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# Maternal Parenting Quality: A Comparative Study of Urban and Rural Mother - Infant Dyads in Their Natural Settings

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**ABSTRACT**

*Parenting is one of the greatest responsibilities that one holds in life time. It is a process of promoting and supporting the physical, emotional, social, and intellectual development of a child from infancy to adulthood. The maternal parenting quality depends on the synchrony established between mother infant dyad which is influenced by child, maternal as well as familial characteristics. The present study was undertaken with an objective to understand the differences in the parenting quality of urban and rural mothers of infants in the age group six to thirty months. The maternal parenting quality was studied in terms of building relationships, promoting learning and supporting confidence among infants of six to thirty months using the video clippings of 12-15 minutes of mother infant dyad interactions in their natural setting and was scored using Keys to Interactive Parenting Scale (KIPS). The sample consisted of 176 mother infant dyads (urban=80 and rural = 96) recruited from Dharwad taluk of Karnataka, India. The results revealed significant differences (t-value= 3.07, p<0.001) in maternal parenting quality of urban and rural mothers with urban mothers better on all the three dimensions of parenting viz. building relationships, promoting learning and supporting confidence. The correlation analysis showed positive and significant correlation between maternal parenting quality and factors such as maternal age, maternal education, maternal age at marriage and socioeconomic status among urban mothers. However among rural mothers, the parenting quality was positively and significantly correlated with maternal education and caste and varied with the gender of infants; favouring females.*

***Key words:*** *Maternal parenting quality, Mother infant dyads, Building relationships, Promoting learning, Supporting confidence*

## INTRODUCTION

Parenting is one of the greatest responsibilities that one holds in life time. Most of the humans, wanting or un-wanting; take up the parental roles; some early and others later.

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Whatsoever, parenting needs preparedness and commitment to shoulder the responsibilities that come along with this new role. Mothers in general have a major role in parenting; especially with the infants, as infants spend most of the time with the mother (the primary caregiver). Parenting does not mean just rearing the young one, rather it a process of promoting and supporting the physical, emotional, social, and intellectual development of a child from infancy to adulthood. In Indian context, parenting extends through the stage of adulthood too.

The interaction between a mother and her infant can be like a dance. There are routines, standards and missteps, there is an exchange, there is unparalleled intimacy, there are often vast differences in skill level as well as motivation; there is understanding and learning. Eventually the new mother learns to adjust to her partner, being sensitive to the needs of her young one; trying to improve the nature and quality of care, so as to ensure normal growth and development of the child. This dance can be swift and smooth, can be sensitive, sometimes awkward, challenging, it may be demanding and sometimes it may just not occur at all.

Sensitivity; a mother's ability to perceive her infant's signals accurately by considering the infant's point of view and respond to them promptly, contingently and appropriately – is evident in the way the mother interacts with her infant, ex: the tone of voice that she uses to call her child. Similarly, synchronicity is defined as a match between mother's and infant's activities that promotes positivity and mutuality in play. By synchronizing with the child's alert states, mothers structure playful interactions, regulate infant attention, facilitate and promote the development of verbal dialogue, and infant's capacity for self-regulation. Mutual synchrony is established when both mother as well as the infant try to focus their attention and stimulation in response to each other simultaneously.

Parent–infant synchrony evolves as a result of myriad parental, child and contextual processes including the mother's initial interactive style during the bonding stage, the parents' personality, the infant's physiological regulation, and the nature of the home environment[2,10]. The experience of synchrony, in turn, provides an important foundation for infant growth and shapes the child's cognitive, symbolic, self-regulatory, and social-emotional development[11].

However, though parenting skills are naturally evolved and passed on from one generation to the other, individual difference exit in parenting. Various factors such as age, education, the locality, occupation, age at marriage, the co-parenting, parenting stress, child as well as adult temperament all affect the way in which the infant is parented. Parenting is found to influence all the domains of infant development both quantitatively as well as qualitatively. Thus by studying the lacunas in parenting, interventions can be provided to mothers on sensitive parenting, so that the infants are out of risk.

Hence the present study was undertaken with an objective to understand the differences in the parenting quality of urban and rural mothers of infants in the age group six to thirty months. The maternal parenting quality was studied in terms of building relationships, promoting learning and supporting confidence among infants of six to thirty months.

## MATERIAL AND METHOD

**Research design:** A differential research design was used to compare the parenting quality of urban and rural mothers. Correlational research design was employed to understand the interrelationship between various factors such as child and maternal characteristics with the maternal parenting quality.

**Population and sample of the study:**

The target population of the study were the mother infant dyads with infants of age group 6-30 months residing in Dharwad taluk of Karnataka. In Dharwad taluk, out of 119 villages, four villages were randomly selected to form the rural sample. The urban sample

comprised of mother infant dyads with infants of age group 6-30 months from four randomly selected areas of Dharwad city.

The sample comprised of 96 rural and 80 urban mother infant dyads with infants in the age group of 6-30 months. From each of the three villages, 20 samples were randomly recruited for the study, whereas 36 mother infant dyads were recruited from one of the village (large village). Out of the 20 samples recruited for the study, five each were mother infant dyads with infants from the age group of 6-12 months, 13-18 months, 19-24 months and 25-30 months. However the gender of the infants was proportionally drawn from the available population in each village. Similarly the sample of mother-infant dyads was carried out in urban Dharwad. Thus, the sample for the study comprised of 176 mother infant dyads.

The data collection was through interviews of mothers on general information including socio-economic status and 12 – 15 minutes video recording of interactions (play and clean up activity if required) of mother-infant dyads in their natural settings (home) along with the observations of the mother infant interactions to study the parenting quality of mothers in rural and urban areas. The video recording was employed after building rapport with the mothers. The care was taken to ensure that infants were alert and mother – infant dyads were not conscious of the recording being conducted. A written consent/ oral consent were taken from the participants of the study and they were briefed about the study and were explained for the video clip being recorded. The video recording of mother infant dyad consisted of play interactions of the dyad in their natural setting with paly materials of their choice with which they usually play together such as ball, bat, dolls, kitchen set, picture books, charts or any other locally available material with which they were familiar, so that the naturalistic nature of interactions were preserved.

**Measures used:**

Keys to Interactive Parenting Scale (KIPS), a brief practical observational tool to assess the quality of parenting behaviour developed by Comfort and Gordon[8], was used to measure the quality of parenting of urban and rural mothers. KIPS measures 12 behaviours under three constructs:

**I. Building Relationships (**Sensitivity of Responses**,** Supports Emotion, Physical Interaction**,** Involvement in Child's Activities**,** Open to Child's Agenda**)**

**II. Promoting Learning (**Language Experiences**,** Reasonable Expectations, Adapts Strategies to child's interests and behaviours**,** Limits and consequences)

**III. Supports Confidence (**Supportive Directions**,** Encouragement**,** Promotes Exploration/ curiosity).

To ensure reliability, mother infant interactions were video tapped and scored later. Each of the 12 items is scored on 1 to 5 scale, with behaviour descriptions for 1, 3 and 5 ratings. It consists of 15- 20 minutes of observation of parent child playing together. The KIPS mean scores indicates the quality of parenting. Based on mean scores the quality of parenting is classified as follows:

| Parenting Quality | Mean Scores |
|---|---|
| Low quality | 1.0 to 2.90 |
| Moderate quality | 3.0 to 4.0 |
| High quality | 4.0 to 5.0 |

The reliability value of this scale was calculated based on the data gathered from pre-testing the scale on a sample of 25 infant mother dyads. Test- retest reliability was used and an online certification for using the same was obtained by undergoing an online examination with test scores compared to expert panel with 92% inter-rater reliability. The tool was found to be highly reliable with no significant difference in test retest scores.

**Socio – economic Scale** developed by Agarwal *et al.*[1], was used to measure socio - economic status of rural and urban families. The scale consisted of 22 items which considers caste, education, occupation, monthly per capita income from all sources, family possessions, type of house and location, essentials, vehicles, number of children, number of earning members in family, education of children, possession of agricultural and non-agricultural land along with animals and social status of family. Socio - economic status is categorized as provided by the author as below:

| Social status | Range of score |
|---|---|
| Upper high | ≥ 76 |
| High | 61–75 |
| Upper middle | 46–60 |
| Lower middle | 31–45 |
| Poor | 16–30 |
| Very poor or Below poverty line | ≤ 15 |

The Guttmann split-half value for this scale was 0.83.

## RESULTS AND DISCUSSION

The figure 1 describes the maternal parenting quality of urban and rural mothers. In urban Dharwad, 42 per cent of the mothers were found to have moderate parenting quality followed by 34 per cent with high parenting quality and 24 per cent with low parenting quality. In rural Dharwad, 44 per cent of the mothers were low on parenting quality followed by 36 per cent with moderate parenting quality and 20 per cent with high parenting quality. The chi-square analysis revealed highly significant association ($\chi^2$ = 8.69) between the levels of parenting quality and locality.

The comparison of mean scores (table 1) of parenting quality by locality showed highly significant mean differences (t=3.07, p≤ 0.01) between urban and rural mothers on their parenting quality with urban mothers high on parenting quality with the mean score of 42.79. Maher *et al.*[13], found that there were gaps in the knowledge about the differences in the quality of care for children in rural and urban area. In addition rural areas had a variety of resource limitations to inhibit the function of family, including parenting functions.

Chi-square analysis with respect to dimensions of parenting viz. building relationships, promoting learning and supporting confidence showed significant association between all the three dimensions of parenting and locality ($\chi^2$ = 6.87, 9.2, 9.47 respectively). The comparison of mean scores (table 2) also revealed highly significant mean differences with respect to all the three dimensions of parenting between urban and rural mothers, with urban mothers scoring high on parenting quality in all the three dimensions of parenting. This could be accounted to the maternal factors such as maternal age, education, age at marriage, socio-economic status of the urban and rural families. Coleman *et al.*[7] found that parents in rural and urban families view their parenting differently. Urban parents placed more emphasis on social development than rural parents did. Parents invest economic resources in children by purchasing the goods and services that promote child development and well-being[3].

The inter-correlation between the selected variables and maternal parenting quality among urban infants (table 3) shows that maternal parenting quality of urban infants was positively and significantly correlated with maternal age, maternal education, maternal age at marriage and socioeconomic status. It indicates increase in maternal parenting quality with the increase in maternal

age, maternal education, maternal age at marriage and socioeconomic status. Kim *et al.*[12] indicated that among teens, positive-interaction parenting significantly increased with very good/excellent health, and decreased with family functioning. Among advanced age mothers, positive-interaction parenting significantly increased with social support, and decreased with depression, very good/excellent health, and older children. Pomerleau *et al.*[14], indicated that parenthood at young ages is generally associated with less favorable maternal behavior. Chico[6]. findings were in line with the results which revealed that teenagers performed more poorly than adults on tasks of cognitive flexibility and were less sensitive in their infant interactions.

The maternal parenting quality of rural infants (table 4) was positively and significantly correlated with child gender, maternal education and caste indicating increase in maternal parenting quality with infants being females. It also indicated that, higher the maternal education and caste, higher is the maternal parenting quality among rural mothers. Davis-Kean[9] provided the evidence that education predicts greater parental engagement with children, particularly with respect to reading. Bornstein *et al.*[4]. also revealed that maternal education and intelligence correlate positively with Sensitivity. Whereas Bornstein *et al.*[5], confounded that maternal education influence is similar to maternal intelligence and family SES to Responsiveness. Sterling *et al.*[15], reported that parents use more autonomy-supportive strategies with boys than with girls and use more supportive speech with daughters than with their sons.

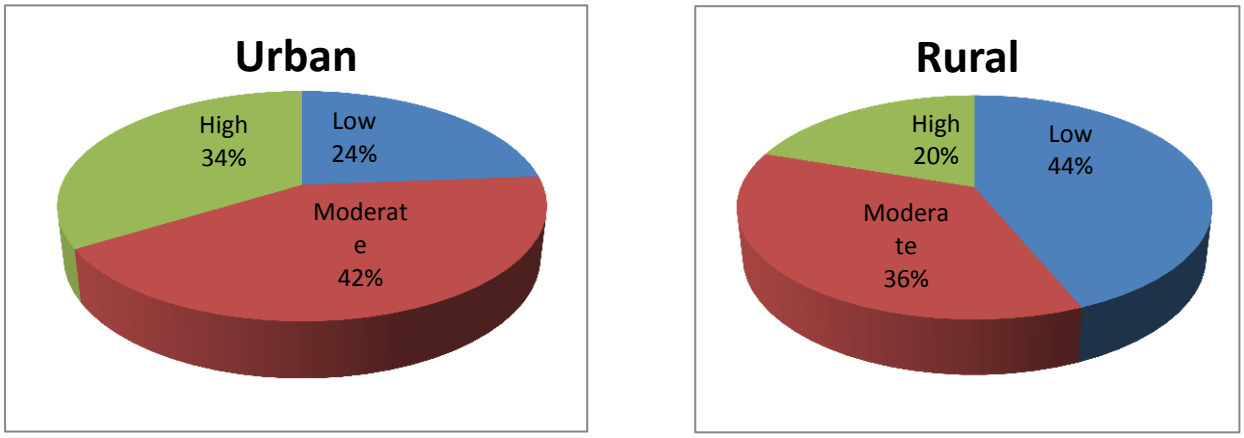


**Fig. 1: Maternal parenting quality of urban and rural mothers**

**Table 1: Comparison of mean scores of urban and rural infants by maternal parenting quality**

**N=176**

| Locality | Mean ± SD | t-value |
|---|---|---|
| **Urban n=80** | 42.79 ± 9.062 | 3.07** |
| **Rural n=96** | 38.50 ± 9.362 | |

** Significant at 1 per cent level of probability

**Table 2: Comparison of mean scores of urban and rural infants by dimensions of maternal parenting quality**

| Dimensions of parenting | Locality | Mean ± SD | t-value |
|---|---|---|---|
| **Building relationships** | **Urban (n=80)** | 19.04 ± 4.02 | 2.02* |
| | **Rural (n=96)** | 17.66 ± 4.86 | |
| **Promoting learning** | **Urban (n=80)** | 13.30 ± 3.14 | 2.96** |
| | **Rural (n=96)** | 11.84 ± 3.33 | |
| **Supporting confidence** | **Urban (n=80)** | 10.45 ± 2.58 | 3.20** |
| | **Rural (n=96)** | 9.22 ± 2.49 | |

*Significant at 5 per cent level of probability
** Significant at 1 per cent level of probability

**Table 3: Inter-correlation between selected variables and maternal parenting quality among urban infants**

| | Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Maternal parenting quality | 1 | | | | | | | | | | | | | | |
| 2 | Child age | -0.017 | 1 | | | | | | | | | | | | | |
| 3 | Child Gender | 0.093 | -0.177 | 1 | | | | | | | | | | | | |
| 4 | Child Ordinal position | -0.092 | -0.157 | 0.235* | 1 | | | | | | | | | | | |
| 5 | Number of Siblings | -0.10 | -0.152 | 0.260* | 0.613** | 1 | | | | | | | | | | |
| 6 | Maternal Age | 0.313** | 0.102 | 0.112 | 0.139 | 0.045 | 1 | | | | | | | | | |
| 7 | Maternal education | 0.28** | 0.057 | 0.064 | -0.407** | -0.36** | 0.324** | 1 | | | | | | | | |
| 8 | Maternal age at marriage | 0.349** | -0.024 | -0.131 | -0.402** | -0.254* | 0.433** | .625** | 1 | | | | | | | |
| 9 | Length of marriage | 0.024 | 0.057 | 0.197 | 0.624** | 0.439** | 0.483** | -0.243* | -0.36** | 1 | | | | | | |
| 10 | Family size | -0.036 | -0.114 | 0.207 | 0.141 | 0.527** | -0.126 | -0.172 | 0.001 | -0.073 | 1 | | | | | |
| 11 | Family type | 0.047 | -0.027 | 0.034 | -0.269* | -0.071 | -0.02 | 0.016 | 0.29** | -0.36** | 0.434** | 1 | | | | |
| 12 | Adult child ratio | -0.065 | 0.024 | 0.00 | 0.563** | 0.317** | 0.077 | -0.269* | -0.367** | 0.55** | -0.39** | -0.627** | 1 | | | |
| 13 | Caste | 0.173 | -0.151 | 0.088 | -0.116 | -0.13 | 0.171 | 0.219 | 0.365** | -0.187 | -0.125 | 0.144 | -0.128 | 1 | | |
| 14 | Support System | -0.002 | -0.127 | 0.059 | -0.332** | -0.105 | 0.214 | 0.308** | 0.412** | -0.179 | 0.33** | 0.337** | -0.406** | 0.32** | 1 | |
| 15 | SES | 0.240* | 0.022 | 0.019 | -0.372** | -.260* | 0.163 | 0.627** | 0.436** | -0.217 | -0.043 | 0.091 | -0.29** | 0.36** | 0.301** | 1 |

*Significant at 5 per cent level of probability
**Significant at 1 per cent level of probability

**Table 4: Inter-correlation between selected variables and maternal parenting quality among rural infants N=96**

| | Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Maternal Parenting | 1 | | | | | | | | | | | | | | |
| 2 | Child age | 0.06 | 1 | | | | | | | | | | | | | |
| 3 | Child gender | 0.220* | 0.133 | 1 | | | | | | | | | | | | |
| 4 | Child ordinal position | 0.041 | 0.016 | 0.350** | 1 | | | | | | | | | | | |
| 5 | Number of Siblings | -0.043 | 0.131 | 0.189 | 0.582** | 1 | | | | | | | | | | |
| 6 | Maternal Age | 0.075 | 0.280** | 0.143 | 0.234* | 0.141 | 1 | | | | | | | | | |
| 7 | Maternal education | 0.307** | -0.151 | -0.09 | -.219* | -0.183 | -0.077 | 1 | | | | | | | | |
| 8 | Maternal age at marriage | 0.039 | 0.087 | 0.124 | -0.066 | -0.102 | 0.383** | 0.232* | 1 | | | | | | | |
| 9 | Length of marriage | 0.154 | 0.168 | 0.228* | 0.577** | 0.368** | 0.479** | -0.183 | -0.149 | 1 | | | | | | |
| 10 | Family size | -0.037 | -0.14 | 0.146 | 0.105 | 0.470** | -0.06 | 0.087 | -0.129 | -0.079 | 1 | | | | | |
| 11 | Family type | -0.189 | -0.162 | 0.017 | -0.144 | 0.053 | -0.194 | 0.041 | -0.16 | -0.196 | .458** | 1 | | | | |
| 12 | Adult child ratio | 0.005 | 0.139 | -0.159 | 0.163 | 0.114 | 0.168 | -0.005 | 0.064 | 0.134 | -0.118 | -0.393** | 1 | | | |
| 13 | Caste | 0.201* | -0.092 | 0.166 | 0.081 | -0.083 | 0.288** | 0.095 | 0.178 | 0.127 | -0.044 | -0.112 | 0.127 | 1 | | |
| 14 | Support System | 0.011 | -0.125 | 0.134 | -0.065 | 0.028 | -0.004 | 0.271** | 0.008 | -0.102 | 0.426** | 0.304** | -0.312** | 0.071 | 1 | |
| 15 | SES | 0.024 | -0.204* | 0.008 | -0.01 | 0.073 | 0.015 | 0.373** | 0.082 | 0.001 | 0.277** | 0.081 | 0.119 | 0.161 | 0.236* | 1 |

*Significant at 5 per cent level of probability
**Significant at 1 per cent level of probability

## CONCLUSIONS

The maternal parenting quality differed with locality showing higher percent of rural mothers to be low on parenting quality with lower means on all the three dimensions of parenting viz. building relationships, promoting learning and supporting confidence. Urban maternal parenting quality was higher than rural maternal parenting quality. The urban maternal quality increased with the increase in maternal age, maternal education, maternal age at marriage and socioeconomic status whereas the rural maternal parenting quality increased with maternal education and upper caste. The gender of infants influenced the rural maternal parenting and was found to be favourable towards female infants. However the high percent of low maternal parenting quality especially in rural area calls for early intervention so as to reduce the risk in all the domains of development and to promote well-being of infants.

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