NHSJ Nursing and Health Sciences Journal

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

The impact of primiparous self-efficacy on increasing maternal competence during the postpartum period

Hanan Al-Jarrah[1], Manal Kassab[2], Abdulkarim Alzayyat[3]

[1]Clinical Instructor, Philadelphia University, Jordan
[2]Associate Professor, Jordan University of Science and Technology, Jordan
[3]Registered Nurse, Albashewr Hospitals, Jordan

Corresponding Author: Abdulkarim Alzayyat; e-mail: Sclassroom68@gmail.com

***Abstract*:**
Commonly, primiparous are unfamiliar with the experience of dealing with a newborn, nor do they have the competence to take care of them. A high level of self-efficacy will increase maternal competence in dealing with the newborn. The study aimed to (1) determine the level of maternal sense of competence among primiparous women in Jordan, (2) determine the level of perceived maternal self-efficacy among primiparous women in Jordan, (3) determine whether a significant relationship exists between maternal sense of competence and perceived maternal self-efficacy, and (4) identify whether sociodemographic characteristics are significantly related with maternal sense of competence and perceived maternal self-efficacy. The study employed a cross-sectional, descriptive correlational research design. Recruitment was performed at the King Abdullah University Hospital. A total of 89 participants joined the study. The Maternal Efficacy Questionnaire (MEQ) measured the perceived maternal self-efficacy, and the Parenting Sense of Competence Scale (PSOCS) measured the maternal sense of competence. Participants had a moderate positive maternal sense of competence and a high level of perceived maternal self-efficacy. Age had a weak positive but significant relationship with a maternal sense of competence. No significant relationships were found between maternal sense of competence and perceived maternal self-efficacy. Maternal self-competence and self-efficacy are significant components that make up a mother's armamentarium to perform parenting skills and make decisions about child-rearing. However, no significant relationship was found between perceived maternal self-competence and maternal self-efficacy. Future research should explore what factors drive low self-competence and self-efficacy among primiparous women. Nurses can assist and support mothers in improving their perceived self-competence levels and help mothers sustain the already high levels of maternal self-efficacy. Interventions must be multidimensional and multidisciplinary, involving other specialties such as midwives, nurses, and breastfeeding counselors.

Article Info:
Submitted:
27-10-2023
Revised:
15-02-2025
Accepted:
17-02-2025

***Keywords*:**
maternal; self-efficacy; maternal competence; primiparous; motherhood

https://doi.org/10.53713/nhsj.v5i1.307

INTRODUCTION

Mothers have a focal role in forming the family. Therefore, they should be given great attention, especially during the periods of childbearing and child-rearing (Bastos et al., 2023). When a mother gives birth, she moves into a new stage of her life, handling new responsibilities and tasks (Gbogbo, 2020). This transition is not without significant stress and challenges. Therefore, proper interaction between the father and the mother regarding expected roles from each other and adaptation and acceptance of their new roles are of utmost importance during those times (Janssens et al., 2021).

Parenting experience, particularly the first time, can be overwhelming and troublesome to the mothers unless they are given genuine support from significant others and the needed education on

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

how to deal with the newborn (Schobinger et al., 2022). Mothers' satisfaction with the childbirth experience is associated with personal control, knowledge about childbirth, and perceived pain level (McKelvin et al., 2021). in addition to high levels of positive psychological functioning in the first three months of motherhood (Coo et al., 2021).

The postpartum stage is the six to eight weeks following giving birth, starting an hour after the fetus's birth and expulsion of the uterus (Schrey-Petersen et al., 2021). It reflects the approximate time required for uterine involution and the return of most maternal body systems to a non-pregnant state (Rao et al., 2020). Among the diversity of physical and psychological factors that help primiparous mothers adapt to their new role postpartum, the maternal sense of competence is a particularly significant factor (Busari & Nwafor, 2023). It should be considered when providing education and support to new mothers. Sense of competence in mothers raising their first child, with support from their husbands during the first three months of the infant's life, was positively linked with their interaction with their newborn (Yang et al., 2020).

It is now widely accepted that when facing childbirth pain experience through the early and adequate assessment of self-efficacy expectancies, it is possible to determine whether coping behaviors will be initiated and sustained (Huang et al., 2024). In Jordan, the findings showed that first-time mothers face several challenges while performing infant parenting roles. Also, it has been shown that it is stressful and difficult for mothers to continue completing required parenting tasks (Adams et al., 2021). Therefore, maternal identity achievement and self-capacity among primiparous are vital to establishing expert knowledge of infants' needs and attaining competence and confidence in their mothering activities (Marques et al., 2020).

Another crucial factor that improves the mothers' abilities to adapt during the postpartum period is maternal parental self-efficacy (MPSE) (Abuhammad, 2021). MPSE is mothers' cognitive belief in their ability to perform their newborn care tasks (Mannocci et al., 2021). It is identified as a significant determinant of competent parenting behaviors (Albanese et al., 2019). Generally, primiparas have low MPSE regarding various newborn care tasks. Several components could enhance MPSE, such as social support, personal resources, and environmental context (Triantafyllidis & Darvin, 2021). Also, determinants of MPSE could be classified into (1) maternal attributes, namely age, socioeconomic status, prior experiences with childcare, and emotional state; (2) infant attributes, including infant health status, irritability, and temperament; and (3) environmental attributes, such as family functioning, marital satisfaction, and social and cultural background (Shorey et al., 2018).

Primiparous is a term used to describe a woman who is pregnant or giving birth for the first time (Khamehchian et al., 2020). Commonly, primiparous are unfamiliar with the experience of dealing with a newborn, nor do they have the competence to take care of them (Salarvand et al., 2020). Maternal self-efficacy refers to the mother's confidence in her ability to be a successful mother and is considered an essential factor in helping mothers deal with their newborn (Bagherinia et al, 2018). To date, to the researcher's knowledge, no local Jordan-based studies have considered the relationship between maternal sense of competence and their level of self-efficacy in a national context. Therefore, this study investigates the impact of primiparous mothers' self-efficacy on their competence level during the postpartum period, i.e., the first three months after giving birth in a hospital. The study postulates that a high level of self-efficacy will increase maternal competence in dealing with the newborn.

Specifically, the study aims to: 1) Determine the maternal sense of competence level in Jordan. 2) Identify the perceived level of maternal self-efficacy in Jordan. 3) Determine whether a significant relationship exists between primiparous mothers' self-efficacy and their sense of competence. 4) Identify whether there is a relationship between demographic profile (age, level of education, and socioeconomic status) and maternal self-efficacy.

METHOD

Research Design

The study utilized a descriptive, cross-sectional, correlational design. The design should allow the researcher to investigate whether any significant relationship exists between the two variables of interest: maternal self-efficacy and competence level (Polit & Beck, 2017). Cross-sectional design

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

enables the researcher to assess variables of interest at a certain period for a selected population. This design is suitable for the current study because we aim to determine, through a survey method, mothers' perceptions of their self-efficacy and competence during the postpartum period (Polit & Beck, 2017).

Study Setting

The study was performed at the King Abdullah University Hospital (KAUH), located in Irbid. KAUH was selected for two reasons: (1) it is one of the largest hospitals in the North of Jordan with a bed capacity of around 800 beds distributed over 15 floors, including large maternity and postnatal departments; (2) the researcher has accessibility to this hospital.

Sampling Method

Purposive sampling was utilized to select mothers who participated in the study. In purposive sampling, participants are selected according to a set of inclusion-exclusion criteria that determine their recruitment eligibility, ensuring homogeneity of sample characteristics in this respect (Polit & Beck, 2017). Moreover, purposive sampling was performed due to the difficulty of randomizing mothers attending the postpartum clinic and the ease of recruiting participants as they present in the hospital. The inclusion criteria for this study were (1) Literate women, i.e., able to read and write; (2) primiparous (first child); (3) In reproductive age (18-35 years); (4) Currently in their postpartum period up to 12 weeks; and (5) have a free medical history. At the same time, the exclusion criteria were: (1) Admission of the newborn to the hospital for any medical reason and (2) history of the mental or psychiatric disorder. A sample of 89 mothers was recruited for this study. The sample size was determined using G Power 3.1. According to Polit and Beck, a conservative effect size should be utilized for descriptive research to avoid underestimating or overestimating variable effects (Polit & Beck, 2017). Green (1991) provides a comprehensive overview of the procedures used to determine regression sample sizes. He suggests N > 50 + 8 m (where m is the number of IVs) for testing the multiple correlations since we have two variables, the minimum required sample size = 50 + 8*2 = 66 participants, given that alpha level of 0.05, medium effect size (0.5), and the desired statistical power level of 0.8 (medium-sized relationship). Considering the average survey response rate of around 60% to 70% (Lindemann, 2018), a total sample of 89 participants was recruited, meaning the final sample size was over 40% more than the calculated minimum sample size. Any possible attrition should also cover the overage.

Study Questionnaires

The study survey is composed of three sections. The first section is sociodemographic characteristics (age, level of education, and socioeconomic status), and the second section is the self-efficacy scale, composed of 10 items reflecting primiparous self-efficacy. The third section is the parenting sense of competence scale, with 17 items representing mothers' sense of competence.

The Maternal Efficacy Questionnaire (MEQ) was developed by Teti & Gelfand (1991). It is a 10-item scale that was developed to assess Parental Self-Efficacy (PSE) in mothers of infants. It is primarily a domain-specific measure of PSE because 9 of the 10 items address mothers' self-efficacy in specific parenting tasks (e.g., soothing the baby; feeding, changing, and bathing the baby), and one item assesses general PSE (Jones & Prinz, 2005). Cronbach's α for the scale was tested in previous studies, and scores ranged from 0.70 to 0.86) (Leerkes & Burney, 2007; Leerkes & Crockenberg, 2002; Teti & Gelfand, 1991). The construct validity of the MEQ is demonstrated by a significant correlation (r= −0.75) with the perceived lack of parenting competence as assessed by the Parenting Stress Index Sense of Competence Scale (Teti & Gelfand, 1991). Responses were scored from 1, which meant "not good at all," to 4, which meant "very good." Higher scores correspond to higher levels of maternal self-efficacy.

The Parenting Sense of Competency Scale (PSOC) was developed by Gibaud-Wallston and presented at the American Psychological Association by Gibaud-Wallston and Wandersman in 1978. The PSOC is composed of 17 items. Each item is rated on a 6- 6-point Likert scale as 1 = "Strongly Disagree" to 6 = "Strongly Agree." Nine (9) items (#s 2, 3, 4, 5, 8, 9, 12, 14, and 16) are negatively stated, which means a high score on the individual item does not indicate having a sense of

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

competency. Negatively stated questions were reverse coded before analysis of the total score of the items. A higher overall score of the items indicates a higher parenting sense of competency. There are no average scores or 'cut-offs' for the PSOC tool. Internal consistency reliability and construct validity were established in previous studies (Ohan et al., 2000). PSOC exhibited satisfactory psychometric properties in treatment-seeking women and may be used by clinicians and researchers to assess parenting sense of competence, including satisfaction and efficacy (Delhalle et al., 2024).

Before distribution, the questionnaires were translated into the Arabic language by a professional English-Arabic translator, then given to another English expert and a nursing professor for back-translation. Then, the translations were compared for differences, and any meaningful differences were reconciled. After that, the translated instrument was given to three experts in the field to check for the appropriateness of the tool's wording and face validity. All comments and feedback about the tool items were considered and modified before distribution.

A pilot study was performed on a small sample consisting of 30 mothers To ensure the reliability of the study instruments' items, The sample size is based on recommendations by Polit and Beck (2017). The instruments' internal consistency was measured based on the responses of the pilot study participants. The researcher identified the correlation of the items. Cronbach's alpha test was used to reach this end.

Data Collection Procedure

Once ethical approvals were granted at the university and hospital levels, the researcher prepared a questionnaire package that included the consent form and the study instruments. The data collection was performed between 1/7/2020-1/1/2021. The researcher distributed the questionnaire package on-site to the participants meeting the inclusion-exclusion criteria, explaining the study's aims and guiding them on how to fill in the included questionnaire. The participants were required to give the completed questionnaire together with their consent to the researcher. The returned questionnaires were coded, and data were entered into an Excel sheet and then exported into the Statistical Package of Social Sciences (SPSS) SPSS program for data analysis. The instruments did not provide a guide to address missing data, so incomplete questionnaires with more than 20% unanswered items were not used for data analysis. Questionnaires were considered incomplete if any of the scales were not answered or if most items under the scale were not answered. Participants were free to ask any clarifications or queries surrounding using the survey forms by contacting the researcher via phone or email.

Ethical Considerations

The study sought ethical approval from the Jordan University for Science and Technology (JUST) and the research and ethics review board from KAUH. No personal information that can identify the participants was collected. All data collected were in the researcher's safekeeping, and no one else could access the data. The researcher ensured data protection and storage according to the legal provisions for data protection in Jordan. Raw data will be kept up to five years post-publication.

Informed consent was attained from each participant. Only those participants who consented to participate were included in the study. If the participant initially consented to join but refused further participation, any collected data was no longer included in data analysis and destroyed. Mothers had the right to refuse to join the study without explanation. Those who refused to join were assured that nonparticipation in the study would not affect their hospital treatment.

There was no experimentation or intervention to be performed on the participants. Because data collection is limited to survey questionnaires and there will be no in-depth interviews that can result in psychological and emotional harm, the study is expected to carry minimal risk. Participants have the right to full disclosure of data collection methods and study intent and access study results by asking the researcher to explain the results in simple language or provide a plain summary. There was no monetary benefit from joining the study. Still, it was explained to the participants that the study results could help elucidate any relationship between maternal self-efficacy and competence level.

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

Statistical Analysis

The study was purely quantitative; hence, descriptive and inferential statistics were performed to analyze the data. The Statistical Package for the Social Sciences (SPSS) Version 24 was used. Means, medians, modes, and standard deviations, wherever applicable, were calculated for the demographic characteristics of the participants. Homoscedasticity was calculated to determine the distribution of the sample. Pearson's r was calculated to determine any relationship between interval level maternal self-efficacy and level of competence. Independent t-tests and one-way ANOVAs were used to determine any differences between variables among groups based on the interval-level sociodemographic characteristics.

RESULT

Sociodemographic Characteristics of Participants

The study consisted of 89 participants. The mean age was 27 years old (SD = 3.5). More than half of the participants (n = 52, 58.4%) had a high school degree, while only 2 (2.2%) had a Master's or Ph.D. degree. Regarding socioeconomic status, most were classified as having earned JD1000 to JD1499 monthly (n = 52, 58.4%), while only 2 (2.2%) earned more than JD1500. Table 1. illustrates the sociodemographic characteristics of the participants.

Table 1. Sociodemographic Characteristics (n = 89)

	Frequency (n)	Percentage (%)
Age (Mean±SD)	27	3.5
Educational attainment		
High school	52	58.4
Diploma	31	34.8
Bachelor's	4	4.5
Master's or PhD	2	2.2
Socio-economic status		
Less than JD500	13	14.6
JD500 – JD999	22	24.7
JD1000 – JD1499	52	58.4
JD1500 or more	2	2.2

Perceived Maternal Self-Competence

Perceived maternal self-competence was measured in this study using the Parenting Sense of Competence Scale (Objective 1). Each response was assigned a score from 1 when the mother strongly disagreed with the statement to 7 when the mother strongly agreed. Other responses in between are “Moderately Disagree” (score = 2), “Slight Disagree” (score = 3), “Uncertain” (score = 4), “Slightly Agree” (score = 5), and “Agree” (score = 6). The higher the score, the higher the perception of maternal self-competence among participants. Table 2 illustrates the participants' scores on specific areas of maternal self-competence. Participants had the highest sense of self-competence in believing that being a good mother is a reward (mean = 6.8, SD = 0.9). High scores in perceived self-competence were also found to understand the effects of one's actions in resolving issues with childcare (mean = 6.4, SD = 1.0) and meeting one's expectations in providing care (mean = 6.0, SD = 1.4). On the other hand, participants had the lowest perceived self-competence in believing that their mothers were better prepared than they were (mean = 2.6, SD = 2.1) and that they felt tense and anxious as parents (mean = 2.6, SD = 2.1). Low scores were also found for participants feeling manipulated as mothers (mean = 2.9, SD = 2.2) and becoming a better parent if only child-rearing were interesting (mean = 2.9, SD = 2.2). Overall, mothers had a moderate positive level of perceived self-competence (mean = 5.1, SD = 0.8).

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

Table 2. Maternal Perceived Self-Competence (n = 89)

Item #	Statement	Mean	SD
1	The problem of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired.	6.4	1.0
2	Even through being a parent could be rewarding, I am frustrated now while my child is at his/her present age.	4.1	2.2
3	I go to bed the same way I wake up in the morning, feeling I have not accomplished a whole lot.	4.3	2.2
4	I do not know why it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated	2.9	2.2
5	My mother was better prepared to be a good mother than I am.	2.6	2.1
6	I would make a fine model for a new mother to follow in order to learn what she would need to know in order to be a good mother.	5.7	1.3
7	Being a parent is manageable, and any problems are easily solved.	5.0	1.8
8	A difficult problem in being a parent is not knowing whether you're doing a good job or bad one.	3.0	2.1
9	Sometimes I feel like I'm getting anything done.	3.4	2.3
10	I meet by own personal expectations for expertise in caring for my child.	6.0	1.4
11	If anyone can find the answer to what is troubling my child, I am the one.	5.7	1.9
12	My talents and interests are in other areas, not being a parent.	5.2	1.9
13	Considering how long I've been a mother, I thoroughly familiar with this role	4.8	2.0
14	If being a mother of a child were only more interesting, I would be motivated to do better job as a parent.	2.9	2.2
15	I honestly believe I have all the skills necessary to be a good mother to my child.	5.6	1.6
16	Being a parent makes tense and anxious	2.6	2.1
17	Being a good mother is a reward in itself.	6.8	0.9
	Overall	5.1	0.8

Maternal Self-Efficacy

Maternal self-efficacy was measured using the Maternal Efficacy Questionnaire (MEQ) (Objective 2), which was composed of 9 items specific to childcare activities and 1 item asking for a global score on how well participants felt the capacity to perform specific parenting activities. Responses were scored from 1, which meant "not good at all," to 4, which meant "very good." Nine (9) items (#s 2, 3, 4, 5, 8, 9, 12, 14, and 16) are negatively stated, which means a high score on the individual item does not indicate having a sense of competency. Negatively stated questions were reverse coded before analysis of the average score of the items. Higher scores correspond to higher levels of maternal self-efficacy. Table 3 illustrates the participants' per-item responses. Mean scores for all responses were at similarly high levels; overall, mothers felt they were good at performing childcare activities. No item was scored as low self-efficacy.

Table 3. Maternal Self-Efficacy (n = 89)

Item #	Statement	Mean	SD
1	In comparison to other mothers in general, how good are you at soothing your baby when he/she is upset or distressed?	6.4	1.0
2	In comparison to other mothers in general, how good are you in understanding what your baby wants or needs?	4.1	2.2
3	In comparison to other mothers in general, how good are you at getting baby to show-off for visitors?	4.3	2.2
4	Compared to others mothers in general, how good do you feel you are as a mother?	2.9	2.2
5	Compared to other mothers in general, how good are you at knowing what activities your baby enjoys?	2.6	2.1
6	In comparison to other mothers in general, how good are you at finding things for you baby to do while doing housework	5.7	1.3

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

Item #	Statement	Mean	SD
7	Compared to other mothers in general, how good are you at feeding, changing, and bathing your baby?	5.0	1.8
8	Compared to other mothers in general, how good are you at making your baby understands what you want him to do?	3.0	2.1
9	Compared to other mothers in general, how good are you at getting and keeping your baby's attention?	3.4	2.3
10	In comparison to other mothers in general, how good are you at getting your baby to have fun with you?	6.0	1.4
	Overall	5.1	0.8

Perceived Maternal Self-Competence and Maternal Self-Efficacy

Pearson's r was calculated to determine a significant relationship between perceived maternal self-competence and maternal self-efficacy (Objective 3). However, no significant relationship was found; the r statistic further suggested no measurable relationship at all, as the value was very close to zero ($r = 0.03$, $p = 0.74$).

Perceived Maternal Self-Competence and Sociodemographic Characteristics

Whether perceived maternal self-competence was significantly correlated with sociodemographic characteristics was tested using Pearson's r (e.g., age) for interval level data and Spearman's rho for ordinal data (e.g., educational attainment) (Objective 4). The study showed that age had no significant relationship with perceived maternal self-competence ($r = 0.2$, $p = 0.07$). As such, no significant relationships were found between perceived maternal self-competence and socioeconomic status (Spearman's $\rho = 0.1$, $p = 0.3$) and between perceived maternal self-competence and educational level (Spearman's $\rho = 0.01$, $p = 0.9$). In support of the results, one-way analysis of variance (ANOVA) did not show any significant differences in perceived maternal self-competence based on socioeconomic status ($p = 0.26$) and educational level ($p = 0.83$). Table 4 shows the significance values for correlation tests between sociodemographic characteristics and perceived maternal self-competence.

Table 4. Perceived Maternal Self-Competence and Socio-demographic Variables (n = 89)

Socio-demographic Characteristics	p-Value
Age	0.07
Socio-economic status	0.3
Educational level	0.9

* p-value significant at $p < 0.05$.

Maternal Self-Efficacy and Sociodemographic Characteristics

It was tested to determine whether maternal self-efficacy significantly correlated with sociodemographic characteristics (Objective 4). Maternal self-efficacy was not significantly related to age ($r = 0.1$, $p = 0.38$), socioeconomic status (Spearman's $\rho = -0.0$, $p = 0.98$), and educational level (Spearman's $\rho = -0.1$, $p = 0.64$). In support of the results, one-way analysis of variance (ANOVA) did not show any significant differences in maternal self-efficacy based on socioeconomic status ($p = 0.64$) and educational level ($p = 0.96$). Table 5 shows the significance values for correlation tests between sociodemographic characteristics and maternal self-efficacy.

Table 5. Maternal Self-Efficacy and Socio-demographic Variables (n = 89)

Socio-demographic Characteristics	p-Value
Age	0.10
Socio-economic status	0.64
Educational level	0.96

* p-value significant at $p < 0.05$.

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

DISCUSSION

Maternal Self-Competence

The study demonstrated one of the few attempts to examine maternal self-competence and self-efficacy among primiparous women in Jordan and determine whether there was a significant relationship between the two variables. No comparison can be made with the participants ' scores because of the shortage of international studies and the lack of national studies exploring maternal self-competence and self-efficacy. The results reflected the first set of empirical data measuring the two variables, providing insight into how mothers viewed their skills inadequately caring for their child and their beliefs in their ability to care for their children successfully.

The study results showed that participants had a moderate positive level of perceived self-competence, meaning they felt they had the skills and capacity to care for their newborns. The high level of perception regarding self-competence might stem from the participants' view that being a mother was a rewarding experience, with good outcomes of their actions seen from the behavior and disposition of their newborns. Participants felt that they could meet their expectations regarding parenting for their newborns, avoiding the frustration that stems from being unable to achieve one's objectives. The mothers' ability to respond to issues and concerns about their children boosted their perceived self-competence, especially when they received satisfaction from resolving problems relating to child-rearing.

On the other hand, results showed there were areas where mothers felt that they did not possess the necessary competence. Results showed that participants felt that their mothers were better prepared than they were, either by looking up to their mothers as more competent individuals or reflecting the participants' lack of self-confidence about parenting, which must be an entirely new set of skills and expectations. Participants felt tense and anxious when asked about their beliefs about their ability to care for their children. There were also more responses to feeling manipulated as new mothers and believing they would become better parents if they found child-rearing interesting.

However, with no qualitative data, it was difficult to ascertain why mothers demonstrated low perceived self-competence in the above-mentioned areas. Future research can focus on the qualitative exploration of the reasons that drive low perceived self-competence among primiparous women in Jordan.

Maternal Self-Efficacy

In contrast to the varying levels of perceived self-competence, participants demonstrated similarly high scores for maternal self-efficacy. Mothers felt they were good at performing childcare and parenting activities such as soothing their babies when they were upset or distressed, understanding the needs and demands of their babies, knowing what activities their babies enjoyed, meeting their babies' hygiene and personal care needs, getting their babies' attention, and generally having fun with their babies. Moreover, participants gave high scores when asked how good they felt as mothers to their newborns. These results might stem from maternal cultural background, highlighting good parenting and family members' socioeconomic support (Abuhammad, 2020).

Maternal Self-Competence and Self-Efficacy

However, no significant relationship was found when testing whether perceived maternal self-competence was significantly correlated with maternal self-efficacy. Also, since the r-value was 0.03 and very close to zero, the results suggested no relationship between perceived maternal self-competence and maternal self-efficacy. Unfortunately, since this is the first study that explored the possible relationship between the two in Jordan, as far as the author's knowledge and literature review were concerned, no comparisons can be made with previous studies. However, it is worth mentioning that Bagherinia et al. (2018) found a significant relationship between perceived maternal self-competence and maternal self-efficacy among primiparous women in Iran. One possible reason for the observed result, as outlined by Vance and Brandon (2018), was that conceptually, there were suggestions from the literature that the two terms were interchangeable since both variables pertained to the belief of possessing the necessary skills and abilities to provide care to newborns

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

successfully. In effect, no relationship was found among responses that measured the same construct, although it will also be possible to obtain very high correlations on some occasions. Another possible reason was that participants differed significantly regarding how far along postnatally the two variables were measured. The only inclusion criterion used for sampling was that participants should be primiparous women, without mentioning when the tools were administered postpartum. Maternal self-efficacy improved over time as mothers began to get accustomed to the demands of being a new parent; consequently, if the tools were administered at random during the postpartum period, no relationships might be detected because of the variation in participant responses (Botha et al., 2020).

Maternal Self-Competence, Self-Efficacy, and Sociodemographic Characteristics

Furthermore, participants might have significantly differed on other unmeasured sociodemographic characteristics, resulting in unrelated responses. Social support, ethnicity, and family income predicted maternal self-efficacy. Parental alliance, social support, and child temperament were significant predictors of maternal self-competence (Liu & Xu, 2024). Finally, results suggested that there was indeed no significant relationship between the two variables, offering a counter perspective on the assumption that maternal self-competence and maternal self-efficacy are related. Future research can be targeted toward ascertaining the relationship between the two variables utilizing a homogenous sample in terms of factors found in the literature to predict maternal self-competence and self-efficacy significantly.

No significant relationship was found between the key variables, socioeconomic status, and educational level. Similar to the r-value between maternal self-competence and maternal self-efficacy, correlation values were close to zero (-0.1 to 0.1), suggesting no relationship. One-way ANOVA results concurred, finding no significant differences among participants on maternal self-competence and maternal self-efficacy based on socioeconomic status and educational level. Such results contradict Azmoude et al. (2015) and Muhammad (2020), who found significant correlations among the above variables. The relative homogeneity of the sample, of which more than 90% finished high school or a diploma course and more than 80% earned between JD500 and JD1499, contributed to the observed lack of significant differences. The only significant relationship found was between age and maternal self-competence (although the measured relationship was weakly positive and only significant at an error rate of 10%), suggesting that older mothers had higher beliefs related to their self-competence to care for their newborns. Other sociodemographic characteristics might have a significant relationship with maternal self-competence and self-efficacy, which can be explored in future research.

Implications

Implications for Practice

Perceived maternal self-competence and self-efficacy are essential components of mothers' abilities and individual capacities in performing parenting skills and providing care to their newborns. Low levels of competence and self-efficacy, especially among first-time mothers, can potentially negatively affect the care infants receive from their mothers, mothers' satisfaction as new parents, and the quality of maternal-infant attachment that develops from the bond and care between mother and baby. Hence, nurses can assist and support mothers in improving their perceived self-competence levels and help mothers sustain the already high levels of maternal self-efficacy.

Implications for Policy

While literature suggests that maternal self-efficacy improves over time, the higher level of anxiety arising from the realization that one becomes a new parent soon after giving birth can be considered a conducive starting point in implementing interventions that target maternal improvement self-efficacy and maternal self-competence. Interventions must be multidimensional and multidisciplinary, involving other specialties such as midwives, nurses, and breastfeeding counselors. Institutionalizing the inclusion of strategies on organizational policies that can help mothers develop the necessary skills to be able to perform parenting skills, respond to the demands of their babies, and make decisions with regards to child-rearing has the potential of standardizing

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

practice and ensuring consistency; that all first-time mothers receive the same quality of training to strengthen knowledge, skills, and attitudes.

Limitations

The study has several limitations. Most importantly, the study focused on measuring perceived maternal self-competence and maternal self-efficacy, not the actual level of those two variables. Therefore, it was unclear whether the measured perception was how mothers performed in reality; it might be possible that mothers had high maternal self-efficacy but performed parenting skills poorly in practice. Two, because of the cross-sectional nature of the research design, the variables were only measured in a snapshot of time; hence, the value of responses relied significantly on the participants' disposition regarding their self-competence and self-efficacy at the point of data collection. A longitudinal, prospective design would allow measuring and tracking changes in mothers' values to their self-competence and self-efficacy over time. Lastly, there was sampling bias as most of the participants belonged to a particular cluster of socioeconomic status and educational level, meaning the degree of homogeneity might have resulted in detecting a lack of significant relationships between and among variables.

CONCLUSION

Finding oneself becoming a mother to a newly-born infant is a life event fraught with anxiety and tension, especially for the woman who now finds herself suddenly expected to possess the knowledge, skills, attitudes, and instincts to be able to care for her child. Maternal self-competence and self-efficacy are significant components that make up a mother's armamentarium to perform parenting skills and make decisions about child-rearing. Jordanian primiparous women had moderate positive perceived maternal self-competence and high maternal self-efficacy. Older mothers had higher scores of perceived maternal self-competence. However, no significant relationship was found between perceived maternal self-competence and maternal self-efficacy. Future research should explore what factors drive low self-competence and self-efficacy among primiparous women and the effects of perceived maternal self-competence and maternal self-efficacy on long-term developmental outcomes.

ACKNOWLEDGMENTS

The author would like to acknowledge the deanship of academic research at Jordan University of Science and Technology.

Conflict of Interest Statement: The authors declare no potential sources of conflict of interest.

Source of Funding: None.

REFERENCES

Abuhammad, S. (2020). Predictors of maternal parenting self-efficacy for infants and toddlers: A Jordanian study. *PLOS ONE*, *15*(11), e0241585. https://doi.org/10.1371/journal.pone.0241585

Abuhammad, S. (2021). Perceived maternal parenting self-efficacy as a predictor maternal responsiveness in infants and toddlers. *International Journal of Clinical Practice*, *75*(5), e14043. https://doi.org/10.1111/ijcp.14043

Adams, E. L., Smith, D., Caccavale, L. J., & Bean, M. K. (2021). Parents Are Stressed! Patterns of Parent Stress Across COVID-19. *Frontiers in Psychiatry*, *12*, 626456. https://doi.org/10.3389/fpsyt.2021.626456

Albanese, A. M., Russo, G. R. and Geller, P. A. (2019). The role of parental self-efficacy in parent and child well-being: A systematic review of associated outcomes. *Child: Care, Health and Development*, *45*(3), 333–363. https://doi.org/10.1111/cch.12661

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

Bagherinia, M., Meedya, S. and Mirghafourvand, M. (2018). Association between maternal sense of competence and self-efficacy in primiparous women during the postpartum period. *Shiraz E Medical Journal*, *19*(3). https://doi.org/10.5812/semj.59286

Bastos, F., Dias, A., & Campos, M. J. (2023). Family Nursing Care during the Transition to Parenthood: A Scoping Review. *Healthcare*, *12*(5), 515. https://doi.org/10.3390/healthcare12050515

Botha, E., Helminen, M., Kaunonen, M., Lubbe, W., & Joronen, K. (2020). Mothers' parenting self-efficacy, satisfaction and perceptions of their infants during the first days postpartum. *Midwifery*, *88*, 102760. https://doi.org/10.1016/j.midw.2020.102760

Busari, D., & Nwafor, J. A. (2023). Romanticizing pregnancy: When motherhood becomes a malady. *Journal of Human Behavior in the Social Environment*, *35*(2), 143–160. https://doi.org/10.1080/10911359.2023.2287021

Coo, S., García, M. I., & Mira, A. (2021). Examining the association between subjective childbirth experience and maternal mental health at six months postpartum. *Journal of Reproductive and Infant Psychology*, *41*(3), 275–288. https://doi.org/10.1080/02646838.2021.1990233

Delhalle, M., Monseur, C., Knüppel, I., & Blavier, A. (2024). Psychometric Properties of the Parenting Sense of Competence Scale for a Sample of French-speaking Mothers. *Journal of Child and Family Studies*, *33*(1), 151-165. https://doi.org/10.1007/s10826-023-02776-w

Gbogbo, S. (2020). Early motherhood: voices from female adolescents in the Hohoe Municipality, Ghana—a qualitative study utilizing Schlossberg's Transition Theory. *International Journal of Qualitative Studies on Health and Well-Being*, *15*(1). https://doi.org/10.1080/17482631.2020.1716620

Gibaud-Wallston, J., & Wandersman, L. P. (1978). Parenting sense of competence scale. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*

Green, S. B. (1991). How many subjects does it take to do a regression analysis. *Multivariate behavioral research*, *26*(3), 499-510

Huang, Y., Zhong, Y., Chen, Q., Zhou, J., Fu, B., Deng, Y., ... & Wu, Y. (2024). A comparison of childbirth self-efficacy, fear of childbirth, and labor pain intensity between primiparas and multiparas during the latent phase of labor: a cross-sectional study. *BMC Pregnancy and Childbirth*, *24*(1), 400. https://doi.org/10.1186/s12884-024-06571-3

Janssens, J. J., Achterhof, R., Lafit, G., Bamps, E., Hagemann, N., Hiekkaranta, A. P., M. Hermans, S. F., Lecei, A., Myin-Germeys, I., & Kirtley, O. J. (2021). The Impact of COVID-19 on Adolescents' Daily Lives: The Role of Parent–Child Relationship Quality. *Journal of Research on Adolescence*, *31*(3), 623-644. https://doi.org/10.1111/jora.12657

Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical psychology review*, *25*(3), 341-363.

Khamehchian, M., Adib-Hajbaghery, M., HeydariKhayat, N., Rezaei, M., & Sabery, M. (2020). Primiparous women's experiences of normal vaginal delivery in Iran: a qualitative study. *BMC pregnancy and childbirth*, *20*, 1-8. https://doi.org/10.1186/s12884-020-02954-4

Leerkes, E. M. and Burney, R. V. (2007). The development of parenting efficacy among new mothers and fathers. *Infancy*, *12*, 45–67.

Leerkes, E. M. and Crockenberg, S. C. (2002). The development of maternal self-efficacy and its impact on maternal behavior. *Infancy*, *3*(2), 227–247. https://doi.org/10.1207/S15327078IN0302_7

Liu, M., & Xu, Z. (2024). A study on regulating factors of the influence of Children's negative emotions on mothers' parenting stress: A study of China's post-80s generation. *Children and Youth Services Review*, *159*, 107533. https://doi.org/10.1016/j.childyouth.2024.107533

Mannocci, A., Ciavardini, S., Mattioli, F., Massimi, A., Lia, L., Scaglietta, F., Giannini, A., Antico, R., Dorelli, B., Svelato, A., Orfeo, L., Benedetti Panici, P., Ragusa, A., La Torre, G., & Group, H. M. (2021). HAPPY MAMA Project (Part 2)—Maternal Distress and Self-Efficacy: A Pilot Randomized Controlled Field Trial. *International Journal of Environmental Research and Public Health*, *19*(3), 1461. https://doi.org/10.3390/ijerph19031461

Volume 05, Number 01 (March 2025)
e-ISSN: 2798-5067
p-ISSN: 2798-5059

Marques, G. M., Nascimento, D. Z., Trevisol, D. J., & Iser, B. P. (2020). Instruments measuring pregnant women's expectations of labor and childbirth: A systematic review. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, *246*, 90-98. https://doi.org/10.1016/j.ejogrb.2020.01.014

McKelvin, G., Thomson, G., & Downe, S. (2021). The childbirth experience: A systematic review of predictors and outcomes. *Women and Birth*, *34*(5), 407-416. https://doi.org/10.1016/j.wombi.2020.09.021

Ohan, J. L., Leung, D. W., & Johnston, C. (2000). The Parenting Sense of Competence scale: Evidence of a stable factor structure and validity. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, *32*(4), 251.

Polit, D. F. & Beck, C. T. (2017). Nursing Research: Generating and Assessing Evidence for Nursing Practice. In *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. Wolters Kluwer Health.

Rao, T. K., Kumar, B., Chaurasia, S., Sharma, V. K., Kumar, P., & Malaviya, D. J. (2020). Features of Uterine Involution in Dairy Animals: A Review. *Theriogenology Insight-An International Journal of Reproduction in all Animals*, *10*(3), 81-91.

Salarvand, S., Mousavi, M. S., Esmaeilbeigy, D., Changaee, F., & Almasian, M. (2020). The Perceived Health Needs of Primiparous Mothers Referring to Primary Health Care Centers: A Qualitative Study. *International Journal of Women's Health*, *12*, 745–753. https://doi.org/10.2147/IJWH.S258446

Schrey-Petersen, S., Tauscher, A., Dathan-Stumpf, A., & Stepan, H. (2021). Diseases and Complications of the Puerperium. *Deutsches ÄRzteblatt International*, *118*(25), 436. https://doi.org/10.3238/arztebl.m2021.0168

Schobinger, E., Vanetti, M., Ramelet, A., & Horsch, A. (2022). Social support needs of first-time parents in the early-postpartum period: A qualitative study. *Frontiers in Psychiatry*, *13*, 1043990. https://doi.org/10.3389/fpsyt.2022.1043990

Shorey, S., Ng, Y. P. M., Siew, A. L., Yoong, J. and Mörelius, E. (2018). Effectiveness of a Technology-Based Supportive Educational Parenting Program on Parental Outcomes in Singapore: Protocol for a Randomized Controlled Trial. *Journal of Medical Internet Research*, *20*(1), 1–13. https://doi.org/10.2196/resprot.8062

Teti, D. M. and Gelfand, D. M. (1991). Behavioral Competence among Mothers of Infants in the First Year: The Mediational Role of Maternal Self-Efficacy. *Child Development*, *62*(5), 918–929. Retrieved from https://doi.org/10.1111/j.1467-8624.1991.tb01580.x

Triantafyllidis, S., & Darvin, L. (2021). Mass-participant sport events and sustainable development: Gender, social bonding, and connectedness to nature as predictors of socially and environmentally responsible behavior intentions. *Sustainability science*, *16*(1), 239-253.

Vance A. and Brandon D. (2018). Delineating among Parenting Confidence, Parenting Self-Efficacy and Competence. *Advances in Nursing Science, 40(4),* E18 – E37.

Yang, X., Ke, S., & Gao, L. (2020). Social support, parental role competence and satisfaction among Chinese mothers and fathers in the early postpartum period: A crosssectional study. *Women and birth*, *33*(3), e280-e285. https://doi.org/10.1016/j.wombi.2019.06.009