DOI: 10.4274/gulhane.galenos.2025.59023
Gulhane Med J 2025;67(2):77-84

From attachment to well-being: An examination of father-infant attachment, parental mental health, and relationship satisfaction

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Cite this article as: İpar N, Alper EN, Aydın NE, Aktaş Ö, Murzoğlu Kurt Ö, Baygül A. From attachment to well-being: an examination of father-infant attachment, parental mental health, and relationship satisfaction. Gulhane Med J. 2025;67(2):77-84.

Date submitted:
31.10.2024
Date accepted:
19.01.2025
Epub:
31.01.2025
Publication Date:
03.06.2025

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Keywords: Father-infant attachment, parental mental health, postpartum depression, relationship satisfaction, mother-infant attachment

ABSTRACT

Aims: Father-infant attachment impacts children's cognitive, emotional, and social development in the early childhood. The present study examined the relationship between father-infant attachment and parental mental health, including depression and anxiety, along with relationship satisfaction and mother-infant attachment.

Methods: This cross-sectional study included parents of children aged 3 to 12 months. We administered the Edinburgh Postnatal Depression Scale (EPDS), Beck Anxiety Inventory (BAI), Couple Satisfaction Index-4, Postnatal Paternal-Infant Attachment Questionnaire (PPAQ), and Maternal Attachment Inventory (MAI) to the participants.

Results: A total of 66 father-mother dyads from İstanbul, Türkiye, participated in the study. The median age was 31.0 (25.0-39.0) years in mothers, 33.0 (26.0-47.0) years in fathers, and 8.0 (3.0-12.0) months in infants. Mothers showed significantly higher EPDS and BAI scores than fathers [9.0 (1.0-20.0) vs. 4.0 (1.0-16.0), p<0.001]. We observed a weak but significant positive correlation between the MAI score and the "affection and pride" subscale of the PPAQ score (r=0.260, p=0.035). Paternal EPDS scores positively correlated with paternal BAI (r=0.599, p<0.001), maternal EPDS (r=0.279, p=0.023), and maternal BAI (r=0.283, p=0.021) scores. Relationship satisfaction showed a negative correlation with maternal and paternal depression (r=-0.357, p=0.003, and r=-0.541, p<0.001, respectively) and anxiety (r=-0.310, p=0.011 and r=-0.374, p=0.002, respectively) scores.

Conclusions: Although we observed no direct association between father-infant attachment and parental mental health or relationship satisfaction, the weak association between mother-infant and father-infant attachment highlights the need for family-centered support. Future research is warranted to explore the complex relationships in the postpartum period to develop effective strategies.

Introduction

Parenting can be highly stressful, particularly for first-time parents, impacting both mental and physical health in the postpartum period (1). The mental status of the father and the mother can be volatile in the postpartum period, which eventually impacts family dynamics (1). Therefore, postpartum depression can be present in both women and men (1,2). The rate of depression during pregnancy and up to one year after birth was reported as 23.8% for mothers and 10.4% for fathers (3).

Postpartum depression in the father can have detrimental effects on well-being and the growth and development of the newborn. The global incidence of paternal depression ranges from 1.2% to 26%, tends to increase between 3 and 6 months after birth, and occurs later than maternal postpartum depression (2). Along with fewer symptoms experienced by the fathers, the diagnosis of paternal depression is often difficult (1). Postpartum depression correlates with low levels of co-parenting and father-infant bonding (4).

Effective parenting involves active, equal participation from both parents. Good communication, skillful co-parenting, cooperation, and support create a nurturing environment for the child's growth and development (5). Moreover, a strong, healthy romantic relationship between partners enhances a supportive parenting environment (6).

The foundation of infants' emotional security, social relationships, and cognitive development heavily depends on parental involvement (7). Father-infant attachment impacts a child's cognitive, emotional, and social development in the early years. As the strength of father-infant attachment increases, breastfeeding rates improve, cognitive delays decrease, and rates of failure to thrive diminish (8). With socio-economic advancements and evolving cultural norms, there has been a notable rise in paternal engagement in childcare, prompting growing interest in fathers' perinatal mental health, father-infant attachment, and their impact on early child development (9).

Promoting strong family ties and ensuring that children grow to their full potential physically and psychosocially during their formative years depends on the analysis of interrelated elements. While much of the existing research on parenting has predominantly focused on maternal-infant attachment, the bond between fathers and their infants has not been studied as comprehensively (1,10). The existing body of literature from various countries highlights a correlation between impaired father-infant bonding and factors such as paternal postpartum depression (4), paternal anxiety, maternal stress (11), and partnership quality during both the antenatal and postnatal periods (12). However, the limited number of studies and the diverse backgrounds of study populations across various countries make it challenging to draw definitive conclusions or establish generalizations. Moreover, actors associated with father-infant attachment have not yet been examined in many populations. Therefore, this study aimed to investigate the relationship between father-infant attachment and parental mental health, including depression and anxiety, as well as relationship satisfaction and mother-infant attachment.

Methods

Participants

The cross-sectional study included parents of children aged 3 to 12 months who sought care at the Koç University, General Pediatrics Outpatient Clinic of İstanbul, between March and August 2024. The Koç University Institutional Review Board approved the study protocol (decision no: 2023.428.IRB3.181, date: 28/12/2023), which complied with the principles outlined in the Declaration of Helsinki. We excluded parents diagnosed with neurological or psychiatric disorders, as well as children with either neurological or psychiatric disorders or chronic diseases.

Participants were selected using a non-probability sampling method. The required minimum sample size was determined to be 63 parent pairs, utilizing a 20% margin of error. Parents visiting the outpatient clinic were informed about the study, and those who consented to participate received a link to an online questionnaire on Qualtrics, delivered via phone or email. Participants provided informed consent through the online survey platform before completing the questionnaire. No incentives were offered for participation.

Data collection

The demographic questionnaire included 20 questions about children's age, gender, delivery method, feeding method, parents' age, education level, and electronic device use. Parents were asked to complete several inventories: the Edinburgh Postnatal Depression Scale (EPDS), the Beck Anxiety Inventory (BAI), and the Couples Satisfaction Index-4 (CSI-4). Fathers were asked to complete the Postnatal Paternal-Infant Attachment Questionnaire (PPAQ), while mothers were asked to complete the Maternal Attachment Inventory (MAI).

Edinburgh Postnatal Depression Scale

The EPDS, developed by Cox et al. (13) in 1987, is a self-report tool designed to assess depression in mothers. It has demonstrated reliable sensitivity and specificity for detecting depressive symptoms. EPDS is a validated tool for use in screening fathers for depression (14). The Turkish version of EPDS was validated in Turkish women by Aydin et al. (15). The EPDS consists of ten items, each rated on a four-point Likert scale from 0 to 3, with a minimum score of 0 and a maximum score of 30. In women, a score of 13 or higher is considered indicative of a risk for postpartum depression. Edmondson et al. (16) found an optimal cut-off score of 10, with a specificity

of 78.2% and a sensitivity of 89.5%. In the present study, Cronbach's alpha for the EPDS was 0.855.

Beck Anxiety Inventory

The BAI was developed by Beck et al. (17) in 1988 to assess the severity of anxiety symptoms in the previous month. It's a self-report tool that evaluates 21 symptoms, each rated on a four-point Likert scale from 0 to 3. The total score ranges from 0 to 63, with higher scores indicating greater anxiety levels. The Turkish version of BAI was validated by Ulusoy and Hisli Şahin (18), and the scale was found to be reliable and valid. In the present study, Cronbach's alpha for the BAI was 0.919.

Couple Satisfaction Index-4

The CSI-4 is an effective tool for assessing communication and satisfaction levels within romantic relationships, providing valuable insights into family dynamics (19). The CSI-4 is a self-report questionnaire that rates overall relationship satisfaction, communication quality, and marital dynamics and shows valid variance and precision. It consists of 4 items, each rated on a 6-point Likert scale from 0 to 5, with higher scores indicating better marital quality. The Turkish version of the CSI-4 was validated by Özdemir and Sağkal (20). In the present study, Cronbach's alpha for the CSI was 0.929.

Postnatal Paternal-Infant Attachment Questionnaire

Condon et al. (21) developed the PPAQ, a 19-item self-report instrument, to assess father-infant attachment. Scores range from a minimum of 19 to a maximum of 95, with higher scores indicating stronger attachment between the father and the infant. The questionnaire also yields three factors in which "patience and tolerance", "pleasure in interaction" and "affection and pride" are tested to assess variance. Interpretation of scores is based on both global and subscale measures. The Turkish version of PPAQ was validated by Güleç and Kavlak (22). In the present study, Cronbach's alpha for the PPAQ was 0.762.

Maternal Attachment Inventory

The MAI developed by Müller in 1994 is used to assess the level of maternal-infant attachment. It is a 26-item self-report questionnaire employing a 4-point Likert scale (23). The answers ranged from "almost always" to "almost never", which are 4 and 1, respectively. The total score ranges from 26 to 104, with higher scores indicating higher maternal-infant attachment. The Turkish version of the MAI was validated previously (24). In the present study, Cronbach's alpha for the MAI was 0.867.

Statistical Analysis

Data were analyzed using SPSS Statistics for Windows (version 28.0; IBM Corp, Armonk, NY). The normality of the data was assessed using the Shapiro-Wilk test. The Mann-Whitney U test was used to compare non-normal distributions. Relationships among independent categorical variables were examined using Pearson's Chi-square test or, when appropriate, the Continuity Corrected Chi-square or Fisher's Exact test. Spearman correlation analysis was employed to assess relationships between non-normally distributed variables. $P<0.05$ was considered statistically significant.

Results

Socio-demographic characteristics

This study included 66 father-mother dyads from İstanbul, Türkiye. The median age of the mothers and fathers was 31.0 (25.0-39.0) and 33.0 (26.0-47.0) years, respectively. The median age of the infants was 8.0 (3.0-12.0) months. The infants' sex distribution was nearly equal, with 32 girls (48.5%) and 34 boys (51.5%). Table 1 shows the socio-demographic characteristics of the participants.

The median screen time for mothers was shorter than for fathers [3.0 (0.0-14.0) hours vs. 5.3 (2.0-16.0) hours, $p<0.001$]. The median PPAQ score was 76.1 (53.3-88.6) and the median MAI score was 99.0 (78.0-104.0). Table 2 shows the socio-demographic and attachment characteristics of the parents.

Assessment of parental mental health

The median EPDS score was 9.0 (1.0-20.0) for mothers and 4.0 (1.0-16.0) for fathers ($p<0.001$). The median BAI score was 8.5 (0.0-42.0) for mothers and 3.0 (0.0-47.0) for fathers ($p<0.001$). Mothers consistently had higher scores on EPDS

Table 1. Socio-demographic characteristics of the participants

Children's age, months, median (min-max)	8.0 (3.0-12.0)
Sex, n (%)	
Female	32 (48.5)
Male	34 (51.5)
Maternal age, years, median (min-max)	31.0 (25.0-39.0)
Paternal age, years, median (min-max)	33.0 (26.0-47.0)
Childbirth order, n (%)	
First	57 (86.4)
Second	9 (13.6)
Planned pregnancy, n (%)	
Yes	61 (92.4)
Method of delivery, n (%)	
Cesarean	55 (83.3)
Vaginal	11 (16.7)
Feeding method, n (%)	
Breastfeeding only	13 (19.7)
Breastfeeding+formula	5 (7.6)
Breastfeeding+complementary feeding	36 (54.5)
Formula+complementary feeding	12 (18.2)
Maternal working status, n (%)	
Yes	32 (48.5)
Paternal working status, n (%)	
Yes	66 (100)

Min-max: Minimum-maximum

across different severity levels, 7+, 9+, and 13+ than fathers (p<0.001, p<0.001, and p=0.028, respectively). Anxiety scores, as measured by the BAI, showed a similar pattern, with mothers exhibiting higher anxiety levels compared to their counterparts (p=0.002). In contrast, the CSI total score for relationship satisfaction was similar in both groups (p=0.331) (Table 3).

Correlation analyses

We observed a weak positive correlation between MAI and the "affection and pride" subscale of father-infant attachment (r=0.260, p=0.035).

Paternal EPDS scores positively correlated with paternal BAI, maternal EPDS, and maternal BAI (r=0.599, p<0.001; r=0.279, p= 0.023; and r=0.283, p=0.021, respectively). Paternal EPDS inversely correlated with paternal CSI (r=-0.541, p<0.001).

Paternal BAI scores positively correlated with maternal EPDS and maternal BAI (r=0.381, p=0.002 and r=0.258, p=0.037, respectively) and inversely correlated with paternal CSI (r=-0.374, p=0.002). Additionally, paternal CSI scores correlated positively with maternal CSI scores (r=0.295, p=0.016).

Maternal EPDS and BAI scores showed a strong positive correlation (r=0.628, p<0.001). Maternal CSI scores negatively correlated with maternal EPDS (r=-0.357, p=0.003) and maternal BAI (r=-0.310, p=0.011).

Maternal MAI scores inversely correlated with maternal EPDS and BAI scores (r=-0.257, p=0.023, and r=-0.319, p=0.009, respectively). Table 4 shows the correlations between parental attachment, depression, anxiety, and relationship satisfaction.

We observed a weak negative correlation between maternal EPDS and marital duration (r=-0.277, p=0.025). However, we observed no significant correlations between maternal EPDS, BAI, CSI, MAI, and children's age, maternal education level, screen time, or marital duration. Similarly, there were no significant correlations between paternal EPDS, BAI, CSI, PPAQ, and the child's age, paternal education level, screen time, or marital duration.

Table 2. Parents' socio-demographic and attachment characteristics

	Median (min-max)
Maternal education, years	16.0 (11.0-24.0)
Paternal education, years	16.0 (8.0-26.0)
Marital duration, years	4.0 (2.0-26.0)
Maternal screen time, hours	3.0 (0.0-14.0)
Paternal screen time, hours	5.3 (2.0-16.0)
Paternal PPAQ total score	76.1 (53.3-88.6)
PPAQ subscale 1	33.8 (16.0-40.0)
PPAQ subscale 2	27.6 (18.0-35.0)
PPAQ subscale 3	15.0 (9.6-15.0)
MAI total score	99.0 (78.0-104.0)

PPAQ: Postnatal Paternal-Infant Attachment Questionnaire, MAI: Maternal Attachment Inventory, Min-max: Minimum-maximum

Discussion

The present study evaluated father-infant attachment in the context of parental mental health, including depression, anxiety, relationship satisfaction, and mother-infant attachment. The findings revealed that mothers reported higher levels of depression and anxiety compared to fathers. No significant relationship was observed between father-infant attachment and parental mental health or relationship satisfaction. However, a weak association was found between mother-infant attachment and the "affection and pride" subscale of father-infant attachment. Additionally, mother-infant attachment was inversely correlated with maternal depression and anxiety.

Parental mental health

The postpartum period can be challenging for parents as they adapt to their evolving roles and the associated expectations, often leading to depression, irritability, and feelings of helplessness and hopelessness (1). In the present study, both EPDS scores, which assess depression, and BAI scores, which measure anxiety, were significantly higher in mothers than fathers. Notably, 18.2% of mothers and 4.5% of fathers had an EPDS score of 13 or higher, indicating a higher

Table 3. Parents' psychological characteristics

	Maternal (n=66)	Paternal (n=66)	p
EPDS total score, median (IQR)	9.0 (1.0-20.0)	4.0 (1.0-16.0)	**<0.001***
EPDS class, n (%)			
EPDS <7	16 (24.2)	43 (65.2)	**<0.001****
EPDS ≥7	50 (75.8)	23 (34.8)	
EPDS <9	29 (43.9)	51 (77.3)	**<0.001****
EPDS ≥9	37 (56.1)	15 (22.7)	
EPDS <13	54 (81.8)	63 (95.5)	**0.028****
EPDS ≥13	12 (18.2)	3 (4.5)	
BAI total score, median (min-max)	8.5 (0.0-42.0)	3.0 (0.0-47.0)	**<0.001***
BAI subscale, n (%)			
Minimal anxiety levels (0-7)	29 (43.9)	51 (77.3)	**0.002*****
Mild anxiety (8-15)	24 (36.4)	10 (15.2)	
Moderate anxiety (16-25)	8 (12.1)	3 (4.5)	
Severe anxiety (26-63)	5 (7.6)	2 (3.0)	
CSI total score, median (min-max)	17.0 (3.0-21.0)	17.0 (4.0-21.0)	0.331*

*Mann-Whitney U test, **Continuity correction, ***Chi-square tests.
EPDS: Edinburgh Postnatal Depression Scale, BAI: Beck Anxiety Inventory, CSI: Couple Satisfaction Index, IQR: Interquartile range, Min.-max.: Minimum-maximum

likelihood of clinical depression. Moderate to severe anxiety was observed in 19.7% of mothers compared to only 7.5% of fathers. Additionally, a strong correlation was found between depression and anxiety in both parents. Consistent with the present findings, a meta-analysis by Paulson and Bazemore (3) of 43 studies with a total of 28,004 participants found that the rate of depression during pregnancy and up to one year after delivery was 23.8% for mothers and 10.4% for fathers. Zheng et al. (25) assessed postpartum depression among Chinese mothers and fathers, finding that mothers exhibited higher levels of depression compared to fathers. In another work, a meta-analysis of 79 studies reported an estimated prevalence of depression among mothers between 21.8% and 37.9%, while anxiety levels ranged between 24.1% and 53.6%. In contrast, fathers exhibited an estimated prevalence of depression between 12.5% and 23.8%, with anxiety levels ranging from 8.1% to 36.3% (26). Another study reported that the maternal depression rate in high-income countries was 10-20%, while it was above 20% in low-and middle-income countries (27). The wide variation in prevalence numbers may result from assessments conducted at different time points, using different methods, and variations in population characteristics, including socio-economic backgrounds (3,27,28). Furthermore, the higher prevalence of depression in mothers compared to fathers in the present study, as well as in the literature, underscores the urgent need for targeted guidelines to support parental mental health, particularly for mothers, during this sensitive period. Disparities in maternal and paternal involvement in childcare may also contribute to maternal mental health outcomes. Future research should examine the impact of parental involvement, along with other contributing factors, to gain a comprehensive understanding of parental mental health.

Attachment

We observed a weak correlation between maternal attachment (measured by the MAI) and the “affection and pride” subscale of paternal attachment (measured by the PPAQ). Mother-infant attachment was negatively correlated with maternal depression and anxiety, whereas father-infant attachment did not show similar associations. We observed no significant relationships between maternal attachment, paternal attachment and relationship satisfaction. However, similar studies have demonstrated different results. Wells and Jeon (4) found that paternal postpartum depression was associated with lower levels of co-parenting and impaired father-infant bonding. Fathers experiencing depressive symptoms also reported higher levels of impaired attachment, feelings of rejection, anger, and anxiety related to caregiving. In addition, fathers who reported a higher quality of co-parenting experienced lower levels of impaired attachment, rejection, anger, and caregiving-related anxiety. A similar study conducted in Poland identified a strong correlation between impaired paternal bonding and factors such as paternal anxiety and maternal stress. Regression analysis revealed that two factors significantly predicted paternal bonding: Maternal-infant bonding and paternal stress (11). A review conducted in Türkiye suggested that paternal depression in the postnatal period negatively affects father-child attachment and may lead to behavioral problems, delayed

Table 4. Correlation between parental attachment, depression, anxiety and relationship satisfaction

	1	2	3	4	5	6	7	8	9	10	11	12
1. PPAQ score	1											
2. Patient and tolerance	**0.859****	1										
3. Pleasure in interaction	**0.753****	**0.399****	1									
4. Affection and pride	**0.416****	0.196	**0.253***	1								
5. MAI	0.132	0.046	0.112	**0.260***	1							
6. Paternal EPDS	0.005	-0.067	0.047	0.059	0.018	1						
7. Paternal BAI	-0.064	-0.152	0.081	-0.157	-0.140	**0.599****	1					
8. Paternal CSI	0.153	0.106	0.127	0.196	0.059	**-0.541****	**-0.374****	1				
9. Maternal EPDS	-0.096	-0.109	-0.082	-0.019	**-0.257***	**0.279***	**0.381****	-0.208	1			
10. Maternal BAI	-0.059	-0.096	-0.013	0.012	**-0.319****	**0.283***	**0.258***	-0.188	**0.628****	1		
11. Maternal CSI	0.058	0.103	0.074	0.016	0.154	-0.193	-0.020	**0.295***	**-0.357****	**-0.310***	1	
12. Child age	0.086	-0.037	0.121	0.141	0.047	0.103	0.111	-0,076	0.218	0.031	-0.140	1

*Spearman rho correlation coefficients, **Significant correlations at p<0.05, p<0.01 level, respectively.
PPAQ: Postnatal Paternal-Infant Attachment Questionnaire, MAI: Maternal Attachment Inventory, EPDS: Edinburgh Postnatal Depression Scale, BAI: Beck Anxiety Inventory, CSI: Couple Satisfaction Index

speech, hyperactivity, anxiety, and depression in the child (2). A meta-analysis of 28 articles showed a significant association between paternal depression and lower levels of positive and higher levels of negative parenting behaviors, with the positive behaviors "warmth, sensitivity, responsiveness" and negative behaviors as "hostility, intrusiveness, disengagement" (29). Knappe et al. (12) found that fathers with depressive disorders exhibited lower levels of antenatal attachment to their children. The study further emphasized that both antenatal and postnatal partnership quality, with antenatal father-to-child attachment, was positively associated with postnatal father-to-child attachment. We observed a weak association between maternal and paternal attachment to the infant. While maternal mental health was found to be associated with attachment, no association was observed between paternal mental health and attachment. The lack of association may be attributed to the small sample size or the mother's greater involvement in childcare. Future studies should involve a larger sample size across multiple centers focused on parent-infant attachment. Additionally, the present findings, along with previous research, highlight the need to focus on both mothers' and fathers' mental health to improve parent-child attachment and overall family well-being.

Relationship satisfaction

The present study found no significant difference in relationship satisfaction, as measured by the CSI, between mothers and fathers. However, a positive correlation was found between maternal and paternal relationship satisfaction, and it was found that relationship satisfaction negatively correlated with anxiety and depression for both mothers and fathers. This finding aligns with a cross-sectional study on maternal and paternal relationship dynamics, which demonstrates that dyadic satisfaction and co-parenting alliance significantly influence maternal mental health by reducing stress and depressive symptoms (30). Despite the differences between the questionnaires used, several previous studies reported similar associations. Keles et al. (6) observed that postpartum depression rates in mothers were higher in the presence of marital dissatisfaction compared to those without, underscoring the importance of relationship quality and co-parenting dynamics for maternal well-being. Not only does couple satisfaction univariately influence the mental state of parents but Knappe et al. (12) have also addressed the multivariate nature of this phenomenon. They found that partners experiencing depression exhibited reduced relationship satisfaction both prenatally and postpartum. Couples in which one partner experienced depression demonstrated lower overall satisfaction and displayed more dysfunctional interaction patterns, including poorer communication and problem-solving abilities, decreased social support, less self-disclosure and intimacy, increased negativity, and an intensified focus on physical and psychological concerns. The quality of parents' relationship and its influence on an infant's well-being are critical issues. Cox et al. (13) found that while marital satisfaction was high during pregnancy, it tended to decrease during the transition to parenthood and continued to decline throughout the child's first year. Thus, the observed natural decline in couple satisfaction during an infant's first year raises the question of how the quality of the parents' romantic relationship, as assessed by the CSI or similar questionnaires, affects the infant's well-being. Sarkadi et al. (31) suggested that positive parental bonding improves children's emotional regulation in later years. Cabrera et al. (32) further highlighted the benefits of parental engagement activities, play, and direct care, which reduce stress and improve overall mental wellness. The present findings suggest that depression and anxiety in both mothers and fathers directly impact relationship satisfaction, which may subsequently affect family dynamics and the child's well-being. Therefore, we recommend implementing interventions aimed at improving the mental health of both parents, with a particular focus on mothers. In addition, further research is needed to explore these relationships in more detail.

Several limitations of the study should be acknowledged. First, the voluntary nature of participation, along with the assessment of variables such as depression, anxiety, relationship satisfaction, and parent-child attachment through self-report questionnaires, may introduce bias, particularly because individuals experiencing depression and anxiety may have chosen not to participate. Furthermore, the study did not examine how maternal and paternal involvement in childcare may influence parental mental health, relationship satisfaction, and attachment. Finally, the cross-sectional design and relatively small sample size limit the ability to infer causal relationships between variables. The strength of the present study was the examination of the relationships between father-infant and mother-infant attachment, parental mental health, and relationship status among the same parental dyads.

Conclusion

The present study showed that depression and anxiety were associated in parents and were negatively associated with relationship satisfaction. The results highlight the impact of mental health on relationship quality. Although no direct association was found between father-infant attachment and either parental mental health or relationship satisfaction, the presence of a weak association between mother-infant and father-infant attachment highlights the importance of family-centered support. Future research is needed to further explore the complex interactions among parental mental health, attachment, and relationship satisfaction to improve family outcomes in the postpartum period.

Ethics

Ethics Committee Approval: The study was approved by the Koç University of Ethics Committee (decision no: 2023.428. IRB3.181, date: 28/12/2023).

Informed Consent: Consent form was filled out by all participants.

Footnotes

Authorship Contributions

Concept: N.İ., N.E.A., Design: N.İ., N.E.A., Data Collection or Processing: N.İ., Analysis or Interpretation: N.İ., A.B., Literature Search: N.İ., E.N.A., Ö.A., Ö.M.K., Writing: N.İ., E.N.A., Ö.A.

Conflict of Interest: One author of this article, Necla İpar, is a member of the editorial board of the Gülhane Medical Journal. However, she did not take part in any stage of the editorial decision of the manuscript. The other authors declared no conflict of interest.

Financial Disclosure: The authors declared that this study received no financial support.

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