



RESEARCH

Parental attitudes, child mental health problems and gender factor in the divorce process

Boşanma sürecinde ebeveyn tutumları, çocuk ruh sağlığı sorunları ve cinsiyet faktörü

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Abstract

Purpose: This study aimed to investigate the relationships between parental attitudes throughout and after the divorce process, child's gender, and mental health. Another objective of this study was to explore factors that may potentially affect the occurrence and progression of psychopathological issues in children whose parents have divorced.

Materials and Methods: The study involved 129 children and adolescents, ranging in age from 2 to 18 years, whose parents had officially divorced. Information was gathered using both a Sociodemographic Information Form and a Divorce Questionnaire. Psychiatric diagnoses were assessed based on the diagnostic criteria outlined in DSM-5.

Results: Majority of the sample (88.4%) exhibited one or more psychopathologies. The most prevalent psychopathology was attention deficit hyperactivity disorder (57.4%). The sex of the child did not have a significant impact on the presence of psychopathology. Logistic regression analysis revealed that the age of the child at the time of divorce were associated with an elevated risk of psychopathology in the child, while being female decreased the risk of psychopathology.

Conclusion: Divorce can be a mentally challenging life event for parents and children. During this process, it can be beneficial to seek professional support for the child's mental health to proactively identify and address situations that could potentially impact the child's mental well-being.

Keywords: Divorce, parent, gender, psychopathology

Öz

Amaç: Bu çalışmada boşanma süreci ve sonrasında ebeveyn tutumları ile çocuğun cinsiyeti ve ruh sağlığı arasındaki ilişkilerin incelenmesi amaçlanmıştır. Ebeveynleri boşanan çocuklarda psikopatoloji varlığı ve gelişimini etkileme potansiyeli olan faktörlerin incelenmesi ise çalışmanın bir diğer amacıdır.

Gereç ve Yöntem: Yaşları 2-18 arasında olan ebeveynleri resmi olarak boşanmış 129 çocuk ve ergen dahil edilmiştir. Sosyodemografik form ve boşanma anket formu ile veriler toplanmıştır. Psikiyatrik tanıları DSM-5 tanı kriterlerine göre değerlendirilmiştir.

Bulgular: Örneklemde çoğunda (%88,4) en az bir ya da daha fazla psikopatoloji bulunduğu saptanmıştır. En sık saptanan psikopatoloji, dikkat eksikliği hiperaktivite bozukluğu (%57,4) idi. Çocuklarda psikopatoloji varlığının çocuğun cinsiyetinden etkilenmediği görülmüştür. Çocuklarda psikopatolojinin olası yordayıcılarını belirleyebilmek adına yapılan lojistik regresyon analizinde boşanma sırasında çocuğun yaşının büyük olmasının artan psikopatoloji riskiyle ilişkili olduğu, kız cinsiyetten olmanın ise psikopatoloji riskini azalttığı bulunmuştur.

Sonuç: Boşanma hem ebeveynler hem de çocuklar için ruhsal olarak zorlayıcı bir yaşam olayı olabilir. Bu süreçte çocuğun ruh sağlığı için profesyonel destek alınması, çocuğun ruh sağlığı için risk yaratabilecek durumların önceden tespit edilerek gerekli önlemlerin alınması fayda sağlayacaktır.

Anahtar kelimeler: Boşanma, ebeveyn, cinsiyet, psikopatoloji

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INTRODUCTION

Divorce is a situation and/or process that has the potential to impact nearly every facet of family life, encompassing emotional, social, structural, and material aspects^{1,2}. This life event is not merely a straightforward separation of spouses; it also influences the family structure, which serves as the core of society and has implications for the children who represent the future of that society. Family institutions play a pivotal role in promoting the healthy development of children who are key participants in various aspects of the divorce process². In this context, a functional family environment is anticipated to provide safety and predictability in addition to fulfilling the child's fundamental requirements for love, affection, and care. Divorce, characterized by its unexpected and stress-inducing nature, poses a significant risk that can have adverse effects on the mental health of both parents, with children being particularly vulnerable in this regard^{2,3}.

In recent years, there has been a notable rise in the crude divorce rate in both Eastern and Western countries, although some nations have experienced contrasting trends with decreasing divorce rates. In a study examining 20 years of data from Taiwan, South Korea, and the United Kingdom, it was noted that the reduction in divorce rates in these nations was primarily attributed not to a decline in divorces themselves, but rather to a decrease in the proportion of married couples within the population⁴. In Türkiye, based on data from the Turkish Statistical Institute (TurkStat) for 2019, marriage rates saw a decrease of 2.3% compared to the preceding year, while divorce rates increased by 8.0%, resulting in a crude divorce rate of 1.88 per thousand. Additionally, it has been noted that the crude divorce rate in Türkiye surged at a rate three times higher than the trends observed over the past two decades⁵. Data from 2017 indicate that the crude divorce rate among European Union (EU) member countries stood at 1.9 per thousand, whereas in Türkiye, during the same year, this rate was 1.6 per thousand. In 2019, the rate in Türkiye increased to 1.88 per thousand, bringing the crude divorce rate closer to the rates observed in EU countries^{5,6}. In 2014, as part of the "Research on Reasons for Divorce in Türkiye," a prediction model was developed using advanced statistical analysis methods. According to this model, it was forecasted that the crude divorce rate in Türkiye would reach

1.93 per thousand by the year 2023⁷. In 2019, based on the outcomes of completed divorce cases, a total of 155,047 couples divorced in Türkiye, resulting in 139,660 children affected by custody arrangements⁵. Considering these statistics, it is evident that divorce in our country has evolved into an increasingly significant social issue, potentially posing risks to the mental wellbeing of children and adolescents.

For children, divorce introduces a multitude of potential issues secondary to it, including adjustments to a changed family structure and living arrangement, feelings of being different from their peers, experiencing discomfort, weakened parental relationships, heightened financial challenges, ongoing relationship issues between separated parents, and the complexities of remarriage⁸⁻¹⁰. Family instability can have detrimental effects on children's social, emotional, and cognitive development¹¹. While it may not be realistic to assert that every divorce experience will uniformly have negative effects on the development and mental wellbeing of children, it has been documented that the children of divorced parents face an elevated risk of experiencing issues such as anxiety, depression, behavioral disorders, diminished academic performance, and substance abuse¹²⁻¹⁴. In these studies, divorce was also linked to increased occurrences of mental problems and interpersonal relationship issues that individuals' lives in adulthood. One study found that children of emotionally detached (divorced) parents exhibited more frequent and severe symptoms of depression, anxiety, stress, and aggression than children of legally divorced parents¹⁵. This implies that any form of separation/detachment between parents can have significant repercussions on their children's psychological well-being.

As mentioned, the literature has extensively explored the connection between divorce and mental health issues in children and adolescents. However, studies examining the influence of the child's gender on the parents' divorce process and its subsequent consequences are scarce. Given that gender roles and stereotypes are pervasive factors influencing various aspects of our lives, including family dynamics and structure¹⁶, it stands to reason that the gender of the child could indeed have a relationship between parents' navigating the divorce process and the mental well-being of their children. Our hypothesis posits that the child's gender has an impact on parental attitudes throughout the divorce process,

leading to differences in the child's mental health outcomes. In this context, one of the objectives of this study was to investigate the relationship between a child's gender, parental attitudes, and the child's ongoing mental well-being throughout and after the divorce process. Another goal was to explore the predictors related to the occurrence and progression of psychopathology in children whose parents were divorced.

MATERIALS AND METHODS

Sample

This clinic based, cross-sectional study included 129 children and adolescents, aged 2-18 years, whose parents were officially divorced. These participants sought assistance at the Mersin University Faculty of Medicine, Child and Adolescent Mental Health and Diseases Outpatient Clinic between January 1, 2019, and May 1, 2021. The children whose parents are not divorced, the children under two years old ($n=8$), the children with moderate and severe intellectual disability ($n=12$), vision and hearing loss ($n=1$) whom we can not communicate adequately with the psychiatric examination, patients diagnosed with schizophrenia and bipolar disorder ($n=0$) and the patients with missing data ($n=2$) were excluded. This study center is a university hospital and a center where research assistant doctors are trained and specialized, and where patients are cared for is provided together with research assistant doctors under the supervision of a professor and an assistant professor (currently an associate professor). Two fourth-year research assistant doctors completed the sociodemographic information form and divorce questionnaire, while the psychiatric evaluation and diagnosis were conducted by an assistant professor doctor (GGA).

Data collection tools

Sociodemographic Information Form

In this study, characteristics such as age, gender, educational level, educational status, self-report based psychiatric conditions of the parents and occupation of the parents of children whose parents had divorced were assessed using a sociodemographic information form developed by the researchers.

Divorce Questionnaire

In this study, several crucial variables that could influence a child's lifestyle during and after the

divorce process, which may be linked to parental attitudes, were surveyed using a questionnaire designed by the researchers. The questionnaire included questions regarding situational variables such as the child's age at the time of divorce, who conveyed the divorce decision to the child and whether it was a joint decision by the parents, the child's living arrangement after divorce, the child's contact with the other parent, the parents' adherence to court orders following the divorce, their marital status after divorce, and whether they had additional children after divorce.

Procedure

Ethical approval for the study was granted by the Mersin University Clinical Research Ethics Committee (reference numbers 2021/469 and 2018/306, respectively) on June 23, 2021.

The sample comprised individuals who sought assistance at the outpatient clinic where it was learned that their parents had divorced during their visit. These individuals willingly agreed to participate in this study. The children were diagnosed with mental disorders by a qualified child psychiatrist (assistant professor doctor, GGA) following the diagnostic criteria outlined in the DSM-5. Following the evaluation interview, both participants and their parents were provided with information regarding the study's objectives. Subsequently, all literate children and their parents were presented with an Informed Consent Form and were asked to read it. Informed consent was obtained from the parents of the children included in the study, and the children provided verbal/written assent. Following this, the requests in the Sociodemographic Information Form and the Divorce Questionnaire were completed by an expert based on the information provided by the parents.

Statistical analysis

The data were analyzed using IBM SPSS (Statistical Package for Social Sciences) version 20.0, (IBM Inc., Armonk, NY). A priori power analysis for chi-square test revealed that detecting a difference of medium effect size ($\Phi=0.3$) between genders at an error rate of 0.05, and 95.0 % power would require 145 participants¹⁷. Within the study period, 129 participants were recruited, which led to 93.0 % power.

To establish descriptive statistics, frequencies and

percentages were used for categorical variables, while the mean and standard deviation values were calculated for continuous variables. Prior to the analysis, missing data were excluded, and valid percentages were documented. To compare numerical variables between the sons and daughters of divorced couples, the t-test for independent groups was used, while the chi-squared test was employed to compare categorical data. Ordinal data between the groups were compared using the Mann-Whitney U test. When necessary, the likelihood ratio, linear-by-linear association, and Yates' corrections were applied to the chi-square test. Significant findings for numerical data were reported with 95% confidence intervals, and if significance was observed in the chi-square test, effect sizes were indicated using Phi or Cramer's V values. Predictors of psychopathology in children whose parents had divorced were assessed by logistic regression analysis. Predictors were selected according to bivariate comparisons among offspring with and without psychopathology. They were the gender of the child, the presence of psychopathology in the mother and

father, the age of the child at the time of divorce, and whether the parents adhered to court orders after the divorce or remarried. Enter method was used in analysis. P was determined using two-tailed tests ($P < 0.05$).

RESULTS

The study sample consisted mostly of male participants ($n = 80.62.0\%$). It was observed that although girls (10.9 ± 4.2 years) tended to be older than boys (9.5 ± 3.2 years), this difference did not reach statistical significance ($t [83.0] = -1.9, p = 0.06, 95\% \text{ CI} = -2.7 \text{ to } 0.0$). In the results of comparative analyses of other sociodemographic variables, it was discovered that there were no gender differences in terms of the educational levels and occupations of mothers and fathers. However, it is noteworthy that boys from divorced families were notably more likely to receive primary education, whereas girls were significantly more likely to receive high school education (Table 1).

Table 1. Sociodemographic characteristics of children from divorced families and their families in relation to the child's gender

Variables		Male (n = 80)	Female (n = 49)	Total (n = 129)		
		\bar{x} (SS)			P*	t
Age		9.5 (3.2)	10.9 (4.2)	10.0 (3.7)	0.06	-1.9
		N (%)			P*	E. S.
Level of education	None	2 (2.5)	2 (4.1)	4 (3.1)	0.049	0.29
	Preschool	8 (10.0)	5 (10.2)	13 (10.1)		
	Primary school	62 (77.5)	28 (47.3)	90 (69.8)		
	High school	7 (8.8)	14 (28.6)	21 (16.3)		
	Special education	1 (1.3)	0 (0.0)	1 (0.8)		
Mother's education	Primary school	27 (33.8)	16 (32.6)	43 (33.3)	0.479	0.18
	High school	25 (31.3)	23 (46.9)	48 (37.2)		
	College and higher	28 (35.0)	10 (20.4)	38 (29.5)		
Father's education	Primary school	19 (24.0)	18 (36.7)	37 (28.9)	0.283	0.18
	High school	29 (36.7)	11 (22.4)	40 (31.3)		
	College and higher	31 (39.2)	20 (40.8)	51 (39.8)		
Mother's occupation	Housewife	20 (25.0)	15 (30.6)	35 (27.1)	0.886	0.07
	Worker	14 (17.5)	7 (14.3)	21 (16.3)		
	Civil servant/manager	27 (33.8)	15 (30.6)	42 (32.6)		
	Freelancer	19 (23.8)	12 (24.5)	31 (24.0)		
Father's occupation	Unemployed	7 (8.8)	6 (12.2)	13 (10.1)	0.869	0.08
	Worker	11 (13.8)	5 (10.2)	16 (12.4)		
	Civil servant/manager	20 (25.0)	13 (26.5)	33 (25.6)		
	Freelancer	42 (52.5)	25 (51.0)	67 (51.9)		

*Chi-squared test (with the application of linear-by-linear association and likelihood ratio corrections as necessary); E.S.: Effect Size (Phi or Cramer's V)

The initial findings of the study, which aimed to explore potential associations between important variables related to the divorce process and its aftermath and child gender, revealed that, on average, parents divorced when their children were 5.5 years old (± 3.8), and that there were no statistically significant differences in the ages of male (5.1 ± 3.4) and female (6.1 ± 4.4) children at the time of divorce ($t [81.6] = -1.4, p = 0.165, 95\% \text{ CI} = -2.5 \text{ to } 0.4$). Furthermore, the study revealed that thirty-one children (24.0%, $n = 18, 58.1\%$ boys) had a stepmother, while 18 children (14.2%, $n = 12, 66.7\%$ boys) had a stepfather, and that the child’s gender did

not have a significant impact on the presence of either a stepmother ($\chi^2 = 0.1, p = 0.788, \text{ Yates}^*$) or a stepfather ($\chi^2 = 0.1, p = 0.816, \text{ Yates}^*$). However, the study found that several variables related to the divorce decision (e.g., who informed the child about the decision and whether it was jointly made by the parents) and other circumstances that could impact the child’s post-divorce lifestyle (including living arrangements, parents’ adherence to court decisions, contact with the other parent, parents’ new marital status, and the presence of stepsiblings after the divorce) did not exhibit any significant differences based on the gender of the child (Table 2).

Table 2. The association between certain situational variables concerning the divorce process and its aftermath and the gender of the child

		Male (n = 80)	Female (n = 49)	Total (n = 129)		
		\bar{x} (SS)			P*	N%
Child’s age at the time of parents’ divorce		5.1 (3.4)	6.1 (4.4)	5.5 (3.8)	0.165	-1.4
		N (%)			P*	E. S.
Variables associated with the decision to divorce						
Communication of the decision	Mother	39 (48.8)	31 (63.3)	70 (54.3)	0.213	0.20
	Father	4 (5.0)	4 (8.2)	8 (6.2)		
	Both parents	26 (32.5)	8 (16.3)	34 (26.4)		
	Other	11 (13.8)	6 (12.2)	17 (13.2)		
Whether the decision was mutually agreed upon		64 (80.0)	38 (77.6)	102 (79.1)	0.913	0.03
Circumstances pertaining to post-divorce processes						
Person(s) the child resides with	Mother	74 (92.5)	40 (81.6)	114 (88.4)	0.176	0.17
	Father	5 (6.3)	8 (16.3)	13 (10.1)		
	MGM/PGM	1 (1.3)	1 (2.0)	2 (1.6)		
Parents’ adherence to the court order		21 (26.6)	10 (20.4)	31 (24.2)	0.562	0.07
Child’s allowed contact with the other parent		67 (83.8)	40 (81.6)	107 (82.9)	0.945	0.03
Subsequent marriages of the parents		30 (37.5)	18 (36.7)	48 (37.2)	1.00	0.01
Presence of a stepmother/stepfather	Stepmother	18 (58.1)	13 (41.9)	31 (24)	0.788	0.1
	Stepfather	12 (66.7)	6 (33.3)	18 (14.2)	0.816	0.1
Existence of a half-sibling from a subsequent marriage		12 (15.0)	9 (18.4)	21 (16.3)	0.797	0.04

*Chi-squared test (with the application of Yates and likelihood ratio corrections); E.S.: Effect Size (Phi or Cramer’s V); MGM/PGM: Maternal grandmother/Paternal grandmother

In this study, it was observed that most of the children ($n = 114, 88.4\%$; $n = 74, 57.4\%$ male) exhibited at least one psychopathology following psychological evaluation. A significant proportion of both boys ($n = 60, 75.0\%$) and girls ($n = 29, 59.2\%$) met the criteria for psychiatric diagnosis. The most prevalent psychopathologies identified in children were attention deficit hyperactivity disorder (ADHD) ($n = 74, 57.4\%$), oppositional defiant disorder/conduct disorder (ODD/CD) ($n = 20,$

15.5%), obsessive-compulsive disorder (OCD) and related disorders ($n = 7, 5.4\%$), and anxiety disorders ($n = 7, 5.4\%$). Conversely, it was noted that 16 mothers (12.8%) and 14 fathers (11.9%) exhibited self-report psychiatric conditions necessitating treatment when questioned about potential psychiatric issues during the assessment of divorced parents. Among mothers, the most prevalent diagnosis was major depressive disorder (MDD) ($n =$

10, 62.5%), while fathers most commonly had OCD (n = 4, 28.6%) (See Table 3).

Based on the findings concerning the potential influence of sex on the presence, number, and types of psychiatric diagnoses in children, it was determined that the presence of psychopathology during the evaluation was not significantly influenced

by the child's sex ($\chi^2 = 2.5$, $p = 0.113$, Yates, Phi = 0.17). There was no significant disparity between the median number of diagnoses for boys and girls (Mann-Whitney U test, $Z = -0.5$, $p = 0.638$). Among the specific psychopathologies, only ADHD was significantly more prevalent in boys than in girls ($\chi^2 = 4.2$, $p = 0.04$, Yates', Phi = 0.20) (Table 3).

Table 3. The association between the child's gender and the presence, quantity, and types of psychiatric diagnoses in children of divorced parents

N (%)	Male (n = 80)	Female (n = 49)	Total (n = 129)		
	N (%)			P*	E. S.
Psychiatric diagnosis (at least 1 or more)	74 (57.4)	40 (43.6)	114 (88.4)	0.113	0.17
Type of psychiatric diagnosis					
ADHD	52 (65.0)	22 (44.9)	74 (57.4)	0.04	0.20
ODD/CD	12 (15.0)	8 (16.3)	20 (15.5)	0.84	-
OCD and related disorders	4 (5.0)	3 (6.1)	7 (5.4)	0.08	-
Anxiety disorders	3 (3.8)	4 (8.2)	7 (5.4)	0.28	-
Trauma and stressor-related disorders	2 (2.5)	4 (8.2)	6 (4.7)	0.14	-
MDD	0 (0.0)	5 (10.2)	5 (3.9)	-	-
Other	15 (19.0)	7 (14.1)	22 (17.3)	0.51	-

*Chi-squared test (including Fisher's exact test); E.S.: Effect Size (Phi), ADHD: attention deficit/hyperactivity disorder, ODD: oppositional defiant disorder, CD: conduct disorder, OCD: obsessive compulsive disorder, MDD: major depressive disorder

Finally, logistic regression analysis was used to ascertain the potential predictors of psychopathology in children whose parents had divorced. The analysis included predictor variables, such as the gender of the child, the presence of psychopathology in the mother and father, the age of the child at the time of divorce, and whether the parents adhered to court orders after the divorce or remarried. The model was found to be suitable for the provided data (Hosmer-Lemeshow $\chi^2 (8) = 4.3$, $p = 0.825$) and accounted for 22.6% of the variation in psychopathology among children (Nagelkerke $R^2 = 0.226$). Moreover, the model

correctly classified 6.7% (n = 1) of children without psychopathology and 99.1% (n = 113) of children with psychopathology (mean 88.2 %, AUC = 0,769, Sensitivity = 0.991, Specificity = 0.067) without multicollinearity (Variance Inflation Factor between 1.0-1.1).

The analysis revealed that the child's age at the time of divorce was associated with an elevated risk of psychopathology, whereas being female was associated with a reduced risk of psychopathology (Table 4).

Table 4. Predictors of psychiatric disorders in children of divorced parents

Predictor variable	O. R.	P*	95% Confidence interval	VIF
Child's age at the time of divorce	1.2	0.035	1.0 - 1.4	1.1
Gender (Female)	0.2	0.022	0.1- 0.8	1.1
Psychopathology in the mother	3.1	0.326	0.3- 28.5	1.0
Psychopathology in the father	2.6	0.403	0.3 - 25.4	1.1
Parents' adherence to the court order	1.0	0.968	0.2 - 4.2	1.1
Presence of stepfather	2.1	0.990	0.0- ∞	1.1
Presence of stepmother	3.9	0.124	0.7-22.3	1.0

O. R.: Odds Ratio, VIF: Variance Inflation Factor

DISCUSSION

The findings of this cross-sectional study indicated that gender did not exert a significant influence on parental attitudes in various critical situations related to the divorce process and its consequences and that boys from divorced families were significantly more likely to be diagnosed with ADHD than girls. The study also found that being older at the time of divorce heightened the risk of psychopathology in the child and that being female appeared to have a protective effect against the development of psychopathological conditions.

What influence does the child's gender and age have on the parents' decision to divorce? In addition to certain research results suggesting that the gender of the child does not have a significant impact on the likelihood of divorce¹⁸, a comprehensive review of the literature highlights a more prevalent trend of consistent findings, which indicates that male children often play a protective role in reducing the likelihood of marriage ending in divorce¹⁹⁻²¹. For instance, in a study investigating the association between child gender and marital stability, it was observed that having a male child was linked to a reduced divorce rate²⁰. In another study, it was reported that couples with male children tended to lead a more stable and traditional marital life than those with female children. Additionally, they placed higher value on maintaining marriage rather than opting for divorce¹⁹. On the other hand, it can be noted that in the literature, findings indicating that the protective role of children in preserving marriages diminishes with increasing age are also more commonly observed. In one study, it was discovered that as a child's age increased, it was linked to a higher risk of divorce in couples, whereas a younger age of the child was associated with a decrease in divorce rates²¹. Another study reported that when the child's age reached 13 years or older, the risk of divorce became comparable to that of couples who had never had children, and this risk was relatively high²². Another study that yielded results indicating similar age-related patterns suggested that this trend might indicate the possibility that parents with young children tend to delay divorce²³. In our study, it was noted that, on average, children were 5.5 years old when their parents divorced, and the age difference between genders was relatively small and similar. In contrast to the typical findings in the literature, the gender of children, along with their relatively young age, did not exert significant effects on parents'

decisions to divorce. In other words, parents appear to proceed with divorce irrespective of whether their children are girls, boys, or younger. This can be viewed as a noteworthy and significant contribution to the literature, highlighting a shift away from traditional tendencies based on cultural attitudes. This suggests that waiting for children to grow up or leave home before divorce, or mothers enduring marital problems to prevent the child from being deprived of the father, is changing regardless of the child's gender. On the other hand, these findings also indicate that certain factors associated with socioeconomic advancement, which are linked to these attitudinal shifts, might play a more prominent role in influencing couples to divorce more frequently and readily than the gender and age of their children. Indeed, recent studies conducted in Türkiye regarding the causes of divorce have often underscored that the rising divorce rates today primarily result from factors such as the increased engagement of women in the workforce, higher levels of education among individuals, and the fact that legal divorce has become more accessible for married individuals than for the past²⁴⁻²⁶.

However, a notable and significant aspect of the descriptive findings from our questionnaire-based study was that mothers played a more prominent role than fathers in most matters both during and after the divorce process. For instance, 54.3% of children were notified of their mothers' divorce decisions, whereas only 6.2% were informed by their fathers. Furthermore, following divorce, 88.4% of the children resided with their mothers, whereas 10.1% lived with their fathers. These circumstances could be linked to the children in the sample being closer to their mothers and requiring more maternal care, especially given their younger age at divorce. However, they may also be associated with societal expectations regarding gender roles²⁷.

Research in the literature suggests that couples without children tend to experience higher divorce rates compared to couples with children^{26,28,29}. Furthermore, having children is reported more frequently and with higher priority as one of the most significant obstacles to divorce by married mothers and fathers with children³⁰. On the other hand, having a child in common can also pose challenges for parents in terms of both remarriage and divorce. After divorce, it is more common for children to reside with their mothers, and the prospect of remarriage can present a more complex situation for

mothers³¹. Furthermore, in clinical practice, it is more often heard, especially in our society and from mothers, statements such as, “I endure the challenges of marriage for the sake of my children.” It can be argued that certain descriptive statistics from our existing data align with these observations. Indeed, based on our findings, 37.1% of parents chose to remarry after divorce. Of the children, 14.2% had a stepfather and 24.0% had a stepmother.

In contrast, in our study, the decision to divorce was made jointly by parents in most cases (79.1%). This factor could potentially serve as a causal and logical explanation for another finding in our study, where 82.9% of the cases reported no issues regarding the children’s contact with the other parent after divorce. Furthermore, this situation can be interpreted as an indication of the presence of supportive attitudes in parents’ communication with their children, even though they mutually agreed to divorce. However, another finding indicated that parents’ adherence to court orders after divorce was relatively low (24.2%). It appears probable that this is attributed to the challenge of sustaining the child-parent relationship after divorce, solely through adherence to court-imposed regulations.

In our study, we also explored the potential influence of gender on current mental health issues experienced by children whose parents were divorced. A 2019 meta-analysis, which analyzed the long-term effects of divorce on children’s mental health across 54 studies and 506,299 participants, revealed an increase in issues such as depression, anxiety, suicide, alcohol, and drug abuse among children following divorce³². Furthermore, studies indicate that both boys and girls from divorced families tend to experience more depression and behavioral disorders than children from non-divorced families³³⁻³⁵. In our study, a significant majority of participants (88.4%) exhibited at least one psychopathology following psychiatric evaluation. Furthermore, noteworthy rates of mental issues were identified in both sexes, with the most prevalent diagnoses being ADHD (57.4%), ODD/CD (15.5%), and obsessive-compulsive and related disorders (5.4%), respectively.

When reviewing the literature, it becomes apparent that the psychological consequences of divorce can vary among children based on gender. While certain studies suggest that the adverse effects of divorce are more prevalent and pronounced in boys³⁶ and others in girls^{13,37}, there are also research findings indicating

that there are no significant gender differences in this regard^{38,39}. In our study, it was concluded that sex was not a factor that influenced the presence and (total) number of psychiatric diagnoses in children. Moreover, it was observed that sex had a notable impact only on ADHD among the psychiatric diagnoses observed in children; this disorder was significantly more prevalent in boys than in girls. As mentioned, while the results on this topic are not uniformly consistent, it can be stated that this finding aligns with the existing literature, which suggests that externalization problems, particularly those related to ADHD, tend to be more prevalent in boys from divorced families^{33,40,41}.

In this study, we examined potential predictors that might contribute to the emergence of psychopathological issues in children following their parents’ divorce. Based on our analysis, we found that the child’s age at the time of divorce was associated with an increased likelihood of psychopathology in the child. This study revealed that being female had a protective effect against the development of psychopathological issues. Existing literature presents varying findings and perspectives regarding the impact of a child’s age at the time of their parents’ divorce on their overall well-being and mental health outcomes. In a comprehensive study that encompassed 8984 participants, it was observed that the level of subjective well-being in adolescents decreased as they aged. However, this study found that the current age of adolescents at the time of their parents’ divorce did not alter the impact of divorce on them. The same study also underscored that there was no specific age period following divorce during which young individuals would be particularly sensitive to the long-term adverse consequences of divorce⁴⁰. In their study, Yulaf et al. concluded that older age and residing with the mother played protective roles in reducing the likelihood of observing mental issues in children and adolescents following a divorce⁴¹. Another study reported that younger children might experience a higher prevalence of mental problems than older children in the aftermath of their parents’ divorce. The study highlighted that children at a relatively younger age might struggle to adequately comprehend the primary reasons behind divorce. As a result, they may also be more prone to blame themselves and experience feelings of abandonment as a result⁴². According to our findings, there is a 1.2 times higher risk of psychopathology in children associated with an increase in their age at the time of divorce. While we

believe that our findings represent a valuable addition to the existing literature, it appears that there is a requirement for more extensive and diverse studies to gain a clearer and more comprehensive understanding of this subject.

We did not find a significant relationship between the presence of stepmother or stepfather and psychiatric disorders in children of divorced parents in this study. A meta-analysis of 61 studies reported that parents' remarriage was linked to an increased tendency for children to experience mental health issues⁴³. In a long-term follow-up study, it was discovered that individuals whose parents divorced before the age of 16 and a significant portion of whom remarried exhibited lower levels of psychological well-being and life satisfaction. Additionally, the same study indicated that girls, in particular, experienced a higher prevalence of psychological problems and interpersonal relationship issues in adulthood, including conditions such as depression and psychosomatic disorders, compared to boys⁴⁴.

Another noteworthy finding from our study is that girls whose parents were divorced exhibited a lower risk of developing psychopathological issues than boys. Even though this difference is relatively small, with a rate of only 0.2, it can be concluded that being female appears to have a somewhat protective effect in the context of the relationship between divorce and mental health. Nonetheless, as previously emphasized, it is evident that various studies have yielded different results regarding the relationship between the gender of child, and, divorce, and the development of mental issues in children in this process. There is no universally accepted consensus on this matter in the existing literature^{13,36-39,41}. This implies that, as is the case with our other significant and non-significant findings, there may be numerous mediating and moderating variables that could contribute to the emergence and progression of psychopathological conditions in both sexes. Indeed, children's personality traits¹⁰, regardless of gender, age at the time of their parents' divorce and their current ages²¹, the duration of existing mental problems⁴¹, the presence of effective sources of social support after divorce⁴⁵, the quality of their relationships with their parents, whether they are living together or separately⁴⁶, and the presence of stepmothers or stepfathers, as well as the attitudes of these adults towards them⁴³ can all play a role in the presence or absence of mental problems in children, as well as the development and severity of

psychopathological conditions. Hence, we believe that future research investigating the indirect effects of the mentioned situations or similar variables in more extensive samples will offer valuable insights for a more comprehensive understanding of the relationships we have explored in our study.

Finally, while our study did not reveal any significant effects of parental psychopathology on the development of psychopathology in children, it is worth noting that divorce is a stressful life event that can have negative and profound impacts on the well-being and mental health of adults. As a matter of fact, it is commonly noted that rates of psychopathology tend to be higher in individuals who have experienced divorce compared to those who are married, and divorce is often linked to an increased risk of long-term mental health issues⁴⁷. The findings from a recent study involving 172 newlywed couples suggest that individuals with high levels of psychopathic traits tend to marry partners who also exhibit similar traits and rates of psychopathy. This study examined how these psychopathic traits in both partners were associated with marital communication, marital satisfaction over a 4-year period, and divorce rates over a 10-year period. Furthermore, the study revealed that psychopathic traits were predictive of lower levels of marital satisfaction, both at the outset of marriage and over the course of marriage. Additionally, the study found that psychopathic traits, as reported by women regarding their husbands, were linked to a decline in their husbands' marital satisfaction and were predictive of divorce rates over a 10-year period⁴⁸. Our study found that 12.8% (n=16) of mothers and 11.9% (n=14) of fathers of children whose parents had divorced had a psychopathology that required treatment. Although it is worth noting that these findings are based on self-reports from parents, which may raise questions regarding the reliability of existing psychiatric diagnoses, this ratio is remarkable.

The results of our study should be interpreted with caution, considering its limitations. The first limitation is its cross-sectional nature, which means that a causal relationship cannot be established between the findings. Furthermore, the limited sample size, non-random sampling, and the fact that the study was conducted at the single-center nature of the study may limit the generalizability of the results. Another limitation is that data on psychiatric diagnoses in parents were not obtained through structured interviews but were self-reported. Other

limitations of the study include the fact that psychiatric disorders in children were diagnosed during the psychiatric examination and their temporal relationship with divorce was not assessed. Also, due to the heterogenous nature of the residents' practices in applying psychometric measures, the children were not evaluated with standard measures. Lastly, the sample exhibits heterogeneity in the remarriage status of parents, with some recently divorced and others divorced long ago. This variability has the potential to affect children in diverse ways. We believe that this study has certain strengths, there are studies related to divorce, concurrent assessments of parental attitudes, gender factors, and evaluations of child mental health whose parents are divorced are scarce. This study assessed the predictors influencing child mental health issues, which can lead to the implementation of preventive measures.

Studying the mental health of children and divorced parents through long-term research can help identify factors that may increase the risk of psychopathology in childhood, adolescence, and adulthood. This can help take early precautions to prevent such risks.

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REFERENCES

1. Stallman HM, Ohan JL. Parenting style, parental adjustment, and co-parental conflict: Differential predictors of child psychosocial adjustment following divorce. *Behav Chang*. 2016;33:112-26.
2. Ongider N. Effects of divorce on children. *Curr Approaches Psychiatry*. 2013;5:140.
3. Geniş M, Tokar B, Şakiroğlu M. Boşanmanın çocuklara etkisi, çocuğa söylenmesi ve ebeveyn yabancılaşması: Derleme çalışması. *Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*. 2019;3:190-99.
4. Chen M, Yip PSF. Decomposing the crude divorce rate in five countries: Singapore, Taiwan, South Korea, the UK, and Australia. *Asian Popul Stud*. 2018;14:137-52.
5. Türkiye İstatistik Kurumu. Evlenme ve Boşanma İstatistikleri, 2019 <https://data.tuik.gov.tr/Bulten/Index?p=Evlenme-ve-Boşanma-İstatistikleri-2019-33708#:~:text=Evlenenin%20%C3%A7iftlerinin%20say%C4%B1s%C4%B1%202019%20y%C4%B1nC4%B1nda%20541%20bin%20424%20oldu&text=Bo%C5%9Fanın%20%C3%A7iftlerinin%20say%C4%B1s%C4%B1%202018%20y%C> (Accessed on 01.07.2021).
6. Türkiye İstatistik Kurumu. Evlenme ve Boşanma İstatistikleri, 2020. <https://data.tuik.gov.tr/Bulten/Index?p=Evlenme-ve-Boşanma-İstatistikleri-2020-37211> (Accessed on 01.07.2021).
7. TBNA. Türkiye Boşanma Nedenleri Araştırması (Ed Turgut M). TC Aile ve Sosyal Politikalar Bakanlığı, 2014.
8. Moxnes K. Risk Factors in Divorce. *Childhood*. 2003;10:131-46.
9. Raley RK, Sweeney MM. Divorce, repartnering, and stepfamilies: A decade in review. *J Marriage Fam*. 2020;82:81-99.
10. Kelly JB, Emery RE. Children's adjustment following divorce: Risk and resilience Perspectives. *Fam Relat*. 2003;52:352-62.
11. Lee D, McLanahan S. Family structure transitions and child development: Instability, selection, and population heterogeneity. *Am Sociol Rev*. 2015;80:738-63.
12. Averdijk M, Malti T, Eisner M, Ribeaud D. Parental separation and child aggressive and internalizing behavior: An event history calendar analysis. *Child Psychiatry Hum Dev*. 2012;43:184-200.
13. Anthony CJ, DiPerna JC, Amato PR. Divorce, approaches to learning, and children's academic achievement: A longitudinal analysis of mediated and moderated effects. *J Sch Psychol*. 2014;52:249-61.
14. Roizblatt SA, Leiva F VM, Maida S AM. Parents' separation or divorce. Potential effects on children and recommendations to parents and pediatricians. *Rev Chil Pediatr*. 2018;89:166-72.
15. Hashemi L, Homayuni H. Emotional divorce: child's well-being. *J Divorce Remarriage*. 2017;58:631-44.
16. Cano T, Gracia, P. The gendered effects of divorce on mothers' and fathers' time with children and children's developmental activities: A longitudinal study. *Eur J Popul*. 2022;10;38:1277-1313.
17. Faul F, Erdfelder E, Lang AG, Buchner A. G*Power 3: a flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behav Res Methods*. 2007;39:175-91.
18. Diekmann A, Kurt S. Do parents of girls have a higher risk of divorce? An eighteen country study. *J Marriage Fam*. 2004;66:651-60.
19. Lundberg S, Rose E. Child gender and the transition to marriage. *Demography*. 2003;40:333-49.
20. Malhotra C, Sarda S, Wang G. The Relationship between children's gender and the divorce rate. *Deakin Pap Int Bus Econ*. 2011;4:27.

21. Xu Q, Yu J, Qiu Z. The impact of children on divorce risk. *J Chinese Sociol.* 2015;2:1-20.
22. Kalmijn M, De Graaf PM, Poortman AR. Interactions between cultural and economic determinants of divorce in The Netherlands. *J Marriage Fam.* 2004;66:75-89.
23. Waite LJ, Lillard LA. Children and marital disruption. *Am J Sociol.* 1991;96:930-53.
24. Akgül Sarpkaya O. Boşanmış adınlar da toplumsal baskıya direnme stratejileri: Van rneđi. *Uluslararası Sosyal Arařtırmalar Dergisi.* 2013;6:29-50.
25. Aktař Akođlu Ö, Küçükkaragöz H. Bořanma nedenleri ve boşanma sonrasında arřılařıl angüçlük lere iliřkin bir arařtırma: İzmir ili örneđi. *Toplum ve Sosyal Hizmet.* 2018;29:153-72.
26. Kaya K, Eren GT. Bořanma ve erken boşanmaların artıř nedenleri. *Sosyal, Beřeri ve İdari Bilimler Dergisi.* 2020;3:708-28.
27. Kađıtçıbařı Ç. *Yeni İnsan ve İnsanlar*,10. Baskı. İstanbul, Evrim Yayınevi, 2014.
28. Jennings EA. Predictors of marital dissolution during a period of rapid social change: Evidence from South Asia. *Demography.* 2016;53:1351–75.
29. Odimegwu C, Akinyemi JO, De Wet N. Premarital birth, children's sex composition and marital instability among women in sub-Saharan Africa. *J PopulRes (Canberra).* 2017;34:327–46.
30. Knoester C, Booth A. Barriers to divorce: When are they effective? When are they not? *J Fam Issues.* 2000;21:78-99.
31. Schnor C, Pasteels I, Van Bavel J. Sole physical custody and mother's repartnering after divorce. *J Marriage Fam.* 2017;79:879-90.
32. Auersperg F, Vlasak T, Ponocny I, Barth A. Long-term effects of parental divorce on mental health - A meta-analysis. *J Psychiatr Res.* 2019;119:107-15.
33. Brown JH, Portes PR. Understanding gender differences in children's adjustment to divorce: Implications for school counselors. *J Sch Couns.* 2006;4:EJ901143.
34. Hockenberry MJ. Family, social, cultural, and religious influences on child health promotion. *Maternal Child Nursing Care.* 5th ed. Canada: Elsevier Mosby. 2014:732-49.
35. Wamboldt MZ. Epidemiology, assessment, and treatment of children of divorcing parents. *J Am Acad Child Adolesc Psychiatry.* 2016;55:27.
36. Fuller-Thomson E, Dalton AD. Gender differences in the association between parental divorce during childhood and stroke in adulthood: findings from a population-based survey. *Int J Stroke.* 2015;10:868-75.
37. Peris TS, Emery RE. A prospective study of the consequences of marital disruption for adolescents: predisruption family dynamics and postdisruption adolescent adjustment. *J Clin Child Adolesc Psychol.* 2004;33:694-704.
38. Amato PR, DeBoer DD. The transmission of marital instability across generations: Relationship skills or commitment to marriage? *J Marriage Fam.* 2001;63:1038-51.
39. Fischer T. Parental divorce and children's socio-economic success: Conditional effects of parental resources prior to divorce, and gender of the child. *Sociology.* 2007;41:475-95.
40. StØrksen I, RØysamb E, Holmen TL, Tambs K. Adolescent adjustment and well-being: Effects of parental divorce and distress. *Scand J Psychol.* 2006;47:75-84.
41. Yulaf Y, Semerci Z. Comparison of psychiatric disorders between children with a history of parental divorce and parental death. *Psychiatry Behav Sci.* 2019;1.
42. Lansford JE. Parental divorce and children's adjustment. *Perspect Psychol Sci.* 2009;4:140-52.
43. Jaynes WH. The impact of parental remarriage on children: A meta-analysis. *Marriage Fam Rev.* 2006;40:75-102.
44. Huurre T, Junkkari H, Aro H. Long-term psychosocial effects of parental divorce: A follow-up study from adolescence to adulthood. *Eur Arch Psychiatry Clin Neurosci.* 2006;256:256-63.
45. Jackson LJ, Fife ST. The impact of parental divorce: The relationship between social support and confidence levels in young adults. *J Divorce Remarriage.* 2018;59:123-40.
46. Demir-Dagdas T. Parental divorce, parent-child ties, and health: Explaining long-term age differences in vulnerability. *Marriage Fam Rev* 2021;57:24-42.
47. Whisman MA, Salinger JM, Sbarra DA. Relationship dissolution and psychopathology. *Curr Opin Psychol.* 2022;43:199-204.
48. Weiss B, Lavner JA, Miller JD. Self- and partner-reported psychopathic traits' relations with couples' communication, marital satisfaction trajectories, and divorce in a longitudinal sample. *Personal Disord* 2018;9:239-49.