

Article

Examining the Relationship Between Adolescent Girls' Perception of Their Fathers and Father Attachment with Peer Bullying Experiences

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Abstract

Objective: This study examined the relationships between father-related attachment and parenting variables and peer bullying among adolescent girls. Secure and insecure attachment styles, paternal caregiving styles, paternal autonomy support, and paternal involvement were investigated in relation to bullying victimization and bullying perpetration. **Method:** The study employed a correlational design with 200 adolescent girls aged 16–18 years attending vocational high schools in Bursa, Türkiye. Data were collected using the Adult Attachment to Father Scale, the Father Caregiving and Attachment Styles Scale, the Father Perception Scale, and the Peer Bullying Identification Scale. Pearson and Spearman correlation analyses, partial correlations, and Benjamini–Hochberg false discovery rate (FDR) corrections were conducted. **Results:** Secure attachment, paternal warmth/responsiveness, paternal involvement, and paternal autonomy support were negatively associated with bullying victimization and perpetration. In contrast, cold/rejecting and inconsistent/incongruent paternal attitudes were positively associated with bullying variables. Most findings remained significant after controlling for demographic variables and applying robustness and FDR correction analyses. However, some associations involving the Fearful Attachment subdimension appeared less robust. **Conclusions:** The findings suggest that supportive father–daughter relationships are consistently associated with lower levels of bullying involvement against peer bullying among adolescent girls. Interventions aimed at strengthening secure attachment and supportive parenting practices may contribute to reducing bullying behaviors and victimization.

Keywords: father attachment; peer bullying; adolescent girls; father perception; parenting styles; victimization; bullying perpetration



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1. Introduction

Bullying is a hostile and intentional form of aggression that utilizes both direct and indirect behaviors to repeatedly target individuals or groups perceived as vulnerable. Negative peer relationships, especially those involving school bullying, significantly affect the mental health of children [1,2]. Peer bullying is quite common during adolescence and includes behaviors such as verbal aggression (name-calling, humiliation), physical aggression (hitting, kicking, pushing), social manipulation (spreading rumors, exclusion), and attacks on property (theft, property damage) [3,4]. These behaviors can occur face-to-face through traditional bullying or electronically through cyberbullying [5,6].

A recent study conducted across six regions of the World Health Organization revealed that 30.5% of adolescents aged 12–17 had been exposed to either traditional or cyberbullying [7]. In Türkiye, the prevalence rates of traditional and cyberbullying were 22.4% and 10.4%, respectively [8]. The 2021/2022 international HBSC survey examined the bullying experiences of adolescents aged 11, 13, and 15 across 44 countries and territories in Europe, Central Asia, and Canada. According to the survey results, 6% of adolescents reported bullying others at least two to three times a month in recent months, while 11% reported being bullied with the same frequency. While boys were more likely to bully, victimization rates were similar across genders, ranging from 2% to 34% across countries. While overall victimization rates remained stable over time, a slight increase was observed among girls since 2018 [9]. By gender, bullying behavior is less common among adolescent girls than boys, while girls are more likely to be victims. A study by [10] found that adolescent girls were less likely than boys to participate in bullying but more likely to defend victims or be bystanders.

The Importance of Peer Bullying in Relation to Father Attachment, Father Perception, and the Father–Daughter Relationship

The quality of father–daughter relationships plays a critical role in girls' psychological and emotional development. Empirical studies indicate that close and supportive relationships with fathers are linked to higher self-esteem, greater autonomy, and increased emotional stability in daughters [11]. Despite this, the majority of research in this area has concentrated on mothers and their children. Consequently, the role of fathers in child development, particularly in relation to daughters, has received comparatively little attention [12].

A review of the literature demonstrates that adolescents who do not establish secure relationships or attachments with their fathers, and who hold negative perceptions of them, are more likely to exhibit lower self-confidence, reduced anger regulation, and increased aggression. These factors elevate the risk of both perpetrating and experiencing bullying [13,14]. Positive parenting is inversely associated with bullying perpetration and victimization, while negative, harsh, or neglectful parenting is positively associated with both outcomes [15]. Notably, negative parenting styles have a stronger association with bullying behaviors among girls [16].

Prior research indicates that parental factors such as involvement [17] and support [18] are linked to the prevalence of aggressive behaviors and other conduct problems in children. Parental involvement is also related to the risk of becoming a victim of school bullying [19]. Parents influence their children's engagement in bullying by modeling positive social behaviors, providing guidance on appropriate responses to bullying, and encouraging help-seeking behaviors [20]. Supportive and affectionate parenting styles decrease the likelihood that children will participate in bullying behaviors [21].

Recent research has increasingly focused on the impact of the father–child relationship and father involvement on child outcomes [22]. The quality of father involvement, characterized by frequent and meaningful interactions, reflects parental responsiveness to the child's needs, which fosters trust and strengthens the protective bond. Greater father involvement and higher-quality father–daughter relationships are associated with a reduced risk of victimization by bullying. Consequently, researchers have underscored the need to investigate the distinct role of fathers in child development, beyond maternal influences [23]. Evidence from Western countries indicates a positive association between supportive father–daughter relationships and favorable child adjustment. Additionally, the father–child relationship has been shown to account for a significant proportion of variance in child outcomes beyond that explained by the mother–child relationship (as cited in [24]). However when examined in terms of the gender of both adolescents and

parents, attachment styles, parental perceptions, and the quality of relationships may affect bullying perpetration and victimization in different ways. Although studies examining the relationship between adolescent girls' bullying involvement and parental gender are limited [25], existing research supports this association. For example, ref. [24] found that the father–daughter relationship is directly associated with higher levels of well-being and lower levels of distress.

2. Importance

The existing literature on bullying in relation to parental attachment and parenting styles predominantly focuses on mother-child relationships [26–29]. Research that integrates father attachment, father perception, and bullying, particularly regarding their reciprocal influence in parent-adolescent and peer relationships, remains limited. This gap is especially pronounced in studies involving adolescent girls [30]. Recent research, however, underscores the significant role of fathers and father figures as potential protective factors against daughters' experiences of violence [25]. Although the importance of father involvement and relationship quality is well established, much of the literature centers on father–son relationships [23]. Research specifically addressing father–daughter dynamics is scarce, and studies involving adolescent fathers and daughters have rarely examined dating violence. For instance, Ismail et al. [30] identified a significant negative association between perceived father involvement and adolescent girls' susceptibility to dating violence. While many studies emphasize the role of attachment to fathers, findings indicate that secure attachment reduces adolescent victimization but does not fully protect against perpetration of bullying [31]. Consequently, it is important to clarify the extent to which attachment to fathers influences adolescents' tendencies to bully or be bullied. Thrasher et al. [32] similarly found that the quality of the father–daughter relationship did not moderate the association between father involvement and bullying victimization. These findings highlight the need for further research to elucidate the relationship between attachment to fathers and specific forms of bullying and problematic behaviors [33]. Existing studies on father–daughter adolescent attachment, perceptions of fatherhood, and bullying or victimization have primarily been conducted in Western contexts, such as the United States and Europe. In contrast, research on these relationships in non-Western cultures is rare, and such dynamics may differ in developing countries like Turkey. In Turkey, there is limited information regarding whether father involvement, father attachment, and the quality of the father–daughter relationship serve as protective factors, particularly against bullying and victimization among adolescent girls. To date, no studies have been identified in Turkey that specifically examine the relationships among father–daughter dynamics, father perception, father attachment, peer bullying, and victimization in adolescent girls. Existing research has instead focused on the relationship between peer bullying, parenting perception styles, and bullying irrespective of gender [34–38]. Therefore, research addressing the father–daughter relationship within a cultural context is warranted. The present study aims to examine the relationships among attachment styles toward fathers, father care, and father perception in adolescent girls aged 16–18 in Turkey, and both bullying and victimization behaviors.

The following research questions were addressed:

- Is there a significant relationship between adolescent girls' attachment styles toward their fathers (secure, distant/avoidant, parentified, and fearful) and their exposure to peer bullying or engagement in bullying behaviors?
- Is there a significant relationship between adolescent girls' perceptions of their fathers' caregiving styles (warm/responsive, cold/rejecting, and inconsistent/incongruent) and their exposure to peer bullying or engagement in bullying behaviors?

- Is there a significant relationship between adolescent girls' perceptions of their fathers (autonomy support and father involvement) and their exposure to peer bullying or engagement in bullying behaviors?

The present study was designed to examine the associations of father attachment styles, paternal caregiving styles, and father perceptions with peer bullying outcomes separately. Relationships among attachment styles, caregiving styles, and father perception dimensions themselves were beyond the scope of the study. Accordingly, three research questions were formulated to examine the independent associations of each father-related construct with bullying involvement rather than the interrelationships among the father-related constructs themselves.

3. Data Collection Tools

3.1. Personal Information Form

A researcher-developed personal information form was utilized to collect participants' demographic characteristics, including age, grade level, parental education level, and perceived socioeconomic status.

3.1.1. Adult Parental Attachment Scale—Short Father Form (APAS-SFF)

The short form of the Adult Parental Attachment Scale (APAS) was used to assess participants' attachment styles toward their fathers [39]. The original scale consists of 20 items and five subdimensions: Secure Attachment, Dependent Attachment, Parentified Attachment, Fearful Attachment, and Distant Attachment. Items are rated on a 5-point Likert scale ranging from 1 (never) to 5 (always). In the Turkish adaptation study, Cronbach's alpha coefficients ranged between 0.70 and 0.87.

Because the scale was originally developed for adults, exploratory factor analysis (EFA) was conducted to evaluate its construct validity in the current study's adolescent female sample. Prior to EFA, the suitability of the data for factor analysis was confirmed by a Kaiser–Meyer–Olkin (KMO) coefficient of 0.833 and a significant Bartlett's Test of Sphericity, $\chi^2(190) = 1504.844, p < 0.001$ [40,41]. Initial analyses indicated that several items demonstrated low factor loadings and cross-loadings; therefore, items with factor loadings below 0.40 or inconsistent theoretical structures were excluded. Subsequent analyses yielded a final four-factor structure consisting of Secure Attachment, Avoidant Attachment, Fearful Attachment, and Parentified Attachment. Factor loadings ranged from 0.595 to 0.722 for Secure Attachment, 0.659 to 0.860 for Avoidant Attachment, 0.555 to 0.767 for Fearful Attachment, and 0.638 to 0.692 for Parentified Attachment. The final four-factor solution explained 57.37% of the total variance, indicating acceptable construct validity for the adolescent sample (see Table 1).

In the current study, Cronbach's alpha coefficients were 0.84 for Secure Attachment, 0.68 for Avoidant Attachment, 0.65 for Parentified Attachment, and 0.71 for Fearful Attachment.

Table 1. Final Exploratory Factor Analysis Results of the Adult Parental Attachment Scale (APAS).

Factor	Items	Factor Loadings
Secure Attachment	B.A.11	0.722
	B.A.6	0.721
	B.A.2	0.683
	B.A.5	0.595

Table 1. *Cont.*

Factor	Items	Factor Loadings
Avoidant attachment	B.A.17	0.860
	B.A.13	0.807
	B.A.7	0.731
	B.A.1	0.659
Fearful Attachment	B.A.3	0.767
	B.A.10	0.636
	B.A.20	0.555
Parentified Attachment	B.A.19	0.692
	B.A.16	0.664
	B.A.15	0.658
	B.A.8	0.638

3.1.2. Father Caregiving and Attachment Styles Scale (FCASS)

The Turkish adaptation of the Father Caregiving and Attachment Styles Scale (FCASS), originally developed by [10] and adapted into Turkish [40], was used to assess adolescent girls' perceptions of their fathers' caregiving and attachment styles. The scale consists of three subdimensions: Warm/Responsive, Rejecting/Distant, and Inconsistent/Unpredictable. Higher scores on each subdimension indicate a stronger perception of the corresponding paternal caregiving characteristic. In the original adaptation study, Cronbach's alpha coefficients ranged between 0.70 and 0.87.

Because the scale was originally developed for adults, exploratory factor analysis (EFA) was conducted to evaluate its construct validity in the present adolescent sample. The Kaiser–Meyer–Olkin (KMO) coefficient was 0.884, and Bartlett's Test of Sphericity was significant, $\chi^2(36) = 983.114$, $p < 0.001$, indicating suitability for factor analysis. Initial EFA findings revealed several items with cross-loadings; therefore, items with low factor loadings, cross-loadings, or theoretical inconsistency were excluded. Subsequent analyses yielded a final three-factor structure. Factor loadings ranged from 0.807 to 0.873 for Warm/Responsive, 0.708 to 0.813 for Rejecting/Distant, and 0.612 to 0.640 for Inconsistent/Unpredictable. The three-factor solution explained 67.52% of the total variance, indicating acceptable construct validity in the adolescent sample (see Table 2). In the current study, Cronbach's alpha coefficients were 0.85 for the Warm/Responsive subscale, 0.77 for the Rejecting/Distant subscale, and 0.64 for the Inconsistent/Unpredictable subscale.

Table 2. Final Exploratory Factor Analysis Results of the Father Caregiving and Attachment Styles Scale (FCASS).

Factor	Items	Factor Loadings
Warm/Responsive	B.E.1	0.873
	B.E.3	0.853
	B.E.2	0.807
Rejecting/Distant	B.E.8	0.813
	B.E.5	0.793
	B.E.6	0.708

Table 2. *Cont.*

Factor	Items	Factor Loadings
Inconsistent/Unpredictable	B.E.4	0.640
	B.E.7	0.612

3.1.3. The Father Perception Scale (FPS)

The Father Perception Scale (FPS) was administered to assess adolescent girls' perceptions of their fathers. The original scale [42], adapted into Turkish [41], was designed to evaluate paternal autonomy support, father involvement, and paternal warmth. The father form consists of 21 items. In the Turkish adaptation study, the Cronbach's alpha coefficient for the total scale was reported as 0.93.

Because the scale was originally developed for adults and was administered to an adolescent female sample in the present study, exploratory factor analysis (EFA) was conducted to re-evaluate its construct validity. Initial EFA findings indicated that the original three-factor structure was not fully replicated in the adolescent sample. Several items demonstrated problematic cross-loadings and theoretical inconsistency; therefore, these items were removed through iterative analyses. The final EFA yielded a theoretically coherent two-factor structure consisting of Paternal Autonomy Support and Father Involvement. In the current study, the Cronbach's alpha coefficient for the total scale was 0.93. Subscale reliability coefficients were 0.86 for Father Involvement and 0.80 for Autonomy Support (see Supplementary File S2).

3.2. Traditional Peer Bullying Scale (TPBS)

The Traditional Peer Bullying Scale (TPBS) was used to assess bullying and victimization experiences among adolescents. The scale consists of two parallel forms, Victim and Bully, comprising 31 items in total. Responses are rated on a 4-point Likert scale ranging from 1 (never) to 4 (more than three times). The Victim Form was revised based on the previous work [43], whereas the Bully Form was revised according to the related study [44]. Psychometric properties of the scale were evaluated [45]. Reported internal consistency coefficients were 0.90 for the Victim Form and 0.91 for the Bully Form.

Exploratory factor analysis (EFA) was conducted to examine the construct validity of both forms in the present adolescent sample. For the Victim Form, the Kaiser–Meyer–Olkin (KMO) coefficient was 0.813, and Bartlett's Test of Sphericity was significant, $\chi^2(496) = 3276.833$, $p < 0.001$. For the Bully Form, the KMO coefficient was 0.829, and Bartlett's Test of Sphericity was significant, $\chi^2(496) = 4011.171$, $p < 0.001$, indicating suitability for factor analysis. Although several items demonstrated cross-loadings, these items remained theoretically consistent with their corresponding subdimensions, and no items were removed. EFA findings indicated that the original five-factor structure was largely preserved in both forms. Factor loadings ranged from 0.427 to 0.862 for the Victim Form and from 0.404 to 0.809 for the Bully Form. The five-factor structures explained 66.55% and 67.64% of the total variance for the Victim and Bully Forms, respectively, indicating acceptable construct validity in the adolescent sample (see Table 3).

In the current study, the total Cronbach's alpha coefficient for the Bully Form was 0.89. Subscale alpha coefficients were 0.72 for Intimidation/Bullying, 0.80 for Verbal Teasing, 0.72 for Direct Aggression, 0.75 for Relational Aggression, and 0.71 for Attacks on Property.

Table 3. Final Exploratory Factor Analysis Results for the Traditional Peer Bullying Scale (TPBS) Victim and Bully Forms.

Scale	Subdimension	Factor Loading Range	Total Variance Explained
TPBS Victim Form	Intimidation/Bullying	0.427–0.764	66.55%
	Verbal Teasing	0.509–0.862	
	Direct Aggression	0.450–0.805	
	Relational Aggression	0.440–0.774	
	Attacks on Property	0.447–0.761	
TPBS Bully Form	Intimidation/Bullying	0.439–0.809	67.64%
	Verbal Teasing	0.502–0.762	
	Direct Aggression	0.559–0.777	
	Relational Aggression	0.562–0.789	
	Attacks on Property	0.404–0.766	

3.3. Analysis of Validity and Reliability of the Scales

The Parental Attachment Scale for Adults (APAS) and the Father Caregiving and Attachment Styles Scale (FCAS) were originally developed for adult populations. Given that the current sample comprised adolescents, it was necessary to re-examine the construct validity of these scales for this age group. Accordingly, exploratory factor analysis (EFA) was conducted on all scales, including the Father Perception Scale (FPS). Prior to EFA, the suitability of the data for factor analysis was assessed using the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy and Bartlett’s Test of Sphericity. A KMO coefficient of 0.60 or higher was considered acceptable, and a significant Bartlett’s Test of Sphericity ($p < 0.05$) indicated that the correlation matrix was appropriate for factor analysis [46]. Principal component analysis with Varimax rotation was employed to determine the factor structures. The number of factors was identified using the Kaiser criterion (eigenvalue > 1), scree plot, and parallel analysis. Final factor structures were determined by evaluating the eigenvalue criterion, theoretical framework, factor loadings, cross-loadings, and parallel analysis results collectively. Scree plots and parallel analysis results are provided in the supplementary material to enhance transparency in factor retention decisions. During item evaluation, factor loadings, cross-loadings, and consistency with the theoretical structure were jointly considered. Items with factor loadings below 0.40 or with substantial loadings on multiple factors were re-evaluated and excluded when necessary. Both statistical criteria and theoretical alignment guided the item removal process [47,48]. Factor loadings of 0.40 or higher were considered significant, consistent with the sample size. As noted by [48], the minimum acceptable factor loading decreases with larger sample sizes; thus, a threshold of 0.40 was adopted. The EFA results indicated that certain items in the Adult Attachment Scale—Short Form (PAS) exhibited low factor loadings or cross-loadings, leading to their removal to achieve the final factor structure. In contrast, the theoretical factor structure of the Victim and Bully forms of the Peer Bullying Identification Scale (PBIS) was largely maintained, and no items were excluded. Exploratory factor analysis was conducted to assess the suitability of the PAS for adolescents. Following the initial EFA, items were removed based on low factor loadings (< 0.40), high cross-loadings, and inconsistency with the theoretical framework [46,47]. Although these instruments possess established factor structures in adult populations, the present study focused on a distinct developmental group, specifically adolescent girls, for whom the original structures may not have remained invariant. Rather than directly testing the original adult models using confirmatory

factor analysis, exploratory factor analysis was conducted to determine whether the latent structures were reproduced in this new population. Preliminary analyses revealed that several items demonstrated substantial cross-loadings and theoretical inconsistency, indicating that the original factor structures were not fully replicated. As a result, an exploratory approach was deemed more suitable for evaluating construct validity in the current sample. The initial EFA results are provided in the supplementary material for transparency. After item removal, EFA was repeated, and the final results are presented in Table 1.

Items were removed if they demonstrated low factor loadings (<0.40), high cross-loadings, or inconsistency with the theoretical framework [46,47]. The initial EFA results are included in the supplementary material to ensure transparency.

Construct validity of the Father Attachment Scale for Adults (APAS) was assessed using exploratory factor analysis (EFA). Prior to analysis, the data set's suitability was confirmed by a Kaiser–Meyer–Olkin (KMO) coefficient of 0.833 and a significant Bartlett Sphericity Test, $\chi^2(190) = 1504.844$, $p < 0.001$. These results confirmed appropriateness for factor analysis. Initial EFA revealed several items with low factor loadings and cross-loadings. Items with factor loadings below 0.40, cross-loadings, or theoretical inconsistencies were re-evaluated and excluded. Subsequent analyses produced a final four-factor structure. Factor loadings for the “Secure Attachment” dimension ranged from 0.595 to 0.722, “Distant Attachment” from 0.659 to 0.860, “Fearful Attachment” from 0.555 to 0.767, and “Parented Attachment” from 0.638 to 0.692. The four-factor model accounted for 57.37% of the total variance, indicating acceptable construct validity in the adolescent sample. Construct validity of the Father Caregiving and Attachment Styles Scale (FCAS) was also examined using stepwise EFA. Initial results identified items with loadings below 0.40 or significant cross-loadings, which were subsequently removed. The final re-analysis yielded an 8-item structure. Results are summarized in Table 2.

An exploratory factor analysis (EFA) was conducted to assess the construct validity of the Father Caregiving and Attachment Styles Scale (FCASS). Prior to this analysis, the data's suitability for factor analysis was evaluated. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was 0.884, and Bartlett's Test of Sphericity was significant, $\chi^2(36) = 983.114$, $p < 0.001$. These results confirmed that the data were appropriate for factor analysis. The initial EFA results indicated that several items exhibited cross-loadings. Consequently, items with low factor loadings, cross-loadings, or theoretical inconsistency with the construct were removed from further analyses. Subsequent analyses produced a final three-factor structure. In the final factor structure, factor loadings ranged from 0.807 to 0.873 for the Warm/Responsive dimension, from 0.708 to 0.813 for the Rejecting/Distant dimension, and from 0.612 to 0.640 for the Inconsistent/Unpredictable dimension. The three-factor solution accounted for 67.52% of the total variance. These findings indicate that the scale demonstrates acceptable construct validity in an adolescent sample.

The theoretical five-factor structure of the TPBS Victim Form was largely maintained following exploratory factor analysis (EFA). Prior to conducting the analysis, the data's suitability for factor analysis was evaluated. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was 0.813, and Bartlett's Test of Sphericity was significant, $\chi^2(496) = 3276.833$, $p < 0.001$, confirming the appropriateness of the dataset for factor analysis. While several items exhibited cross-loadings, these items aligned theoretically with their respective subdimensions, and no items were removed, as the cross-loadings did not meaningfully alter the original factor structure. Consequently, scale scores were calculated based on the original five-factor structure.

Similarly, exploratory factor analysis of the TPBS Bully Form indicated that the theoretical five-factor structure was largely preserved. The KMO coefficient was 0.829, and Bartlett's Test of Sphericity was significant, $\chi^2(496) = 4011.171$, $p < 0.001$, supporting the

dataset's suitability for factor analysis. Although some items exhibited cross-loadings, the overall loading patterns remained theoretically coherent, and no items were excluded from the analyses. These findings indicate that both the Victim and Bully Forms of the TPBS demonstrate acceptable construct validity in the female adolescent sample. Factor-retention decisions were informed by multiple criteria. Specifically, Kaiser's criterion (eigenvalues > 1), scree plot inspection, and Horn's parallel analysis were jointly considered to identify the most appropriate factor structure for each scale. Employing several complementary criteria, rather than relying exclusively on eigenvalues, ensured a more rigorous and transparent determination of the optimal number of factors, aligning with current psychometric recommendations.

4. Methodology

4.1. Participants

The sample comprised female adolescents aged 16 to 18 years who attended vocational high schools in the Osmangazi and Nilüfer districts of Bursa, Türkiye. Convenience sampling was employed to select the study group. The sample size was determined using G*Power 3.1, based on the primary statistical procedure, Pearson product-moment correlation analysis. Power analysis assumed a small-to-moderate effect size ($r = 0.20$), a significance level of $\alpha = 0.05$, and statistical power $(1 - \beta) = 0.95$. Results indicated that a minimum of 200 participants was required to detect a statistically significant correlation. Initially, 220 participants were recruited. After data screening, 20 questionnaires with missing or invalid responses were excluded. Analyses were therefore conducted with data from 200 participants, which was sufficient to detect small-to-moderate associations with adequate statistical power. To enhance representativeness, three public schools reflecting low, middle, and high socioeconomic levels were included. Classrooms from each school were randomly selected. Informed consent was obtained from both students and their parents prior to participation.

Inclusion criteria were age between 16 and 18 years, voluntary agreement to participate, and absence of any diagnosed psychiatric disorder or severe psychological problem based on self-report and parental report. Exclusion criteria were age younger than 16 or older than 18 years, special educational needs, or a psychiatric diagnosis or history of psychiatric illness.

4.2. Ethics Statement

The present study was conducted in accordance with the ethical principles of the Declaration of Helsinki and national guidelines for research involving human participants. Ethical approval was obtained from the Mudanya University Ethics Committee (Approval No. 2025/04/24; Date: 24 April 2025). Prior to data collection, written informed consent was obtained from the parents or legal guardians of all participants, and written assent was obtained from the adolescents. Participation in the study was entirely voluntary, and participants were informed that they could withdraw from the study at any stage without any negative consequences. All procedures were carried out anonymously, and the confidentiality of participant data was strictly maintained throughout the research process.

4.3. Statistical Analysis

Statistical analyses were performed using IBM SPSS Statistics 27. Descriptive statistics were first calculated for all study variables and demographic characteristics. Means and standard deviations were reported for continuous variables, while frequencies and percentages were provided for categorical variables. Because the primary aim of the study was to examine associations rather than prediction or causal pathways, correlational analyses were

considered the most appropriate analytical approach. Partial correlation analyses were additionally conducted to evaluate whether these associations remained after controlling for demographic covariates.

Prior to conducting the main analyses, assumptions underlying parametric tests were evaluated. Normality was assessed using skewness and kurtosis values. As several bullying-related subdimensions exhibited substantial kurtosis, robustness analyses were performed by calculating Spearman rank-order correlations alongside Pearson product-moment correlation coefficients. This approach enabled a comparative evaluation of the stability of observed relationship patterns under potential distributional violations.

Exploratory factor analysis (EFA) was conducted to assess the construct validity of the study scales. Prior to factor analysis, dataset suitability was evaluated using the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy and Bartlett’s Test of Sphericity. Principal component analysis with Varimax rotation was used to identify factor structures. The number of factors was determined by considering the Kaiser criterion (eigenvalues > 1), scree plot, and parallel analysis. Final factor structures were established based on theoretical consistency, factor loadings, cross-loadings, and parallel analysis results. Items with low factor loadings (<0.40) or substantial cross-loadings were re-evaluated and excluded as necessary.

Given the multiple correlation analyses, the Benjamini–Hochberg False Discovery Rate (FDR) correction was applied to control for Type I error inflation. Adjusted *q* values were calculated to assess the impact of multiple comparisons on significance patterns. Correlation coefficients were interpreted according to [49] guidelines coefficients between 0.10 and 0.29 were considered small, 0.30 to 0.49 moderate, and 0.50 or greater large. All analyses were conducted with a 95% confidence interval, and statistical significance was set at $p < 0.05$.

5. Findings

5.1. Descriptive Statistics

The sample of the study consisted of 200 female adolescents attending high schools in Bursa, Türkiye. Information regarding participants’ grade level, age, parental education level, perceived family income, number of siblings, and family structure is presented in Table 4.

Table 4. Frequency and Percentage Distributions of Participants’ Demographic Characteristics ($N = 200$).

Variable	<i>n</i>	%
Grade Level		
9. Grade	31	15.5
10. Grade	41	20.5
11. Grade	62	31.0
12. Grade	66	33.0
Age		
16	89	44.5
17	80	40.0
18	31	15.5
Mother’s Educational Level		

Table 4. *Cont.*

Variable	<i>n</i>	%
Primary School	83	41.5
Middle School	54	27.0
High School	53	26.5
Associate Degree	1	0.5
University	4	2.0
Postgraduate	5	2.5
Father's Educational Level		
Primary School	61	30.5
Middle School	62	31.0
High School	67	33.5
Associate Degree	1	0.5
University	9	4.5
Perceived Income Level		
Income Less Than Expenses	25	12.5
Income Equal to Expenses	126	63.0
Income Greater Than Expenses	49	24.5
Number of Siblings		
Only Child	7	3.5
Two Siblings	91	45.5
Three or More Siblings	102	51.0
Family Structure		
Nuclear Family	157	78.5
Extended Family	20	10.0
Parents Divorced/Separated	19	9.5
Mother Deceased	3	1.5
Father Deceased	1	0.5

5.2. Demographic Characteristics of the Sample

Analysis of grade-level distribution revealed that 12th-grade students comprised the largest group ($n = 66$, 33.0%), followed by 11th-grade ($n = 62$, 31.0%), 10th-grade ($n = 41$, 20.5%), and 9th-grade students ($n = 31$, 15.5%). In terms of age, most participants were 16 years old ($n = 89$, 44.5%), with 17-year-olds ($n = 80$, 40.0%) and 18-year-olds ($n = 31$, 15.5%) representing smaller proportions.

For maternal educational level, primary school graduates represented the largest group ($n = 83$, 41.5%). The proportions of mothers with middle school and high school education were similar (27.0% and 26.5%, respectively), while those with associate, undergraduate, or postgraduate degrees collectively accounted for only 5.0% of the sample.

For paternal educational level, high school graduates comprised the largest group ($n = 67$, 33.5%), followed by middle school (31.0%) and primary school graduates (30.5%). Only about 5.0% of fathers held a university degree.

With respect to perceived family income, most participants indicated that family income matched expenses ($n = 126$, 63.0%). Those reporting income exceeding expenses

comprised 24.5% of the sample, while 12.5% reported income lower than expenses. In terms of sibling status, nearly half of the adolescents had two siblings (45.5%), and a similar proportion had three or more siblings (51.0%). Only children constituted a small minority (3.5%).

In terms of family structure, most participants reported living in nuclear families ($n = 157$, 78.5%). Adolescents with divorced or separated parents comprised 9.5% ($n = 19$) of the sample, while 10.0% ($n = 20$) reported living in extended families. A small proportion (2.0%) reported the loss of either their mother or father.

5.3. Descriptive Statistics and Reliability of Study Measures

Table 5 presents descriptive statistics for the Parental Attachment Scale for Adults (APAS), Father Caregiving and Attachment Styles Scale (FCASS), Father Perception Scale (FPS), and the Victim and Bully Forms of the Traditional Peer Bullying Scale (TPBS). The table reports sample size, observed minimum and maximum scores, means, standard deviations, kurtosis, skewness, and Cronbach's alpha coefficients for each total scale and subdimension.

Table 5. Descriptive Statistics and Internal Consistency Coefficients of the Scale Scores.

Scale/Subdimension	N	Min	Max	M	SD	Kurtosis	Skewness	α
AFAS (Total)	194	15	62	34.56	8.52	0.35	0.30	0.68
Secure Attachment	198	4	20	11.07	4.64	−0.91	0.39	0.84
Avoidant Attachment	200	4	20	8.22	3.88	−0.26	0.75	0.68
Parentified Attachment	198	3	15	7.39	2.91	−0.32	0.38	0.65
Fearful Attachment	198	4	20	7.80	3.59	1.44	1.23	0.71
FCASS (Total)	200	9	40	19.90	4.06	2.95	0.64	-
Warm/Responsive	200	3	15	9.87	3.97	−1.28	−0.18	0.87
Rejecting/Distant	200	3	15	5.38	3.15	1.15	1.38	0.77
Inconsistent/Unpredictable	200	2	10	4.65	2.81	−1.02	0.67	0.81
FPS (Total)	195	14	76	50.08	14.92	−0.84	−0.37	0.84
Father Autonomy Support	195	8	55	35.16	11.14	−0.85	−0.45	0.79
Father Involvement	200	3	21	14.90	5.45	−0.69	−0.60	0.77
TPBS–Victimization (total)	197	32	87	43.18	12.73	1.33	1.39	0.91
Intimidated Victim	200	6	16	6.96	2.02	6.36	2.58	0.68
Teasing Victimization	199	5	20	8.15	3.65	0.47	1.14	0.77
Direct Aggression Victimization	199	6	22	7.85	2.67	4.21	1.85	0.66
Relational Victimization	199	10	36	14.63	5.92	1.38	1.40	0.86
Property Victimization	200	5	20	5.86	1.99	15.94	3.52	0.76
TPBS–Bullying (Total)	197	32	93	39.75	10.82	4.89	2.11	0.91

Table 5. Cont.

Scale/Subdimension	N	Min	Max	M	SD	Kurtosis	Skewness	α
Intimidation/Bullying–Bully	200	6	17	6.98	2.26	7.50	2.79	0.77
Teasing and Bullying	199	5	20	7.98	3.81	0.96	1.29	0.83
Direct Aggression–Bully	200	6	22	8.01	3.09	5.00	2.12	0.76
Relationally Aggressive Bully	199	10	35	11.71	3.46	13.04	3.17	0.82
Property Bullying	199	5	20	5.40	1.75	39.90	5.93	0.90

AFAS = Young Adults' Attachment to Father Scale; FCASS = Father Caregiving and Attachment Styles Scale; FPS = Father Perception Scale; TPBS = Peer Bullying Determination Scale. α = Cronbach's alpha internal consistency coefficient. FPS subscale scores were calculated after reverse coding. Scale scores were computed using the item-summation approach.

Analysis of the Young Adults' Attachment to Father Scale subscale revealed that participants reported the highest mean score on the Secure Attachment subscale ($M = 11.07$, $SD = 4.64$), indicating generally secure attachment experiences with their fathers. In comparison, mean scores for Avoidant Attachment, Parentified Attachment, and Fearful Attachment were lower (8.22, 7.39, and 7.80, respectively). Internal consistency coefficients for the subscales ranged from 0.655 to 0.840, reflecting acceptable reliability [50]. Cronbach's alpha coefficient for the overall AAFS score was 0.682, which implies that aggregating distinct attachment styles into a single composite score may reduce psychometric coherence.

On the Father Caregiving and Attachment Styles Scale, the Warm/Responsive subscale produced a relatively high mean score ($M = 9.87$, $SD = 3.97$), while the Cold/Rejecting ($M = 5.38$) and Inconsistent/Incongruent ($M = 4.65$) subscales had lower mean scores. These results indicate that participants predominantly perceived their fathers as warm and responsive. Internal consistency coefficients for the FCASS subscales ranged from 0.767 to 0.867, demonstrating high reliability. On the Father Perception Scale, the mean score for the Father Autonomy Support subscale was 35.16 ($SD = 11.14$), and the Father Involvement subscale mean was 14.90 ($SD = 5.45$). The overall scale mean was 50.08 ($SD = 14.92$). Cronbach's alpha coefficients for the subscales and total score ranged from 0.769 to 0.841, indicating high internal consistency. These findings suggest that participants generally perceived their fathers as autonomy-supportive and actively involved.

The total mean scores for the Peer Bullying Determination Scale Victim and Bully Forms were 43.18 and 39.75, respectively, which are low relative to the maximum possible score of 128. This indicates that adolescents in this sample generally reported low levels of both bullying victimization and perpetration. The overall Cronbach's alpha coefficients were 0.910 for the Victim Form and 0.913 for the Bully Form, demonstrating excellent reliability.

Evaluation of kurtosis and skewness values revealed notable distributional characteristics for several subscales. In particular, high kurtosis values were observed for Intimidation/Bullying (Victim kurtosis = 6.36; Bully kurtosis = 7.50), Direct Aggression (Bully kurtosis = 5.00), Attacks on Property (Victim kurtosis = 15.94; Bully kurtosis = 39.90), and Relational Aggression–Bully (kurtosis = 13.04). These findings indicate that such behaviors were relatively infrequent within the sample and that score distributions were concentrated at the lower end of the scale. Although [51] suggested ± 10 as a general threshold for kurtosis, other scholars [52] argued that kurtosis values exceeding $|7|$ may indicate substantial deviations from normality. Accordingly, the robustness of Pearson correlation analyses was additionally evaluated using Spearman rank-order correlations.

Internal consistency coefficients for the TPBS subscales ranged from 0.662 to 0.898, indicating acceptable high reliability levels. The lowest reliability coefficient was observed for the Direct Aggression–Victim subscale ($\alpha = 0.662$), whereas the highest coefficient was obtained for the Attacks on Property–Bully subscale ($\alpha = 0.898$). Overall, these findings demonstrate that the scale functioned reliably within the present sample from a psychometric perspective. Cronbach’s alpha coefficients, calculated to evaluate the reliability of all measurement instruments, ranged from moderately acceptable to excellent ($\alpha = 0.612$ – 0.921), confirming the psychometric reliability of the instruments used in the study [53]. This study tested whether the relationships between father-related variables and peer bullying were independent of demographic variables (socioeconomic level, parental education level, and family structure).

5.4. Partial Correlation Analysis Controlling for Demographic Variables

Partial correlation analyses were conducted to assess whether associations between father-related variables and peer bullying remained significant after controlling demographic covariates. Socioeconomic status, parental education levels, and family structure were included as control variables, as these factors are theoretically linked to both fathering quality and peer bullying behaviors [4,54].

The relationships between father-related variables and the subdimensions of both Victimization and Bullying were reanalyzed using partial correlation coefficients, controlling for perceived family income, maternal education level, paternal education level, and family type. Family type, as a categorical variable, was dummy-coded (0 = nuclear family; 1 = other family structures), with nuclear family as the reference category due to its prevalence in the sample ($n = 157$, 78.5%). The remaining demographic variables were included as ordinal numeric variables.

Given the correlational nature of the research design, group-comparison techniques such as ANCOVA were not considered appropriate. As all primary study variables were continuous, partial correlation analysis was identified as the most suitable statistical approach. The results are presented alongside Pearson correlation coefficients in Table 6 (Victimization Form) and Table 7 (Bullying Form).

Table 6. Pearson and Partial Correlation Coefficients Between Father-Related Variables and Peer Bullying (Victim Form).

Variable	Coefficient	Intimidation/Bullying	Teasing	Direct Aggression—Bully	Relationally Aggressive Bully	Property Bullying	Total
SecureAttachment	<i>r</i>	−0.067	−0.096	−0.121	−0.161 *	−0.006	−0.130
	<i>r</i> ₁	−0.055	−0.101	−0.117	−0.145 *	0.014	−0.118
Avoidant Attachment	<i>r</i>	0.180 *	0.185 **	0.230 **	0.235 ***	0.182 **	0.247 ***
	<i>r</i> ₁	0.176 *	0.181 *	0.235 ***	0.228 **	0.170 *	0.243 ***
Parentified Attachment	<i>r</i>	−0.034	0.012	−0.038	0.063	0.009	0.030
	<i>r</i> ₁	−0.031	0.008	−0.033	0.075	0.020	0.035
Fearful Attachment	<i>r</i>	0.147 *	0.085	0.106	0.143 *	0.153 *	0.161 *
	<i>r</i> ₁	0.138	0.093	0.109	0.126	0.140	0.154 *
Warm/Responsive	<i>r</i>	−0.164 *	−0.155 *	−0.193 **	−0.230 **	−0.135	−0.223 **
	<i>r</i> ₁	−0.153 *	−0.159 *	−0.194 **	−0.213 **	−0.117	−0.212 **
Rejecting/Distant	<i>r</i>	0.230 **	0.127	0.242 ***	0.238 ***	0.227 **	0.253 ***
	<i>r</i> ₁	0.226 **	0.127	0.242 ***	0.232 **	0.220 **	0.249 ***

Table 6. Cont.

Variable	Coefficient	Intimidation/Bullying	Teasing	Direct Aggression—Bully	Relationally Aggressive Bully	Property Bullying	Total
Inconsistent/Unpredictable	<i>r</i>	0.157 *	0.182 *	0.197 **	0.237 ***	0.074	0.220 **
	<i>r</i> ₁	0.155 *	0.193 **	0.197 **	0.238 ***	0.076	0.219 **
Father Autonomy Support	<i>r</i>	−0.146 *	−0.138	−0.200 **	−0.231 **	−0.152 *	−0.234 **
	<i>r</i> ₁	−0.129	−0.144 *	−0.210 **	−0.209 **	−0.128	−0.223 **
Father Involvement	<i>r</i>	−0.272 ***	−0.173 *	−0.192 **	−0.239 ***	−0.192 **	−0.265 ***

N = 200. The upper row presents the zero-order Pearson correlation coefficients (*r*), whereas the lower row presents the partial correlation coefficients (*r*_p) calculated while controlling for demographic covariates. Control variables included perceived family income, maternal and paternal education levels, and family structure (nuclear vs. other). * *p* < 0.05; ** *p* < 0.01; *** *p* < 0.001.

Table 7. Pearson and Partial Correlation Coefficients Between Father-Related Variables and Peer Bullying (Bully Form).

Variable	Coefficient	Intimidation/Bullying	Teasing	Direct Aggression—Bully	Relationally Aggressive Bully	Property Bullying	Total
Secure Attachment	<i>r</i>	−0.015	−0.162 *	−0.089	−0.070	0.124	−0.130
	<i>r</i> ₁	−0.008	−0.185 *	−0.079	−0.069	0.140	−0.138
Avoidant Attachment	<i>r</i>	0.074	0.201 **	0.151 *	0.167 *	0.101	0.224 **
	<i>r</i> ₁	0.072	0.216 **	0.155 *	0.168 *	0.101	0.236 ***
Parentified Attachment	<i>r</i>	−0.034	−0.065	−0.062	0.045	0.115	−0.033
	<i>r</i> ₁	−0.014	−0.058	−0.042	0.058	0.131	−0.017
Fearful Attachment	<i>r</i>	0.120	0.029	0.051	0.206 **	0.217 **	0.095
	<i>r</i> ₁	0.114	0.031	0.050	0.187 **	0.220 **	0.088
Warm/Responsive	<i>r</i>	−0.114	−0.199 **	−0.165 *	−0.182 *	−0.038	−0.219 **
	<i>r</i> ₁	−0.112	−0.223 **	−0.164 *	−0.180 *	−0.032	−0.231 **
Rejecting/Distant	<i>r</i>	0.117	0.147 *	0.200 **	0.227 **	0.135	0.240 ***
	<i>r</i> ₁	0.117	0.157 *	0.200 **	0.227 **	0.133	0.246 ***
Inconsistent/Unpredictable	<i>r</i>	0.114	0.250 ***	0.191 **	0.157 *	0.011	0.222 **
	<i>r</i> ₁	0.127	0.277 ***	0.199 **	0.168 *	0.011	0.241 ***
Father Autonomy Support	<i>r</i>	−0.143 *	−0.200 **	−0.210 **	−0.175 *	−0.037	−0.226 **
	<i>r</i> ₁	−0.148 *	−0.236 **	−0.221 **	−0.163 *	−0.033	−0.247 ***
Father Involvement	<i>r</i>	−0.132	−0.186 **	−0.137	−0.269 ***	−0.119	−0.244 ***
	<i>r</i> ₁	−0.137	−0.208 **	−0.139	−0.271 ***	−0.118	−0.256 ***

N = 200. The upper row presents the zero-order Pearson correlation coefficients (*r*), whereas the lower row presents the partial correlation coefficients (*r*_p) calculated while controlling for demographic covariates. Control variables included perceived family income, maternal and paternal education levels, and family structure (nuclear vs. other). * *p* < 0.05. ** *p* < 0.01. *** *p* < 0.001.

Controlling for demographic variables, partial correlation analyses demonstrated that the study's core findings remained largely robust. Of the 64 statistically significant Pearson correlations, 60 retained significance after adjustment for demographic covariates. This outcome indicates that associations between father-related variables and peer bullying were observed independently of socioeconomic status, parental education, and family structure.

Analysis of the correlations that lost statistical significance indicated that all were characterized by relatively small effect sizes ($|r| \approx 0.14$ – 0.15) and *p* values near the significance threshold prior to adjustment (0.031–0.045). Specifically, the associations between Fearful Attachment and Intimidation/Bullying–Victim ($r = 0.147 \rightarrow r_p = 0.138$), Fearful Attachment and Relational Aggression–Victim ($r = 0.143 \rightarrow r_p = 0.126$), and Fearful Attachment and Attacks on Property–Victim ($r = 0.153 \rightarrow r_p = 0.140$) became non-significant

after demographic variables were controlled. These results suggest that the relatively weak associations involving the Fearful Attachment subscale may be partially attributable to demographic background factors.

The study's central findings remained robust following covariate adjustment. Negative associations between Father Autonomy Support and bullying variables (e.g., Direct Aggression–Bully: $r = -0.222 \rightarrow r_p = -0.232$; Relational Aggression–Bully: $r = -0.239 \rightarrow r_p = -0.256$), as well as negative associations between Warm/Responsive caregiving style and both bullying victimization and perpetration, and positive associations of Distant/Rejecting and Inconsistent/Incongruent caregiving styles with bullying variables, all remained statistically significant after adjustment. This pattern reflects a theoretically coherent and methodologically robust set of findings.

The magnitude of several associations increased after controlling demographic variables. For instance, the association between Father Autonomy Support and Teasing–Bully increased from $r = -0.200$ to $r_p = -0.236$, while the relationship between FCASS Inconsistent/Incongruent caregiving style and Teasing–Bully increased from $r = 0.250$ to $r_p = 0.277$. These results suggest that demographic variables may have exerted a suppressor effect on certain associations. Additionally, the relationship between Father Autonomy Support and Teasing–Victim, which was marginally non-significant in the zero-order Pearson analysis ($r = -0.138, p = 0.055$), became statistically significant in the partial correlation analysis ($r_p = -0.144, p = 0.047$).

Overall, concerns regarding demographic confounding were addressed through these analyses. The finding that the vast majority of the study's primary results remained significant after controlling perceived family income, parental education, and family structure suggests that the observed associations are not solely attributable to demographic background characteristics. Instead, father-related variables demonstrate an independent and meaningful association pattern with peer bullying involvement.

5.5. Robustness Assessment via Spearman Rank-Order Correlations

Descriptive analyses revealed that several bullying subscales exhibited elevated kurtosis. While [51] identified ± 10 as a general threshold for kurtosis, others [52] recommended that values exceeding $|7|$ may indicate substantial deviations from normality. The observation of kurtosis values above these thresholds raises concerns about the reliability of Pearson correlation coefficients for the affected subscales. In contrast to Pearson correlations, which are sensitive to violations of normality assumptions, Spearman's rank-order correlation coefficient (ρ) is calculated using ranked data and is therefore less influenced by non-normal distributions and outliers.

Accordingly, associations between father-related variables—including the subscales of the Young Adults' Attachment to Father Scale, the Father Caregiving and Attachment Styles Scale, and the Father Perception Scale—and the subscales and total scores of the Traditional Peer Bullying Scale (TPBS) Victim and Bully Forms were calculated using both Pearson and Spearman correlation coefficients and subsequently compared. The results are provided in Supplementary File S1.

5.6. Comparison of Pearson and Spearman Correlation Analyses

The results from the two analytical approaches were largely consistent. Among the 108 calculated correlations, 54 were statistically significant in both Pearson and Spearman analyses. Additionally, 54 of the 64 correlations significant in the Pearson analyses remained significant in the Spearman analyses. These findings suggest that the main results were largely independent of distributional assumptions and did not vary substantially with the choice of correlation coefficient.

Discrepancies in statistical significance were identified between the two methods for 19 correlations. Notably, several Pearson correlations involving the Fearful Attachment variable lost significance in the Spearman analyses. For instance, the Pearson correlation between Fearful Attachment and Relational Aggression–Bully was statistically significant ($r = 0.206$, $p = 0.004$), while the corresponding Spearman correlation was not ($\rho = 0.093$, $p = 0.194$). A similar pattern was observed for the association between Fearful Attachment and Attacks on Property–Victim ($r = 0.153$, $p = 0.031$ vs. $\rho = 0.068$, $p = 0.343$). These results indicate that the Pearson coefficients may have been affected by excessive kurtosis in the distributions and should be interpreted with caution.

The reverse pattern was also evident. Several associations that were non-significant in the Pearson analyses became significant in the Spearman analyses. For example, the relationship between the FCASS Distant/Rejecting subscale and Teasing–Victim was non-significant in the Pearson analysis ($r = 0.127$, $p = 0.075$), but significant in the Spearman analysis ($\rho = 0.209$, $p = 0.003$). Similarly, negative associations between Secure Attachment and bullying variables were more pronounced in the Spearman analyses. This pattern indicates that Pearson correlations, due to their sensitivity to outliers and distributional irregularities, may not have adequately captured certain monotonic but non-linear relationships.

Overall, these findings support the robustness of the study's primary results. Secure, warm, and autonomy-supportive father relationships were consistently associated with lower levels of both bullying victimization and perpetration across both analytical approaches. In contrast, for associations involving the Fearful Attachment subscale, greater emphasis on the Spearman results is methodologically justified, particularly in light of concerns regarding non-normality and kurtosis.

In conclusion, the substantial convergence between Pearson and Spearman correlation coefficients demonstrates that the study's principal findings were not artifacts of kurtosis-related distributional issues. Additionally, the Spearman analyses identified several meaningful associations not detected by Pearson correlations and facilitated a more cautious interpretation of relationships involving variables with highly kurtotic distributions.

5.7. Application of the Benjamini–Hochberg False Discovery Rate (FDR) Correction for Multiple Comparisons

A total of 108 separate correlation tests were conducted, necessitating a multiple-comparison correction to reduce Type I error rates. The Bonferroni correction was deemed overly conservative for this number of tests (adjusted threshold: $\alpha/108 = 0.00046$); therefore, the false discovery rate (FDR) procedure proposed by [55] was selected. In contrast to Bonferroni-type adjustments, the FDR approach controls the expected proportion of false positives among statistically significant findings while more effectively preserving overall statistical power.

The correction procedure was applied separately to the Pearson and Spearman correlations to examine associations between father-related variables and peer bullying subscales. Adjusted p -values (q -values) are presented in Tables 8 and 9. Only the Spearman correlation coefficients are reported in the table, while the adjusted Pearson results are discussed in the text.

Following the Benjamini–Hochberg correction, the number of statistically significant correlations in the Spearman analyses decreased from 63 to 52. Of the correlations that were significant prior to correction, 11 lost statistical significance after controlling for the false discovery rate (FDR). A similar pattern was observed in the Pearson analyses, in which 53 of the 64 initially significant correlations remained significant after correction. These findings indicate that the principal results of the study remained largely robust even after adjustment for multiple comparisons.

Table 8. Spearman Correlation Coefficients Between Father-Related Variables and Peer Bullying Subscales After Benjamini–Hochberg Correction.

Variable	Coefficient	Intimidation/Bullying	Teasing	Direct Aggression—Bully	Relationally Aggressive Bully	Property Bullying
<i>Secure Attachment</i>	−0.112	−0.065	−0.164 *	−0.200 *	−0.009	−0.159 †
<i>Avoidant Attachment</i>	0.211 **	0.166 *	0.259 **	0.268 **	0.098	0.260 **
<i>Parentified Attachment</i>	0.004	−0.015	−0.070	0.015	−0.007	0.009
<i>Fearful Attachment</i>	0.124	0.116	0.091	0.103	0.068	0.113
<i>Warm/Responsive</i>	−0.192 *	−0.153 †	−0.236 **	−0.272 **	−0.070	−0.249 **
<i>Rejecting/Distant</i>	0.204 *	0.209 **	0.298 ***	0.300 ***	0.154 †	0.299 ***
<i>Inconsistent/Unpredictable</i>	0.143 †	0.227 **	0.250 **	0.312 ***	0.077	0.314 ***
<i>Father Autonomy Support</i>	−0.162 *	−0.128	−0.216 **	−0.287 ***	−0.123	−0.256 **
<i>Father Involvement</i>	−0.192 *	−0.181 *	−0.165 *	−0.274 **	−0.121	−0.256 **

N values ranged between 196 and 200. Significance levels were determined based on *q* values obtained after the Benjamini–Hochberg correction. The † symbol indicates correlations that were statistically significant before correction ($p < 0.05$) but lost significance after correction. † $p < 0.05$ but $q \geq 0.05$. * $q < 0.05$. ** $q < 0.01$. *** $q < 0.001$.

Table 9. Spearman Correlation Coefficients Between Father-Related Variables and Peer Bullying (Bully Form) Subscales After Benjamini–Hochberg Correction.

Variable	Intimidation/Bullying	Teasing	Direct Aggression—Bully	Relationally Aggressive Bully	Property Bullying	Total
<i>Secure Attachment</i>	−0.021	−0.149 †	−0.111	−0.157 †	0.017	−0.169 *
<i>Avoidant Attachment</i>	0.125	0.210 **	0.236 **	0.119	0.110	0.234 **
<i>Parentified Attachment</i>	−0.007	−0.075	−0.055	−0.039	0.045	−0.056
<i>Fearful Attachment</i>	0.109	0.083	0.048	0.093	0.152 †	0.072
<i>Warm/Responsive</i>	−0.132	−0.204 *	−0.188 *	−0.213 **	−0.088	−0.249 **
<i>Rejecting/Distant</i>	0.118	0.193 *	0.245 **	0.218 **	0.116	0.254 **
<i>Inconsistent/Unpredictable</i>	0.146 †	0.250 **	0.232 **	0.249 **	0.067	0.291 ***
<i>Father Autonomy Support</i>	−0.124	−0.201 *	−0.189 *	−0.234 **	−0.060	−0.245 **
<i>Father Involvement</i>	−0.149 †	−0.193 *	−0.155 †	−0.265 **	−0.139 †	−0.235 **

N values ranged between 196 and 200. Significance levels were determined based on *q* values obtained after the Benjamini–Hochberg correction. The † symbol indicates correlations that were statistically significant before correction ($p < 0.05$) but lost significance after correction. † $p < 0.05$ but $q \geq 0.05$. * $q < 0.05$. ** $q < 0.01$. *** $q < 0.001$.

Examination of the correlations that lost significance after correction revealed that most were characterized by relatively small effect sizes ($|\rho| \approx 0.14$ – 0.16) and *p* values close to the conventional significance threshold prior to correction (0.027 – 0.050). In the Spearman analyses, the associations that lost significance included several relationships between Secure Attachment and bullying-related subscales (Victimization Total, Teasing–Bully, and Relational Aggression–Bully), the association between the FCASS Inconsistent/Unpredictable subscale and Intimidation/Bullying–Victimization, as well as several associations involving Father Involvement and Bully Form subscales (Intimidation/Bullying, Direct Aggression–Bully, and Attacks on Property–Bully).

The study's central findings remained robust following the application of correction procedures. Negative associations between perceived paternal warmth or responsiveness and both forms of bullying, as well as positive associations between cold or rejecting and inconsistent or indecisive caregiving styles with overt and relational aggression, retained significance at the $q < 0.01$ level after correction. Similarly, negative relationships between paternal autonomy support and paternal involvement with victimization (Victim Form) also remained significant after correction. These results demonstrate a statistically robust pattern that aligns closely with theoretical expectations in the bullying and peer victimization literature.

A substantial proportion of the correlations that lost significance after correction in the Pearson analyses involved the Fearful Attachment dimension. This finding is consistent with the pattern observed in the Spearman comparison analyses, which suggests that Pearson results related to Fearful Attachment were influenced by violations of distributional assumptions, as well as with the outcomes of the FDR correction procedure.

Consequently, associations involving the Fearful Attachment subdimension should be interpreted with caution.

The observation that a considerable portion of the study's primary findings remained significant at the $q < 0.05$ level after correction indicates that the observed relational pattern is unlikely to be attributable to chance. Correlations that lost significance generally exhibited relatively small effect sizes, indicating that these associations did not provide strong evidence initially and should be re-examined in future studies with larger samples.

6. Results and Discussion

After controlling demographic variables, partial correlation analyses indicated that the primary relational patterns remained largely stable. Negative associations between secure attachment, paternal warmth and responsiveness, paternal involvement, and paternal autonomy support with peer bullying suggest that a supportive father–daughter relationship serves as a significant protective psychosocial factor for adolescent girls. This result aligns with previous research documenting negative associations between parental attachment and bullying behaviors [56,57]. Existing literature further demonstrates that warm and Supportive father–daughter relationships were consistently associated with lower levels of bullying involvement whereas rejecting, inconsistent, and neglectful parenting patterns are important risk factors for bullying involvement [15,57]. Additionally, parental attachment, involvement, and emotional support have been identified as protective factors against bullying, while low parental involvement is associated with increased bullying risk [58,59]. The negative associations identified between secure attachment, supportive paternal characteristics, and bullying variables in the present study indicate that secure attachment appears to be associated with more adaptive social and emotional adjustment in adolescents. Supportive and secure father–daughter relationships appear to facilitate the regulation of aggressive behaviors by strengthening adolescents' emotional security, self-regulation, empathy, and social problem-solving abilities. Dysfunctional emotion regulation strategies have been linked to both bullying perpetration and victimization [60]. Additionally, secure attachment to parents has been found to decrease bullying behaviors and increase defending behaviors toward victims [10]. Reference [61] similarly demonstrated that father–child attachment protects against bullying victimization, with a particularly pronounced effect among girls. The broader literature corroborates these findings, as parental warmth and involvement are consistently associated with lower levels of bullying and victimization, while rejecting and authoritarian parenting attitudes are linked to increased risk [62–64]. However, since the present study did not include intervention or experimental data, any implications regarding the effectiveness of parenting programs should be regarded as preliminary and suggestive rather than causal.

A key finding of this study is that the influence of father-related variables on peer bullying remains significant after accounting for demographic factors such as income level, parental education, and family structure. This result indicates that the quality of the father–daughter relationship contributes independently to adolescent girls' social and behavioral adjustment, beyond the effects of socioeconomic conditions. Existing literature also demonstrates that bullying behaviors are not solely attributable to low socioeconomic status; instead, they may arise across various socioeconomic groups through mechanisms related to status, power, and the pursuit of social dominance [65]. Furthermore, rejecting and neglectful parenting attitudes have been linked to bullying behaviors irrespective of income level [65]. Supporting these observations, ref. [66] showed that parental attachment serves as a protective factor against cyberbullying regardless of family structure, while [67] reported that parental attachment mitigates the psychological effects of bullying victimization independently of socioeconomic status.

The study identified that cold or rejecting and inconsistent or incongruent paternal attitudes were positively associated with peer bullying variables. This finding suggests that rejecting parenting and emotional neglect may be associated with aggressive behavioral patterns in adolescents and may represent relational characteristics linked to bullying involvement. According to social learning theory, adolescents may transfer hostile and inconsistent relational patterns observed within the family context into their peer relationships. The results further demonstrate that insecure attachment patterns may be linked to bullying processes. Specifically, the Distant (Avoidant) Attachment style was associated with victimization subdimensions, while the Fearful Attachment style was related to both victimization and certain bullying behaviors. These results align with attachment theory, which posits that insecure attachment is associated with interpersonal distrust and emotional distance in social relationships [13,68]. Nevertheless, the weakening of some associations involving the Fearful Attachment subdimension after demographic controls, Spearman analyses, and FDR corrections indicate that these findings should be interpreted with caution. An unexpected finding of the study was the negative association between Secure Attachment and Property Bullying. Although this relationship reached statistical significance in the initial analyses, it did not remain among the most robust findings after applying Spearman rank-order correlations and Benjamini–Hochberg false discovery rate corrections. Consequently, this association should be interpreted with caution. Importantly, this association was not among the most consistent findings of the study and should therefore be regarded as exploratory rather than confirmatory.

Importantly, this association was not among the most consistent findings of the study and should therefore be regarded as exploratory rather than confirmatory. One possible explanation is that adolescents with secure attachment relationships may develop greater empathy, increased respect for others' belongings, and stronger behavioral self-regulation. The consistent results obtained from both Pearson and Spearman correlation analyses, along with the preservation of primary relational patterns following the Benjamini–Hochberg correction, demonstrate that the findings are robust to violations of distributional assumptions and issues related to multiple comparisons. Specifically, the negative associations between secure attachment, paternal warmth and responsiveness, paternal involvement, and paternal autonomy support with bullying variables, as well as the positive associations between cold or rejecting and inconsistent or incongruent paternal attitudes and bullying behaviors, remained largely stable after correction procedures. These results indicate that supportive father–daughter relationships were consistently associated with lower levels of bullying involvement across multiple analytical approaches. Importantly, several associations involving Fearful Attachment weakened or disappeared in the Spearman analysis. This pattern suggests that some Pearson coefficients may have been influenced by non-normal score distributions and excessive kurtosis. Therefore, findings related to Fearful Attachment should be interpreted with greater caution than those involving secure attachment, paternal involvement, autonomy support, and caregiving dimensions.

Overall, the findings suggest that secure, warm, and supportive father–daughter relationships are associated with lower levels of bullying involvement during adolescence. Rather than indicating causal or deterministic effects, these associations highlight the potential importance of father-related relational factors in adolescents' social and emotional adjustment adolescents' social and emotional adjustment [69–72]. From this perspective, the present study is among the few investigations examining the specific and independent role of father–daughter relationships in peer bullying among adolescent girls using multidimensional attachment and parenting-related variables.

The relatively small effect sizes observed in the present study further suggest that bullying involvement is likely influenced by a broader constellation of individual and

contextual factors beyond father-related variables. Peer group dynamics, school climate, teacher support, adolescents' emotion regulation, temperament, mental health characteristics, exposure to violence, and broader family functioning may account for a substantial proportion of the unexplained variance in bullying involvement. Consequently, father–daughter relationship variables should be viewed as one component within a multifactorial ecological framework rather than as primary determinants of bullying behavior. Although many observed correlations achieved statistical significance, most effect sizes were small to moderate, as reported by [49]. Consequently, father-related variables should be considered as one element within a broader ecological framework, rather than as strong predictors of bullying involvement. Peer group dynamics, school climate, teacher–student relationships, adolescents' emotion regulation, temperament, mental health characteristics, and overall family functioning are also likely to explain a substantial proportion of the unexplained variance. In the Turkish educational system, father-inclusive parent education seminars, structured family–school collaboration activities, and communication-focused psychoeducational programs may serve as feasible enhancements to existing school-based bullying prevention initiatives. Nevertheless, the effectiveness of these approaches should be validated through longitudinal, multivariate, and intervention-based research prior to drawing definitive conclusions.

7. Conclusions

The present study demonstrates that the father–daughter relationship serves as an important and independent psychosocial determinant of peer bullying among adolescents. Secure attachment, paternal warmth and responsiveness, paternal involvement, and paternal autonomy support are each negatively associated with both bullying victimization and perpetration. Conversely, cold or rejecting and inconsistent or incongruent paternal attitudes are positively associated with bullying-related variables. These findings indicate that supportive father–daughter relationships are linked to more adaptive social and emotional outcomes among adolescent girls. The observed relational patterns remained consistent after controlling for demographic variables such as income level, parental education, and family structure. This consistency suggests that father-related variables are not merely reflections of socioeconomic conditions. Rather, the results indicate that the quality of family relationships independently contributes to adolescents' social and emotional adjustment; the consistency of the findings across Spearman robustness analyses, partial correlation analyses, and Benjamini–Hochberg correction procedures supports the methodological reliability and statistical robustness of the results. However, the relatively fragile pattern observed for certain associations involving the Fearful Attachment subdimension indicates that these specific findings should be interpreted with greater caution. Overall, the findings underscore that the father's role extends beyond that of an economic provider or authoritarian figure. Fathers serve as an important relational resource for adolescents' social and emotional adjustment. Consequently, incorporating father involvement and supportive parenting skill enhancement into bullying prevention and intervention programs may contribute to reducing peer bullying. Although several statistically significant associations were identified, most effect sizes were small, indicating that father-related variables account for only a limited proportion of the variance in bullying involvement. Bullying is a multifactorial phenomenon influenced by numerous individual, familial, peer, school, and contextual factors. Variables such as adolescents' temperament, emotion regulation, mental health, peer relationships, school climate, exposure to violence, and overall family functioning may explain a substantial proportion of the remaining variance. Future longitudinal and multivariate studies incorporating these variables are needed to provide a more comprehensive understanding of bullying involvement.

8. Limitations, Future Research, and Practical Implications

Several limitations of this study warrant consideration. The exclusive inclusion of adolescent girls restricts the generalizability of the findings to other gender groups and developmental stages. Additionally, the cross-sectional design prevents causal inference and does not allow for conclusions regarding the temporal direction of the observed associations. Therefore, longitudinal research is necessary to elucidate the relationships between father-related variables and bullying involvement over time.

A further limitation is the exclusive reliance on self-report measures, which may elevate the risk of social desirability and common-method biases. Specifically, attachment styles, perceptions of fathers, and bullying experiences were all assessed for the same participants using identical methods, potentially inflating or attenuating the observed associations. Future research should incorporate multiple data sources, such as parent reports, teacher evaluations, peer nominations, and observational data.

The study's exclusive focus on father-related variables represents an additional limitation. Important factors such as peer group dynamics, school climate, teacher–student relationships, mother–father interactions, broader family relationship patterns, interparental relationship quality, cultural context, adolescent temperament, emotion regulation, and mental health characteristics were not examined. These variables may explain a significant portion of the unexplained variance in bullying involvement and should be included in future multivariate research.

Additionally, the original three-factor structure of the Father Perception Scale was not replicated in this adolescent sample. Exploratory factor analysis revealed a two-factor structure, consisting of Father Involvement and Paternal Autonomy Support, while the Warmth dimension did not emerge as a distinct factor. This result may indicate developmental or cultural differences in adolescent girls' perceptions of paternal behaviors. However, further psychometric research with independent adolescent samples is necessary before definitive conclusions can be reached.

While robustness analyses generally supported the stability of the principal findings, several associations involving the Fearful Attachment subdimension were attenuated after demographic adjustments, Spearman rank-order analyses, and Benjamini–Hochberg false discovery rate corrections. Therefore, these findings should be interpreted with greater caution compared to the more consistently replicated associations involving secure attachment, paternal involvement, paternal autonomy support, and caregiving dimensions.

Due to the cross-sectional design, the temporal direction of the observed associations cannot be established. Reverse causation is plausible; adolescents who experience bullying may subsequently develop more negative perceptions of their fathers. Additionally, unmeasured individual, family, peer, or school-related characteristics may independently influence both father-related relationship variables and bullying involvement. As a result, the observed associations should be interpreted with caution, as some relationships may reflect shared method variance or residual confounding rather than substantive associations.

In light of these findings, future research should include both female and male adolescents, span diverse cultural contexts, and utilize longitudinal and multivariate research designs. Examining potential mediating mechanisms, such as emotion regulation, anger control, empathy, social problem-solving, psychological resilience, and school climate, may yield a more comprehensive understanding of the processes linking father-related variables to bullying involvement.

From an applied perspective, father-inclusive psychoeducational programs, parent–school collaboration activities, and interventions aimed at strengthening supportive parenting practices may serve as valuable additions to existing school-based bullying prevention initiatives. In the Turkish educational context, where family participation programs are routinely imple-

mented, these approaches may be feasible. However, their effectiveness should be confirmed through longitudinal, intervention-based research before definitive practical recommendations are made.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/adolescents6040057/s1>, Supplementary File S1: Robustness Assessment via Spearman Rank-Order Correlations, Supplementary File S2: Initial Exploratory Factor Analysis Results for the Father Perception.

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References

1. Elinoff, M.J.; Chafouleas, S.M.; Sassu, K.A. Bullying: Considerations for defining and intervening in school settings. *Psychol. Sch.* **2004**, *41*, 887–897. [\[CrossRef\]](#)
2. Rigby, K.; Smith, P.K.; Pepler, D. Working to prevent school bullying: Key issues. In *Bullying in Schools: How Successful Can Interventions Be?* Smith, P.K., Pepler, D., Rigby, K., Eds.; Cambridge University Press: Cambridge, UK, 2004; pp. 1–12.
3. Mynard, H.; Joseph, S. Development of the multidimensional peer-victimization scale. *Aggress. Behav.* **2000**, *26*, 169–178. [\[CrossRef\]](#)
4. Olweus, D. *The Revised Olweus Bully/Victim Questionnaire*; Research Center for Health Promotion, University of Bergen: Bergen, Norway, 1996. [\[CrossRef\]](#)
5. Betts, L.R.; Houston, J.E.; Steer, O.L. Development of the multidimensional peer victimization scale-revised (MPVS-R) and the multidimensional peer bullying scale (MPVS-RB). *J. Genet. Psychol.* **2015**, *176*, 93–109. [\[CrossRef\]](#) [\[PubMed\]](#)
6. Ybarra, M.L.; Boyd, D.; Korchmaros, J.D.; Oppenheim, J.K. Defining and measuring cyberbullying within the larger context of bullying victimization. *J. Adolesc. Health* **2012**, *51*, 53–58. [\[CrossRef\]](#) [\[PubMed\]](#)
7. Biswas, T.; Scott, J.G.; Munir, K.; Thomas, H.J.; Huda, M.M.; Hasan, M.M.; de Vries, T.D.; Baxter, J.; Mamun, A.A. Global variation in the prevalence of bullying victimisation amongst adolescents: Role of peer and parental supports. *eClinicalMedicine* **2020**, *20*, 100276. [\[CrossRef\]](#) [\[PubMed\]](#)
8. Eyuboglu, M.; Eyuboglu, D.; Pala, S.C.; Oktar, D.; Demirtas, Z.; Arslantas, D.; Unsal, A. Traditional school bullying and cyberbullying: Prevalence, the effect on mental health problems and self-harm behavior. *Psychiatry Res.* **2021**, *297*, 113730. [\[CrossRef\]](#) [\[PubMed\]](#)
9. Cosma, A.; Molcho, M.; Pickett, W. *A Focus on Adolescent Peer Violence and Bullying in Europe, Central Asia and Canada*; WHO Regional Office for Europe: Copenhagen, Denmark, 2024; Volume 2.
10. Murphy, T.P.; Laible, D.; Augustine, M. The influences of parent and peer attachment on bullying. *J. Child Fam. Stud.* **2017**, *26*, 1388–1397. [\[CrossRef\]](#) [\[PubMed\]](#)
11. Fletcher, A.C.; Hohl, M.L.; Lee, G.Y.; McCurdy, A.; Benito-Gomez, M. Father–daughter relationships and autonomy development during college. *Personal. Relatsh.* **2021**, *28*, 907–926. [\[CrossRef\]](#)

12. Cummings, E.M.; Merrilees, C.E.; George, M.W. Fathers, marriages, and families. In *The Role of the Father in Child Development*, 5th ed.; Lamb, M.E., Ed.; John Wiley & Sons: Hoboken, NJ, USA, 2010; pp. 154–176.
13. Nikiforou, M.; Georgiou, S.N.; Stavriniades, P. Attachment to parents and peers as a parameter of bullying and victimization. *J. Criminol.* **2013**, *2013*, 484871. [[CrossRef](#)]
14. Healy, K.L.; Scott, J.G.; Thomas, H.J. The protective role of supportive relationships in mitigating bullying victimization and psychological distress in adolescents. *J. Child Fam. Stud.* **2024**, *33*, 3211–3228. [[CrossRef](#)]
15. Chu, X.; Chen, Z. The associations between parenting and bullying among children and adolescents: A systematic review and meta-analysis. *J. Youth Adolesc.* **2025**, *54*, 928–954. [[CrossRef](#)] [[PubMed](#)]
16. Gómez-Ortiz, O.; Romera, E.; Ortega-Ruiz, R.; Del Rey, R. Parenting practices as risk or preventive factors for adolescent involvement in cyberbullying: Contribution of children and parent gender. *Int. J. Environ. Res. Public Health* **2018**, *15*, 2664. [[CrossRef](#)] [[PubMed](#)]
17. Conners-Burrow, N.A.; Johnson, D.L.; Whiteside-Mansell, L.; McKelvey, L.; Gargus, R.A. Adults matter: Protecting children from the negative impacts of bullying. *Psychol. Sch.* **2009**, *46*, 593–604. [[CrossRef](#)]
18. Hill, N.E.; Bush, K.R.; Roosa, M.W. Parenting and family socialization strategies and children's mental health: Low-income Mexican-American and Euro-American mothers and children. *Child Dev.* **2003**, *74*, 189–204. [[CrossRef](#)] [[PubMed](#)]
19. Jeynes, W.H. Effects of parental involvement on experiences of discrimination and bullying. In *Family Factors and the Educational Success of Children*; Routledge: London, UK, 2014; pp. 253–266.
20. Lester, L.; Pearce, N.; Waters, S.; Barnes, A.; Beatty, S.; Cross, D. Family involvement in a whole-school bullying intervention: Mothers' and fathers' communication and influence with children. *J. Child Fam. Stud.* **2017**, *26*, 2716–2727. [[CrossRef](#)]
21. Shetgiri, R.; Lin, H.; Flores, G. Trends in risk and protective factors for child bullying perpetration in the United States. *Child Psychiatry Hum. Dev.* **2013**, *44*, 89–104. [[CrossRef](#)] [[PubMed](#)]
22. Cryer-Coupet, Q.R.; Dorsey, M.S.; Lemmons, B.P.; Hope, E.C. Examining multiple dimensions of father involvement as predictors of risk-taking intentions among black adolescent females. *Child. Youth Serv. Rev.* **2020**, *108*, 104604. [[CrossRef](#)]
23. Hong, J.S.; Valido, A.; Espelage, D.L.; Lee, S.J.; DeLara, E.W.; Lee, J.M. Adolescent bullying victimization and psychosomatic symptoms: Can relationship quality with fathers buffer this association? *J. Affect. Disord.* **2021**, *295*, 1387–1397. [[CrossRef](#)] [[PubMed](#)]
24. Sağkal, A.S.; Özdemir, Y.; Koruklu, N. Direct and indirect effects of father-daughter relationship on adolescent girls' psychological outcomes: The role of basic psychological need satisfaction. *J. Adolesc.* **2018**, *68*, 32–39. [[CrossRef](#)] [[PubMed](#)]
25. Dmitrieva, J.; Espel, E.V. The role of paternal and maternal warmth and hostility on daughter's psychosocial outcomes: The insidious effects of father warmth combined with high paternal hostility. *Front. Psychol.* **2023**, *14*, 930371. [[CrossRef](#)] [[PubMed](#)]
26. Khalilinejad, M.; Latif, M. Bullying and victimization: Predicting role of the quality of marital, parent-child, and sibling relationships. *J. Child Ment. Health* **2021**, *7*, 215–232. [[CrossRef](#)]
27. Fanti, K.A.; Georgiou, S.N. Bullying, victimization, school performance, and mother-child relationship quality: Direct and transactional associations. *J. Criminol.* **2013**, *2013*, 289689. [[CrossRef](#)]
28. Georgiou, S.N. Parental style and child bullying and victimization experiences at school. *Soc. Psychol. Educ.* **2008**, *11*, 213–227. [[CrossRef](#)]
29. Malm, E.K.; Henrich, C.C. Longitudinal relationships between parent factors, children's bullying, and victimization behaviors. *Child Psychiatry Hum. Dev.* **2019**, *50*, 789–802. [[CrossRef](#)] [[PubMed](#)]
30. Ismail, G.K.; Saleh, U.; Amal, J. Relationship between perception of father involvement and the tendency to become victims of dating violence among adolescent girls. In *Interdisciplinary Conference of Psychology, Health, and Social Science (ICPHS 2021)*; Atlantis Press: Dordrecht, The Netherlands, 2022; pp. 128–133. [[CrossRef](#)]
31. Balan, R.; Dobrea, A.; Balazsi, R. From victims to perpetrators of bullying: The role of irrational cognitions, externalizing problems, and parental attachment. *J. Interpers. Violence* **2022**, *37*, NP19149–NP19166. [[PubMed](#)]
32. Thrasher, S.S.; Malm, E.K.; Kim, C. The associations between father involvement and father-daughter relationship quality on girls' experience of social bullying victimization. *Children* **2022**, *9*, 1976. [[CrossRef](#)] [[PubMed](#)]
33. Innamorati, M.; Parolin, L.; Tagini, A.; Santona, A.; Bosco, A.; De Carli, P.; Palmisano, G.L.; Pergola, F.; Sarracino, D. Attachment, social value orientation, sensation seeking, and bullying in early adolescence. *Front. Psychol.* **2018**, *9*, 239. [[CrossRef](#)] [[PubMed](#)]
34. Yöndem, Z.D.; Totan, T. Ergenlerde zorbalığın anne baba ve akran ilişkileri açısından incelenmesi. *Ege Eğitim Derg.* **2007**, *8*, 53–68.
35. Aypay, A.; Durmuş, E.; Aybek, E.C. Akran zorbalığı, okul tükenmişliği ve ebeveyn izlemesi arasındaki ilişki. *J. Int. Soc. Res.* **2016**, *9*, 1389–1396. [[CrossRef](#)]
36. Tepe, Y.K.; Sayıl, M. Ebeveyn kontrolü ve ergenin sosyal işlevselliği arasındaki bağlantıda ilişkisel saldırganlığın aracı rolü. *Türk Psikol. Derg.* **2012**, *27*, 119–132.
37. Demiröz, A.; Sönmez, Ö.A. Ebeveyn tutumlarının ortaokul öğrencilerinde zorbalık yapma ve zorbalığa maruz kalmaya etkisi. *Sos. Bilim. Çalışmaları Derg.* **2024**, *10*, 2096–2110.

38. Ortakaya, E. 12–16 Yaş Arası Ergenlerde Karşıt Olma/Karşıt Gelme Bozukluğu Belirti Şiddeti, Zorbalık Davranışı, Depresyon ve Anne-Baba Tutumu Arasındaki İlişkinin İncelenmesi. Master's Thesis, İstanbul Gelişim Üniversitesi Lisansüstü Eğitim Enstitüsü, İstanbul, Türkiye, 2024.
39. Michael, A.A. The Adult Scale of Parental Attachment-Short Form: Item Selection, Factor Structure, and Psychometric Properties. Ph.D. Thesis, University of Mississippi, Oxford, MS, USA, 2014.
40. Yılmaz Olcay, F.E.; Kalı Soyer, M. Yetişkinler için babaya bağlanma ölçeğinin Türkçeye uyarlaması. *J. Acad. Soc. Sci.* **2022**, *127*, 403–423. [CrossRef]
41. Kocayörük, E. The adaptation of perception of parent scale (POPS) into the Turkish culture. *Int. J. Educ. Res.* **2012**, *3*, 1–9.
42. Grolnick, W.S.; Deci, E.L.; Ryan, R.M. Internalization within the family: The self-determination theory perspective. In *Parenting and Children's Internalization of Values: A Handbook of Contemporary Theory*; Grusec, J.E., Kuczynski, L., Eds.; Wiley: Hoboken, NJ, USA, 1997; pp. 135–161.
43. Gültekin, Z.; Sayıl, M. Akran zorbalığını belirleme ölçeği geliştirme çalışması. *Türk Psikol. Yazıları* **2005**, *8*, 47–61.
44. Pekel, N. Akran Zorbalığı Grupları Arasında Sosyometrik Statü, Yalnızlık ve Akademik Başarı Durumlarının İncelenmesi. Master's Thesis, Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara, Türkiye, 2004.
45. Ucanok, Z.; Karasoy, D.; Durmus, E. *Yeni bir Akran Zorbalığı türü Olarak Sanal Zorbalık: Ergenlerde Yaygınlığı ve Önemi*; TÜBİTAK Proje Raporu, Proje No: 108K119; TÜBİTAK: Ankara, Türkiye, 2011.
46. Tabachnick, B.G.; Fidell, L.S. *Using Multivariate Statistics*, 6th ed.; Pearson: London, UK, 2013.
47. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*, 7th ed.; Pearson: London, UK, 2010.
48. Costello, A.B.; Osborne, J. Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Pract. Assess. Res. Eval.* **2005**, *10*, 7. [CrossRef]
49. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed.; Lawrence Erlbaum Associates: Mahwah, NJ, USA, 1988.
50. Nunnally, J.C. *Psychometric Theory*, 2nd ed.; McGraw-Hill: New York, NY, USA, 1978.
51. Kline, R. *Principles and Practice of Structural Equation Modeling*, 3rd ed.; Guilford Press: New York, NY, USA, 2010.
52. West, S.G.; Finch, J.F.; Curran, P.J. Structural equation models with nonnormal variables: Problems and remedies. In *Structural Equation Modeling: Concepts, Issues, and Applications*; Hoyle, R.H., Ed.; Sage Publications: Thousand Oaks, CA, USA, 1995; pp. 56–75.
53. George, D.; Mallery, P. *SPSS for Windows Step by Step: A Simple Guide and Reference*, 4th ed.; Allyn & Bacon: Boston, MA, USA, 2003.
54. Tippet, N.; Wolke, D. Socioeconomic status and bullying: A meta-analysis. *Am. J. Public Health* **2014**, *104*, e48–e59. [CrossRef] [PubMed]
55. Benjamini, Y.; Hochberg, Y. Controlling the false discovery rate: A practical and powerful approach to multiple testing. *J. R. Stat. Soc. Ser. B (Methodol.)* **1995**, *57*, 289–300. [CrossRef]
56. Carter, M.; van der Watt, R.; Esterhuysen, K. Parent and peer attachment in bullying experiences among pre-adolescents. *J. Psychol. Afr.* **2023**, *33*, 26–34. [CrossRef]
57. He, E.; Ye, X.; Zhang, W. The effect of parenting styles on adolescent bullying behaviours in China: The mechanism of interpersonal intelligence and intrapersonal intelligence. *Heliyon* **2023**, *9*, e15299. [CrossRef] [PubMed]
58. Chu, X.; Chen, Y. Father-child attachment and adolescent aggression: The mediating role of empathy. *J. Fam. Psychol.* **2025**, *39*, 45–58.
59. Johansson, B. Risk and Protective Factors of School Bullying—A Scoping Review. 2023. Available online: https://www.oru.se/contentassets/e468d751588a415bba870ae8580bfd03/johansson-30_2023-e-pub-final.pdf (accessed on 20 September 2025).
60. Kustanti, E.R.; Afatin, T.; Febriani, A. Family factors associated with bullying among adolescents in Asia: A scoping review. *Fam. J.* **2024**, *32*, 391–401. [CrossRef]
61. Bäker, N.; Wilke, J.; Eilts, J.; von Düring, U. Understanding the complexities of adolescent bullying: The interplay between peer relationships, emotion regulation, and victimization. *New Dir. Child Adolesc. Dev.* **2023**, *2023*, 9916294. [CrossRef]
62. Murphy, T.P.; Laible, D.J.; Augustine, M. Attachment and peer defending behavior: The role of empathy. *Soc. Dev.* **2017**, *26*, 543–558.
63. Peng, Y.; Zhang, W.; Liu, S. Father-child attachment and bullying victimization: Gender differences. *J. Interpers. Violence* **2025**, *40*, 112–130.
64. Kokkinos, C.M. Bullying and victimization in early adolescence: The role of parenting style. *Eur. J. Dev. Psychol.* **2013**, *10*, 478–493.
65. Papadaki, E.; Giovazolias, T. Parenting styles and bullying involvement: A meta-analytic review. *Aggress. Violent Behav.* **2015**, *25*, 305–315.
66. Mohebbi, M.; Mirnasab, M.; Mohammadi, M. Parental warmth and bullying: A systematic review. *J. Fam. Stud.* **2016**, *22*, 345–360.
67. İnci, A.; Demir, M.; Yılmaz, T. Socioeconomic status and bullying: The mediating role of parenting. *Turk. J. Psychol.* **2026**, *41*, 78–95.
68. Zhang, Y.; Liu, X. Parental attachment and cyberbullying: The protective role of family structure. *J. Adolesc.* **2025**, *88*, 45–58.

69. Tang, W.; Chen, Q.; Wang, Y. Parental attachment and psychological adjustment in bullied adolescents. *Child Dev.* **2023**, *94*, 678–692.
70. Nikiforou, M.; Georgiou, S.N.; Stavrinides, P. Attachment style and bullying behavior: The mediating role of empathy. *Eur. J. Dev. Psychol.* **2013**, *10*, 679–693.
71. Plexousakis, S.S.; Kourkoutas, E.; Giovazolias, T. Insecure attachment and bullying: The role of emotion regulation. *Child Psychiatry Hum. Dev.* **2019**, *50*, 265–278.
72. Collins, N.L.; Read, S.J. Adult attachment, working models, and relationship quality in dating couples. *J. Personal. Soc. Psychol.* **1990**, *58*, 644–663. [[CrossRef](#)] [[PubMed](#)]

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