

# Perceived Maternal Role Competence among Mothers of Infant Residing in Pokhara, Nepal

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## ABSTRACT

**Introduction:** Childbirth is a phase of transition for a woman. Mothers who have high perceived maternal role competence are able to make a successful transition to motherhood and gain mastery in their maternal role performance.

**Objective:** This study aims to measure the perceived maternal role competence among mothers of infant.

**Methodology:** This study used a descriptive cross sectional design. Simple random sampling was used to select 185 mothers of infants residing in Pokhara Sub-metropolitan City, Kaski, Nepal.

**Result:** The mean score for perceived maternal role competence of respondents was  $72.48 \pm 8.33$ . More than one quarter (26.5%) of respondents had a good level of perceived maternal role competence. There was a significant association between level of perceived maternal role competence and age of the mother ( $p < 0.022$ ), educational status ( $p = 0.011$ ), employment status ( $p = 0.019$ ) and readiness for pregnancy ( $p = 0.022$ ). There was a statistically significant correlation ( $p < 0.001$ ) between satisfaction and self-efficacy subscale of parent sense of competence scale.

**Conclusion:** The study concluded that influencing factors for perceived maternal role competence are mothers' age, educational status, employment status and readiness for pregnancy. So health care professionals should focus on family planning counseling and community awareness programs to raise women's educational status and empowerment so that every pregnancy is planned and help mother to adapt successfully in transition to motherhood.

**Keywords:** Maternal role competence, mothers, infant and Pokhara, Nepal.

## INTRODUCTION

Motherhood is a rewarding and challenging phase of a woman's life. It is potentially a time of joy as well as stress. It involves a number of challenges which revolve around learning infant care tasks, getting to know the infant and confronting one's self expectation as a mother.<sup>1</sup> Motherhood represents a major transition in a woman's life that involves examining one's capacity to

provide care for another human being. The transition to motherhood is often an opportunity for self-evaluation.<sup>2</sup>

Mothers do not naturally adapt to the maternal role during the early postpartum period. Instead, they learn and adjust continuously. Achieving competence and satisfaction in the maternal role are critical components of maternal role adaptation during the transition to motherhood which has a huge impact on the quality of parenting behaviors and ultimately, the child's psychological development.<sup>3</sup> How mothers adjust is influenced by their confidence in their role. A mother's confidence in her ability to care for her infant is necessary for healthy transition to motherhood and a positive mother-infant relationship.<sup>4</sup>

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It is difficult to achieve competence if a mother is not satisfied with role and maternal satisfaction is unlikely if women feel incompetent in mastering in maternal role.<sup>5</sup> In the context of Nepal, much emphasis has been placed on improving maternal and child health. However, there are very few published studies about mothers’ perceptions of their maternal competence. The author was interested in identifying the level of perceived maternal role competence and determining the factors affecting that competence during the transition to motherhood.

**METHODOLOGY**

This descriptive cross sectional study was carried out in Pokhara Sub-metropolitan City, Kaski, Nepal. For calculating sample size, the mean score (64.34) and standard deviation (7.9) was taken from the study by Shah, Shrestha, Pokherel, Shrestha and Baral in Dharan.<sup>6</sup> A probability sampling technique was used to select 185 women from the total population of mothers of infants residing in Pokhara Sub-metropolitan City. Three representative wards out of 29 total wards of Pokhara Sub-metropolitan City were chosen by lottery. From the 3 wards, 782 infants between 1 and 12 months in these 3 wards were identified using information provided by ward office and Female Community Health Volunteers from which 185 mothers of infant were randomly selected for this study.

The sample size was calculated by following formula:

$$n = [(Z\alpha + Z\beta)S/\delta]^2$$

The author choose a confidence interval of 95%, power 90%, tolerance 2 and S.D. 8, which yielded a sample size of 185.

And standard tool “Parenting sense of competence” was used to measure the primary outcome of perceived maternal role competence. Reported  $\alpha$  coefficient for total PSOC scores range from .82 to .87. The tool consisted to 17 items which included three subscales satisfaction, self-efficacy and interest each consisting 9, 7 and 1 items respectively. Respondents indicated the degree of their agreement or disagreement with each statement on a 6 point Likert-type scale from 1 (strongly agree) to 6 (strongly disagree) for a possible range of 17-102. Items in self-efficacy and interest subscales were

reverse scored for analysis so that higher scores indicate a higher perceived level of maternal competence. For categorization of the obtained competence score quartile were used. Poor means score below  $Q_1$  (3.88) average competence  $Q_1$ - $Q_3$  (3.88-4.6) and good competence above  $Q_3$ .

Two stage back translation of the research instrument was done. A pretest of the research instrument’s reliability was carried out using 18 mothers of infants who were not part of the larger study. Cronbach’s alpha was : 0.79 and determined to be satisfactory for use in the study.

The author collected these data during face-to-face interviews with mothers of infants in their homes. The average time spent with a respondent was 20-25 minutes and on an average 9-12 respondents were interviewed per day. The data were coded and entered in MS Excel 2007 and exported into the IBM SPSS version 20.0 for analysis.

**RESULT**

Of the 185 respondents, 40.5% were between the ages of 25-29 while 8.1% were under 20 years. The mean age was 25.5 years. More than half (56.8%) of the respondents were living in a nuclear family.

**Table 1: Socio-demographic Characteristics of Respondents**

Variables	Frequency	Percentage
<b>Age (in Years) (n=185)</b>		
15-19	15	8.1
20-24	62	33.5
25-29	75	40.5
≥ 30	33	17.8
Mean±SD	25.50 ±4.23	Min.:16 Max. : 35
<b>Religion ( n=185)</b>		
Hinduism	150	81.1
Buddhism	28	15.1
Christianity	7	3.8
<b>Ethnic group ( n=185)</b>		
Dalit	28	15.1
Disadvantaged janajati*	35	18.9
Relatively advantaged janajaties**	39	21.1
Ungrouped caste/ethnicity	83	44.9

**Cont... Table 1: Socio-demographic Characteristics of Respondents**

<b>Education status ( n=185)</b>		
Illiterate	16	8.6
Literate	169	91.4
<b>Educational level (n=169)</b>		
Primary	47	27.9
Secondary	49	28.9
Intermediate	41	24.3
University	32	18.9
<b>Employment status ( n=185)</b>		
Unemployed	137	74.1
Employed	48	25.9

Over 40% were married between the ages of 20-24 years whereas 0.5% married after the age of 29 years. The mean age at marriage was 20.58 years and the mean age of first pregnancy was 22.31 years. 71.9% of the respondents had planned pregnancy whereas 28.1% had unplanned pregnancy. The mean age of the infants were 7.09 months. There were more male(53%) infants as compared to their counterparts.

**Table 2: Social Support of Respondents**

Variable	Frequency	Percentage
<b>Social support(n=185)</b>		
Minimal social support (<3.89)	106	57.3
Maximum social support (≥3.89)	79	42.7
<b>Support person* (n=184)</b>		
Husband	147	79.4
Mother	109	58.9
Mother in law	102	55.1
Sister	82	44.3
Sister in law	28	15.1
Neighbour	50	27.0
Maid	29	10.0

\*Multiple response question

Table 2 shows that 57.3% had minimal social support while 42.7% had maximum social support. Regarding the availability of a support person for caring for the infant, 99.45% had a support person whereas 0.54% had no one to support them in caring their infant as she was living in rented house and her husband was working in abroad. Most (79.45%) respondents acknowledged their spouse as the support person.

**Table 3: Level of Perceived Maternal Role Competence of the Respondents**

Level of Perceived Maternal Role Competence	Frequency	Percentage
Poor competence (<3.88)	42	22.7
Average competence(3.88 -4.6)	94	50.8
Good competence (>4.6)	49	26.5
Mean±SD = 4.26±0.49	185	100

Table 3 shows that 50.8% respondents had average perceived maternal role competence whereas 22.7% had poor level of perceived maternal role competence. Among 185 respondents 26.5% had good level of perceived maternal role competence. The mean (SD) of the competence score was 4.26(0.49)

Table 4 shows that there is significant association between perceived level of maternal role competence among respondents and age (p=0.022), education status (p=0.011), employment status (p=0.019), age at marriage (p=0.019), and readiness for pregnancy (p=0.004) whereas there was no significant association between level of perceived maternal role competence and type of family and parity.

**Table 4: Association between Respondents' Perceived Level of Maternal Role Competence and Maternal Variables**

Variables	Level of Perceived Maternal Role Competence			$\chi^2$	p- value
	Poor	Average	Good		
	n (%)	n (%)	n (%)		
Age ( In Years)					
≤19	9(42.9)	9(42.9)	3(14.3)	11.45	0.022**
20-29	27(20)	73(55.7)	31(23.7)		
≥30	6(18.2)	12(36.4)	15(45.5)		
Education status					
Illiterate	6(37.5)	8(50.0)	2(12.5)	8.965	0.011**
Literate	36(21.30)	50(29.6)	83(49.1)		
Employment status					
Unemployed	27(19.7)	78(56.9)	32(23.4)	7.934	0.019*
Employed	15(13.2)	16(33.3)	17(35.4)		
Type of family					
Nuclear family	27(25.7)	48(45.7)	30(28.6)	2.610	0.271*
Joint family	15(18.8)	46(57.5)	19(23.8)		
Age at marriage(in Years)					
≤19	30(30.3)	21(48.5)	21(21.2)	7.882	0.019*
>20	12(7.13)	46(53.5)	28(32.6)		
Parity					
Primiparous	23(24.2)	51(53.7)	21(22.1)	1.928	0.381*
Multiparous	19(21.1)	43(47.8)	28(31.1)		
Readiness for pregnancy					
Planned	22(16.5)	71(53.4)	40(30.1)	10.82	0.004*
Unplanned	20(38.5)	23(44.2)	9(17.3)		

Significance level at 0.05

\* Pearson's chi square

\*\*Likelihood ratio

The present study shows that there is no significant association between perceived maternal role competence and age of the infant or sex of the infant.

**Table 5: Relationship between Subscales of Parent Sense of Competence**

Variable	Correlation	
	r	p-value
Satisfaction & Self Efficacy	0.316	<0.001*

\*Calculated value obtained by spearman rank correlation

Result shows that there is statistically significant correlation ( $p < 0.001$ ) between satisfaction and self-efficacy subscale of parent sense of competence scale. This indicates that respondent having high self-efficacy is more satisfied with their maternal role performance.

### DISCUSSION

The study was conducted to find out perceived maternal role competence among mothers of infants residing in Pokhara Sub-metropolitan City. This study revealed that the mean score of perceived maternal role competence was  $72.48 \pm 8.33$  and the mean score of satisfaction, efficacy and interest domain were  $32.61 \pm 5.76$ ,  $34.34 \pm 4.45$  and  $5.53 \pm 0.77$  respectively. The mean score of competence is slightly more than that of study of Ngai et al. conducted in China in which 17 item Parent Sense of Competence Scale was used and mean score was 69.1 (10.5) and Shah et al. in which mean score was  $64.34 \pm 7.91$ .<sup>5,6</sup>

A positive correlation between perceived maternal role competence and age ( $r = 0.202$ ,  $p = 0.006$ ) was seen in this study. Similar results were shown by Ngai, Chan & Ip and Shah et al. Literate mothers perceived themselves significantly more competent in their maternal role ( $p = 0.011$ ).<sup>6,8</sup> The result was consistent with study of Gilmore and Cuskelly and Shah et al.<sup>6,9</sup> Contradictory to this finding, the study by Mercer did not show a relationship between education and maternal competence.<sup>4</sup>

There was significant difference in perceived maternal role competence with employment status ( $p = 0.019$ ). Mothers who were job holders perceived themselves more competent in comparison to housewives which is supported by Shah et al study whereas results from study by Ngai, Chan, Ip revealed employment status was not associated with maternal role competence.<sup>6,8</sup>

There was significant difference in perceived maternal role competence with readiness for pregnancy

( $p = 0.004$ ). The mothers who had planned their pregnancy perceived themselves as more competent. This might be because mothers who had an unplanned pregnancy were not ready to take up the new role as mother.

Perceived maternal role competence was not significantly different with infant's age. This finding was consistent with study results of Elek, Hudson, Bouffard.<sup>10</sup> In contradictory to this finding, study by Secco et al. reported significant increase in perceptions of infant care competence over time.<sup>11</sup> Whereas study by Ngai, Chan and Ip revealed maternal role competence declined at 6 weeks post-partum, followed by improvement at 6 months.<sup>8</sup> Thus, inconsistent results shows need of further study to find out association of perceived maternal role competence with infant's age.

The study finding showed that there was no significant difference of perceived maternal role competence with infant sex. The finding was in accordance with findings of Elek, Hudson & Bouffard and Coleman & Karraker.<sup>10,12</sup> In contrary, study by Ohan, Leung, Johnston found significantly higher efficacy scores for mother with girls than boys.<sup>13</sup>

### CONCLUSION

Based on the discussion of findings of the study, conclusion has been drawn. The study findings revealed that more than one quarter respondents had good perceived maternal role competence. Adolescent mothers perceived themselves less competent in their maternal role. So, there is need to support young mothers to adjust and enhance their development in the new role of mother. Similarly, the study result found literate and employed mothers were more competent. Thus educating mothers would help in increasing their competence. Those respondents who were married at after 20 years perceived themselves more competent as compared to their counterpart who married at younger age. Those mothers who had planned their pregnancy perceived themselves more competent. So, women

should be aware regarding family planning methods so every child birth is wanted and planned, thus, they would be ready to take up their role as mother.

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**Conflict of Interest:** None

**Ethical Clearance:** Taken from Chitwan Medical College-Institutional Review Committe

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