東海大學企業管理學系

碩士論文

月嫂的顧客導向照護及參與程度對於產後媽媽的照護服務品質之影響－以病人為主的導向為調節變數

Perceived Patient-centered Care and Postpartum Women Engagement on Quality of Care with Patient’s Orientation as the Moderating Variable

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ABSTRACT

Postpartum or "*zuo yue zi*" services are well-received among Chinese communities such as Taiwan, China, Singapore, and Malaysia. The postpartum services which are provided by confinement center or confinement lady are designed to support postpartum women's needs and regain their health. Prior studies revealed that the postpartum service could provide postpartum women with social support which resulted in reduced postpartum stress and improved general health. Most researchers conducted studies emphasizing on the physical environment of a confinement center or investigating the factors that influence the postpartum women's satisfaction. Many studies have demonstrated that patient-centered care is an important factor in establishing a healing relationship and effectively drives patient engagement and healing process, enhances patients' confidence in managing their health, improves patient well-being, etc. Therefore, this research attempted to examine the impact of patient-centered care towards the quality of the postpartum care. Engagement was proposed as the mediating variable to investigate whether patient-centered care can drive the postpartum women's engagement and eventually improve the quality of care. In addition, patient-practitioner orientation was tested whether it moderates the relationship between patient-centered behavior and quality of care. The research sample for this study was the women who had the experience of using postpartum service in Taiwan and a questionnaire was used to collect the data. In order to verify the research hypotheses, this research utilized AMOS 18.0 and SPSS 17.0 program to conduct structural equation modeling and multiple regression analysis respectively. The analysis results showed that patient-centered care had significant and positive effect on quality of care. Meanwhile, the mediating effect of

postpartum women engagement and moderating effect of patient's orientation were not significant. These empirical results indicated patient-centered care plays an important role in delivering high quality care; service providers should train their caregivers (confinement ladies) to identify the specific needs of their clients and adjust their behaviors in accordance with the mother's condition.

Keywords: Postpartum Service, Patient-centered Care, Patient Engagement, Patient–Practitioner Orientation Scale, Quality of Care

中文摘要

產後照護服務或稱為『坐月子』服務在中國、馬來西亞、新加坡等華人社區的歡迎。月子服務由月子中心的專業人員或個人月嫂所提供，是因應產後媽媽的需求以及為了恢復健康而設計的。先前研究指出月子中心所提供的服務讓產後婦女感知有社會支持，因此有效降低產後壓力以及提升總體健康。大多研究皆以月子中心的硬體環境來進行探討，或是探討影響坐月子婦女滿意的因素。許多研究已驗證了”以病人為中心的照護”是建立療癒關係的重要因素，並有效增強病人參與整個療癒的過程、提升病人對於管理自己健康的自信、改善病人的幸福感等。因此本研究試圖探討”以病人為中心”的照護模式對於產後照護品質的影響，並提出以”產後婦女參與”作為中介變數來檢驗此模式是否能夠激發產後婦女的參與，最終提高產後照護服務品質。此外，本研究也調查病人—醫療人員取向(Patient-Practitioner Orientation)在影響以病人為中心的照護模式與產後服務照護品質之間的調節效果。研究對象為在台灣使用過產後照護服務的婦女，並透過問卷調查法來進行相關資料蒐集 。以 AMOS 18.0 和 SPSS 17.0 統計軟體分別進行路徑分析和迴歸分析來驗證研究假說。分析結果顯示以病人為中心的照護模式對產後照護品質有顯著的正面影響，而產後婦女參與之中介效果和患者溝通取向之調節效果並不顯著。這些實證結果表示在提供產後照護過程中，”以病人為中心”的照護模式扮演了一個重要的角色，因此產後照護業者應該培訓照護人員(月嫂)，注意產後婦女的特定需求並根據情況調整行為。

關鍵詞：產後照護服務、以病人為中心照護、病人參與、病人—醫療人員取向量表、照護品質

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CHAPTER 1 INTRODUCTION

1. 1 Research Background

Postpartum period is a crucial phase for mothers to adjust to changes and regain physical strength and inner vitality. Proper postpartum practices can promote maternal health conditions and development of child. Despite of the importance of postpartum care, many people have neglected this phase and most maternal and infant deaths occur during this period. World Health Organization (WHO) revealed that in 2015, approximately 303,000 women died due to pregnancy issues and 2.7 million infant mortalities were recorded. Some mothers seek for alternative treatments to accelerate the recovery of their body and mind. Particularly in Asia, most women follow the customs of doing postpartum practice which is also known as confinement practice.

In Chinese community, the postpartum practice is called as “zuo yue zi” which literally means doing the month. During the period of “zuo yue zi”, women are generally banned to have sexual intercourse, bath, cry, and eat certain foods, etc. The awareness of doing confinement has increased due to the influence of media and health professionals (Fok, et al. 2016). Besides, due to economic stability and increased available resources, more contemporary women observe doing the month practice than the previous generation (Chen, 2011). Businesses have identified the trends the maternal market and they offer various products and services. Originated from Taiwan in 1980s, the postpartum care service has grown dramatically in East Asia. The first confinement center in Taiwan could be found in 1994, and then the number increased to 94 centers in fifteen years and grew dramatically to 210 confinement centers in 2016 (see Table 1-1).

The confinement service business model later was later imitated by other countries and it is well-accepted within Chinese communities such as China, Singapore, and Malaysia. According to Mother and Child Industry Case Report (Shen, et al., 2016), there are approximately 700 confinement centers in China; while Shanghai is recorded to have the most confinement center with the total of 80 centers. The demand for confinement service in China is expected to grow as the new two-child policy was introduced in October 2015 allowing all Chinese families to have two children. Since then, the birth rate had raised to 17.8 million in 2016, an increment 7.9 percent over 2015. Based on the increasing number of births, it is

estimated the annual market growth of confinement service is 25% and the market scale in 2019 is forecasted to reach 15 billion RMB.

Table 1-1 The number of birth and confinement center in Taiwan from 2009-2016

Year	Number of Birth	Number of Confinement Center
2009	191,310	94
2010	166,886	103
2011	196,627	117
2012	229,481	148
2013	199,113	171
2014	210,383	187
2015	213,589	201
2016	208,440	210

Source: Taiwan Ministry of the Interior and Taiwan Ministry of Health & Welfare

In spite of the rapid development of postpartum service industry, the quality of postpartum care has received little attention in academic research. The confinement centers are designed to meet after-birth mothers' physical and psychological needs and also provide an environment for mothers to learn about newborn care (Hung, et al., 2010a). Those caregivers are trained to be technically professional and serve to help the mothers to regain their health. Nevertheless, some postpartum mothers might encounter with depression problem, the caregivers with weak interpersonal skill may fail to comfort the emotional and psychological needs of their clients. In medical service, an effective doctor-patient relationship is crucial in generating positive outcomes. Originally developed by Samueli Institute, healing relationship, one of the Optimal Healing Environment components, has been proven to improve the well-being of patients (Sakallaris, et al., 2015). Comparing with curing, healing environment can improve the patients' health condition physically (shorter length of hospital stay) and psychologically (lower anxiety or depression index), and socially (social interaction) (Yoo, 2015). The postpartum care providers should be able to cultivate healing relationship in order to support healing capacity and increase the satisfaction of their clients.

Studies have found that patient-centered communication is the core of fostering healing relationship and it positively influences the patient outcomes (Kee, et al., 2018;

Rathert, et al, 2017; McCormack, et al., 2011; and Epstein & Street, 2007). The primary functions of patient-centered communication include performing information exchange, response to emotions, sharing decision making; which are the contrast to the doctor-centered communication (Graugaard & Finset, 2000). Studies have shown that patient-centered care was related to better physical condition of patients and improved caregivers' efficiency in delivering care (Stewart, et al., 2000). Nonetheless, there were limited empirical studies that show whether the services provided by the postpartum caregivers are perceived as patient-centered care by the clients and whether patient-centered care influence the quality of care.

The success of a healthcare treatment depends on the patients themselves and they are advocated to be more viable in managing their own health. When the patients take active role in the treatment, they can reduce the work loading of the providers. Hence, the providers can provide optimal service and might even shorten the time required for healing process. Edwards et al., (2009) suggested patient-centered care such as exchanging information and sharing decision making can increase the patient's the motivation to search for information and adhere to the providers' instructions. On the other hand, the effectiveness of provider's communication depends on the patient's preferences, despite of how pleasing the patient-centered behavior shown by healthcare provider (Krupat, et al., 2000). Therefore, the postpartum caregivers should be able to identify their clients' preferences and adjust their behavior according to the specific needs of the postpartum women. Based on the explanations above, author is motivated to conduct a study with title of "**Perceived patient-centered care and postpartum women engagement on quality of care with patient's orientation as the moderating variable**".

1. 2 Research Objectives

Based on the research background described in the previous section, it is known that the demand for postpartum service has increased since it has substantial impact on helping mothers regaining physical health. Nevertheless, most of the postpartum service centers tend to offer services for physical purposes rather than focusing on emotional needs. Therefore, this study aims to explore the effects of patient-centered care and postpartum women engagement on quality of care with

postpartum women's orientation as the moderating variable. The purposes of this present research are:

1. To explore if perceived patient-centered care is positively related to quality of care.
2. To examine whether postpartum women engagement mediates the interaction between perceived patient-centered care and quality of care.
3. To investigate if patient's orientation moderates the effect of perceived patient-centered care on quality of care.

1. 3 Research Process

Based on the research background and purposes deciphered above, literature review was conducted to develop a framework for this research. The first part of the literature review was to examine the presence of prior studies which investigated about the postpartum practices and confinement centers. After confirming that there were no empirical studies or similar research in this topic, author reviewed the literature about patient-centered care, patient engagement, patient- and doctor-oriented communication, and quality of care. According to the empirical results found in the prior studies, author used those theories and evidences to develop a framework and hypotheses. In order to answer the research question in this particular topic, several researchers suggested collecting data from the perspective of the postpartum women so the questionnaire method was selected. The questionnaire which has been tested to be reliable and valid was modified to the postpartum service setting and utilized in this present study. The modified and translated questionnaire was distributed to some mothers for checking the problems such as wording or time consumption issues in filling the questionnaire. After refining the questionnaire, author distributed the questionnaire through online link and printed questionnaire to the postpartum mothers in Taiwan. In order to reach the targeted respondents, the snowball sampling technique was utilized, meaning the initial respondent was asked to find other participants to fill the questionnaire. Subsequent to the return of questionnaire, the collected data was organized and analyzed by using AMOS 18.0 and SPSS 17.0 program. Finally, the conclusion and recommendations from this research were provided.

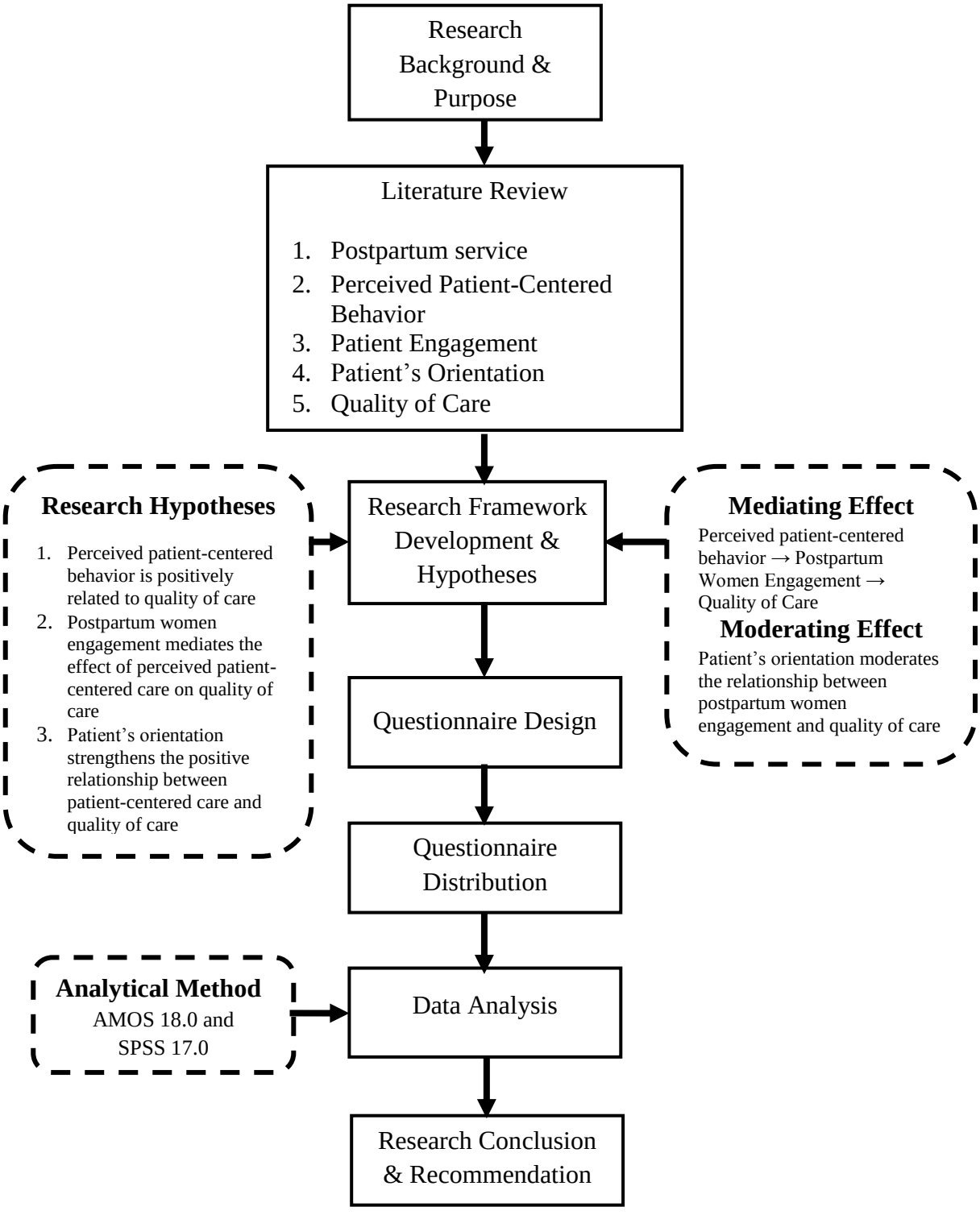

Figure 1-1 Research flowcharts

CHAPTER 2 LITERATURE REVIEW

As suggested by WHO, the postpartum period is six weeks following birth and this period may influence postpartum women's well-being and even cause mental health issues (Schwab-Reese, et al., 2017). In many Asian countries, strict diets and specific rituals are obliged to the after-birth mothers during the postpartum period. Several studies revealed that the way of doing the postpartum practices differ across the countries depending on the local beliefs (Fok, et al. 2016). According to a research conducted by Evagorou, et al. (2015), Koreans undergo special traditional diets of consuming seaweed soup after giving birth, Vietnamese mothers are not allowed to attend any weddings or funeral, Japanese women should not work after marriage or pregnancy, etc. In Taiwan, most postpartum women follow the tradition of "doing the month" which constrains the mothers from doing house chores and taking bath, to have a full rest for thirty to forty days, consume only certain foods, and follow some rules (Hung, et al., 2010b).

According to the traditions in Taiwan, mother-in-laws had the responsibility of taking care of her daughter-in-law during the postpartum period. Nevertheless, over time there are several factors changing this traditional customs such as, later marriage, delayed pregnancy, changes in family structure, etc. Nowadays, more women disintegrated from extended family and live in nuclear family, so they may lack assistance in doing the month at home (Hung, 2005). The after-birth women with weak condition are suggested to stay in the hospital for longer period, but some of these mothers chose to discharge sooner and seek for alternative care. Moreover, the coverage from Taiwan's national health insurance for a vaginal birth is only 3 days and 5 days for a caesarean section. New mothers were reported to rely on and demand for the support of the professionals in the hospital's postnatal ward, however many of them perceived the postpartum staffs could not provide adequate care because of the heavy workload (Kurth, et al. 2010). Therefore, there is an increasing number of Taiwanese mothers chose to stay in a confinement center which offers professional services combining traditional customs and a contemporary healthcare setting (Yeh, et al., 2016).

As identified by Hung, et al. (2010a), the services provided by confinement center could facilitate physical recovery and thus decreased stress and improved overall health of the mothers. Through Hung Postpartum Stress Scale, they revealed

the greatest cause of postpartum stress was the embarrassing physical changes after delivery. The changes in the society, gender equality, and trend of working mothers have resulted in more women in the workforce. Those women might feel stress returning to workplace after birth, especially those ones with body change problem. Another study conducted by Hung, et al. (2010b) found that postpartum mothers would have higher satisfaction towards postpartum nursing centers if they received more social support and experienced lenient postpartum stress. They suggested future exploration should pay attention on the spatial and psychological needs of the postpartum women who would like to reside in confinement center. Yeh, et al. (2016) suggested an importance of investigating postpartum women's perspective in enhancing the care quality by the confinement center.

In general, quality is defined by ISO (2005) as "the degree to which a set of inherent characteristics fulfills requirements". The quality of products and service depends on expectation and outcome, so good quality is perceived when the outcomes surpass the expectation. IOM defined quality of care as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge". As noted by Nylenna, et al. (2015), the indicators for measuring health care quality are complex since with there are different conceptual methods and measurement techniques. The indicators used for assessing quality of care rely on the types of recipient, whether the measurement is designed for an individual or a population, or both. Haddad, et al. (2000) suggested it was necessary to assess the quality of care by taking the patients' perspective into account and it was increasingly regarded to be an important assessment. The measurement of care quality was meaningful when it was based on the specific needs and complexities of the patients which could be observed only at individual level.

2.1 Patient-Centered Care and Quality of Care

Institute of Medicine (IOM) defined patient-centered care as "delivering care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that all clinical decisions are based on patient's values". In order to promote patient-centered care, all parties in a health care setting should be involved, such as patients, practitioners, and the health care system (Epstein & Street, 2011).

Since 1980s, studies have been executed to identify the core components of patient-centered care, and in 1993 the Picker Institute identified eight aspects which were respecting patient preferences and values; supporting emotional needs; ensuring physical comfort; providing information and education; promoting continuity and transition; coordinating care; involving patient's family and friends; and facilitating access to care.

Stewart, et al. (2000) proposed six interactive components of patient-centered concepts in the setting of primary care. (1) the exploration of the illness and its experience; (2) comprehension of the patient's entirety; (3) common ground in managing health care; (4) integration of disease precaution and health promotion; (5) establishment of physician-patient relationship; (6) acknowledgement of personal limitations such as being realistic with allocation of time and resources. Among the literature reviews, a common requirement to perform patient-centered care is to instill responsive behavior and attitudes in the care providers and staffs toward the needs of patients beyond biomedical problems. Epstein & Street (2011) argued that achieving patient-centered care requires training caregivers to show more empathy and provide information to their patients, instead of simply accomplishing the duties obliged by the authority. Not only for patients, studies showed that supporting health care providers to show patient-centered behavior has been proven to result in positive outcomes for the providers (Van der Meer, et al., 2018; Balbale, et al., 2015; and Fix & Sias, 2006).

The impact of patient-centered care was tested by Stewart, et al. in 2000. They showed that patient-centered care was related to better health condition of patients and improved caregivers' efficiency in delivering care. Mallinger, et al. (2005) found that patients' satisfaction with the information increased when the physicians communicated in a patient-centered approach. Instead of asking for drugs, many patients actually require information about their health (Epstein & Street, 2011). Patient-centered care also provides emotional support which is needed by most of the patients, for example the patients with cancer who often suffer from uncertainty, anxiety, or fear require emotional support from people around.

As recommended by IOM, health care providers should observe patients' cultures, values, preferences, and needs. Meanwhile, patients might come from culturally diverse background so health care provider needs to take patient-provider partnership approach providing -centered culturally sensitive health care (Tucker, et

al., 2011). The study results by Krupat, et al. (2001) showed the characteristics of people who preferred patient-centered approach were typically young female, white people, well-educated, and high income. In contrast, people who were more comfortable with doctor-centered communication were older people and less educated. Every single individual has different backgrounds, therefore it is necessary for health care providers to be mindful in identifying those differences and make adjustment on their behavior in delivering care service.

Patient-centeredness has been acknowledged as a desired target in health care delivery and it is regarded a crucial mission for health professionals in achieving high quality health care (Greene, et al., 2012). The patient-centeredness has been proved to have the impact on decreasing anxiety and increasing trust (Zwingmann, et al., 2017; Fiscella, et al., 2004), thus patient-centered communication can help the physicians to obtain more information about the patients from the discussions. As noted by Pawluski, et al. (2017), a substantial number of postpartum women suffered from anxiety or depression which could result in affecting the mother, child, and family adversely, so they needed supports in facing postpartum depression. Giving supports and interacting with the postpartum mothers in a patient-centered approach could help building mother's level of confidence (Mantha, et al., 2008).

Stewart, et al. (2000) noted patient-centered care was related to a greater patient satisfaction, achievement of desired health outcomes, lower health care cost. Care providers who could perform patient-centered communication also motivated the patients to adhere to the suggested changes and prescribed treatment. As explained by Bertakis & Azari (2011b) when patients perceived their doctor has full comprehension of their disease and how the illness affected patient's lives, the trust in the doctor increased and they tended to have fewer requests for medical treatment or consultations. The association between patient-centeredness and positive outcomes on health care has been proved in the research of Zwingmann, et al. (2017); Hibbard, et al. (2013); and Fiscella, et al. (2004). Thus, the assumption of the hypothesis 1 is as follows:

H-1: Perceived patient-centered care is positively related to quality of care

2.2 The Mediating Role of Patient Engagement

Agency for Healthcare Research and Quality (AHRQ) defined patient engagement as the actions taken by the patients to be involved in their own health aiming to be more confident and wiser in making decisions for their own health and the treatment. Through a concept analysis, Higgins, et al. (2017) described patient engagement as: "the enthusiasm and ability to be active in health treatment process and be cooperative with the healthcare provider to achieve the desired outcomes". They identified four major components of patient engagement namely personalization, access, commitment, and partnership. Personalization indicates tailored care based on the unique needs and conditions of individual patient. Access means the availability of patients to acquire information about their own health or the necessary institutional resources. Commitment is the cognitive resource and or emotional factors driving the patients to utilize the available resources. Partnership is the therapeutic alliance between the patients and the healthcare professionals.

Individual factors such as patient's motivation, willingness, and ability can influence the degree of engagement, yet the organization's characteristics and physician practices also plays important role in driving patient engagement (Carman, et al, 2013). As noted by Barello, et al. (2012), the nursing community had acknowledged the significance of patient engagement, but nurses themselves do not often allow patients to be involved in the health care. Angel & Frederiksen (2015) identified several challenges in achieving patient participation including professional-dominated relationship, knowledge gap between the patient and nurse, time to get to know each other, unpleasant situations due to the patient's health condition, and nurse's attitude. In some cases, nurses discouraged patient engagement because they believed the patients were too ill to participate in the care or treatment process.

The level of patient engagement differs due to patients' physical and psychological factors (Carman, et al, 2013). The physical factors include the body condition, functional capacity, and self-efficacy. The psychological issues might comprise of inner motivation, values, beliefs, experience with the health care system, etc. Tse, et al. (2015) stated that patient engagement is confined by cultures and interpreted differently across cultures. For instance, respect for authority is a deeply instilled in the culture so Chinese people tend to let the doctor make the decision because they believe that expert know the best. In contrast to western people who

value collaboration and partnership, they believe every individual has rights to make decisions and ability to overcome challenges.

The studies associating patient engagement with physical outcomes, illness experience, and cost effectiveness had grown numerously (Hibbard & Greene, 2013). Loh, et al. (2011) conducted a study on investigating the survivorship of breast cancer and the results showed self-management program successfully bring women to cooperate with their health care providers in managing medical treatment, emotions, some of the care provider's task in a more independent way. In spite of the benefits of involving patients in decision making, empirical studies revealed that many women actually had insufficient knowledge to take optimized decisions for their own maternal health and care (Gee & Corry, 2012). Hence, healthcare providers have role in educating postpartum women to be actively during the postpartum period.

Stewart, et al., (2000) suggested a successful process of patient-doctor communication on improving patient's health status should firstly influence the patients' perceptions of being actively involved during the discussion. The communication between the patient and doctor should not be one sided and directed by the doctor only, and patients should be encouraged to share their illness experience. Patients' active roles determined the requirements for treatment and care outcomes; furthermore, Greene, et al. (2012) observed there is an increasing patient's awareness toward being initiative in managing their own health. Nevertheless, Axelin, et al. (2010) suggested the new mother's participation varies according to mother's characteristics and her experiences before and during Neonatal Intensive Care Unit admission, hence nurses should take them into considerations before involving the mothers in maternity and infant care.

Safran, et al. (1998) indicated that patient's perception of their health care provider having "whole person knowledge" (patient-centeredness) significantly predicted the patient's adherence to treatment and therapy. In the research by Heisler, et al. (2002), doctors' communication and decision making style were found to be strongly associated with increased patients' self-management of their own illness. They suggested patient-centered care actually enhanced patients' knowledge of their disease, raised self-management over the illness, and increased patients' confidence. When the healthcare providers successfully exchange information and share the decision making with their patients, the motivation of patients to seek information and engage in the treatment would increase significantly (Edwards et al., 2009).

The findings of Hibbard & Greene (2013) highlighted the role of patient engagement significantly predicted the improvement of quality of care and health outcomes. Health literacy is the foundation of patient engagement because it allowed patients to seek, process, and comprehend basic health information, so they could participate in decision making and eventually take good care of themselves. Nowadays, people attempt to obtain health information from different platforms; especially e-health sources have been increasingly utilized. The research by Xiang & Stanley (2017) affirmed that patients who accessed to online health information were more motivated in finding information from their physicians and thus their active roles facilitated the process of patient-centered communication in leveraging perceived health care quality. Therefore, the following hypothesis is expected to be verified:

H-2: Postpartum women engagement mediates the effect of perceived patient-centered care on quality of care

2.3 The Moderating Role of Patient's Orientation

Krupat et al. (1999) constructed the Patient–Practitioner Orientation Scale (PPOS) as a tool to measure the orientation towards patient-centered communication among physicians, medical students and patients. They argued that patient-centeredness was adopted widely by researchers and practitioners, but there was no available instrument for identifying the patient's orientation over what kind of communication style back then. Patient's preference is culturally and contextually diverse, therefore physicians were recommended to learn about patients' communication preference and adjust their own communication style with the patients (Wang, et al., 2017). The score PPOS of Krupat, et al. (1999) indicated a person prefers a patient-oriented style or disease- or doctor-oriented style of interaction.

Graugaard & Finset (2000) indicated some different characteristics displayed by patient-centered and doctor-centered communication. Patient-centered communication tend to ask open questions, facilitate patient's engagement, explore the disease and its experience, pay attention to psychosocial needs, and aim for emotional commitment. Meanwhile, physicians that communicate with doctor-centered approach prefer asking closed questions, control and dominate the consultation, restrict focus to disease experience, and concern only on somatic aspects. Wang, et al. (2017) argued that

there were discrepancies in the perceptions of patient-centered attitude between practitioners and patients. Meanwhile, the congruence between the physician's style and patients' communication orientation is important and prior studies pointed that doctor-patient fit significantly predicted health outcomes (Krupat, et al., 2000).

Historically, doctors tended to take doctor-centered approach and regarded themselves as the expert. They often discouraged patients from telling opinions and required patients to cooperate with their prescriptions. Nevertheless, the growth of customized healthcare has changed the traditional perspective of doctor taking the charge and more patients require their physicians and caregivers to perform patient-centered care. Although patient-centered communication is more preferred, a substantial number of patients still expressed their preference for a doctor-centered approach. For instance, many older patients preferred doctor-centered communication because they believe the doctor would make the best decision (Krupat, et al., 2000). In the research by Dowsett, et al. (2000), one third of the respondents preferred a doctor-centered style when the oncologists were able to provide accurate prognosis and professional treatment. By conducting an experimental study, Graugaard & Finset (2000) revealed students experiencing greater anxiety were more comfortable to a doctor-centered communication. Hence, healthcare providers ought to observe the patients' preferences in order to deliver optimal care.

Patient's communication preferences might serve as a crucial hub between doctor's communication style and patient health outcomes (Swenson, et al., 2004). The success of healthcare provider styles relies on the patient's personal preferences; despite of how pleasing the patient-centered care shown by healthcare provider (Krupat, et al., 2000). Martinez, et al. (2016) found patient communication style preference played a moderating role in influencing the relationship between doctor communication style and perceived decision quality. They reported women with breast cancer who preferred non-directive communication (e.g. contributing in decision making) and experienced autonomy-supportive communication made better decision, rather than those patients who preferred directive communication (e.g. receiving more treatment suggestions) but obtained autonomy-supportive communication.

Swenson, et al. (2004) argued that patients tended to choose or even change the providers to reach doctor-patient fit. The healthcare service become inefficient when patients change their providers frequently, so healthcare providers should alter their

communication style to fit with patient preferences. Krupat et al. (2001) discovered the congruence between doctors' communication style and patients' preferences had a strong impact on patient's satisfaction and trust in the health care. Furthermore, Lee & Lin (2010) revealed that patient autonomy preference moderated the association between perceived autonomy supports and patient's health outcomes. The results showed greater perception of autonomy supports could elevate patient health and trust on the physician. They suggested that patient preference is strongly predicted with patient personality and thus it is not easily influenced by external factors. Hence, the hypothesis 3 could be formulated as follow:

H-3: Patient's orientation strengthens the positive relationship between patient-centered care and quality of care

Based on the literature review above, patient-centered care has been widely acknowledged as a key element in bringing positive outcomes for patients and achieving high care quality. Patient-oriented care such as understanding the patient, showing empathy, sharing decision making, and fostering partnership can support patients emotionally and psychologically in facing their illness and taking responsibility in managing their own health. When patients decide to be involved in their health, they are more willing to learn about their disease and take actions to improve their health. Hence, health care providers serve as a major part in driving the patients' engagement and their perceived quality of care. Meanwhile, it is also crucial to identify the patient's preference in the care delivery. If the patient desire for patient-centered care, the support given by health providers will increase his/her motivation to be engaged and also the perceived quality of care. In contrast, the patient-centered approach taken by the providers might affect the quality of care adversely if the patient prefers a doctor-centered approach.

Different from the prior studies, the research respondents are the postpartum women who have experienced the care service provided by the confinement lady. Given the increasing demand for confinement centers and confinement lady, it is important to understand the interaction of patient-centered care on postpartum engagement and quality of care. Moreover, postpartum practices differ across cultures so the confinement lady has to identify the client's preference and adjust their behaviors. The framework for this study is illustrated in the Figure 2-1:

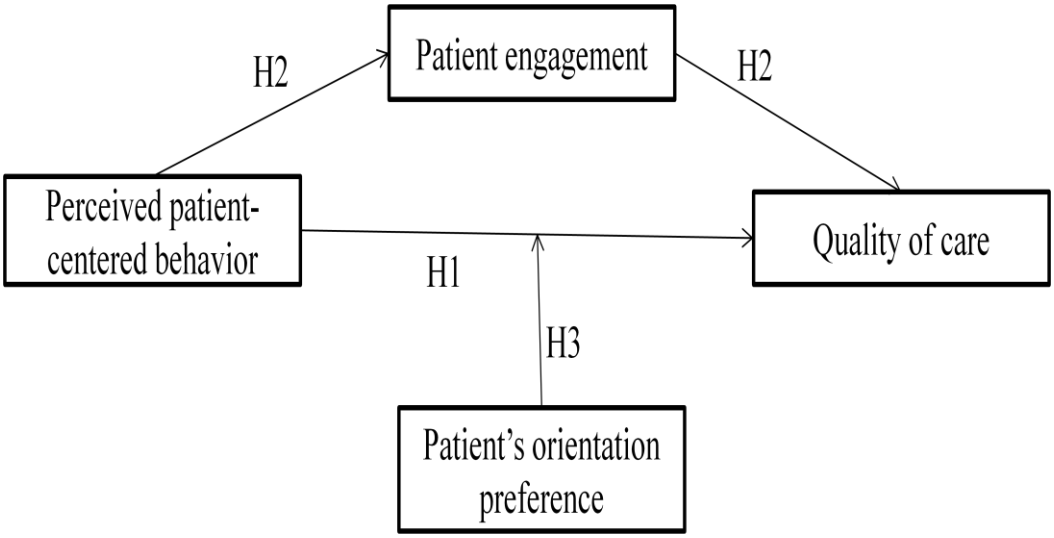

Figure 2-1 Research framework

CHAPTER 3 RESEARCH METHODOLOGY

3. 1 Research Design

This research implements quantitative research methodology as the required data could not be observed directly by the researcher. It is a causal-comparative research because the interrelation among the variables has causal relation. This research is categorized as cross-sectional study which is a research designed to investigate the variables at a particular point in time. In order to conduct this research, literature review was conducted to select the most appropriate items to construct the questionnaire. The questionnaire was later distributed in the form of Google Form and hardcopy to the mothers who have experienced postpartum service provided by a confinement lady or caregivers in a confinement center in Taiwan.

3. 2 Research Sample

This study utilized one of the non-probability sampling techniques namely the snowball sampling technique which is a technique of selecting research subjects based on the reference of initial respondents whom have the characteristics, experiences, or attitudes similar to their own. The criterion for this research sample is the women who have the experience of being taking care by a confinement lady or caregivers in a confinement center during the postpartum period. Postpartum women who agreed to contribute in this study were asked to fill the questionnaire about their experience in doing confinement practices. The data collection took around one month starting from April 2018 to May 2018. A total of 102 samples were collected for this research and no missing data was identified in the dataset. Nevertheless, 19 cases were identified as invalid questionnaires and 3 cases were detected to being unengaged in filling the questionnaire as the respondents gave the same answers to almost every likert scale item. Therefore, 80 questionnaires were used for data analysis. The sample data which is acquired through questionnaire method consists of several characteristics as follows: age, marital status, education, health condition, number of children, length of using confinement service, reason of choosing the confinement service, and experience of changing caregiver.

Table 3-1 Respondent characteristics

No	Respondent Characteristics	Frequency	Percentage
1	**Age**		
	21-30 years old	12	15
	31-40 years old	38	47.5
	41-50 years old	25	31.3
	>51 years old	5	6.3
2	**Marital status**		
	Married	77	96.3
	Single mother	3	3.8
3	**Education**		
	High school	14	17.5
	Bachelor	46	57.5
	Master	15	18.8
	Doctorate	5	6.3
4	**Health condition**		
	Healthy	59	73.8
	Normal	20	25.0
	Not healthy	1	1.3
5	**Number of children**		
	1	25	31.3
	2	43	53.8
	3	12	15
6	**Length of using confinement service**		
	< 1 month	42	52.5
	1-3 month	26	32.5
	3-6 month	7	8.3
	>6 month	5	6.3
7	**Reason of choosing confinement service**		
	Choose from list	6	7.5
	Recommended by friends	54	67.5
	Search online	20	25.0
8	**Changing caregiver before**		
	Yes	74	92.5
	No	6	7.5

Source: Processed data

As shown in Table 3-1, the respondents in this research are dominated by women aging 31-40 years old (47.5% from total respondents). Based on statistics published by the Ministry of the Interior (2018), the average age of women having their first baby was 30.83 years in 2017, with the largest age group in the 30-34 group, accounting for 36.73% of the total, followed by women in the 25-29 age group at 28.54%, and the 35-39 group at 18.33%. Thus, the respondents in this research are appropriate to represent the current population in Taiwan. Most of the respondents are

married women (96.3%) and have attended university for their education (57.5% bachelor degree and 18.8% master degree). The respondents have good health condition with 73.8% of mothers claiming it and 25% people stated their health is normal. The largest proportion according to the number of children is the group of mothers having two children (53.8%) and followed with one child (31.3%) and three children (15%). Despite of the accessibility of information on the internet, 67.5% of the respondents chose their confinement service suggested by their friends compared to only 25% searching online. They used the confinement service mostly one to three months and they rarely changed their caregiver during confinement period, in which only 6 (7.5%) people claimed that they have ever changed the confinement lady.

3. 3 Analytical Method

The analytical method utilized in this study is Structural Equation Model (SEM) and multiple regression analysis. In this study, two programs will be used to analyze the collected data: AMOS (Analysis of Moment Structures) program 18.0 version and SPSS (Statistical Package for Social Sciences) program 17.0 version. AMOS program is utilized to conduct Structural Equation Modeling (SEM) which is an analytical technique to identify structural relationship among variables, while SPSS program is employed to verify the proposed hypotheses.

3.3.1 Structural Equation Modeling (SEM)

In recent years, structural equation modeling has been increasingly used in scientific studies in the field of psychology, behavioral, and social sciences because it could confirm the relationships among variables in a single model (Rahman, et al,, 2015). SEM could be used to conceptualize a theoretical model, measure the relationships among variables, and thus gain insights into the interactions and its strength of the variables (Tarka, 2018). SEM is also referred to as causal modeling, causal analysis, simultaneous equation modeling, analysis of covariance structures, path analysis, or confirmatory factor analysis (Ullman & Bentler, 2013). There were both mediating and moderating effects proposed in this present study, so SEM through AMOS was used to facilitate the data analysis process by testing the variables in a single model.

Followed the two-step approach suggested by Anderson & Gerbing (1998), SEM was begun by conducting factor analysis, reliability test, and validity test as the

first step; then followed by the second step is to confirm the model fit and assessing the path significances of the research hypotheses. Factor analysis is a process of identifying the best observed (latent) indicators. There are two types of factor analysis namely exploratory and confirmatory. Fabrigar, et al. (1999) suggested exploratory factor analysis (EFA) is a more appropriate approach when there are limited theoretical basis to support the factors or little prior specification of the number of factors. Since the factor structure has been confirmed by prior studies, this present study selected confirmatory factor analysis (CFA) as the factor analysis method. Followed the suggestion by (Hair, et al., 2010), the factor loadings for factor analysis should be greater than 0.50 for better results and 0.50 is the threshold limit for acceptable loadings. Therefore, the indicators with factor loading below 0.50 were removed from this study.

Reliability test is to measure the internal consistency of the indicators in a latent variable (Blumberg, et al., 2011). The internal consistency of each variable was determined by measuring Composite Reliability (CR) and Hair, et al. (2010) recommended the variable is considered reliable if the Construct Reliability (CR) value is above 0.70. Validity is the extent to which the research truly measures what it was intended to measure, so the research results are credible when the research measurement tools are valid (Blumberg, et al., 2011). Construct validity comprises of convergent validity and discriminant validity. Convergent validity aims to find high correlations between the measures of the same construct while discriminant validity aims to find difference between the measures of different constructs (Straub, 1989). As suggested by Bagozzi & Yi (1988), the criteria for convergent validity are: each latent variable should have a factor loading ≥ 0.50; composite reliability should be ≥ 0.70; and Average Variance Extracted (AVE) of every construct should be ≥ 0.50. As for discriminant validity, the criteria is the square root of AVE should exceed the inter-construct correlations below and across them (Fornell & Larcker, 1981).

In order to test the structural model, the model fit indices should meet the required threshold. The indices used to assess the model fit in this present study were chi-square with degree of freedom (CMIN/df), comparative fit index (CFI) and root mean square error of approximation (RMSEA). CMIN gives the minimum value of discrepancy between the data and the model. CMIN/df is Chi-square divided by degrees of freedom. The Degrees of freedom is the amount by which the number of sample moments exceeds the number of parameters to be estimated. Comparative fit

index (CFI) compares the performance of the model with baseline model. Baseline model assumes zero correlations between all observed variables. Root mean square error of approximation (RMSEA) shows a lack of fit of the model to population data. The criterion for each index is shown below:

A. The acceptable range of CMIN/df should be greater than 1 and lower than 3 as suggested by (Hu & Bentler, 1999) and the maximum limit should be below 5 (Wheaton, et al., 1977).
B. The CFI pays a penalty of one for every parameter estimated ranging between 0 and 1. Bagozzi & Yi (1988) suggested CFI with values greater than 0.90 indicating a good fit. As suggested by Hu & Bentler (1999), an excellent fit cut-off value for CFI is greater than 0.95, it is considered good fit if the CFI value is above 0.90, and the most lenient threshold is above 0.08.
C. Hu & Bentler (1999) recommended the value of Root mean square error of approximation (RMSEA) should be below 0.05 to indicate a good model fit. If the RMSEA value ranges between 0.05 and 0.10, the model is considered to have moderate fit. The model has a poor fit when the RMSEA has a value above 0.10.

3.3.2 Multiple Regressions Analysis

SPSS functions as data analyzer with statistical calculation either parametric or non-parametric. It allows for in-depth data access and preparation, analytical reporting, graphics and modeling. This study employed SPSS program to conduct descriptive statistics, Pearson's correlation coefficient, F test, t test, and coefficient of determination test.

A. Descriptive statistics is a tool for summarizing and presenting the basic features of a cluster of data. The measurements used to present the data in this study were mean and standard deviation.
B. Pearson's correlation coefficient is a statistical tool to measure the linear relationship, or association, between two continuous variables. The Pearson's correlation is measured with the r value with value greater than 0.70 could be interpreted strong correlation; r value ranging between 0.50 and 0.70 is regarded as good correlation; r value which lies between 0.3 and 0.5 is considered having moderate correlation; and r value is interpreted having poor correlation when it is below 0.30 (Hazra & Gogtay, 2016).

C. F Test is utilized to testify the effect of overall independent variables in the regression model towards dependent variable simultaneously. As suggested by Arkkelin (2014), the criteria for F test are the probability value should be below 0.05 indicating the regression model can be used to predict the dependent variable. If the probability value is above or equal to 0.05 so the regression model cannot be used to predict the dependent variable.

D. t Test

t test is employed to verify the impact of independent variables towards the dependent variable by conducting independent testing per variable. An independent variable is considered having a significant effect if the probability value is below 0.05 and is regarded having no significant effect if the probability value is greater than 0.05 (Arkkelin, 2014).

E. Coefficient of Determination Test

Coefficient of determination test is utilized to test the correlation among variables. A high value of adjusted R2 indicates the proposed variables significantly predict the dependent variable. A low value of adjusted R2 indicates the ability of independent variables in predicting dependent variable is lower and the existence of other bigger factors affecting the dependent variable.

3. 4 Operational Variable Definition

In this research, perceived patient-centered care is utilized as the independent variable and quality of care as the dependent variable. Postpartum women engagement is proposed as the mediating variable to test whether it mediates the association between the independent variable and the dependent variable. A moderating variable which is the patient's orientation is used to test its impact in strengthening the relationship between perceived patient-centered care and quality of care.

3.4.1Perceived Patient-centered Care

In order to measure perceived patient-centered care, Tucker- Culturally Sensitive Health Care Provider Inventory – Patient Form (T-CSHCPI-PF) developed by Tucker, et al. (2013) is utilized after the modification based on the postpartum care setting. T-CSHCPI-PF is a tool to assess the caregiver's patient-centered behaviors and attitudes in serving culturally diverse patients. The reason for choosing this

measurement in this research is different family has different beliefs on doing postpartum practices, so the caregivers have to be culturally sensitive in delivering her service.

This inventory consists of 27 items comprising three subfactors: competence, sensitivity, and respect. The competence factor measures the extent of a provider in demonstrating capability and confidence in his/her expertise to the patient. The sensitivity dimension assesses how well the health professional understands the patient's culture, religious belief, family relation, economic stability, etc and interacts with the patients. The respect dimension evaluates the caregiver's communication capability in demonstrating appreciation towards the patient's opinions and experiences.

The modification of the questionnaire according to the postpartum care setting removed three questions from the competence factor, two questions from the sensitivity factor, and four questions from the respect factor. The reason of removing some of the question is to prevent survey fatigue. Moreover, during the pre-test, the respondents responded that some questions seem similar in the Chinese translation.

3.4.2Postpartum Women Engagement

The Altarum Consumer Engagement (ACE) scale which was developed by Duke, et al. (2015) is utilized to measure the postpartum mother's engagement in observing confinement practices. The ACE consists of 21 items which assesses an individual's engagement in taking care of his/her health and making decisions for the treatment. The authors conducted Principal Component Analysis and identified four scales for the measure consisting of commitment, ownership, informed choice, and navigation. The commitment factor assesses the patient's conviction and aptitude in maintaining a healthy routines and managing health. The ownership factor measures the degree to which the patient believe the health belongs to his/herself and how much control over the health. The informed choice factor evaluates the extent to which the patient seeks and uses information about health and treatment. The navigation factor assesses the patient's confidence and capability in asking and participating in the treatment process.

In this present research, only the commitment (4 indicators) and ownership (4 indicators) factors are used to measure postpartum women engagement because the indicators appear to be more suitable for the postpartum care setting. One of the items

in the informed choice factor ask the patient's considerations when choosing a new doctor/ caregiver, meanwhile the research objects in this study have chosen their caregiver and the objective of this study is to measure their engagement during the postpartum period. Regarding the navigation factor, the scale reliability was the lowest (0.662) compared to the other factors and the items do not fit the setting of postpartum care. For instance, one of the items asked the respondent's agreement about freedom of choices after listening to advices given by different doctors; the postpartum women however are less likely to receive postpartum care from more than one confinement lady in one time.

3.4.3Patient's Orientation

Originally developed by Krupat, et al. (1999), the Patient–Practitioner Orientation Scale (PPOS) has been used across countries in measuring the patient's preferences towards patient-centered care and the translations are available in several languages (Wang, et al., 2017). In this study, PPOS is used to assess the postpartum mothers' beliefs on patient-centeredness while receiving the service given by the caregiver. This scale contains 18 items which are divided in two dimensions namely caring and sharing. The item measurement are based on a six-point Likert scale which ranges from 1 (strongly agree) to 6 (strongly disagree). There are three questions that requires reverse scoring while calculating the scores which are item 9, 13, and 17. According to Krupat, et al. (2000), the participant indicates preferences for patient-centered relationship if the mean score is ≥5.00, while a mean score of ≤4.75 shows that the participant prefers a doctor-centered relationship.

Instead of a six-point Likert scale, a five-point scale was applied to gauge patient's orientation in order to comply with the other items' measurement scale. The scale ranges from 1 indicating strongly disagree to 5 meaning strongly agree; this scale is the inverse from the original version, so all items require reverse scoring except for item Sha1 and Car3. A mean score of ≤3.96 indicates the respondent prefer caregiver-centered care, while a mean score of ≥4.17 indicates orientation for patient-centered care. Item removal was conducted to prevent survey fatigue and six questions remain for each dimension.

3.4.4Quality of Care

Haddad, et al. (2000) developed a scale for rating quality of care based on patient perceptions after visiting a physician. This measurement is utilized because the

items can be modified into the postpartum mother's perceptions of quality of care after receiving the postpartum care. The scale identified three subscales comprising 22 items. The first subscale is the interpersonal skill dimension which reflects the patient's opinion on how his/her doctor's skills in communicate and interact with him/her. The second subscale, technical aspect measures the level of patient's perception on the doctor's work. Lastly, the outcome dimension assesses the patient's opinion on what he/she got from the visit and the impact on health.

Despites its compatibility with the setting of postpartum service, some items in the technical dimension consist of medical terms that are less relevant with the confinement practices. For instance, item number 13 "appropriateness of the tests and exams prescribed by the doctor" and item number 17 "time spent waiting to obtain test results" are not suitable for the respondents in this study because the postpartum mothers do not have to undertake specific test. Therefore, eight items were removed from the technical dimension. Table 3-2 shows operational definition of each variable.

Table 3-2 Operational variable definition

Variable	Operational Definition	Components	Source
Perceived Patient-centered Care	The postpartum mother's perception of the caregiver's patient-centered behaviors in delivering care	-Competence -Sensitivity -Respect	T-CSHCPI-PF by Tucker, et al. (2013)
Postpartum Women Engagement	The postpartum mother's engagement in doing the confinement practices	-Commitment -Ownership	Altarum Consumer Engagement by Duke, et al. (2015)
Patient's Orientation	The postpartum mothers' beliefs on patient-centeredness while receiving the service given by the caregiver	-Caring -Sharing	Patient–Practitioner Orientation Scale by Krupat, et al. (1999)
Quality of Care	The postpartum mother's perceptions of quality of care after receiving the postpartum care	-Interpersonal -Technical skill -Impact on health	Quality of Care by Haddad, et al. (2000)

Source: Processed information

3. 5 Instrument Design

As suggested by Haddad, et al. (2000), it was necessary to assess the quality of care by taking the patients' perspective into account; therefore, this is questionnaire was designed to be a self-reported survey for postpartum women. The questionnaire

was divided into two parts: profile of the respondents and their experience of using postpartum service. The first part of the questionnaire asked about the respondents' age, marital status, education, health condition, number of children, length of using confinement service, reason of choosing the confinement service, and experience of changing caregiver. The second part of the questionnaire was based on the modification of the existing questionnaires, namely: T-CSHCPI-PF form, ACE form, PPOS, and Haddad, et al. (2000) scale for rating quality of care. All items in the questionnaire were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The selected instruments were modified to adjust to the postpartum service setting and a total of 52 questions were translated into Chinese. Before the questionnaire was distributed for a full-scale study, a pre-test was conducted to confirm the face validity. The questionnaire was handed to to some mothers for checking the problems such as wording or time consumption issues; subsequently the questionnaire was refined based on the pre-test group's suggestions. In order to ensure the appropriateness of the questionnaire, the instrument should pass the confirmatory factor analysis (CFA), validity, and reliability testing. Confirmatory factor analysis (CFA) is to verify whether the indicators or observed variables have fit in the factor structure. The Goodness-of-Fit Index is used to test the confirmatory factor model which includes Chi-Square, probability, RMSEA, CFI, and CMIN/DF. The results of CFA for the variables are discussed as below. Table 3-3 presents the design of questionnaire for this study.

Table 3-3 Questionnaire Design

Questionnaire	Dimension	Item
T-CSHCPI-PF (Patient-centered care)	Competence	1-6
	Sensitivity	7-13
	Respect	14-18
ACE (Engagement)	Engagement	19-26
PPOS (Patient's Orientation)	Sharing	27-32
	Caring	33-38
Haddad's quality of care scale (Quality of care)	Interpersonal	39-43
	Work	44-47
	Health Impact	48-52

Source: Processed data

3.5.1Confirmatory Factor Analysis

3.5.1.1 Independent Variable

The perceived patient-centered care which is proposed to be the independent variable consists of 18 indicators with sub-dimensions of competence (6 indicators), sensitivity (7 indicators), and respect (5 indicators). The result of confirmatory factor analysis for the independent variable is shown below:

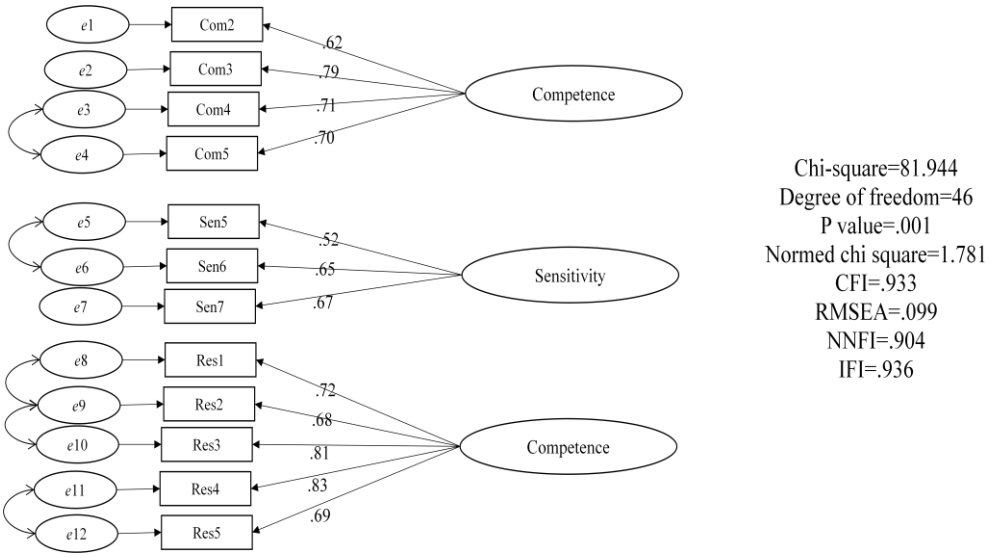

Figure 3-1 CFA result of independent variable

After the CFA test was conducted, some indicators having low factor loading were removed from the model. For the first sub-dimension factor, Competence, two indicator were removed namely Com1 and Com5. The final model shows that every rise of Competence by one will be followed with the increment of 0.62 of Com2, 0.79 of Com3, 0.71 of Com4, and 0.69 of Com5. By having the highest loading factor of 0.79, author assumes the Com3 indicator has a dominant role among the indicators in observing Competence.

The second sub-dimension factor which is represented by Sensitivity has four indicators removed after the CFA test. The remaining indicators explain the increment of 0.52 of Sen5, 0.66 of Sen6, and 0.67 of Sen7 will increase the value of Sensitivity by one. Author feel justified to remove four indicators from Sensitivity factor after evaluating the low loading factor below 0.50. Author assumes the low loading factors were due to the irrelevance between the questions and the environment of respondents. The questionnaire was developed for the US respondents where religion and cultural difference were seen to be the important factors for patient-centered care. Meanwhile,

religion and culture are relatively homogeneous in Taiwan so the respondents might have viewed these factors to be less relevant in terms of sensitivity.

The indicators for the third sub-dimension factor, Respect, remain intact after the CFA test. The model suggests that every rise of Respect by one will be followed with the increment of 0.72 of Res1, 0.68 of Res2, 0.81 of Res3, 0.83 of Res4 and 0.69 of Res5. The Res4 indicator was the highest loading factor of 0.83, and hence author assumes it the most representative indicators in observing Respect.

The proposed indicators for the independent variable show good model fit as indicated with the Goodness of Fit index: chi square for the model is 81.944, normed chi-square value is 1.781, CFI value is 0.933 > 0.800, and RMSEA is 0.099 < 0.100.

3.5.1.2 Mediating Variable

The postpartum women engagement represents the mediating variable in this model with a total of 8 indicators. The result of confirmatory factor analysis for the mediating variable is shown below:

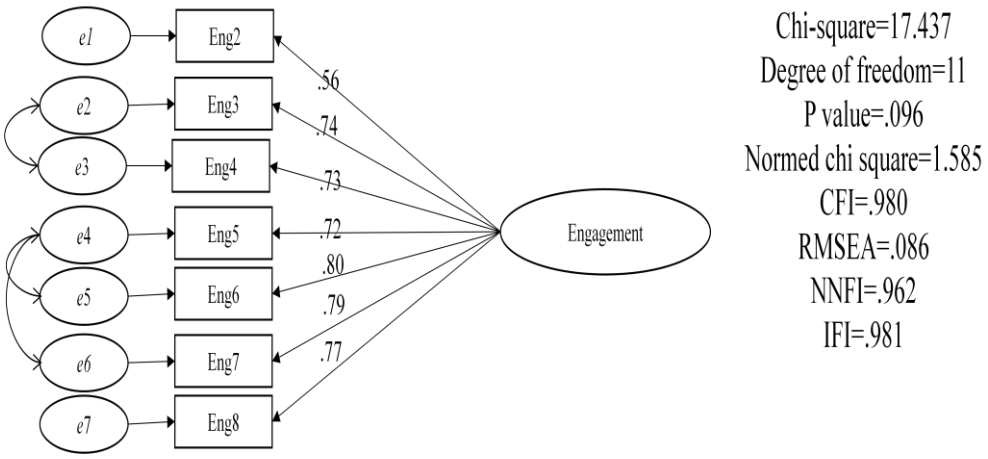

Figure 3-2 CFA result of mediating variable

One indicator that has factor loading below 0.50 was removed from the mediating variable, namely Eng1. The model shows that every rise of Engagement by one will be followed with the increment of 0.52 of Eng2, 0.74 of Eng3, 0.79 of Eng4, 0.72 of Eng5, 0.80 of Eng6, 0.79 of Eng7, and 0.77 of Eng8. By having the highest loading factor of 0.80, author assumes the Eng1 indicator has a dominant role among the indicators in observing postpartum women engagement. The values of Goodness of Fit index for the mediating variable indicate the proposed model is in good fit: chi square for the model is 17.437, normed chi square value is 1.585, CFI value is 0.980 > 0.800, and RMSEA is 0.086 < 0.100.

3.5.1.3 Moderating Variable

The patient's orientation represents the moderating variable in this model with a total of 6 indicators for each dimension. The result of confirmatory factor analysis for the mediating variable is shown below:

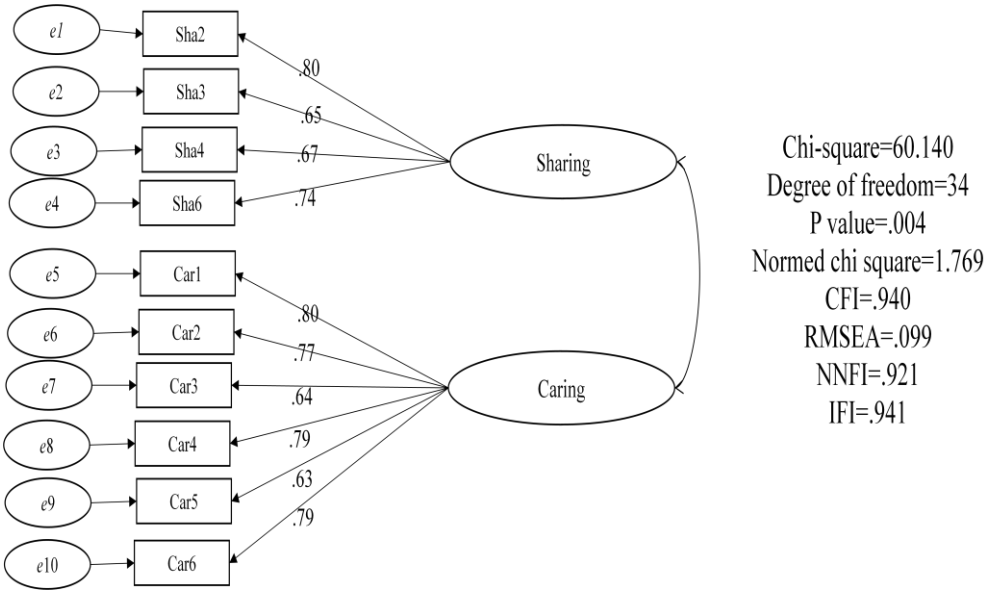

Figure 3-3 CFA result of moderating variable

Two indicators were removed from the moderating variable, namely Sha1 and Sha5. The model shows every rise of Patient's Orientation by one will be followed with the increment of 0.80 of Sha2, 0.65 of Sha3, 0.67 of Sha4, 0.74 of Sha6, 0.80 of Car1, 0.77 of Car2, 0.64 of Car3, 0.79 of Car4, 0.63 of Car5, and 0.79 of Car6. By having the highest loading factor of 0.80, author assumes Sha2 and Car1 have a dominant role among the indicators in observing Patient's Orientation. The values of Goodness of Fit index for the moderating variable indicate latent variable is in good fit: chi square for the model is 60.140, normed chi square value is 1.769, CFI value is 0.940 > 0.800, and RMSEA is 0.099 < 0.100.

3.5.1.4 Dependent Variable

The quality of care as the dependent variable is observed with three sub-dimension factor with a total of 14 indicators. The result of confirmatory factor analysis for the dependent variable is shown below:

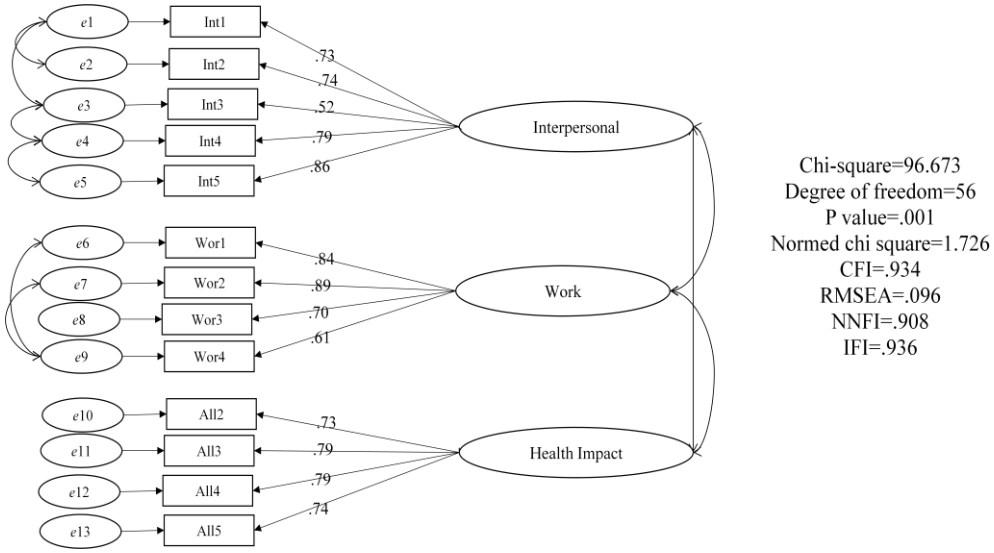

Figure 3-4 CFA result of dependent variable

The CFA test detected only one indicator has low factor loading which is the All4 indicator. The values of first sub-dimension factor, Interpersonal, show that every rise of Interpersonal by one will be followed with the increment of 0.73 of Int1, 0.74 of Int2, 0.52 of Int3, 0.79 of Int4, and 086 of Int5. The Int5 indicator has the highest loading factor of 0.86, indicating the most potent indicator in observing the latent variable of Interpersonal.

Work as the second sub-dimension factor shows the value indicating every increment of 0.84 of Wor1, 0.80 of Wor2, 0.70 of Wor3, and 0.61 of Wor4 will increase the value of Work by one. The Wor1 indicator has the highest loading factor of 0.84, indicating the most dominant indicator in observing the Work.

Four indicators for the third sub-dimension factor, Health Impact, remain after the CFA test. The values of indicators indicate every rise of Health Impact by one will be followed with the increment of 0.73 of All1, 0.79 of All2, 0.79 of All3, and 0.74 of All5. The indicator All2 and All3 have the highest loading factor of 0.79, therefore it can be concluded that the both indicators have a dominant role among the indicators in observing Health Impact.

The proposed indicators for the dependent variable show good model fit as indicated with the Goodness of Fit index: chi square for the model is 96.673, normed chi square value is 1.726, CFI value is 0.934 > 0.800, and RMSEA is 0.096 < 0.100.

3.5.2Validity Test

According to Fornell & Larcker (1981), the threshold for Average Variance Extracted (AVE) should be above 0.50. The construct is considered valid if the indicator has a factor loading ≥ 0.50, but if one indicator has a loading value of <0.50 then the indicator should be removed. Table 3-4 shows the output of validity test.

Table 3-4 Average variance extracted

Variable	AVE	Squared AVE
Patient-centered care	0.764	0.87407094
Competence	0.502	0.70851958
Sensitivity	0.529	0.72732386
Respect	0.552	0.74296702
Engagement	0.534	0.73075303
Patient's Orientation		
Sharing	0.515	0.717635
Caring	0.548	0.74027022
Quality of care	0.783	0.884872872
Interpersonal	0.6	0.77459667
Work	0.52	0.721110255
Impact on Health	0.589	0.76746335

Source: Processed data

3.5.3Reliability Test

Reliability test is to measure the internal consistency of the indicators in a latent variable. As suggested by Hair, et al. (2010), the variable is considered reliable if the Construct Reliability (CR) value is ≥ 0.70. Table 3-5 shows the reliability test results.

Table 3-5 Construct reliability

Variable	CR
Patient-centered care	0.906
Competence	0.800
Sensitivity	0.769
Respect	0.859
Engagement	0.893
Patient's Orientation	
Sharing	0.808
Caring	0.878
Quality of care	0.918
Interpersonal	0.882
Work	0.807
Impact on Health	0.851

Source: Processed data

CHAPTER 4 ANALYSIS AND DISCUSSION

4.1 Descriptive Statistics

This study utilized Patient-centered Care as the independent variable which consist of competence, sensitivity, and respect as the sub-dimension. There were mediating variable and moderating variable proposed in this study which were Engagement and Patient's Orientation. The dependent variable in present study, Quality of Care, comprises of interpersonal, work, and health impact sub-factors. The Table 4-1 is the descriptive statistics showing the mean value and standard deviation level for each variable and sub-dimensions proposed in this study.

Table 4-1 Descriptive Statistics

Variable		N	Mean	Std. Deviation
Patient-Centered Care		80	3.9329	0.48543
	Competence	80	3.9438	0.54100
	Sensitivity	80	3.9250	0.53558
	Respect	80	3.9300	0.60135
Engagement		80	4.3107	0.41277
Orientation		80	3.5432	0.49240
	Sharing	80	3.5031	0.50550
	Caring	80	3.5833	0.51421
Quality of Care		80	3.8958	0.44706
	Interpersonal	80	4.0250	0.50051
	Work	80	3.7625	0.53055
	Health Impact	80	3.9000	0.48653

Source: Processed Data

As shown in the table above, the Patient-Centered Care shows a mean value of 3.9329 with a standard deviation of 0.48543. The mean value indicates the respondents' perception towards the confinement care provider in delivering service in a patient-centered approach was moderately high. The mean value of Engagement is 4.3107 with a standard deviation of 0.41277 indicating the respondents regarded themselves were active and engaged during the postpartum period. The orientation shows a mean value of 3.5432 with a standard deviation of 0.49240 indicating the average respondents tended to prefer the care-giver centered approach (mean value $\leq$ 3.96). Quality of care has been rated averagely 3.8958 with a standard deviation of 0.44706 indicating the postpartum mothers evaluated the care given by their caregiver was moderately high quality.

4.2 Structural Equation Model Analysis

Structural equation model analysis is employed to identify structural associations among the observed variables. Structural relationships among variables were tested for compliance with the goodness-of-fit index. The result of equation modeling structure analysis in this study is shown in Figure 4-1 below:

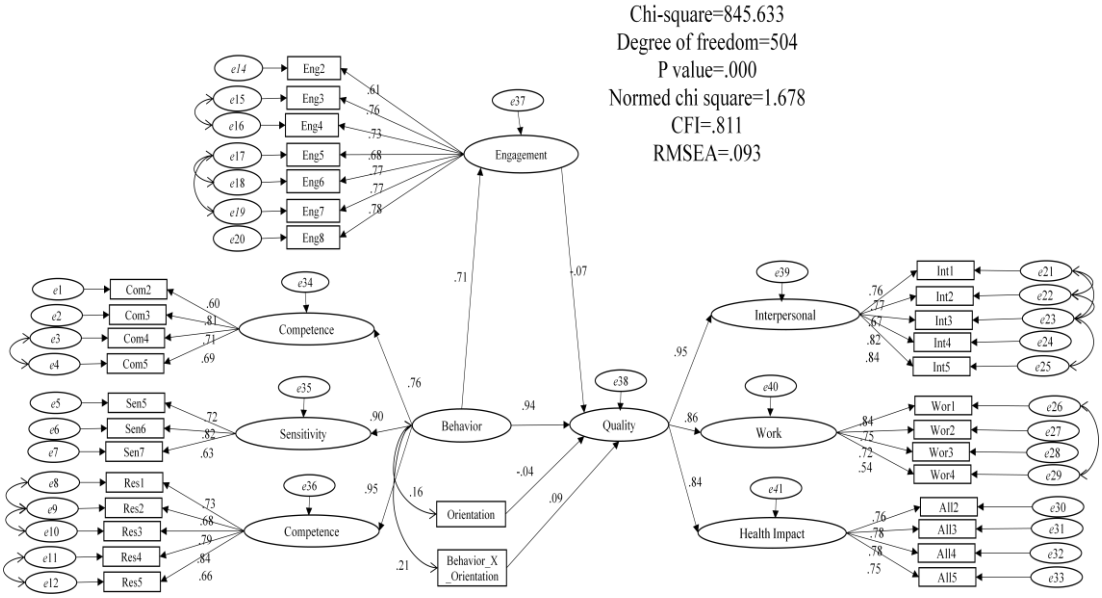

Figure 4-1 SEM full model measurement

The Goodness of fit index shown in the Table 4-2 below:

Table 4-2 Goodness of fit index

Measure	Observed	Cut-off Value	Description
Chi-square	845.633	As low as possible	Acceptable
Normed chi square	1.678	1<x<3	Acceptable
CFI	0.811	>0.800	Acceptable
RMSEA	0.093	<0.100	Acceptable

Source: AMOS processed result

As shown from the table above, the chi square for the model is 754.237, normed chi square value is 1.678, CFI value is 0.822 > 0.800, and RMSEA is 0.096 < 0.100. These values indicate the proposed model is in good fit and thus the SEM could be further conducted. Hypothesis test is conducted with AMOS SEM and SPSS linear regression analysis to determine the relationship among variables in this study. The hypothesis is accepted if the significance (p) value <0.05. Table 4-3 shows the results of AMOS full model path analysis in which the effects of the variables proposed in this study are illustrated. The results indicate that the direct effect of Patient-centered Care towards Quality of Care is significant with an estimate value of 0.945 and 0.000.

The effect of Engagement in mediating the relationship of between Patient-centered Care and Quality of Care has an estimate value of -0.050 and p-value of 0.354. The moderating effect of Patient's Orientation shows an estimate value of -0.047 and p-value of 0.562. The mediating and moderating effects exhibit a p-value greater than 0.05 indicating both effects are not significant.

Table 4-3 AMOS full model path analysis

Relationship	Variable			Estimate	P-value	Results
Direct Effect	Quality of care	<---	Patient-centered care	0.945	0.000	Significant
Mediating Effect	Quality of care	<---	Postpartum women - centered care	-0.050	0.354	Insignificant
Moderating Effect	Quality of care	<---	Patient's Orientation	-0.045	0.576	Insignificant

Source: AMOS processed result

4.3 Multiple Regression Analysis

4.3.1 Correlation Coefficient Analysis

The Pearson's correlation analysis was utilized to measure the strenght between two variables. The correlation between the two variables is categorized as highly correlated when the correlation coefficient value (r value) is greater than 0.70; and the relationship between two variables is considered moderately correlated when the r value is lower than 0.40. According to Pearson's correlation analysis shown in the Table 4-4, there was a very strong positive correlation between Patient-centered Care and Quality of Care (r=0.767, p=0.000). Engagement had moderately positive correlation with Quality of Care (r=0.514, p=0.000) and Patient-centered Care (r=0.563, p=0.000). Table 4-4 illustrates the Pearson's correlation analysis for this study.

Table 4-4 Pearson's correlation coefficient

Variable	Quality	Care	Engagement	Orientation	CareXOri
Quality	1				
Care	**0.767****	1			
Engagement	**0.514****	**0.563****	1		
Orientation	0.099	0.126	0.094	1	
CareXOri	0.156	0.103	-0.092	**0.208***	1

*: $P \leq 0.05$, **: $P \leq 0.01$, bold values indicate correlation

Source: Processed Data

4.3.2F Test

Table 4-5 shows the F test results for multiple regression model in this study. The first model included only the control variables: Child, Health, Marital, Length, Education, Change, Method, and Age; and the F value for this model is 1.396 with significance value of 0.218 indicating the control variables do not have the impact on the dependent variable. After inputting the independent variable of Patient-centered Care in the second model, the F value became 13.941 and the significance value decreased to 0.000. Since the second regression model has a significance value lower than 0.05, this model can be concluded to significantly predict the quality of care. The third model included the mediating variable which was the Engagement and had a significance value of 0.000 with an F value of 12.761; while the forth model with the moderating variable also had a significane value of 0.000 and F value of 10.644. Both third and forth model shows a significane value smaller than 0.05 indicating the variables included in the model simultaneously influence the depedent variable. The F test results are presented in table below:

Table 4-5 Multiple Regression Model F Test Results

ANOVA[e]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.133	8	0.267	1.386	0.218[a]
	Residual	13.656	71	0.192		
	Total	15.789	79			
2	Regression	10.135	9	1.126	13.941	0.000[b]
	Residual	5.654	70	0.081		
	Total	15.789	79			
3	Regression	10.248	10	1.025	12.761	0.000[c]
	Residual	5.541	69	0.080		
	Total	15.789	79			
4	Regression	10.357	12	0.863	10.644	0.000[d]
	Residual	5.433	67	0.081		
	Total	15.789	79			

a. Predictors: (Constant), Child, Health, Marital, Length, Education, Change, Method, Age

b. Predictors: (Constant), Child, Health, Marital, Length, Education, Change, Method, Age, Care

c. Predictors: (Constant), Child, Health, Marital, Length, Education, Change, Method, Age, Care, Engagement

d. Predictors: (Constant), Child, Health, Marital, Length, Education, Change, Method, Age, Care, Engagement, Orientation, Care_X_Orientation

e. Dependent Variable: Quality

Source: Processed Data

4.3.3T Test

According to t test results for this multiple regression model, Patient-centered Care has a t value of 1.034 and a significance value of 0.000. The t value for Engagement is 7.492 with a significance level of 0.175. The Orientation and CareXOrientation which function as the moderating variable in this model had t value -0.175 with p value 0.861 and t value 1.152 with p value 0.253 respectively. These values indicate that only Patient-centered Care can significantly predict Quality of Care because it has a significance value below 0.05. On the other hand, the Engagement and Patient's Orientation have significance value greater than 0.05, so both variables have no significant effect on Quality of Care. The results of the t test for this regression model are presented in Table 4-6 below:

Table 4-6 Multiple Regression Model t Test Results

Coefficients[a]

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.607	0.587		1.034	0.305
Care	0.652	0.087	0.707	7.492	0.000
Engagement	0.136	0.099	0.126	1.372	0.175
Orientation	-0.012	0.071	-0.014	-0.175	0.861
Care_X_Orientation	0.044	0.038	0.095	1.152	0.253

[a.] Dependent Variable: Quality

Source: SPSS processed result

Table 4-7 provides a model summary for the SPSS linear regression analysis.

Table 4-7 SPSS linear regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.368[a]	0.135	0.038	0.43857	0.135	1.386	8	71	0.218
2	0.801[b]	0.642	0.596	0.28421	0.507	99.064	1	70	0.000
3	0.806[c]	0.649	0.598	0.28338	0.007	1.409	1	69	0.239
4	0.810[d]	0.656	0.594	0.28475	0.007	0.670	2	67	0.515

a. Predictors: (Constant), Child, Health, Marital, Length, Education, Change, Method, Age

b. Predictors: (Constant), Child, Health, Marital, Length, Education, Change, Method, Age, Behavior

c. Predictors: (Constant), Child, Health, Marital, Length, Education, Change, Method, Age, Behavior, Behavior, Engagement

d. Predictors: (Constant), Child, Health, Marital, Length, Education, Change, Method, Age, Behavior, Behavior, Engagement, Orientation, Bhx_X_Ori

Source: SPSS processed result

H-1: Perceived patient-centered care is positively related to quality of care (supported)

Based on the AMOS processed result in Table 4-3, the P value for the relationship between patient-centered care and quality of care is 0.000 < 0.001 with Beta value of 0.945. As shown in SPSS regression analysis in Table 4-7, there is a significantly positive relationship between perceived patient-centered care and quality of care (Sig 0.000<0.05). This value indicates eligible standards of P value less than 0.05 so H-1 can be concluded acceptable in this study.

H-2: Postpartum women engagement mediates the effect of perceived patient-centered care on quality of care (not supported)

The results of bootstrapping in Table 4-8 indicated the P value for the effect of postpartum women engagement in mediating patient-centered care on quality of care is 0.345 > 0.005 with Beta value of -0.050. As shown in the result SPPS test in Table 4-7, the P value for postpartum women engagement as the mediating variable is also insignificant 0.278 > 0.005. Therefore, it is concluded that H-2 is rejected.

Table 4-8 The results of mediating variable test through bootstrapping

	Indirect Effect	**Direct Effect**
Bootstrapping Estimates	-0.050	0.945
Bootstrapping P-Value	0.349	0.001
Result	Insignificant	Significant

Source: AMOS processed result

H-3: Patient's orientation strengthens the positive relationship between perceived patient-centered care and quality of care (not supported)

Following the recommendations by Aiken & West (1991), the interaction among variables was determined by plotting the association between patient-centered care and quality of care at high and low levels of patient's orientation. In this plotting analysis, high level of patient's orientation indicates preference for patient-centered care, while low level of patient's orientation indicates preference for caregiver-centered care. As illustrated in Figure 4-2, mothers with high (patient-centered) orientation exhibited slightly stronger reactions towards patient-centered care, compared to the ones who prefer low (caregiver-centered) orientation. Nevertheless, AMOS analysis in Table 4-3 indicates the effect of patient's orientation was not significant in moderating the association between patient-centered care and quality of care (0.576 > 0.005 with Beta value of -0.045). As shown in the SPPS test in Table 4-

7, the P value for patient's orientation as the moderating variable was also not significant 0.683 > 0.005. Therefore, it is concluded that H-3 is rejected.

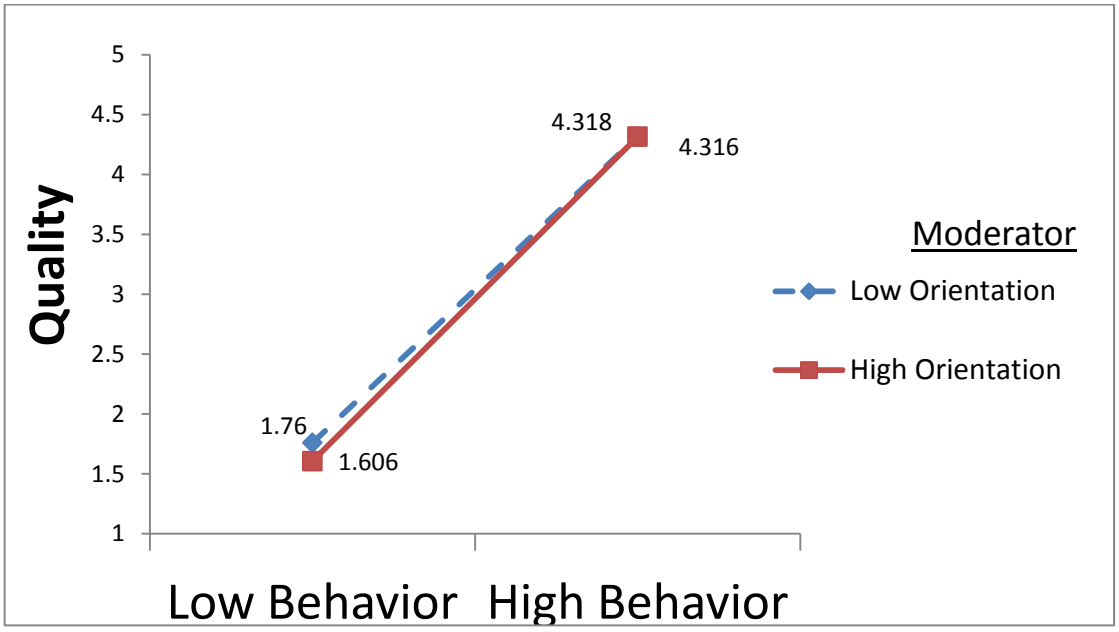

Figure 4-2 The moderating role of patient's orientation on the association between patient-centered care and quality of care

4.3.4Coefficient of Determination Test Results

As shown in Table 4-9 below, the coefficient determination test indicates the value of R^2 for this model is 0.656, which means the independent variable correlates positively with the dependent variable. The value of adjusted R^2 for this regression model is 0.594 which means 59.4% of Quality of Care can be explained by the variables of Patient-centered Care, Engagement, and Patient's Orientation. The remaining 40.6% is explained by other factors that are not included in this study. The coefficient of determination test results are shown in Table 4-9 below:

Table 4-9 Coefficient of determination test results

Dependent Variable	R^2	Adjusted R^2	Std. Error of the Estimate
Quality of Care	0.656	0.594	0.28475

Source: SPSS processed result

CHAPTER 5 CONCLUSION

Based on the statistical test in chapter four, this chapter provides the conclusion and recommendations for the related parties to improve confinement service. Lastly, research limitations and directions for further study are also described in this chapter.

5.1 Conclusion

This research aims to study the effect of perceived patient-centered care and postpartum women engagement on quality of care with patient's orientation as the moderating variable. Based on the result discussions in chapter four and literature review in chapter two, conclusion for this study is discussed as below:

1. Perceived patient-centered care is confirmed to have a significantly positive impact on quality of care. When a postpartum woman perceived patient-centered care shown by the caregiver, she would rate the service to be high quality. This study confirmed the prior investigations conducted by Zwingmann, et al. (2017); Hibbard, et al. (2013); Bertakis & Azari (2011a); Bertakis & Azari (2011b); Fiscella, et al. (2004); and Stewart, et al. (2000). It can be concluded that the perceived patient-centered care not only can improve patient-doctor relationship, but it is also a key factors for high quality confinement service. Bertakis & Azari (2011b) explained that patients will have more trust on their physician if the physician understands the patient's physical and emotional condition. One of the consequences of increasing trust is fewer requests by the patients for further consultations, thus reducing the workload of the physician and improving the service efficiency.
2. Postpartum women engagement does not mediate the interaction between perceived patient-centered care and quality of care. Several studies have proven encouragement given by physicians or nurses can drive the patients to be highly involved with their own health and hence increase the health condition and overall service quality. As noted by Axelin, et al. (2010), however, the new mother's participation level is different according to the mother's experiences. The newly postpartum mothers might be unfamiliar or felt incompetent with the confinement practices so they might follow the instruction passively provided by the caregiver or people around her (Gao, et al., 2010). Another possible reason is the confinement practices in Asia, particularly in Taiwan, constrain the postpartum women to do most of the activities, so they have to rest on bed for

most of the time. Moreover, the mothers' engagement might not be supported by the other family members or even the caregiver. Other family members, such as mother-in-law often might have different opinions with the confinement practices which restrain the postpartum mother's actions (Wong & Fisher, 2009).

3. Patient's orientation do not moderate the interaction of perceived patient-centered care on quality of care. Krupat, et al., (2000) identified many older patients would prefer doctor-centered relationship, and they feel assured when doctors make the decision instead of asking for their opinions. Some people with certain characteristics (low education level or old people) might rely on the doctor because they believe the doctor is an expert in their field and receives a high degree of education. By contrast, some confinement nannies in Taiwan did not receive a proper education or trainings, and they provide service based on their previous experience. Therefore, a postpartum woman might not be fully dependent on the confinement lady even if she preferred a doctor-centered communication. Another factor is all healthy postpartum mothers might prefer their caregiver to be respectful to them and ask the mothers' opinions in decision making in spite of their patient's orientation. Graugaard & Finset (2000) identified students with high anxiety level preferred doctor-centered communication style because they were indecisive in making decision. In this study, most of the respondents are healthy and have no anxiety problems, so their communication might be insignificant in effecting the service quality.

5.2 Research Implications and Recommendations

This research has implications for service provider, postpartum mothers, and academics; thus, author provides several recommendations that can be taken as a reference by the related parties.

1. For Service Providers

   Service providers, whether it is a unit (confinement center) or an individual (confinement lady), should deliver their services in a more patient-centered approach. Currently, most of services provided by the caregivers tend to focus on regaining physical health, such as providing nutritious food, breastfeeding massage, postpartum exercise/yoga, weight-loss training, beauty therapy, etc.

The importance of establishing positive patient-caregiver relationship might have been ignored and interpersonal skill training is rarely included in the courses of the confinement center. Meanwhile, postpartum period might be very stressful for some women, so the caregiver should be able to provide some assistance in terms of emotion and psychology. Another important role of a caregiver is handling conflict between the mother and the other family members. Service providers should train their caregivers to build a good relationship with the other family members and encourage them to be engaged supportively during the postpartum period. By creating a healing relationship, the mothers might regain their health faster and studies also showed it is also beneficial to the caregivers because good relationship can reduce caregiver's frustration and increase job satisfaction (Van der Meer, et al., 2018; Balbale, et al., 2015; and Fix & Sias, 2006). Besides providing training to those caregivers, the institution can use the patient-centered behavior scale (care provider self assessment) to recruit the caregivers with traits required in patient-centered care.

2. For Postpartum Women

Although the mediating effect of postpartum women engagement in this study is not significant, studies have confirmed patient's active participation increases the patient's confidence in managing own health and thus accelerates the healing process. Postpartum women engagement also indicates the patient is willing to coordinate with the caregiver; hence it might leverage the caregiver's motivation in delivering the service. Learning to be involved in the postpartum practice is notably essential for new mothers because they have no experience and knowledge of what to do. With the development of technology and access to information, new mothers can easily find information about their health from the internet. By doing so, they can discuss about their condition with the caregiver and help the caregiver to understand more from their opinions. Again, although the patient's orientation is not significant in this study; new mothers can take this factor as a reference in choosing the confinement center or caregiver. By understanding their own preference, pregnant women can find the suitable caregiver or service in advance and thus avoid conflicts with the caregiver.

3. For Academics

Despite the rapid development of postpartum service industry, studies on the role of the caregiver received limited attention in academic research. Within the

medical literature, the patient-centered care has been verified to be beneficial for both patients and physicians or nurses. Moreover, several studies on healing environment suggest that instead of conventional medicine, elements such as physical environment and good relationship have been proven to be more effective in the healing process of the patient (Huisman, et al., 2012 and Epstein & Street, 2011). This study shows patient-centered care can be implemented in the postpartum services which mainly focused on physical health of the mothers. Besides the role of caregiver in fostering good relationship and engagement with the mother, examinations on the social support by family members could prove useful. While this study proposes the role of patient-centered care in predicting quality of care, further investigations on physical environment during the postpartum period are also suggested.

5.3 Limitations and Future Research

There are five limitations in this study that must be addressed. First, important factors may have been omitted due to the first attempt of conceptual framework establishment for the postpartum service. Most of the reviewed works of literature were taken from medical literature in which the characteristics of the service are different from postpartum service. Moreover, the studies on confinement lady or caregiver in confinement center were limited and the main reason is that confinement practices are only popular in Asian communities. Although some other non-Asia countries do have the customs of practicing confinement, the practices are different across countries and cultures. Future research should explore literatures from other fields such as service management to develop more comprehensive conceptual frameworks and then examine the framework empirically.

The second limitation is the generalizability issue. The conceptual framework appears to be applicable to other countries since the core of patient-centered care is to observe the specific needs of the patient, but this should be verified. The degree of respect, the proper way of communication, or the body language may differ across countries, even in the Asia region. Future research might investigate and compare cross-cultural and cross-national differences and similarities in the role of patient-centered care in delivering the postpartum care.

Third, although the respondents for this study have the experiences of using postpartum service, the type of service (living in confinement center or hiring a confinement lady) and the time distance between current condition and last usage (e.g. maximum past one year) were not controlled for this study. The reason for not controlling these factors was because of the difficulty in reaching the sufficient number of respondents. Hospitals or confinement centers often do not allow other people to disturb the postpartum women who need rest. Especially the private confinement centers, they highly restrict the distribution of questionnaires because of privacy issues. Using an only specific group of respondents or controlling some characteristic differences may generate better results.

The fourth limitation is the common method variance (CMV) issue. Collecting data only from the postpartum women may cause the factors to significantly correlate with each other. Nevertheless, some observed variables which experienced CMV-based inflation were eventually removed. All variables were tested to have an acceptable model fit and pass the reliability and validity test. Therefore, the problem of CMV was not a threat to the validity of the findings reported in this study. Future research might collect data from both postpartum women and their caregivers. The quality of care and perceived patient-centered care can be self-reported data by the postpartum women and the degree of postpartum women engagement and awareness of patient-centered care can be rated by the caregiver.

Lastly, the questionnaire which is developed for US respondents might not suitable for the respondents where the culture is homogenous. Some questions which are related to religion and culture were eventually omitted during the CFA test because of low factor loadings. In Taiwan, a country where the religion and cultural differences do not vary greatly, people might have considered those factors to be less relevant for the quality of care. More accurate behavioral measure tool and psychometrically sound scales can be developed in the future.

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APPENDIX

QUESTIONNAIRE

您好！我是東海大學企管所研究生，目前在探討月嫂的顧客導向照護對於產後媽媽的感知護理服務之品質，為使本研究能反映真實狀況，您的協助對我們了解顧客導向行為有莫大的幫助。答案僅提供本研究學術分析之用。感謝您的協助，我們在此致上最誠摯的謝意與祝福！

東海大學企業管理研究所

指導教授 周瑛琪 博士

研 究 生 龔莉君 敬上

第一部份

請您提供一些基本資料，僅做學術分析用，絕對保密，請放心在題後適當□內打✓！

1. 年齡 □<20 □21-30 □31-40 □41-50 □>51

2. 婚姻狀況 □已婚 □未婚 □離婚

3. 最高学历 □高中 □大学 □碩士 □博士

4. 健康很優良 □非常同意 □普通 □非常不同意

5. 與月嫂的關係長度 □<1 個月 □1－3 個月 □3－6 個月 □>6 個月

6. 選擇該月嫂的原因 □從列表中挑選 □朋友推薦 □網上搜查

7. 換過月嫂 □無 □有

8. 子女數目 □ 1 □ 2 □ 3 □ >4

第二部份

下一頁是問項是關於月嫂的顧客導向行為對於產後媽媽的感知護理服務之品質，請於右側欄位選出您所感受到的情感強度之□內打✓作答，請您依個人感受填答即可。

No.	問題	非常不同意	不同意	無意見	同意	非常同意
1	月嫂對自己的能力有自信	1	2	3	4	5
2	月嫂對產後病狀有豐富的知識	1	2	3	4	5
3	月嫂致力於這份工作	1	2	3	4	5
4	月嫂喜歡自己做的事	1	2	3	4	5
5	月嫂誠實和正直	1	2	3	4	5
6	月嫂對我的事情感興趣	1	2	3	4	5
7	月嫂尊重我的信仰	1	2	3	4	5
8	月嫂關心我的孩子	1	2	3	4	5
9	月嫂了解我的文化	1	2	3	4	5
10	月嫂了解我們家的經濟狀況	1	2	3	4	5
11	月嫂持續了解關心我的身體狀況	1	2	3	4	5
12	月嫂做事都會事先準備齊全	1	2	3	4	5
13	月嫂很願意採納我的意見	1	2	3	4	5
14	月嫂不會以居高臨下的語氣跟我說話	1	2	3	4	5
15	月嫂不會試圖挖掘我的內在隱私	1	2	3	4	5
16	月嫂不會讓我尷尬	1	2	3	4	5
17	月嫂會跟我溝通	1	2	3	4	5
18	即使不是很嚴重的事，月嫂也會真誠關心	1	2	3	4	5
19	即使坐月子有壓力，我知道我可以按照規劃, 並執行相關活動讓身體健康	1	2	3	4	5
20	當我努力改善我的健康時，我真的看到成效	1	2	3	4	5
21	我會對自己的健康負責	1	2	3	4	5
22	我為了自己的健康，會採取積極的行為	1	2	3	4	5
23	我的健康是我的責任，而不是別人的	1	2	3	4	5
24	我自己的行為才是決定自己健康的關鍵因素	1	2	3	4	5
25	我能夠做好預防我健康發生問題的措施	1	2	3	4	5
26	當我對自己的健康有疑問時，我會主動找答案	1	2	3	4	5
27	個人化的坐月子服務象徵著月子產業的進步	1	2	3	4	5
28	不將健康問題完全告知產後媽媽，通常對產後媽媽來說是最好的	1	2	3	4	5

29	產後媽媽應信賴月嫂的專業知識，不需另外自行找出自己的身體狀況	1	2	3	4	5
30	當月嫂詢問許多關於產後媽媽個人背景的問題時，有窺探太多個人隱私之嫌	1	2	3	4	5
31	假如月嫂的專業能力夠好，那麼她們和產後媽媽間的關係如何，就不是很重要	1	2	3	4	5
32	即使對進一步瞭解現況沒有幫助，許多產後媽媽仍然不斷地提出問題	1	2	3	4	5
33	產後媽媽要的通常只是安心，而不是和其健康有關的資訊	1	2	3	4	5
34	當產後媽媽與月嫂意見不同時，這通常是月嫂無法取得產後媽媽尊重和信任的指標	1	2	3	4	5
35	一項坐月子計畫如果與產後媽媽的生活型態或價值觀相衝突，那是不會成功的	1	2	3	4	5
36	產後媽媽必須瞭解，坐月子過程是由月嫂主導的	1	2	3	4	5
37	了解產後媽媽的文化背景，在坐月子的過程中是不重要的	1	2	3	4	5
38	產後媽媽自行尋找相關的坐月子資訊時，通常無法獲得助益，反而容易被混淆	1	2	3	4	5
39	月嫂接待我的方式非常禮貌及友善	1	2	3	4	5
40	月嫂會尊重我	1	2	3	4	5
41	月嫂表現出令人安心的態度	1	2	3	4	5
42	做身體檢查或接觸時，月嫂會尊重我的隱私	1	2	3	4	5
43	月嫂會傾聽、鼓勵我表達我的問題	1	2	3	4	5
44	所選擇的健康照顧方式可以解釋清楚及完整（過程，效果、併發症）	1	2	3	4	5
45	月嫂會對我健康史進行評估（坐月子前、個人問題、家族病史）	1	2	3	4	5
46	月嫂的檢查建議和規劃是適當的	1	2	3	4	5
47	下次再聘僱同一位月嫂的可能性	1	2	3	4	5
48	月嫂提供的服務改善我的健康狀況（減輕症狀、減輕疼痛）	1	2	3	4	5
49	月嫂提供的服務減輕我的恐懼和焦慮	1	2	3	4	5
50	月嫂的服務使我快速回到日常生活	1	2	3	4	5
51	如果我的健康狀況惡化，我能夠做出反應（該怎麼做、聯繫誰）	1	2	3	4	5
52	月嫂使我有動機遵守產後坐月子的作習	1	2	3	4	5