Redmond, 2010). Additionally, a person's emotional, physical, and psychological well-being could influence their feelings about their abilities in a particular situation.

According to Bandura (1977), the sheer intensity of emotional and physical reactions does not hold significance; rather, the perception and interpretation of these reactions are significant. Specifically, people with a high sense of efficacy are likely to view their state of affective arousal as an energising performance facilitator. In contrast, those who are challenged by self-doubts regard this arousal as a delimitator. By learning how to manage anxiety and enhance mood when experiencing challenging situations, individuals are able to improve their sense of self-efficacy.

iv. Physiological Feedback

With correct intentions and manner, feedback can be one of the most important sources of building levels of self-efficacy. Without frequent feedback, one may be confused about whether they should proceed with their actions. Additionally, the absence of feedback may prevent the individual from identifying the aspect that they should fix within themselves. Self-efficacy improves after receiving higher and more thorough performance feedback (Beattie, Woodman, Fakehy, Dempsey, 2015).

Self-efficacy reflects the belief and sense of confidence in individuals' capability of fulfilling tasks. Related to the level of motivation, actions, and psychological state, it denotes an individual's overall self-confidence in facing the challenges of different environments, contexts, or burgeoning issues. Self-efficacy may reflect an individual's behaviour and psychological status in different contexts, such as the correlation of nurses' self-efficacy with mental health, resilience, and job burnout. Additionally, previous studies found a negative correlation between general self-efficacy and anxiety (Yu, 2019).

Quantitative findings indicated that the mean of the item "I can always manage to solve difficult problems if I try hard enough" was higher than the other items that emerged with different statements by the interviewed nurses. Meanwhile, the mean of the item "I can usually handle whatever comes my way" was the lowest, which was in line with the

description of the interview session. Following that, the obstetric nurses' professional value was slightly low. The mean of the item "participate in peer review" was the lowest, indicating the complaint by most of the participants during the interview that they either did not have time or opportunity. While the obstetric nurses' job satisfaction level was slightly low, the mean of the item "the importance of nursing has not been widely recognised by society" was higher than other means. This result indicated the importance of placing serious consideration on the participants at the interview session. Furthermore, the mean of the item "you can handle the current workload" was the lowest, indicating another critical issue among the participants from the qualitative phase.

In the tests of correlation among independent and dependent variables, one significant item was identified from self-efficacy "I can always manage to solve difficult problems if I try hard enough". In this case, the inability of the obstetric nurse to solve job-related problems may lead to low job satisfaction compared to the nurses who could solve problems. Three significate items were also detected from professional value: "improve the working environment," "recognize the role of nursing in health care," and "practice with fidelity and respect principles". These items had a significant relationship with job satisfaction. Besides, many other potential factors may also correlate with job satisfaction.

The interview data in the qualitative phase were placed through thematic analysis and classified into sub-themes and themes. During the interview, most nurses hoped to improve their work efficiency and quality by improving their working environment, professional orientation, and recognition to achieve better nursing care. However, they also stated the times when they felt extremely tired and helpless, especially after encountering significant problems and difficulties in their work. Therefore, they were not able to solve difficult problems despite their effort. The nurses also discussed their perceptions and feelings about their work, including their expectations for the work.

In the qualitative phase, the majority of the participants commonly expressed how they knew, what they knew, and what they understood about the nursing profession. They also mentioned the challenges they faced or might face in their job, including their perception related to their job that contributed to the challenge. Their perception was also related to their job and family balance, which occurred especially when they had to work overtime or the night shift. This chapter also highlighted some nurses' accounts of their

struggling experience in balancing between their family matters and jobs. Overall, these discrepancies were attributed to the differences in demographic data and factors affecting job satisfaction, such as salaries, benefits, workload, and employee relations.

Statistic results indicated a good level of obstetric nurses' self-efficacy, which took place with different highlights from the qualitative findings. Based on the interviewed obstetric nurses, they were constantly incapable of solving difficult problems despite their efforts. Considering the heavy tasks, hectic work schedule, and high work pressure, the communication between the nurses was insufficient and maintaining their relationship was difficult. Going to work is a personal job where no one is able to care for others. Under current policies, nurses are the first individuals to be held accountable when problems occur although the patients are at fault in some cases.

Obstetric nurses also stated that if a certain individual opposes them, most of the time they are unable to find the means and ways to achieve their desired outcome. While the law of the country is to protect the rights of patients, many individuals take advantage of this law to intentionally cause medical issues for financial gain. Consequently, the hospital management and nurses have to pay for the troubles caused by patients. Following that, nurses would have to go through point deduction, restriction from participating in the evaluation of excellence, and postponement for academic and clinical skills training.

In this study, all the participants are female. Most of the married nurses in the interview did not consider themselves good mothers as they did not have time to accompany their children. Additionally, they also missed their children's birthdays, performances, and parent-teacher meetings for their children's schooling. On the other hand, the unmarried nurses felt that they were more indebted to their parents. Nurses related their responsibilities and obligations to their multiple roles; they were not able to accomplish their aims and goals. They were also unable to efficiently manage unexpected events and unforeseen situations. As concluded by the interviewees when nurses were stressed, isolated, and physically and mentally, their coping abilities would decrease. To illustrate, they were not able to efficiently solve most problems despite their effort, which led to their self-doubt, mood swings, anxiety, and inability to work and rest normally.

6.3 EXPERIENCE OF OBSTETRIC NURSES WORKING WITH POOR JOB SATISFACTION

In general, some of the behavioural changes and emotional adjustments had intersections from the stressful response, which could also have a corresponding association with obstetric nurses' poor satisfaction. These significant constructs were interrelated from different perspectives and included social influences, such as expectations of social support, belongingness and social acceptance, self-isolation, and loneliness. This relevance of the constructs suggested the rationality of combining both methods in a single study.

The qualitative phase aimed to explore obstetric nurses' experience of poor job satisfaction. The overall findings of the qualitative analysis demonstrated that (1) obstetric nurses complained of stressful work-life events; (2) obstetric nurses also suffered from poor participation in social activities characterised by inadequate social interactions, feelings and expectations of social support, belongingness and social acceptance, and self-isolation and loneliness. These factors were frequently raised by the interviewed nurses who described their views and feelings about social influence. This was followed by (3) feelings of hopelessness that included hopelessness, loneliness, helplessness, low self-esteem, self-blame, low self-confidence, and negative attitude, and; (4) experiencing job-related suffering through self-management and positive approaches.

6.3.1 Obstetric Nurses' Experience of Stressful Work-life Events

A vast majority of obstetric nurses discussed their work-life with stress, starting from the date when they failed to balance work and personal life. While the endurance and severity of their sufferings might differ, the same impact took place on the nurses' work and lives. Among these interviewed nurses, most of them expressed their persistent worries and fears

concerning personal health, family-job balance, professional development, on-duty performance, work overload, and fear of working error.

A study by Mao (2019) demonstrated that a large number of night shifts is the influencing factor of low satisfaction, while the risk of low satisfaction is higher for nurses who participate in night shifts compared to nurses who do not have night shifts. Nurses on the night shift are often required to take care of more patients. Furthermore, excessive workload and lack of sleep leave them in a state of physical fatigue for the long term. The patients' condition also significantly changes at night. The nurses' obligation to attend to emergencies alone leads to their feeling of powerless and psychological disturbance. In addition, frequent night shifts may disrupt an individual's biological cycle and affect family and social life, which intensifies the nurses' refusal of night shifts. Therefore, a "flexible scheduling" system should be adopted to reduce the frequency of night shifts for nurses, increase social and family support, reduce the occurrence of anxiety, depression, and other mental diseases, enhance their inner sense of identity and responsibility for nursing work, and ensure the quality of nursing care service.

The vast majority of the interviewed nurses expressed their views and feelings through challenging life experiences. Based on the observed psychological manifestations, their experience of stressful events (such as overtime, long-term night shift, holiday work, limited career development opportunities, tense interpersonal relationships, and disrupted personal life etc.) were described as the main theme established from the local word "suffocating life", which was also consecutively mentioned by obstetric nurses during their interviews. This aspect was demonstrated in detail by obstetric nurses to highlight the difficulties related to ongoing stressful situations, particularly their concern over personal health, family-job balance, professional development, on-duty performance, work overload, and fear of working error that could be the main factor of their concerns. It also included the distress over family roles, parenthood, and a child's experience to the parents of managing personal life matters.

Other studies found that work-family stress was attributed to the inability to balance work and family roles. A normal family life is affected by work time, pressure, and behaviours, while the needs of family roles interfere with the work of nurses (Wan, 2017).

In the interview, these obstetric nurses shared common experiences, such as anxiety, mood swings, insomnia, lack of energy, and a tendency of making errors.

6.3.2 Reduced Participation in Social Activities

The reduced participation in social activities highlights obstetric nurses' experience of withdrawal from all levels of social engagements and their preference to be alone due to their jobs. Some nurses also explained their avoidance of taking part in any social activities due to their self-imposed social isolation. This type of emotional and social loneliness leads to more depressive events, which may be followed by advances in social influence and occupational stress. Similar studies reported that continuous negative views and feelings were significantly associated with depression (Mao, 2019). Hence, as described in the qualitative in-depth interviews, obstetric nurses' fear of engaging in possible social activities was associated with the lack of social support and acceptance, self-isolation and loneliness, feelings of not fitting in the society, and fear of being ignored.

6.4 FACTORS ASSOCIATED WITH OBSTETRIC NURSES' JOB SATISFACTION

Based on the interview data, it was found that age, educational background, professional position, and years of working experience were associated with nurses' job satisfaction, which affected their feelings, thinking, and actions related to their job.

6.4.1 Socio-demographic Characteristics of the Obstetric Nurses

To explore the obstetric nurses' perceptions of professional values, self-efficacy, and job satisfaction, the quantitative study socioeconomic and demographic features are summarised in the subsequent sections. This research explored the basic situation, psychological and physical health, and the career development of obstetric nurses. Notably, analysing the differences and primary influencing factors of nurses' job satisfaction in terms of age, education, work experience, professional position, professional values, and self-efficacy is crucial to understand obstetric nurses' living conditions, health conditions, psychological conditions, and career development and to explore the factors causing the high resignation rate among nurses.

In this study, 218 obstetric nurses who fulfilled the inclusive selection criteria from targeted hospitals responded with valid online survey submissions. The majority of the nurses (86.2%) were below 36 years old. Meanwhile, almost half (47.7%) of the respondents were younger than 25 years old, while the other 38.5% of obstetric nurses were 26-35 years old. In China, the working schedule commonly involves three types of day shifts and two types of night shifts. Apart from irregular time, the work needs to be handed over before a nurse leaves her work due to several events (e.g., the number of patients is high and the work is not finished). Moreover, nurses with lower monthly income, 6-10 years of working experience, and experience with medical violence are more likely to leave their jobs (Wang, 2017).

In any hospital, nurses have the most contact with patients due to their nature of work that involves changing bed sheets, infusions, and injections, taking body temperature, and writing doctor's orders among others. Therefore, nurses are inseparable from their schedules. Upon communicating with patients, the family members would not be pleased if the nurse's voice was loud, thinking that her attitude was not proper. However, nurses who speak with a low voice are perceived as unprofessional and would be scolded. Notably, obstetric nurses are confronted with the most critical challenge due to the child policy that is open to all families, considering that the child is the treasure of every family.

In most cases, nurses are not respected due to poor social acceptance. Despite their service to emotional patients, they also receive insults and assaults. However, the patients and their family members do not show their anger towards the doctor, making the nurses

their target of anger. Furthermore, with technology and economic development, people more strongly advocate for freedom and are unwilling to engage in challenging, high-intensity, and high-responsibility work. When they have reached stability and relaxation in their lives, they may have a new perspective on their lives and eventually resign due to their dissatisfaction with the status quo.

In China, the length of service of nurses have an obvious impact on their monthly income. However, the income level depends on the professional position instead of working years. For the majority of obstetric nurses, the achievement of professional positions is often delayed by extra-intensive workloads and overtime. Moreover, some nurses have no clear goals for their own career development. Nevertheless, most of the nurses expressed their hopes for regularly participating in career-related training, indicating their strong willingness to develop themselves and change their development trajectory through the improvement in their abilities. Therefore, the monthly income of trained nurses is significantly higher compared to those who have not participated in relevant academic training (Wang, 2017).

According to the statistics of the Ministry of Civil Affairs, the crude divorce rate in China in 2017 among nurses aged 30-40 years old was 2%, which was significantly higher than the national average divorce rate. This phenomenon was strongly related to the working status of nurses. With the renewal of the nursing concept, the continuous enhancement of patients' self-protection awareness, and the increasingly stringent requirements for nursing work, the psychological and physical load of nurses have become heavier, which increases the prominence of "job burnout". In this case, nurses commonly experience insomnia, headache, gastrointestinal dysfunction, irritability, and other symptoms mainly related to irregular work, lack of rest, and complete destruction of the biological clock.

Addressing the nurses' educational background, the majority of respondents (n = 178, 81.7%) stated that they hold undergraduate degrees (Bachelor's degrees or diplomas), while 25 of them (11.5%) hold Master's degrees. Education encourages nurses to not only focus on physical well-being, but also have an awareness of their careers. Another important contribution of education is its efficacy of self-support, which results in

subsequent behavioural change and emotional adjustment and allows the exploration of better approaches to coping with challenges. Thus, as an essential constituent of emotional and psychological counselling, education is considered one of the important factors in examining its possible association with depressive events.

6.4.2 Occupational Stress

Occupational stress denotes the emotional response in the workplace environment when the conditions and facilities are not supported to the capacities, resources, or needs of nurses. This stress emerges from healthcare and the combined responsibilities of work and nurses' personal lives. According to the interviewed obstetric nurses, they often felt depressed as they had to encounter pressures, difficulties, problems, and challenges in their work, which increased their stress.

A study by Yao (2018) highlighted stress as the most important factor of job-related burnout, followed by self-efficacy, personality type (introvert unstable), and job title. In addition, individuals with low self-efficacy and introversion or unstable (high neuroticism) personalities experienced more severe burnout when they faced stress compared to others, regardless of stress level. Hoboubi (2017) stated that personal factors such as the shortcomings, characteristics, and methods of facing life events are impactful on the level of job stress. This statement is in line with the qualitative findings in Theme 2, which discussed job-related challenges. According to the participants during the interview, the effects of job stress took place on the work environment and outside the work setting, especially in personal life. Overall, Liu (2019) concluded that work stress directly influences perceived social support and self-efficacy.

Dagget (2016) highlighted job stress among nurses as a global issue, with 9.2% to 68% of nurses possibly facing job stress. This disorder among nurses may be associated with several psychological (anxiety, depression, exhaustion, and poor concentration), physical (increased heart rate and blood pressure, cardiovascular diseases, and musculoskeletal pains), or organisational (job absenteeism, lack of job satisfaction, and

lack of quality in job performance) problems. Job satisfaction is a positive and pleasant emotional state occurring from an individual's assessment of one's job experience. However, when the needs of nurses are not fulfilled at the workplace, they may experience a variant level of job stress, which may lead to job dissatisfaction. Accordingly, a study by Rahimi (2016) stated that job stress may reduce the level of job satisfaction.

Occupational stress plays a significant role in affecting job satisfaction; as a motivator, it will contribute to creativity and satisfaction and reduce boredom. However, as a negative factor, it will lead to aggression and low job satisfaction. On the other hand, job satisfaction may protect workers from stressors and act as a regulating factor for stress (Hoboubi et al., 2017). This type of stress mainly has indirect effects through job satisfaction, depression, and stress adaptation. With the reduction in nurses' job satisfaction and increase in work and life pressure, nurses would consider resigning. Therefore, managers should have the intention to leave reduction strategies among nurses with a focus placed on creating a less stressful work environment, increasing job satisfaction and stress adaptation, and reducing depressed mood concomitantly (Lo et al. 2018).

According to the participants of this study, job satisfaction with work conditions was found to be significantly lower, particularly in terms of control and responsibility, scheduling, interaction, extrinsic reward, and family and work balance. This result was in line with the qualitative findings in Theme 2, which discussed job-related challenges. Another item related to the "relationship with peers" factor indicated that the impossibility of exchanging experiences and feelings with peers became the main factor of occupational stressors attributed to inadequate time and opportunity. Obstetric nurses also mentioned "conflicts with supervisors", elaborating on the lack of support from direct managers and the act of blaming others for uncontrollable errors.

Another significant social factor was "the conflicts with patients and their families", which was attributed to the lack of adequate and effective communication or unreasonable demands. This result was in line with Hassan et al. (2020) who found that managing angry/blaming relatives, distressed patients, and their expectations of care that could not be fulfilled were important stressors for all healthcare personnel. This result was supported by previous studies implying that stress at the individual level affected job satisfaction

(Sharma et al., 2014; Riklikienė et al., 2015). Moreover, a vicious circle occurred between occupational stress and job satisfaction where intense stress led to job dissatisfaction and increased stress. As a result, nurses tend to consider quitting their jobs at an institution or changing professions (Moustaka et al., 2010).

6.4.3 Professional Identity (Professional Values)

Professional identity in nursing is defined as a sense of oneself. Relationships with others are influenced by the characteristics, norms, and values of the nursing discipline, resulting in individual thinking, acting, and a sense of being a nurse (Godfrey, 2020). At the same time, the values of obstetric nurses are affected by their work. Furthermore, professional values are the values acquired during socialisation into nursing from codes of ethics, nursing experiences, teachers, and peers (Al-Banna, 2017). In this study, professional identity was reflected through nurses' professional values. Establishing a professional identity in nursing may be related to self-confidence and the ability to work collaboratively to improve the workplace and impact patient outcomes (Caryl, 2021).

Obstetric nurses discussed the professional values they learned, which complemented their work-related values. According to the nurses, the implementation of each nursing measure must involve professional values as support and constraints. When nurses work with confidence and are satisfied with their work, they would develop richer values. However, nurses would be deprived of positive energy when they face complaints, criticism, and punishment. Subsequently, the values may be missing or weakened when incentives are provided.

According to Kadir (2017), self-efficacy is a self-assessment of the beliefs and attitudes of the staff working toward their abilities and knowledge accumulation compared to what is expected of them. The research by Soudaga (2015) highlighted self-efficacy as an important predictor of nurses' professional functioning. Azam (2017) also made a relevant point that self-efficacy is the most influential factor in nurses' performance, while high self-efficacy empowers nurses to make efforts to show the best job performance.

Moreover, nurses with high self-efficacy have stronger internal motivation compared to outside pressures for their careers. Thus, they are able to understand and perform practical tasks. Similarly, Caza (2016) stated that nurses with low self-efficacy had low job satisfaction and poor job retention.

The mean levels of nurses' professional values, self-efficacy, and job satisfaction, including the possible relationships between them were recorded from the analysis of phase I results. The results from phase II demonstrated that nurses' job satisfaction was related to their self-efficacy, professional values, professional belonging, and work-related stress in nursing. Nurses' perception of the nursing profession was not only based on the nurses' cognition of the nursing profession, but it was also influenced by the social group's cognition and evaluation of nursing. This result was supported by the qualitative findings in theme one that discussed the conceptualisation of the nursing profession.

Alshmemri (2016) highlighted the importance of career recognition for nurses' objective review and evaluation of their jobs, which could influence job satisfaction. Hu (2022) stated that the increased social recognition of the nurses' profession is important for expanding the nursing workforce in the future. Forming a strong professional identity is important for nurses due to the impact of job satisfaction and the development of a robust nursing workforce. Browne (2018) described professional identity as a person's perception of themselves within a profession or the collective identity of the profession. Professional identity is developed through a self-understanding as a nurse, along with experience in clinical practice and understanding of their role (Philippa, 2021).

According to the American Nurses Association's nursing scope and standards of practice, all nurses have personal and professional identities that converge to form the values they practise. In essence, professional identity in nursing is a step beyond "acting professionally". It focuses on the transformational nature of being a professional rather than the transactional aspects of professional life, such as clocking in on time and completing tasks. Notably, this identity is an important factor in nursing decisions on whether to continue a nursing career or transition from low job satisfaction.

Professional identity is also known as an identified symbol established by the nurses as opposed to the public image established within the consumers' minds. Developing a

professional identity is essential for nurses to form an impression of their selected profession and acculturate it into the profession. The outward image of the nurse has been influenced by stereotypes and public perception mainly due to gender. Form a professional identity based on referral literature, evidence-based practice and professionalism are built by instilling professional values from the actual work.

6.4.4 Perceived External Support

The interviewed obstetric nurses expressed their dire need for more external support that could be provided by the management, colleagues, family, and society. Social support could be considered a job resource, given that the support of the supervisor and colleagues (e.g., useful advice, trust, and empathy) facilitates nursing professionals in carrying out their tasks successfully. Given the complex concept and definition of social support, numerous proposed definitions of this construct are created.

Social support can be defined as the assistance and protection given by others (Velando-Soriano et al., 2020). Support may be present from informal (e.g., family and friends) and formal sources (e.g., supervisors). According to Shirey (2004), four characteristics or types of support can be identified: (a) instrumental support associated with the provision of goods, resources or services; (b) emotional support related to the effect of provision, empathy, trust, or care; (c) informational support related to information that is provided to solve a problem and mitigate stress, and; (d) appraisal support associated with self-evaluation and affirmational support.

Numerous studies observed a positive relationship between the social support perceived by nursing staff and the quality of services and care in health organisations, intention to stay in the organisation, organisational commitment, and job satisfaction. In terms of job satisfaction, high levels of social support foster the exchange of advice, feedback, and guidance to carry out clinical tasks and the development of a strong affective climate of empathy, trust, and mutual reinforcement. As a result of this effective social interaction, nursing professionals show improvement in their job performance, which is

reflected in a positive job evaluation and high job satisfaction (Bagheri Hossein Abadi et al., 2021; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020).

Addressing the obstetric nurses' expectations of support, social support reduces the levels of uncertainty at work, which subsequently increases the levels of job satisfaction. It was found that supervisor and colleagues' social support had direct and indirect effects on participants' job satisfaction through role ambiguity. However, in the case of supervisor's support, the main effect was direct, while the direct and indirect effects were more balanced in the case of colleagues' support. This condition indicates that social support represents the scope of one's level of satisfaction in relation to the necessity of support, information, and interaction, apart from being a key element for coping with challenges.

Social support is a crucial resource in the nursing work context with beneficial effects on well-being and job satisfaction. Through helpful social interactions, the exchange of information and advice about the role functions and responsibilities, and a climate characterised by good interpersonal relationships, trust, and empathy, the nurses' job performance would improve. This improvement would translate into positive emotions and evaluations of the job. Ultimately, nursing staff experiences high perceptions of job satisfaction (Bagheri Hossein Abadi et al., 2021; Ghanayem et al., 2020; Modaresnezhad et al., 2021; Pérez-Fuentes et al., 2020).

Based on the above descriptions, it is contemporarily agreed that social support significantly reduces the various types of stress and remains an option for obstetric nurses' coping strategy. The indirect effect of social support on job satisfaction would take place through role ambiguity based on the addressed relationships between job resources and demands (Bakker & Demerouti, 2017). Complementing with further explanations, it was found from the qualitative study that obstetric nurses' concern for social acceptance and support was frequently highlighted by the participants. This type of concern may be a breakthrough in an individual's expected fear of social awareness and respect for the nursing profession.

Through quantitative and qualitative research, the causes and influencing factors of obstetric nurses' low job satisfaction, including the impact of low job satisfaction on nurses' work and life, were investigated. It was indicated from the statistical results that

improvement in self-efficacy, awareness of professional value, and job satisfaction is critical for nurses. The results also suggested that nurses require more attentive ears that listen to their struggles, pains, challenges, problems, needs, and expectations. According to the participants' descriptions, several main influencing factors and the impact of low job satisfaction on nurses' work and life were identified. Nurses and society need to work together to improve job satisfaction.

6.5 THE INTEGRATION AND INTERPRETATION OF STUDY PHASES ON OBSTETRIC NURSES' EXPERIENCE WITH POOR JOB SATISFACTION

This study employed self-efficacy theory to further analyse and summarise obstetric nurses' responses to previous work situations and current work challenges. The development of understanding and interpretation was extracted and summarised based on the findings from the data results from two phases of quantitative and qualitative research. The qualitative findings concluded in terms of social influences, occupational stress, internal perspectives and feelings of obstetric nurses, and work-related distress. Additionally, the conceptual models of the causes of poor job satisfaction require the integration of managerial and psychosocial support to obstetric nurses. Subsequently, the findings and data analysis of the quantitative research stage were inconsistent with previous research and reports, which indicated the necessity for further qualitative research. The results of the quantitative research have contributed to the qualitative research phase for further acquirement of real information regarding obstetric nurses' job satisfaction.

The interpretation process demonstrated the factors leading to low job satisfaction, the real working conditions of Chinese obstetric nurses, and the relationship between their professional values, self-efficacy, and job satisfaction, which offered the nurses and hospital management the opportunity to improve nurses' job satisfaction (Cui, 2020). Nurses may maintain their posts and reduce or avoid nursing errors. Overall, the improvement of nursing quality does not only require the efforts of nurses, but also the support of management and society.

6.5.1 Conceptualisation of the Elements

The results from the mixed-method study are conceptualised in Figure 6.1, which describes the components of the interpretation process. Provided that some of the components may reveal a bidirectional relationship or a reciprocal effect, personal views and feelings based on cognitive behaviours were also identified as the components. The increased risk of developing emotional disturbance or vulnerability to social influence may directly or indirectly deteriorate depressive experiences.

In terms of theoretical constructions, occupational stress was found to be associated with obstetric nurses' poor job satisfaction, making it one of the components of integration and interpretation process. The obstetric nurses' coping strategy was also considered as one of the components of this model. Hence, the components of the interpretation process on obstetric nurses' poor job satisfaction are illustrated as follows:

- Internalised views and feelings are the first elements that originate in nurses' stress-coping capability. Individual intrinsic cognition plays a role in the nurses' job-related suffering and determines their perceptions. This component also addresses several elements, including the obstetric nurses' internal feelings of hopelessness, loneliness, helplessness, low self-esteem, self-blame, low self-confidence, and negative attitude.
- Social influence is the second component. Obstetric nurses' social challenges are also strongly associated with their depressive experiences. This component emphasises specific elements, including the expectations of social support, belongingness and social acceptance, self-isolation, and loneliness.
- Occupational stress: This component addresses the element of job-related stress, concern over personal health, family-job balance, professional development, on-duty performance, work overload, and fear of working error.
- Managing emotional suffering: This component focuses on the obstetric nurses' attempt to manage their challenging and stressful events and reflect on their responses to the strategies applied to their job and life management. This component

conceptually combines maintaining self-development and adopting positive attitudes or negative approaches such as denial, avoidance, and solitude.

6.5.2 Summary of The Interpretation Process

This process (Figure 6.1) is perceived as a significant demonstration of obstetric nurses' experience of poor job satisfaction as it represents the interaction process and moderating variables about the outcome variable. The interpretation was generated by demonstrating the main findings of this study and highlighting the key results of the quantitative and qualitative data to explain the experience of obstetric nurses' poor job satisfaction. Considering that the shared experience involved multi-dimensional and interlinked exposures, the main components of the conceptualised results included personalised views and feelings, social influence, occupational stress, and management of psychological disturbance.

This study employed the mixed methods approach to methodologically contribute to the research on the work status and job satisfaction of obstetric nurses. Based on self-efficacy theory, the actual level and internal relationship between nurses' professional values, job satisfaction potential, and other influencing factors were investigated and thoroughly explored. By concatenating the investigation processes of the two research phases, then integrating and analyzing the research findings, the current working situation of obstetric nurses is fully understood and interpreted, the direct and indirect causes of low job satisfaction of obstetric nurses are fully explored and deeply excavated. The physical and mental feelings of nurses are better heard, and the problems and challenges faced by nurses in their working lives are identified. It also identifies actionable strategies implemented by healthcare leaders to support obstetric nurses. It helps improve job satisfaction and retention among obstetric nurses, which addresses the issue of nurse shortages and enhances the quality of care.

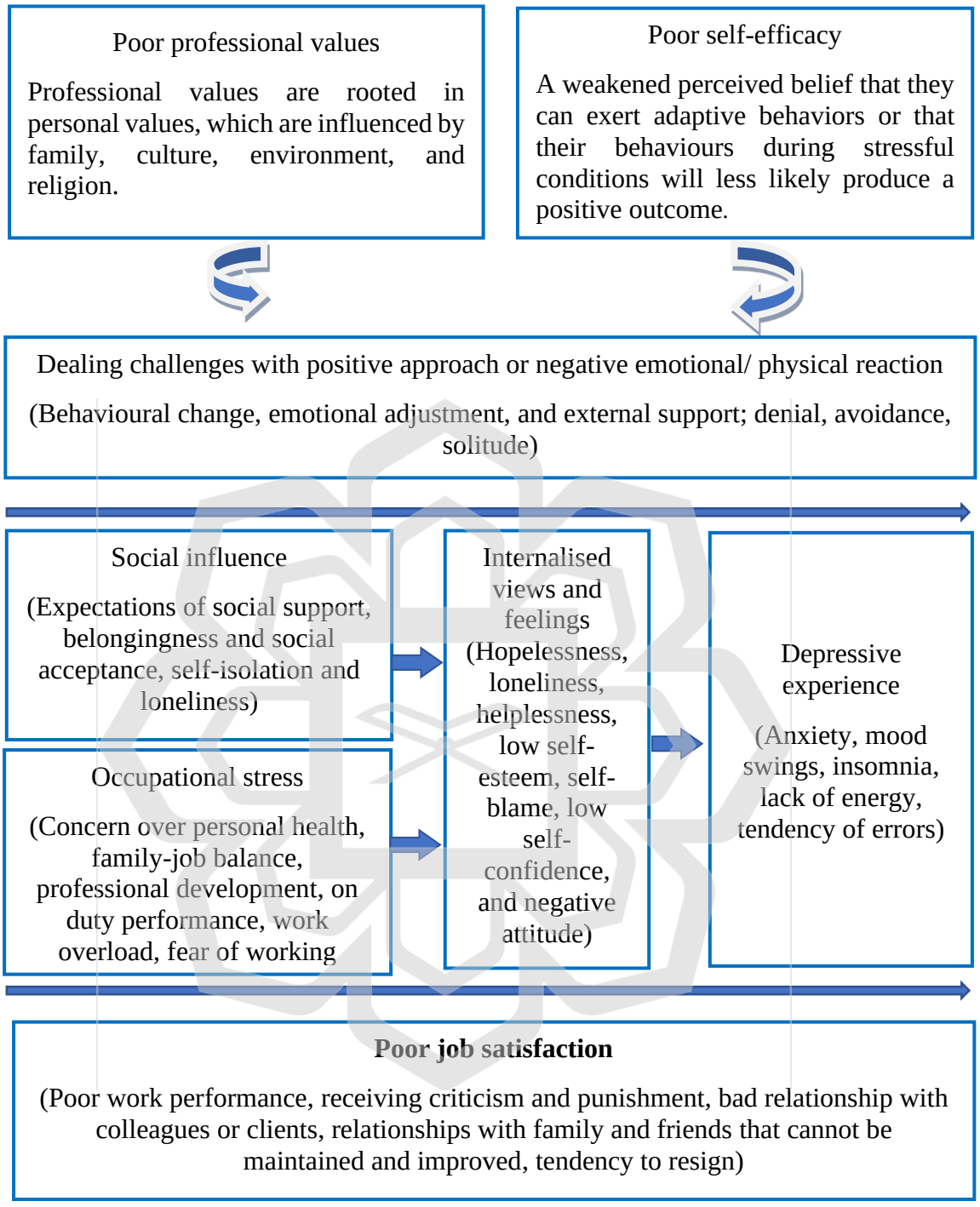

Figure 6.1 An Interpretation Process to Elaborate the Connection of Study Phases

The first phase of the study (quantitative findings) in Chapter Four highlighted the level of obstetric nurses' job satisfaction in relation to the demographic, nurses'

professional values, and their self-efficacy. The results from the second phase (qualitative study) were reported in Chapter Five, which presents an in-depth description of obstetric nurses' job satisfaction. This study was also designed through a mixed-method approach with an aim to address several research questions from the obstetric nurses' perspectives.

6.6 CONTRIBUTIONS AND IMPLICATIONS

This section addresses the challenges faced by the obstetric nurses. Based on the results from the study phases, the conceptual model for explaining the nurses' experience of poor job satisfaction was proposed to explore further explanation and improvement approaches. Subsequently, the results of this research may provide insights into the policies on nurses' education, training, and practice standards.

Comprehensive and correct professional values of nurses, good self-efficacy, and nurses' job satisfaction promote high-quality nursing services that help improve the patients' quality of life. The diversity and complexity of the connotation of nursing quality management require comprehensive management and good quality control of the entire nursing care process. Moreover, nursing is progressing towards consultation-health care-prevention-treatment-nursing-rehabilitation-individualised development. The following section focuses on the contributions of the findings from the qualitative study to explore obstetric nurses' job satisfaction.

6.6.1 Relieving the Work Pressure of Nurses and Paying Attention to Psychological Counselling

Hospital management should help relieve nurses' work pressure and pay attention to their psychological counselling. Specifically, optimising the care and psychological counselling

for nurses who are facing a stressful period at the age of 26-35 years, reducing the pressure on nurses' work and life, and stabilising the nursing team is important. The quality of nursing care also strongly depends on nurses' job satisfaction. Apart from that, understanding the current status of nurses' job satisfaction, analysing the possible influencing factors, and proposing countermeasures are crucial for improving nurses' job satisfaction, stabilising the nursing team, and improving nursing management and quality.

Nurses are not only required to complete ordinary, trivial, and heavy nursing work, but they are also tasked with managing the patients, the patients' family members, and visitors. In this case, they face the different personalities, tempers, knowledge, and economic backgrounds of the patients and their family members on a daily basis, including the patients' emotional changes. As a result of work overload and long-term intense mental work, nurses become physically and mentally exhausted for a long time.

With the improvement of people's demand for medical treatment and the development of new clinical services and new technologies in recent years, the scale of medical institutions has expanded rapidly. However, the increase in the scale of nurses has not occurred accordingly. The allocation and division of labour of nurses' human resources are unscientific, burdened with work, involving physical and mental exhaustion, and prone to pressure and depression. Considering the aforementioned factors, most nurses lack confidence and enthusiasm for their work, leading to a sense of psychological loss that subsequently evolves into various psychological disorders.

Hospital management should cooperate with relevant institutions to carry out psychological counselling and stress reduction programs for nurses, organize a team of psychological experts to conduct psychological assessment and analysis for nurses, and set up a group of psychological instructors to conduct psychological stress reduction courses. This approach is also significant in forming long-term counselling mechanisms and gradually reducing the nurses' sense of job burnout in the process of work.

6.6.2 Pay Attention to the Professional Development of Nurses and Improve the Guarantee and Training System

Paying attention to the professional development of nurses, improving the security and training system, and providing correct career planning guidance to new nurses can build their confidence and enthusiasm about their work. In this case, the importance of career development planning for clinical nurses with a Bachelor's degree or higher education level should be emphasised, allowing highly educated nurses to realise the value of their careers. Furthermore, improvement should be carried out on the hospital security system and training system, followed by standardisation of daily work arrangements of nurses, increase in learning and training opportunities, and improvement in the quality, ability, and skills of nurses. Nurses are required to improve their literacy and have solid medical theoretical knowledge, patience, love, and compassion to deliver high-quality nursing services.

In the process of cultivating nursing students in nursing schools, educators should not only pay attention to the learning of theoretical knowledge for nursing students. The cultivation of nursing talents should receive more attention. In addition, the nursing discipline should not only be regarded as a practical and operational subject, but also improve the self-physical and mental management capabilities, innovation capabilities and scientific research capabilities of nursing staff in practice.

6.6.3 Spread the Positive Energy of Nurses and Enhance Social Recognition

It is important to make full use of social and media resources, strengthen the promotion of nurses' positive energy, and positively promote the hard work of the nurse profession. The public should be informed that the nurses and their profession require comprehensive and objective understanding and tolerance. The researcher viewed the nurses with respect and understanding, particularly in their position as the executors of all medical orders for a patient. However, it should be understood that nurses need to attend to more than one

patient. Moreover, a comprehensive interpretation is required regarding the professional characteristics, work pressure, and psychological pressure of nurses from the perspective of the public to spread their image of "angel in white" and the spirit of "Nightingale".

6.6.4 Standardisation of the Management System to Reduce Occupational Injuries

Attention should be placed on the impact of occupational injury on the physical and mental health of nurses, particularly the impact of sharp weapon damage and psychological violence. Nurses need to be trained in the knowledge and skills of the methods of preventing occupational injury at work, while professional psychological treatment should be offered when required. In nurses' daily nursing work, improvement is required for the education on safety protection, nurses' awareness of protection, education and training of nurses' knowledge of relevant laws and regulations, the cultivation of nurses' comprehensive quality, nursing skills, nursing rules and regulations, and nurses' professionalism of nurses. Additionally, injury intervention strength reduces the occupational injuries of nurses.

Standardisation of the management system and system is recommended to strengthen the popularisation of occupational protection knowledge and encourage nurses to share occupational protection experiences and practices. Notably, increasing the awareness of law and rights protection may reduce the risk of occupational injury among nurses. Improvement in obstetric nurses' belief in, judgment of, or subjective self-perception of their ability to fulfil a goal is crucial. To achieve this outcome, the ability to lead and carry out tasks, provide and be asked for advice, seek opportunities and challenges, understand one's motivations, and improve others' sense of humour are the most important criteria leading to individuals' belief in their ability to master their tasks and regard the demands as challenges rather than threats (Pers, 2013).

6.6.5 Improve Nurses' Satisfaction

Comprehensive strategies should be adopted to intervene in the unreasonable management behaviours of head nurses. Essentially, it is important to improve nurses' self-efficacy and work engagement levels (Lopez-Garrido, 2020). In the promotion, reward, and punishment process, selectors need to conduct a comprehensive evaluation of the candidate's personality traits, management concepts, and leadership styles among others while excluding those who engage in abusive behaviour. Hospitals are also required to provide management training and leadership development opportunities for every professional position.

Relevant national departments have promoted policies to increase the wages of medical personnel. Under this circumstance, the health and hospital management departments are urged to conscientiously implement these policies, reform the employment system, implement equal pay for equal work, fully reflect the principle of fairness, and provide salaries comparable to those of nurses. The time spent on work is directly proportional to the energy, which may increase the effectiveness in reducing the turnover rate, enhance the subjective well-being of nurses, and strengthen their dedication to their careers.

Management should increase nurses' level of job satisfaction and retain it by improving their working conditions. Furthermore, providing nurses with more support, helping them find a spiritual foundation, and organising mindful activities that stimulate positive emotions are effective in improving nurses' psychological status, which is beneficial for securing power in professional development. This emphasis on adopting strategies to reduce perceived job-related stress effectively increases job satisfaction and reduces turnover intention in challenging events.

The results of this study demonstrated the relationship between professional values, self-efficacy and job satisfaction, providing guidance for theory-driven nursing job satisfaction interventions and addressing nurse shortage issues. Effective measures can be taken to enhance nurses' professional values and self-efficacy, thereby improving their job satisfaction and their intention to leave. Families and hospital management ensure that nurses are provided with more positive and dynamic support to help them find spiritual grounding, engage in mindfulness activities, and stimulate positive emotions. Educators

should also pay more attention to instil professional identity, nursing professional values, and self-efficacy in nursing students.

Besides reducing work stress, hospital administrators should utilise additional social support strategies in designing intervention programmes to increase job satisfaction. Strategies such as reducing emotional exhaustion, enhancing social support in the work environment, and reducing job stress would help prevent depression and anxiety among nurses and improve nurses' job satisfaction. Another important intervention to increase nurses' job satisfaction is improvement in the workplace. In this case, a reduction of workload is required to improve job demands and minimise role conflict by reducing conflicting demands.

Additional interventions are recommended to increase nurses' job satisfaction by improving workplace conditions and reducing workload to improve job demands and decision-making, apply therapeutic approaches, enhance interpersonal skills, and minimise role conflict among nurses. This is followed by the provision of timely, clear, and up-to-date information to nurses in response to individual fears and needs, including new handling procedures, patient volumes, and available resources. To increase the effectiveness in helping nursing students acquire correct professional values and shape good self-efficacy in the education process, further research and investigation are required.

6.7 RECOMMENDATIONS

To solve the research problems and achieve the objectives of this study, a mixed-method research was designed. Through quantitative research, data were collected to investigate the current level of professional values, self-efficacy, and job satisfaction of obstetric nurses, including the influencing factors of nurses' job satisfaction. To enhance the understanding of the real working status and job satisfaction status of obstetric nurses, more data are needed, which can be successfully collected through qualitative research.

Extensive research works have been conducted on nurses' professional values, self-efficacy, and job satisfaction. However, the studies related to obstetric nurses' perceptions and associations remain limited. Thus, the in-depth exploration within the domain would offer better revelation and explanation for both the nurses and management.

6.7.1 Nursing Practice

By investigating the job satisfaction of obstetric nurses and its relationship with self-efficacy and nursing professional values, nursing staff may be able to increase their performance in maternal and child healthcare. Furthermore, the exploration into the influencing factors of obstetric nurses' job satisfaction would help develop strategies to improve nursing services and achieve better results. Listening and supporting nurses may also help them seek professional development and improve care plans.

Essentially, it is important for nurses and managers to understand that nursing requires nurses to be physically and mentally prepared at all times. The qualitative phase of this study may increase the understanding of the body and obstetric nurses' experiences, feelings, and reasons for their intention to quit their jobs. It may also address the issue of nurses' reluctance to continue their profession.

6.7.2 Nursing Professional Development and Nursing Education

The professional values and self-efficacy of nurses should be emphasised during the student stage. Schools and teachers should comprehensively and effectively guide students to establish correct professional values and help students strengthen their understanding of the impact of self-efficacy on work and study. Additionally, new nurses who have enrolled on the nursing profession are supervised in a timely manner.

6.7.3 Nursing Research

This study has contributed to the study of obstetric nurses' perceptions of their work, life experiences and careers, particularly their feelings and thoughts about their work. The results may complement the existing evidence-based literature on job satisfaction among obstetric nurses, may be used for job satisfaction research, and provide a basis or reference point for other researchers to conduct related studies. It would also provide a foundation and reference for researchers who wish to expand their research and promote better nursing practice. Notably, this study may not only assist managers in different institutions in utilising detailed and planned strategies for the improvement of nurses' self-efficacy, professional values, and job satisfaction, but it would also contribute to proper leadership and management.

6.7.4 Management Strategy

This research makes an effective contribution to assisting nursing education and nursing management leaders with policy, strategic planning, healthcare development, adaptation and implementation of new technologies and strategies. This aspect can guide leaders in understanding the professional development opportunities available to obstetric nurses. Additionally, this study allowed selected nurses to express their voices in practice.

Society has high expectations of nurses who are educated to provide safe and good care. However, in high-risk environments where nurses are physically and mentally exhausted, anxious, depressed, and dissatisfied with their jobs, unsafe nurse behaviours can affect the quality of care. In this case, this research would help them overcome challenges they may face at work.

This research has contributed to the body of knowledge related to the impact of technological or pedagogical innovations on clinical care and the development of the nursing profession. It will also support the capability of hospital nurse managers and

student nurses in developing a better working environment and providing effective and timely support. This study may influence future policies in nursing management, nursing education, and nurse job satisfaction.

6.8 LIMITATIONS OF THE STUDY

Several limitations are present in this study from the methodological perspective and in terms of several unpredicted issues. The use of cross-sectional design in the quantitative phase restricts the establishment of causality and the actual associates among the factors of the study. In this case, the results should be interpreted with caution in the context of the methodological strengths. This study presents the description and perceptions of one cohort of obstetric nurses who have been assigned to the ward. Therefore, this study might be extended to a wider population albeit with caution.

Addressing another limitation of this study, the work shifts were classified into rotating and fixed shifts. Therefore, the association between the type of work shift (morning, evening, and night) and job dissatisfaction might not be identified. In addition, job satisfaction is a multifactorial issue that may be affected by several factors. Thus, it is recommended for future studies to be conducted on the determinants of job satisfaction to consider various factors.

The use of mixed-methods design may enrich the transferability and external validity of the results by mitigating the weaknesses of single-method studies. However, a larger sample of obstetric nurses should be interviewed to gain more comprehensive information. While some of the results reflected the results shown in earlier studies, they may still be considered contributing to the body of knowledge.

Then unequal sample drawn from each hospital might have a minor impact on the accuracy of the study. Each hospital is a level-three (Jia) government hospital, with the main hospital being affiliated with a level-two public university. However, certain differences were present in the specific settings and staffing of hospitals, which might slightly influence the study.

6.9 CHAPTER SUMMARY

In general, nurses are exposed to various stressors from physical, psychological, and social working environments. The most significant stressors for obstetric nurses in this study are related to their physical working environment and high-intensity work (overtime work, frequent night shifts, rest regimens, and work under pressure). In this study, it was found that the level of nurses' job satisfaction was lower compared to the level reported in some other previous studies.

This result might be attributed to the sample, which consisted of registered nurses working in comprehensive tertiary hospitals with an influx of patients. Furthermore, the hospitals in this study were affiliated with a university, leading to an additional responsibility for teaching nursing students except during their regular nursing duties. This condition resulted in more intensive and stressful work, which could reduce job satisfaction. Besides, many studies demonstrated the effects of high workloads and high stress levels on job satisfaction, suggesting that nursing managers should pay more attention to these issues.

Nurses' job quality and satisfaction are affected by stereotypes and public perceptions, particularly in terms of overloading, high-intensity, and long hours of extra work. The public-maintained stereotype of the nurse is partly shaped by society, in which a nurse is expected to be caring, attentive, conscientious, gentle, hard-working, and doctor- and patient-centred. Job satisfaction is influenced by many factors, such as reward, workload, working conditions, doctor-nurse and patient-nurse relationships, and management principles. Nurses' job satisfaction was also reduced by work-related stress, which included not being able to leave work on time, long night shifts, more overtime, and less vacation time.

According to the nurses in the interview, when nurses face dramatic pressure and stress in life and work, they mostly reflect and change themselves to overcome difficulties, adjust their mentality, and adapt to changes. It was found that nurses could be more competent at work by improving their professional values and self-efficacy, allowing them

to maintain the status quo, develop themselves further, and experience a sense of accomplishment and happiness through their work. This condition increased their capability to accept and achieve satisfaction. Besides accepting and identifying with their profession, the nurses' high satisfaction with their work would build their love for the profession.

The nurse-patient relationship is fragile mainly due to the lack of mutual understanding and effective communication. During the nursing care process, patients' eagerness to recover as soon as possible despite their fragile hearts will lead to higher expectations and demands on nurses. At the same time, the insufficient quality of nurses, lack of patience in work, and lack of professional ability would cause tension in the relationship between nurses and patients and ultimately affect the image of nursing profession. Therefore, nurses should apply strict demands in the work process to improve their quality, attitude towards patients, and their professional ability.

In addition to increasing the income of nurses, one of the most critical suggestions is for educators to recognise the outlook on life and career values of young people and gradually improve the nurse practitioners' freedom and flexibility in their work arrangements and responsibilities. Furthermore, a more reasonable work distribution would reduce their pressure and prevent young people from leaving the profession of "nurse" in the future. It is also important for society to pay more respects to the nurses and realise the importance of nurses to every patient and the entire community.

Younger female nurses carry multiple societal roles during their early phases of married life and building a new family. As a result, many nurses quit their jobs due to the employment location and responsibilities that interfere with their spouse's professional requirements. Moreover, most of the nurses would need occasional maternity leave during and after pregnancy, while some of them choose to quit their jobs to care for their children and family. Additionally, the rate of abortion among nurses is remarkably higher compared to this rate in the general population, indicating that the work-family balance is a delicate matter among Chinese nurses.

Based on the interviewees, the high intensity of nursing work, which does not bring significant difference to the nurses' salaries, creates a strong sense of loss and a higher

intention of turnover. The fact that most Chinese medical institutions follow a "physician-based, nurse-assisted" practice model, which leads to a lack of initiative and independence in clinical activities, may also increase job dissatisfaction. Younger nurses are commonly required to manage a large number of non-nursing incumbent tasks, which may lead to confusion and dissatisfaction about their professional careers. An increased workload in clinical care as a result of high hospitalisation rates disrupts young nurses from having time with their families, which negatively affects turnover intention among them.

Considering the distinctive nature of the nursing profession, it is necessary for the learners of this profession to have an accurate understanding of material content to build their competency in specific clinical situations to apply their learnings. In this case, the use of active educational methods is remarkably effective in enhancing deep thinking skills and the stability of knowledge within the students' minds. Notably, participatory education has the most significant impact on the change in nurses' performance.

Learning in the workplace, which may be formal or informal, is one of the most powerful training methods. Besides, the workplace is one of the most appropriate teaching and learning settings. However, the education staff is a highly strategic and important issue due to their role as the foundation of the development of any organisation, which contributes to the dynamics of the organisation. On the other hand, organisational education activities influence employees' organisational commitment and job satisfaction. Specifically, organisational commitment is the same as attachment and loyalty to the goals of the organisation. However, the lack of this commitment would lead to staff absenteeism, relocation, job creation, theft, and job dissatisfaction. Hence, improving human resources in nursing is one of the important responsibilities of nursing managers. This improvement includes the activities implemented to increase the competence level, the knowledge and awareness of nurses, and the skills of nurses to offer better clinical services.

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Appendix I: Studies on nurses' professional values

Region/ Country	Authors	Study design	Sample size (nurses)	Study setting	Instruments
Korea	Kim (2015)	cross-sectional study	488	clinical setting	ProQOL scale; ethical dilemmas' questionnaire; nursing professional values scale.
Iran	Batool (2017)	cross-sectional study	260	hospitals	Nursing Professional Values Scale-Revised
Iraq	Dara (2017)	cross-sectional study	54	Emergency Management Center	21 items regarding values of nurses about nursing discipline distributed on nine domains of nursing values

Appendix II: Studies on nurses' self-efficacy

Region/ Country	Authors	Study design	Sample size	Study setting	Instruments
Italy	CHIARA (2014)	Exploratory qualitative design	1020	public hospital	PoC scales
Iran	Simin (2013)	cross-sectional study	264	hospital	General Self-efficacy Scale
Turkey	Kuru (2016)	cross-sectional study	101	general hospital in Greece	Minnesota Job Satisfaction Scale, the General Perceived Self-efficacy Scale
Iran	Elham (2016)	cross-sectional study	98	hospitals and health care centers	EBP self-efficacy scale
America	Tseng (2014)	descriptive, correlational, and cross-sectional	300	school health centers	Perceived Organizational Support Short Form; General

					Self-Efficacy Scale; Minnesota Satisfaction Questionnaire
Italy	Valentina (2018)	cross-sectional study	25	palliative care services	questionnaire Professional Competency of the Core Curriculum in Palliative Nursing; job in general'' of the Job Descriptive Index
America	Denise (2017)	Quantitative non experimental exploratory method with a correlational Design	150	clinical setting	Self-Efficacy Scale
Greek	Maria (2018)	phenomenological approach	16	critical or emergency setting	phenomenological interviews
Korea	Min (2015)	cross-sectional descriptive design	214	Emergency Medical Center Setting	Global Interpersonal Communication

					Competence, self-efficacy scale, and job satisfaction scale.
China	Yan (2018)	cross-sectional design	514	11 hospitals in Shanghai	Questionnaire
Indonesia	Kadir(2016)	a cross-sectional study design	115	Public hospitals	questionnaires and interviews
Iran	Azam(2017)	exploratory design	27	Pediatric ward	interview
Poland	Kalandyk(2016)	descriptive design	570	regional hospitals, district hospitals and public healthcare centers.	Generalized Self-Efficacy Scale (GSES)
China	Chang (2018)	Cross sectional design	312	medical centre in northern Taiwan	Maslach Burnout Inventory—Human Service Survey; Generalized Self-

China	Yang (2017)		582	public hospitals	Efficacy Scale (GSES)Generalized Self-Efficacy Scale

Appendix III: Studies on nurses' job satisfaction

Region/ Country	Authors	Study design	Sample size	Study setting	Instruments
China	Xin (2018)	Cross sectional design	848	tertiary hospitals and secondary hospitals in Tianjin	personal innovation behavior scale, self-efficacy scale, colleague solidarity of nurses' scale and career success scale.
America	Cynda (2015)	Cross sectional design	114	Critical-Care units	Maslach Burnout Inventory; Moral distress scale; Perceived stress scale; Resilience scale; Meaning scale; State Hope Scale
Slovenia	Mateja (2012)		509	Clinical Center Maribor, General Hospital Celje, General Hospital Slovenj Gradec,	Job satisfaction scale

				and General hospital Murska Sobota.	
China	Zhang (2015)		368	tertiary Grade A hospitals in Sichuan province; head nurses	self-efficacy scale and job involvement scale
Italy	Renato (2015)	Cross sectional design	1479	public hospital	Occupational Coping Self-efficacy scale; Leiden Quality of Work Life scale; Job Content scale
Finland	Lisa (2018)	cross-sectional and correlational design	318	Newly Educated Workers' (NEW) research project; Finnish Nurses' Association and the Union of Health and Social Care Professionals	Qualities of an Empowered Nurse scale
Malaysia	LEE (2015)	correlational study	716	private hospitals in Penang	Index of Work Satisfaction; National Database

					of Nursing Quality Indicators
Croatia	IVANA (2018)	cross-sectional design	584	university hospital	Core Self-Evaluation Scale, Job Satisfaction Survey and Nurses‘ Professional Commitment Scale
China	Huang (2017)		33	out-patient department nurses	Stamps nurse job satisfaction scale; symptom self rating scale; psychological pressure questionnaire

Appendix IV Survey Instruments

护理专业价值量表

Nurses' professional values scale

亲爱的同行：您好！感谢您抽出宝贵的时间协助调查，本调查是为了了解您对护士专业价值观的一些看法，题目不存在对错之分，请您认真阅读题目，根据自身体会做出选择并在右边相应数字上打"√"。The following is a statement about [nurses' professional values], please read each item then mark your choice that you think about the nursing profession values for each statement.

1=不重要；2=有些重要；3=重要；4=很重要；5=非常重要

1 = not important; 2 = somewhat important; 3 = important; 4 = very important; 5 = most important

	1	2	3	4	5
1. 致力于持续性的自我评量。Engage in on-going self-evaluation.					
2. 当无法满足病患的需求时，会寻求咨询/合作。Seek consultation/collaborative partnership for meeting patients' health needs.					
3. 保证大众的健康与安全。Protect health and safety of the patient/public.					
4. 参与影响资源分配的公共政策决定。Engage in decision making on resource allocation.					
5. 参与同行的评论。Participate in peer review.					
6. 建立标杆规范以作为工作的指引。Establish standards as a guide for practice.					

7. 促进与维持有关策划学生学习活动的标准规范。Promote and maintain standards where planned learning activities for students take place.					
8. 采取行动以改善实际工作的环境。Initiate actions to improve environments of practice.					
9. 寻求更多的教育来更新知识技能。Seek additional education to update knowledge and skills to maintain competency.					
10. 经常积极参加健康相关的活动，以提升专业。Advance the profession through active involvement in health-related activities.					
11. 了解专业护理组织在健康照护政策的角色。Recognize the role of professional nursing associations in shaping health policy.					
12. 促进护理与健康照护的公平机制。Promote fair mechanisms for nursing care and health care.					
13. 担负起满足不同文化族群的健康需求的责任。Responsible for meeting the health needs of different cultural groups.					
14. 承担自己实际工作的职责与责任。Accept responsibility and accountability for own practice.					
15. 维持实际工作领域的能力。Maintain the ability for the nursing field practice.					
16. 保护病患在道德与法律上的权力。Protect moral and legal rights of patients.					
17. 拒绝参与违反自己专业价值伦理的照护。Refuse to participate in care that violates the ethics of your professional values.					
18. 扮演病人的代言人。Act as a patient advocate.					

19. 参与护理研究和/或将研究的发现合理运用到实际工作中。Participate in nursing research and/or implement research findings appropriate to practice.					
20.对不同生活型态的病患提供没有偏见的照护。Provide care without bias or prejudice to patients and populations.					
21. 保护病人的隐私权。Safeguard patient's right to privacy.					
22. 能勇敢面对有问题或不合宜的实际工作者。Confront practitioners with questionable or inappropriate practice.					
23.保护参与研究者的权力。Protect rights of participants in research.					
24. 在待人诚恳与尊重的原则下工作。Practice guided by principles of fidelity and respect for person.					
25. 维护病患的隐私。Maintain patient privacy.					
26.参与专业护理组织的活动。Participate in activities of professional care organizations.					
请填写任何有关护理专业价值观的建议：Please fill out any suggestions about nursing professional values:					

Nurses Professional Values Scale-Three (NPVS-3)

Darlene Weis, PhD, RN & Mary Jane Schank, PhD, RN, 2017

Indicate the importance of the following value statements relative to nursing practice. Please fill in the circle next to the degree of importance. For each item please circle the number to indicate your degree of agreement. (1 = not important to 5= most important) for each statement. Not important=1; Somewhat important=2; Important=3; Very Important=4; Most important=5

1. Engage in on-going self-evaluation. □1 □2 □3 □4 □5

2. Respect the inherent dignity, values, and human rights of all individuals. □1 □2 □3 □4 □5

3. Protect health and safety of the patient/public. □1 □2 □3 □4 □5

4. Assume responsibility for personal well-being. □1 □2 □3 □4 □5

5. Participate in peer review. □1 □2 □3 □4 □5

6. Establish standards as a guide for practice. □1 □2 □3 □4 □5

7. Promote and maintain standards where planned learning activities for students take place. □1 □2 □3 □4 □5

8. Initiate actions to improve environments of practice. □1 □2 □3 □4 □5

9. Seek additional education to update knowledge and skills to maintain competency. □1 □2 □3 □4 □5

10. Advance the profession through active involvement in health-related activities. □1 □2 □3 □4 □5

11. Recognize the role of professional nursing associations in shaping health policy. □1 □2 □3 □4 □5

12. Establish collaborative partnerships to reduce healthcare disparities. □1 □2 □3 □4 □5

13. Assume responsibility for meeting health needs of diverse populations. □1 □2 □3 □4 □5

14. Accept responsibility and accountability for own practice. □1 □2 □3 □4 □5

15. Protect moral and legal rights of patients. □1 □2 □3 □4 □5

16. Act as a patient advocate. □1 □2 □3 □4 □5

17. Participate in nursing research and/or implement research findings appropriate to practice. □1 □2 □3 □4 □5

18. Provide care without bias or prejudice to patients and populations. □1 □2 □3 □4 □5

19. Safeguard patient's right to confidentiality and privacy. □1 □2 □3 □4 □5

20. Confront practitioners with questionable or inappropriate practice. □1 □2 □3 □4 □5

21. Protect rights of participants in research. □1 □2 □3 □4 □5

22. Practice guided by principles of fidelity and respect for person. □1 □2 □3 □4 □5

23. Actively promote health of populations. □1 □2 □3 □4 □5

24. Participate in professional efforts and collegial interactions to ensure quality care and professional satisfaction. □1 □2 □3 □4 □5

25. Promote mutual peer support and collegial interactions to ensure quality care and professional satisfaction. □1 □2 □3 □4 □5

26. Take action to influence legislators and other policy makers to improve health care.

27. Engage in consultation/collaboration to provide optimal care. □1 □2 □3 □4 □5

28. Recognize professional boundaries. □1 □2 □3 □4 □5

護理專業價值量表

下列是有關「護理專業價值」的陳述，請針對每項陳述，勾選出您認為對於護理實務工作的重要程度。護理專業是: 不重要=1; 有些重要=2; 重要=3; 很重要=4; 非常重要=5.

1. 致力於持續性的自我評量。□1 □2 □3 □4 □5

2. 當無法滿足病患的需求時，會尋求諮詢/合作。□1 □2 □3 □4 □5

3. 保護大眾的健康與安全。□1 □2 □3 □4 □5

4. 參與影響資源分配的公共政策決定。□1 □2 □3 □4 □5

5. 參與同儕間的評論。□1 □2 □3 □4 □5

6. 建立標準規範以作為實務工作的指引。□1 □2 □3 □4 □5

7. 促進與維持有關策劃學生學習活動的標準規範。□1 □2 □3 □4 □5

8. 採取行動以改善實務工作的環境。□1 □2 □3 □4 □5

9. 尋求更多的教育來更新知識與技能。□1 □2 □3 □4 □5

10. 經由積極參與健康相關的活動，以提升專業。□1 □2 □3 □4 □5

11. 了解專業護理組織在健康照護政策的角色。□1 □2 □3 □4 □5

12. 促進護理與健康照護的公平機制。□1 □2 □3 □4 □5

13. 擔負起滿足不同文化族群之健康需求的責任。□1 □2 □3 □4 □5

14. 承擔自己實務工作的職責與責任。□1 □2 □3 □4 □5

15. 維持實務工作領域的能力。□1 □2 □3 □4 □5

16. 保護病患在道德與法律上的權利。□1 □2 □3 □4 □5

17. 拒絕參與違反自己專業價值倫理的照護。□1 □2 □3 □4 □5

18. 扮演病患的代言人。□1 □2 □3 □4 □5

19. 參與護理研究和/或將研究的發現合宜地運用於實務工作中。□1 □2 □3 □4 □5

20. 對不同生活型態的病患提供沒有偏見的照護。□1 □2 □3 □4 □5

21. 保護病患的隱私權□1 □2 □3 □4 □5

22. 能勇敢面對有問題或不合宜的實務工作者。□1 □2 □3 □4 □5

23. 保護參與研究者的權利。□1 □2 □3 □4 □5

24. 依待人誠懇與尊重個人的原則下執行工作。□1 □2 □3 □4 □5

25. 維護病患的隱私。□1 □2 □3 □4 □5

26. 參與專業護理組織的活動。□1 □2 □3 □4 □5

請填寫任何有關護理專業價值之建議:

General Self-Efficacy Scale (GSE)

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK:

The General Self-Efficacy Scale is correlated to emotion, optimism, work satisfaction. Negative coefficients were found for depression, stress, health complaints, burnout, and anxiety. The total score is calculated by finding the sum of the all items. For the GSE, the total score ranges between 10 and 40, with a higher score indicating more self-efficacy. For each item, please circle the number to indicate your degree of agreement.

Not at all true=1; Hardly true=2; Moderate true=3; Exactly true=4

Items	1	2	3	4
1. I can always manage to solve difficult problems if I try hard enough.				
2. If someone opposes me, I can find the means and ways to get what I want.				
3. It is easy for me to stick to my aims and accomplish my goals.				
4. I am confident that I could deal efficiently with unexpected events.				
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.				
6. I can solve most problems if I invest the necessary effort.				
7. I can remain calm when facing difficulties because I can rely on my coping abilities.				
8. When I am confronted with a problem, I can usually find several solutions.				
9.If I am in trouble, I can usually think of a solution.				
10. I can usually handle whatever comes my way.				

自我效能问卷

亲爱的同行：您好！感谢您抽出宝贵的时间协助调查，本调查是为了了解您对护士自我效能的一些看法，题目不存在对错之分，请您认真阅读题目，根据自身体会做出选择并在右边相应数字上打“ √ ”。

1=完全不正确 2=部分正确 3=多数正确 4=完全正确

序号	内容	1	2	3	4
1	如果我努力去做的话，我总是能解决问题的。				
2	即使别人反对我，我仍有办法取得我所要的。				
3	对我来说坚持理想和完成目标是轻而易举的。				
4	我自信能应付任何突如其来的事情。				
5	以我的才智，我定能应付意料之外的情况。				
6	如果我付出必要的努力，我一定能解决大多数的难题。				
7	我能冷静地面对困难，因为我相信自己处理问题的能力。				
8	面对一个难题时，我通常找到一个解决方法。				
9	有麻烦的时候，我通常能想到一些应付的方法。				
10	无论什么事在我身上发生，我都能应付自如。				

护士工作满意度评定量表

Nurses' job satisfaction scale

亲爱的同行：您好！感谢您抽出宝贵的时间协助调查，本调查是为了了解您对目前工作的一些看法，题目不存在对错之分，请您认真阅读题目，根据自身体会在右边相应数字上打"√"。First thanks for your participation! The following is a statement about [nurses' job satisfaction], please read each item then mark your choice that you think about the nursing profession values for each statement. Please read the question carefully and write "√" according to your choice.

1=完全不同意 2=部分同意 3=同意 4=完全同意

1 = not agree; 2 = somewhat agree; 3 = agree; 4 = very agree; 5 = most agree

项目 Item	您的看法 (your view)				
	5	4	3	2	1
1.您在本单位的工资及福利（住房、医疗、子女教育等）与同地区的其他单位同行相当。Salary and welfare (accommodation, insurance retirement, children education etc.)					
2.医生认可您的专业素质和工作水准。The doctor recognizes your professionalism and profession level.					
3.您因为工作太忙而不能兼顾家庭。You can't take care of your family because you are too busy at work.					
4.您和医生在工作中配合默契。You can cooperate with doctor well during work.					

5.目前的工资及福利（住房、医疗、子女教育等）让您满意。Salary and welfare (accommodation, insurance retirement, children education etc.) satisfy you.					
6.家人理解并支持您的工作。Your family understands and supports your work.					
7.您会很好处理工作与家庭之间的关系。You are capable to deal with the relationship between work and family.					
8.在工作安排上您有比其他单位同行更多的灵活性。You have more flexibility in your work than your peers.					
9.管理层在排班时会考虑您的个人需要。When manager schedules work shifts, your personal needs will be considered.					
10.您参加继续教育和培训的机会多。There are many opportunities for you to update your education and training.					
11.您提出的管理方面的意见会被管理者所接纳。The manager will consider your comments on management.					
12.倒班对您的生活影响不大。Work shifts have little effect on your life.					
13.您感觉护理工作风险高。You feel that the risk of nursing work is high.					
14.您对本单位护理工作的管理方式（合理、公平等）满意。You are satisfied with the management (reasonable, fair, etc.).					
15.您的工作得不到患者、家属及社会的认可。Patients, families and society do not recognize your work.					
16. 您感觉晋升（职称、岗位迁等）机会少。You feel that there are fewer opportunities for promotion (professional position, job relocation, etc.).					
17. 如果给您更多的时间，会提供好护理。If you get more time, you will provide better quality of care.					

18.工作中您能自主安排工作计划。You can arrange your own work plan.					
19.您会因工作的程序化而感到失望。Because the programmatic work, you will feel disappointed.					
20.患者和家属对您的护理满意。Patients and their families are satisfied with your care.					
21.您面临工作与恋爱/婚姻/家庭之间的冲突少。You face less conflict between work and love/marriage/family.					
22.管理者能与您共同探讨工作中常见问题和工作方法。Managers can work with you to discuss common problems and working methods.					
23.本单位能使您在专业能力方面得到发展和成长。You can develop and grow in terms of professional competence at your working unit.					
24.您认为目前所得的工资是合理的。You think that the current salary is reasonable.					
25.目前的职位能使您充分发挥自己的能力。Current positions enable you to make use of the most of your abilities.					
26.对于您偶尔出现的工作失误，管理者能给予理解与引导。Managers can give understanding and guidance to your occasional work mistakes.					
27.您感觉工作环境嘈杂。You feel that the work environment is noisy.					
28.您可以应付目前的工作量。You can handle the current workload.					
29.护理工作的重要性还未被社会广泛认可。The importance of nursing work has not been widely recognized by society.					
30.您确信护理工作很重要。You are convinced that nursing is important.					

31.您参加护理科研工作及撰写护理论文（包括自行选题、撰文等）机会多。There are many opportunities for you to participate in nursing research and writing nursing papers (including self-selection, writing, etc.).					
32.您感觉工作环境拥挤、通风不好。You feel that the working environment is crowded and the ventilation is not good.					
33.您接到临时加班的通知少。You have received less notice of temporary overtime work.					
34.您和同事之间相处不愉快。You can’t get well with your colleagues.					
35.工作中同事齐心协力，繁忙时会互相帮忙。Colleagues at work together and help each other when they are busy.					
36.您单位的工资水平还需要提高。Your think that the salary needs to be raised.					
37.您经常与同事商讨工作计划。You often discuss work plans with colleagues.					
38 您能应付护理文件规定的越来多要求。You can meet the ever-increasing requirements of nursing documentation.					

Mueller/McCloskey Job Satisfaction scale

Mueller and McCloskey, 1990

Indicate the importance of the following value statements relative to nursing practice. Please fill in the circle next to the degree of importance. For each item please circle the number to indicate your degree of agreement.

Not important=1; Somewhat important=2; Important=3; Very Important=4; Most important=5

1. Salary	5	4	3	2	1
2. Vacation					
3. Benefits package (insurance retirement)					
4. Hours that you work					
5. Flexibility in scheduling your hours					
6. Opportunity to work straight days					
7. Opportunity for part- time work					
8. Weekends off per month					
9. Flexibility in scheduling your weekends off					
10. Compensation for working weekends					
11. Maternity leave time					
12. Child care facilities					
13. Your immediate supervisor					
14. Your nursing peers					
15. The physicians you work with					
16. The delivery of care method used on your unit(e.g. functional, team, primary)					
17. Opportunities for social contact at work					
18. Opportunities for social contacts with your colleagues work					
19. Opportunities to interact professionally with other disciplines					

20. Opportunities to interact with faculty of the college of nursing					
21. Opportunities to belong to department and institutional committees					
22. Control over what goes on in your work setting					
23. Opportunities for career advancement					
24. Recognition for your work from supervisor					
25. Recognition of your work from peers					
26. Amount of encouragement and positive feedback					
27. Opportunities to participate in nursing research					
28. Opportunities to write and publish					
29. Your amount of responsibility					
30. Your control over work conditions					
31. Your participation in organizational decision making					

护士工作满意度评定量表

亲爱的同行：您好！感谢您抽出宝贵的时间协助调查，本调查是为了了解您对目前工作的一些看法，题目不存在对错之分，请您认真阅读题目，根据自身体会在右边相应数字上打“√”。如果您完全同意题目的描述,请在“5”上打“√”；如果您完全不同意,请在“1”上打“√”；如果介于二者之间，在“5”与“1”之间选择（适合您的）任一数字。

项目	您的看法				
	5	4	3	2	1
1.您在本单位的工资及福利（住房、医疗、子女教育等）与同地区的其他单位同行相当。					
2.医生认可您的专业素质和工作水准。					
3.您因为工作太忙而不能兼顾家庭。					
4.您和医生在工作中配合默契。					
5.目前的工资及福利（住房、医疗、子女教育等）让您满意。					
6.家人理解并支持您的工作。					
7.您会很好处理工作与家庭之间的关系。					
8.在工作安排上您有比其他单位同行更多的灵活性。					
9.管理层在排班时会考虑您的个人需要。					
10.您参加继续教育和培训的机会多。					
11.您提出的管理方面的意见会被管理者所接纳。					
12.倒班对您的生活影响不大。					
13.您感觉护理工作风险高。					
14.您对本单位护理工作的管理方式（合理、公平等）满意。					
15.您的工作得不到患者、家属及社会的认可。					

16. 您感觉晋升（职称、岗位迁等）机会少。					
17. 如果给您更多的时间，会提供好护理。					
18.工作中您能自主安排工作计划。					
19.您会因工作的程序化而感到失望。					
20.患者和家属对您的护理满意。					
21.您面临工作与恋爱/婚姻/家庭之间的冲突少。					
22.管理者能与您共同探讨工作中常见问题和工作方法。					
23.本单位能使您在专业能力方面得到发展和成长。					
24.您认为目前所得的工资是合理的。					
25.目前的职位能使您充分发挥自己的能力。					
26.对于您偶尔出现的工作失误，管理者能给予理解与引导。					
27.您感觉工作环境嘈杂。					
28.您可以应付目前的工作量。					
29.护理工作的重要性还未被社会广泛认可。					
30.您确信护理工作很重要。					
31.您参加护理科研工作及撰写护理论文（包括自行选题、撰文等）机会多。					
32.您感觉工作环境拥挤、通风不好。					
33.您接到临时加班的通知少。					
34.您和同事之间相处不愉快。					
35.工作中同事齐心协力，繁忙时会互相帮忙。					
36.您单位的工资水平还需要提高。					
37.您经常与同事商讨工作计划。					
38 您能应付护理文件规定的越来多要求。					

APPENDIX V: PROCESS FLOWCHART OF RESEARCH PHASES