

Emotional Security and Perceived Family Functioning in Relation to Adolescents' Emotional and Behavioral Problems: The Mediating Role of Adolescents' Cognitive Appraisals of Interparental Conflict

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Article Info

Article type:

Original Article

How to cite this article:

Nozari Kohne Shahri, G., Kakavand, A., & Keshavarz, S. (2027). Emotional Security and Perceived Family Functioning in Relation to Adolescents' Emotional and Behavioral Problems: The Mediating Role of Adolescents' Cognitive Appraisals of Interparental Conflict. *Applied Family Therapy Journal*, 8(2), 1-15.

<http://dx.doi.org/10.61838/kman.aftj.5884>



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ABSTRACT

Objective: This study aimed to investigate the relationships of emotional security and perceived family functioning with adolescents' emotional and behavioral problems, with particular emphasis on the mediating role of adolescents' cognitive appraisals of interparental conflict.

Methods and Materials: This descriptive-correlational study employed structural equation modeling. The statistical population comprised all adolescents enrolled in lower- and upper-secondary schools in District 5 of Tehran during the 2024–2025 academic year. A sample of 251 students was selected using multistage random sampling. Data were collected using the Security in the Interparental Subsystem Scale developed by Koss et al. (2007), the McMaster Family Assessment Device developed by Epstein et al. (1983), the Children's Perception of Interparental Conflict Scale developed by Grych and Fincham (1992), and the Symptom Checklist developed by Derogatis et al. (1973). The hypothesized structural model and the direct and indirect relationships among the study variables were examined using AMOS version 24.

Findings: Structural equation modeling indicated that the proposed model demonstrated an acceptable fit to the observed data. The model explained 32% of the variance in adolescents' emotional and behavioral problems. Emotional security and perceived family functioning had significant direct effects on emotional and behavioral problems. Both variables also exerted significant indirect effects through adolescents' cognitive appraisals of interparental conflict. Thus, adolescents' interpretations and evaluations of conflict between their parents significantly mediated the associations between family-related factors and psychological difficulties.

Conclusion: The findings highlight cognitive appraisal as an important psychological mechanism through which emotional security and perceived family functioning influence adolescents' emotional and behavioral adjustment. Preventive and therapeutic interventions may therefore be strengthened by simultaneously enhancing adolescents' emotional security, improving family functioning and parent–adolescent relationships, reducing destructive interparental conflict, and modifying adolescents' negative or threatening interpretations of such conflict.

Keywords: Adolescents; Cognitive Appraisal; Emotional and Behavioral Problems; Emotional Security; Family Functioning; Interparental Conflict

1. Introduction

Adolescence is a developmental period characterized by substantial biological, cognitive, emotional, and social transformation. Pubertal maturation is accompanied by changes in hormonal activity that can affect mood, information processing, emotional sensitivity, and behavioral regulation, while adolescents simultaneously encounter increasing academic demands, expanding peer relationships, greater expectations for autonomy, and evolving family roles (Li, 2024). These overlapping developmental changes may increase vulnerability to emotional and behavioral problems, particularly when adolescents lack stable interpersonal support or effective emotion-regulation resources. Emotional difficulties during this period may include anxiety, depressive symptoms, somatic complaints, obsessive-compulsive symptoms, interpersonal sensitivity, fear, and other forms of psychological distress, whereas behavioral difficulties may be reflected in irritability, aggression, withdrawal, impulsivity, rule-breaking, or maladaptive coping. Because problems emerging during adolescence can interfere with educational attainment, social functioning, identity development, and later adult adjustment, adolescent mental health has become a major developmental and public-health concern (Kumar et al., 2024; Nebhinani & Jain, 2019).

The prevalence and complexity of adolescent emotional and behavioral problems indicate that they cannot be explained exclusively by individual characteristics. A national school-based investigation demonstrated that emotional and behavioral problems among children and adolescents are associated with multiple personal, social, and familial factors, underscoring the need for ecological and developmentally informed explanations (Labib et al., 2024). Evidence of familial clustering further suggests that emotional problems are distributed within family contexts rather than occurring independently in individual adolescents. Similarities in emotional difficulties among family members may reflect shared environmental stressors, relational patterns, parental psychological difficulties, family communication processes, and common vulnerabilities (Jordan et al., 2024). Accordingly, contemporary models increasingly conceptualize adolescent psychopathology as the result of transactions between individual developmental characteristics and the emotional, relational, and organizational conditions of the family.

The family remains one of the most influential developmental systems during adolescence, even as young

people seek greater independence. Family relationships provide emotional support, behavioral guidance, models of conflict resolution, and a context in which adolescents learn how to interpret interpersonal experiences. Family functioning refers broadly to the ways in which family members organize roles, communicate, solve problems, regulate behavior, express and respond to emotions, and maintain relational involvement. It is therefore not a single behavior but a multidimensional construct involving structural, interpersonal, affective, and regulatory processes. Conceptual analyses of family functioning emphasize that it reflects the family's capacity to adapt to demands, coordinate responsibilities, preserve effective communication, and sustain the well-being of its members (Zhang, 2018). When these processes are disrupted, adolescents may experience ambiguity, emotional distance, inconsistent boundaries, ineffective problem solving, or inadequate support.

The association between family functioning and adolescent mental health has been demonstrated across cultural and clinical contexts. Systemic family dynamics, including cohesion, communication, conflict management, and relational organization, are significantly related to mental health problems among secondary-school and university students (Yang et al., 2021). More recent mixed-methods evidence from community and clinical samples similarly indicates that dysfunctional family processes are closely associated with adolescents' emotional and psychological difficulties (Demetriou, 2025). Poor family functioning may create chronic stress, reduce adolescents' access to supportive relationships, and impede the development of adaptive coping strategies. In contrast, families characterized by clear communication, emotional responsiveness, collaborative problem solving, and consistent behavioral regulation may provide a protective environment in which adolescents can process stressful experiences more effectively.

The implications of family functioning extend across diverse forms of adolescent maladjustment. In adolescents, dysfunctional family processes have been associated with psychological distress and suicidal tendencies, indicating that family organization may be relevant not only to general emotional symptoms but also to severe outcomes involving hopelessness and self-harm risk (Setordzi & Adjorlolo, 2025). Family-functioning factors have also been linked to problematic technology-related behaviors, including smartphone addiction and phubbing, suggesting that adolescents may turn to maladaptive digital engagement

when family relationships do not provide sufficient emotional connection, structure, or responsiveness (Kim et al., 2024). These findings support the view that poor family functioning can affect adolescent adjustment through several pathways, including heightened stress, impaired self-regulation, reduced self-worth, and reliance on avoidant coping.

Family functioning may influence adolescent symptoms partly through intrapersonal mechanisms. For example, research on anxiety symptomatology has shown that self-esteem mediates the association between family functioning and adolescent anxiety, indicating that adolescents' internal representations of themselves can transmit the effects of family experiences to mental health outcomes (Farmakopoulou et al., 2024). This observation is consistent with developmental models in which family processes shape emotional regulation, perceived competence, expectations about relationships, and interpretations of stressful events. A systematic review of adolescent emotion regulation and subjective well-being further indicates that the capacity to identify, understand, and regulate emotional experiences is central to psychological adjustment during this period (Martínez-Líbano et al., 2025). Thus, family functioning may be especially consequential when it affects the cognitive and emotional processes through which adolescents evaluate and respond to family stress.

Within the broader family environment, interparental conflict is a particularly salient risk factor. Conflict between parents can vary in frequency, intensity, content, resolution, and emotional tone. Although disagreement is a normal component of close relationships, repeated, hostile, unresolved, or child-related conflict may threaten adolescents' sense of safety and stability. Research has shown that exposure to interparental conflict is associated with emotional reactivity among young people, although the nature of this association may be nonlinear. Moderate and severe conflict may have different implications, and adolescents' physiological and emotional responses may depend on the intensity and patterning of exposure (Davies et al., 2020). Therefore, the developmental consequences of conflict are determined not merely by whether disagreement occurs but by how adolescents experience, interpret, and adapt to it.

The effects of interparental conflict can also differ across family structures and relational arrangements. Evidence indicates that conflict between caregivers is associated with adolescents' emotional security across different family configurations, suggesting that the psychological

significance of destructive conflict is not limited to intact biological families (O'Hara et al., 2023). Interparental conflict may signal the possible disruption of important attachment relationships, the loss of family cohesion, or the escalation of hostility within the home. Adolescents who repeatedly witness conflict may become vigilant to signs of relational instability and may experience uncertainty regarding the availability, predictability, and emotional responsiveness of their caregivers.

Family-systems perspectives provide an additional explanation for the effects of interparental conflict. From this viewpoint, conflict does not remain confined to the marital or coparental subsystem but may spread across family relationships through processes such as triangulation, alliance formation, emotional cutoff, and disrupted boundaries. Recent work informed by Bowen's family systems theory has linked interparental conflict, parent-child triangulation, and differentiation of self to nonsuicidal self-injury among adolescents (Wang, 2026). When adolescents become emotionally or behaviorally involved in parental conflict, they may feel responsible for restoring family stability, protecting a parent, or choosing sides. Such involvement can create intense loyalty conflicts, guilt, helplessness, and psychological overload.

The consequences of interparental conflict may also extend beyond the individual adolescent to sibling relationships. A multi-informant study of military families found that interparental conflict was associated with distress among adolescent siblings, demonstrating that shared exposure to family conflict can affect multiple children within the same household (Quichocho & Lucier-Greer, 2021). However, siblings may differ in their responses because they interpret conflict in distinct ways, occupy different positions in the family system, and possess different coping resources. This variability highlights the importance of examining adolescents' subjective appraisals rather than treating exposure to conflict as a uniform environmental event.

Emotional security theory offers a particularly useful framework for understanding how interparental and family processes affect adolescent adjustment. Emotional security refers to adolescents' confidence in the stability, predictability, and emotional safety of significant family relationships. It involves beliefs and feelings about whether family members will remain available, whether conflict can be contained, and whether the family system can continue to function as a source of protection. Destructive interparental conflict may undermine emotional security by increasing

fear, vigilance, avoidance, involvement in conflict, or attempts to regulate parental interactions. Coparental behaviors are especially important because cooperative, supportive, and coordinated parenting can strengthen children's emotional security, whereas hostility, undermining, and inconsistency may weaken it (Dragomir, 2024).

Emotional insecurity is not simply a temporary emotional response to a single conflict episode. It may become an enduring regulatory pattern that influences attention, interpretation, emotional arousal, and behavior. Adolescents who feel insecure may monitor the family environment for signs of danger, interpret ambiguous interactions as threatening, and experience greater difficulty recovering after conflict. Over time, these reactions may contribute to internalizing symptoms, behavioral dysregulation, interpersonal difficulties, and impaired attachment. Preventive intervention research provides evidence that emotional security is modifiable. Family-focused interventions have produced long-term effects on multiple components of adolescents' emotional insecurity, suggesting that improving parental and family processes can alter adolescents' regulatory responses to conflict (Dennis et al., 2024).

Intervention studies also demonstrate connections between emotional security and attachment relationships. A randomized preventive family intervention showed that changes in adolescents' emotional insecurity were associated with their attachment to fathers, indicating that broader family conflict processes and specific parent-adolescent relationships are interconnected (Hoegler et al., 2022). When adolescents experience parents as emotionally available and dependable, they may be better able to tolerate family stress without interpreting it as a threat to their well-being. Conversely, inconsistent attachment relationships may amplify the effects of interparental conflict by reducing adolescents' confidence that support will be available when family tensions arise.

Despite the importance of emotional security, the effects of family functioning and interparental conflict cannot be fully understood without considering cognitive appraisal. Cognitive-contextual models propose that adolescents actively interpret conflict by evaluating its causes, meaning, consequences, and relevance to themselves. Important appraisal dimensions include perceived threat, coping efficacy, self-blame, and perceptions of conflict properties. Perceived threat concerns the extent to which adolescents believe that conflict may lead to family dissolution, harm,

escalation, or loss of emotional support. Self-blame refers to the belief that they caused, intensified, or should resolve the conflict. Conflict-property appraisals concern perceptions of its frequency, intensity, content, and likelihood of resolution.

These cognitive appraisals can explain why adolescents exposed to similar family conditions display different psychological outcomes. One adolescent may view parental disagreement as temporary, manageable, and unrelated to the self, whereas another may interpret the same interaction as evidence of impending separation, personal responsibility, or uncontrollable danger. The second interpretation is more likely to produce fear, guilt, helplessness, and sustained physiological arousal. Thus, the subjective meaning assigned to conflict may be more proximally related to emotional and behavioral problems than exposure alone. Adolescents with greater emotional security may appraise conflict as less threatening because they retain confidence in family stability and caregiver availability. In contrast, adolescents who perceive poor family functioning may interpret conflict as more dangerous because ineffective communication and problem solving provide little evidence that the family can resolve disagreements constructively.

Longitudinal research supports the importance of appraisal processes. Early-adolescent exposure to interparental conflict and negative family climate has been linked to threat appraisals and subsequent risk of psychopathology in young adulthood (Fosco et al., 2023). This finding suggests that cognitive appraisals are not merely short-term correlates of distress but may contribute to developmental pathways connecting family experiences to later psychological problems. Repeated threat appraisals may consolidate maladaptive beliefs about relationships, personal safety, and conflict, thereby increasing vulnerability to anxiety, depression, and other symptoms over time.

Emotional security and cognitive appraisal are theoretically related but conceptually distinct. Emotional security concerns the adolescent's broader sense of safety and relational stability, whereas cognitive appraisal refers to the specific interpretations made regarding interparental conflict. Emotional insecurity may predispose adolescents to interpret conflict as threatening or self-relevant, while negative appraisals may further intensify insecurity by confirming expectations of instability and danger. Accordingly, cognitive appraisal may function as a mechanism through which emotional security influences emotional and behavioral problems. Adolescents with

stronger emotional security may perceive conflict as less threatening, attribute less responsibility to themselves, and expect more effective resolution; these appraisals may reduce the likelihood of psychological distress.

A similar mediational process may operate in relation to perceived family functioning. Families characterized by effective communication, clear roles, affective responsiveness, collaborative problem solving, and consistent behavioral control provide adolescents with evidence that interpersonal difficulties can be managed safely. Such conditions may reduce catastrophic interpretations of parental disagreement. In contrast, when adolescents perceive their families as disorganized, emotionally unresponsive, or ineffective in resolving problems, interparental conflict may be interpreted as more intense, persistent, and personally threatening. Therefore, negative cognitive appraisal may constitute a pathway through which perceived family dysfunction contributes to emotional and behavioral symptoms.

The integration of family functioning, emotional security, and cognitive appraisal is important because these constructs represent different levels of the family–adolescent process. Family functioning reflects the broader relational and organizational environment; emotional security represents an affective-regulatory state concerning family stability; and cognitive appraisal reflects the adolescent’s interpretation of specific conflict experiences. Examining these variables simultaneously may clarify how distal family conditions are translated into proximal psychological risk. It may also explain why direct associations between family variables and adolescent symptoms are sometimes modest: a substantial portion of their effects may operate indirectly through adolescents’ internal evaluations.

This integrated framework has practical relevance. Interventions limited to reducing overt symptoms may be less effective when adolescents continue to live in environments marked by dysfunctional communication, unresolved parental conflict, or emotional insecurity. Family-based prevention may need to improve coparental cooperation, problem solving, emotional responsiveness, and conflict resolution, while adolescent-focused components may need to address threat interpretations, self-blame, and ineffective coping beliefs. Evidence that preventive interventions can improve emotional security supports the feasibility of such approaches (Dennis et al., 2024; Hoegler et al., 2022). Likewise, the association of family functioning with anxiety, distress, suicidal tendencies, and maladaptive behaviors suggests that family

assessment should form an integral part of adolescent mental-health services (Farmakopoulou et al., 2024; Kim et al., 2024; Setordzi & Adjorlolo, 2025).

Despite extensive evidence linking family relationships to adolescent adjustment, fewer studies have simultaneously tested emotional security and perceived family functioning as predictors of broad emotional and behavioral problems while examining adolescents’ cognitive appraisal of interparental conflict as a mediator. Many studies have investigated individual pathways, such as family functioning and distress, interparental conflict and emotional insecurity, or threat appraisal and later psychopathology. However, integrating these pathways within a single structural model can provide a more comprehensive account of the mechanisms through which family experiences influence adolescent mental health. Such an investigation is especially valuable in culturally specific contexts in which family cohesion, parental authority, emotional interdependence, and responses to marital conflict may shape adolescents’ interpretations and adjustment.

Therefore, the present study aimed to examine the relationships of emotional security and perceived family functioning with adolescents’ emotional and behavioral problems and to determine the mediating role of adolescents’ cognitive appraisals of interparental conflict.

2. Methods and Materials

2.1. Study Design and Participants

In terms of purpose, the present study was basic research, and in terms of data collection, it employed a descriptive-correlational design based on structural equation modeling. The statistical population included all adolescents enrolled in lower- and upper-secondary schools in District 5 of Tehran during the 2024–2025 academic year. From this population, 251 participants were selected through multistage random sampling. According to Kline (2016), the sample size required for path analysis modeling may be determined on the basis of the number of free parameters in the model; specifically, 10 to 20 participants should be considered for each parameter. Considering all parameters in the present model, the minimum required sample size was estimated to be 200 participants. Accordingly, and to improve model fit, 260 participants were initially selected through multistage random sampling. After incomplete questionnaires were excluded, data obtained from 251 participants were analyzed.

The procedure was conducted as follows. In the first stage, nine schools were selected as primary sampling units through simple random sampling from the complete list of lower- and upper-secondary schools in District 5 of Tehran. Each school was assigned a unique code, and the selected schools were identified using random-number-generation software. In the second stage, complete lists of students were obtained from the selected schools, and the final study participants were selected as secondary sampling units through simple random sampling.

The inclusion criteria were being between 13 and 18 years of age, being willing to participate and providing informed consent, having satisfactory mental health, and having no history of consultation with a psychiatrist, based on the students' self-reports. The exclusion criteria were unwillingness to continue participating and incomplete completion of the study instruments. The ethical principles of the Declaration of Helsinki were fully observed in the present study, particularly through obtaining voluntary informed consent from all participants, guaranteeing the right to withdraw at any stage, and maintaining complete confidentiality of the collected information.

2.2. Measures

Basic Emotional Security Test (BEST): This scale was developed by Casey in 2007 to assess emotional security among adolescents. The questionnaire consists of 25 items and two factors: 13 items assess the first factor, security, and 12 items assess the second factor, belonging. Of the 25 items, 22 are completed by all respondents, whereas the remaining three are completed only by respondents who have siblings. Items are scored on a Likert-type scale ranging from "strongly agree" (1) to "strongly disagree" (5). Higher scores indicate greater emotional security in adolescents. In international studies, Cronbach's alpha for this scale has been reported as .88, and its validity has been confirmed through confirmatory factor analysis (Meehan, 2002). The scale was standardized in Iran by Shadaei et al. (2015), who reported Cronbach's alpha coefficients of .87 for the 22-item version and .89 for the 25-item version. Moreover, all item factor loadings were greater than .40 and statistically significant, indicating very good internal consistency and reliability. In the present study, the internal consistency of the scale, calculated using Cronbach's alpha, was .86.

Family Assessment Device: This scale was developed by Epstein et al. (1983) to assess family functioning based on the McMaster Model of Family Functioning. This model

identifies the structural, occupational, and interactional characteristics of the family and specifies six dimensions of family functioning. The scale consists of 53 items scored on a Likert-type scale ranging from "strongly agree" (1) to "strongly disagree" (4), with a total score below 110 indicating family dysfunction. The dimensions include problem solving, communication, roles, affective responsiveness, affective involvement, behavior control, and general family functioning. Accordingly, the Family Assessment Device consists of six subscales measuring these dimensions, in addition to a separate scale assessing general family functioning. The developers examined the criterion validity of the questionnaire using the Locke–Wallace Marital Adjustment Test and reported a correlation coefficient of .73. Cronbach's alpha coefficients for reliability ranged from .72 to .92. Yousefi (2011) examined the convergent and divergent validity of the questionnaire using measures of communication patterns and locus of control and reported coefficients of .46, .36, −.41, and −.43, respectively. The Cronbach's alpha coefficient for the total scale was .86. In the present sample, the internal consistency of the total score, calculated using Cronbach's alpha, was .77.

Children's Perception of Interparental Conflict Scale (CPIC): This questionnaire was developed by Grych and Fincham in 1992 on the basis of the cognitive-contextual framework. It was designed to assess marital conflict from the child's perspective among children and adolescents aged 11 years and older. The scale includes two principal domains: (a) children's perceptions of the characteristics of interparental conflict, including frequency, intensity, resolution, and conflict content; and (b) children's responses to or interpretations of conflict, including perceived threat, coping efficacy, and self-blame. The questionnaire consists of 51 items rated on a three-point Likert-type scale. The developers reported a Cronbach's alpha coefficient of .83 and confirmed the content validity of the scale (Grych & Fincham, 2001). In an Iranian study conducted by Gharabaghi and Vafaei (2009), Cronbach's alpha coefficients were reported as .77 for the total Conflict Properties scale, .61 for the total Conflict Interpretation scale, and .84 for the overall Conflict Appraisal scale. In the present study, Cronbach's alpha for the scale was .91.

Symptom Checklist-25 (SCL-25): This questionnaire is one of the most widely recognized instruments for assessing symptoms of psychological disorders. It was initially developed by Derogatis et al. (1973) to evaluate a broad range of psychological problems. It uses a five-point

response scale ranging from “not at all” (0) to “extremely” (4) to assess the degree of distress experienced by the respondent. The instrument is used to assess general psychological status, conduct preliminary screening of individuals with psychological problems, and evaluate the effectiveness of psychological interventions before and after treatment. It includes three global indices: the Global Severity Index (GSI), which represents the overall depth of psychological disturbance and is considered the best single measure of psychological distress and stress; the Positive Symptom Distress Index (PSDI), which measures symptom intensity; and the Positive Symptom Total (PST), which indicates the number of symptoms reported. The scale also assesses nine dimensions of psychological symptoms: somatization, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Cronbach’s alpha coefficients for this questionnaire have

been reported as satisfactory in Iranian populations and are generally greater than .80, indicating high internal consistency. For example, a study conducted among the general population of Tehran reported Cronbach’s alpha coefficients greater than .80 for the questionnaire (Esfahani et al., 2015). In the present study, Cronbach’s alpha for the scale was .88.

2.3. Data Analysis

The collected data were analyzed using structural equation modeling in AMOS version 24.

3. Findings and Results

The mean age of the participants was 14.99 years, with a standard deviation of 1.26. Of the sample, 35.5% were enrolled in lower-secondary school, whereas 64.5% were enrolled in upper-secondary school.

Table 1

Descriptive Statistics for the Study Measures

Variable	Mean	Standard Deviation	Skewness	Kurtosis
Emotional security, total	51.28	20.49	1.03	1.14
Emotional security	22.38	13.08	1.92	1.24
Emotional attachment	28.31	7.74	1.48	1.93
Perceived interparental conflict	107.33	18.25	1.24	0.78
Family functioning, total	150.27	21.06	1.27	1.60
Problem solving	14.84	3.30	-0.53	-0.05
Communication	16.42	3.26	1.44	1.40
Roles	22.12	3.09	-0.32	-0.08
Affective responsiveness	16.92	3.16	-0.04	-0.62
Affective involvement	19.66	3.40	-0.71	0.68
Behavior control	25.12	3.76	-0.22	-0.26
General functioning	35.93	7.03	0.04	0.80
Behavioral and emotional problems	99.76	20.52	-0.80	0.28
Somatic complaints	23.54	5.90	-0.85	0.19
Obsessive-compulsive symptoms	11.54	3.15	-0.88	0.10
Internalizing symptoms	11.77	3.57	1.94	1.13
Depression	8.00	2.40	-0.71	0.32
Anxiety	11.35	3.09	-0.84	0.15
Phobic anxiety	12.66	2.45	-1.44	1.28
Paranoid ideation	3.73	1.24	-0.75	-0.48
Psychoticism	12.32	2.61	-0.95	0.27
Other symptoms	3.97	1.21	-1.04	0.12

The means and standard deviations of the study variables are presented in Table 1. As shown in the table, the skewness and kurtosis values indicate that the study variables were normally distributed.

One of the assumptions of path analysis modeling is multivariate normality. The critical ratio (CR) was used to

assess multivariate normality. According to the findings, the CR value fell between -1.96 and +1.96, indicating that the assumption of multivariate normality was satisfied. To assess univariate normality, a general criterion suggests that data may be considered nonnormally distributed when skewness and kurtosis values fall outside the range of -2 to

+2. As shown in Table 1, none of the indicators had skewness or kurtosis values outside this range. Therefore, the distributions could be regarded as normal or approximately normal.

Table 2

Correlation Matrix of the Main Study Variables

Variable	1	2	3	4
1. Emotional security	1			
2. Perceived family functioning	.658**	1		
3. Cognitive appraisal of interparental conflict	-.498**	-.422**	1	
4. Emotional and behavioral problems	-.243**	-.320**	.377**	1

As shown in Table 2, all correlations among the main study variables were statistically significant at the .01 level. Emotional security was positively associated with perceived family functioning, $r = .658$, $p < .01$, and negatively associated with cognitive appraisal of interparental conflict, $r = -.498$, $p < .01$, and emotional and behavioral problems, $r = -.243$, $p < .01$. Perceived family functioning was negatively associated with cognitive appraisal of interparental conflict, $r = -.422$, $p < .01$, and emotional and behavioral problems, $r = -.320$, $p < .01$. In addition, cognitive appraisal of interparental conflict was positively associated with emotional and behavioral problems, $r = .377$, $p < .01$, indicating that more negative appraisals of interparental conflict were related to greater emotional and behavioral difficulties among adolescents.

Table 3

Model Fit Indices

Fit Indices	RMSEA	TLI	CFI	IFI	GFI	p	χ^2/df
Model values	.05	.90	.92	.90	.91	.000	2.05
Acceptable values	< .08	> .90	> .90	> .90	> .90	< .05	< 3

The findings presented in Table 3 indicate that the model fit indices were generally within acceptable ranges. Therefore, examination of the study hypotheses was

Because path analysis modeling is based on the variance-covariance matrix or the correlation matrix among variables, the correlation matrix of the study variables is presented in Table 2.

After confirming that the assumptions of structural equation modeling had been satisfied, the data were analyzed using AMOS version 24. The results are presented in the subsequent tables and Figure 1. The final model explained 32% of the variance in adolescents' behavioral and emotional problems. The findings are reported below according to the study hypotheses. Model fit was first evaluated using the chi-square statistic, Comparative Fit Index (CFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Goodness-of-Fit Index (GFI). The results are presented in Table 3. Comparison of the estimated values with the recommended cutoff values indicated that the model demonstrated an acceptable fit.

warranted. The standardized path coefficients of the proposed model are presented in Figure 1 and Table 4.

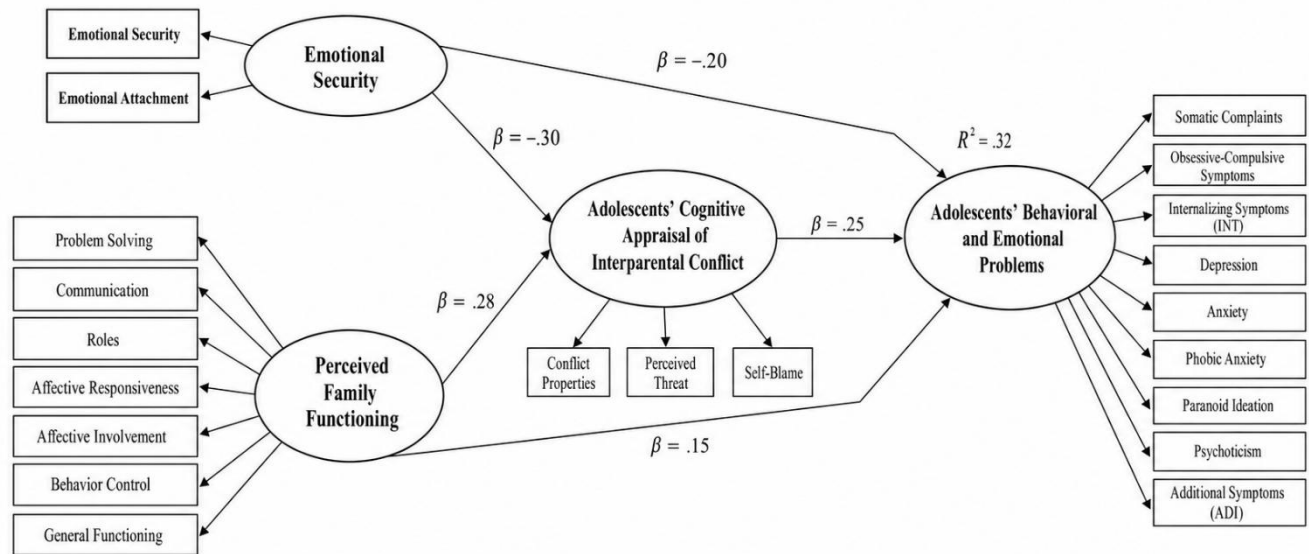
Table 4

Standardized Coefficients and Significance of the Direct Effects Among the Study Variables

Outcome Variable	Predictor Variable	Effect Type	Standardized β	t	p
Behavioral and emotional problems	Emotional security	Direct	-.20	-2.86	.001
Behavioral and emotional problems	Perceived family functioning	Direct	.15	2.50	.010
Behavioral and emotional problems	Conflict appraisal	Direct	.25	3.57	.001
Conflict appraisal	Emotional security	Direct	-.30	-5.02	.001
Conflict appraisal	Perceived family functioning	Direct	.28	4.67	.001

Figure 1

The Proposed Research Model With Standardized Coefficients (All subscales coefficients > 0.7)



According to the path coefficients presented in Figure 1 and the findings in Table 4, all standardized direct effects were statistically significant at the 95% confidence level. The direct association between emotional security and behavioral and emotional problems was $\beta = -.20$, $t = -2.86$. The association between perceived family functioning and behavioral and emotional problems was $\beta = .15$, $t = 2.50$. The association between conflict appraisal and behavioral and emotional problems was $\beta = .25$, $t = 3.57$. The direct

association between emotional security and conflict appraisal was $\beta = -.30$, $t = -5.02$. Finally, the direct association between perceived family functioning and conflict appraisal was $\beta = .28$, $t = 4.67$.

Bootstrapping was used to examine the mediating role of adolescents' cognitive appraisals of interparental conflict in the associations of emotional security and perceived family functioning with adolescents' behavioral and emotional problems. The results are presented in Table 5.

Table 5

Bootstrap Estimates of the Indirect Effects Through Adolescents' Cognitive Appraisals of Interparental Conflict

Indirect Path	Estimated Effect	Upper Bound	Lower Bound	p
Emotional security → behavioral and emotional problems through cognitive appraisal of interparental conflict	-.075	-.03	-.12	.001
Perceived family functioning → behavioral and emotional problems through cognitive appraisal of interparental conflict	.070	.11	.03	.020

As shown in Table 5, the indirect effect of emotional security on adolescents' behavioral and emotional problems through cognitive appraisal of interparental conflict was statistically significant, $p = .001$. This finding indicates that emotional security indirectly reduced adolescents' behavioral and emotional problems by decreasing their negative cognitive appraisals of interparental conflict.

The indirect effect of perceived family functioning on adolescents' behavioral and emotional problems through cognitive appraisal of interparental conflict was also statistically significant, $p = .020$. This finding indicates that

perceiving family functioning as dysfunctional indirectly increased adolescents' behavioral and emotional problems by intensifying their negative cognitive appraisals of interparental conflict. On the basis of these findings, the main hypothesis of the study was supported.

4. Discussion

The present study examined the relationships of emotional security and perceived family functioning with adolescents' emotional and behavioral problems, with adolescents' cognitive appraisal of interparental conflict

considered as a mediating variable. The structural model demonstrated an acceptable fit and explained 32% of the variance in adolescents' emotional and behavioral problems. The findings indicated that emotional security had a significant negative direct effect on emotional and behavioral problems, whereas perceived family dysfunction and negative appraisal of interparental conflict had significant positive direct effects on these problems. Emotional security also negatively predicted adolescents' appraisal of interparental conflict, while perceived family dysfunction positively predicted such appraisal. In addition, the indirect effects showed that cognitive appraisal of interparental conflict significantly mediated both the relationship between emotional security and emotional and behavioral problems and the relationship between perceived family functioning and these outcomes. Overall, the findings support an integrated developmental framework in which the quality of the family environment, adolescents' sense of emotional safety, and their interpretations of conflict jointly contribute to psychological adjustment.

The first finding showed that greater emotional security was associated with fewer emotional and behavioral problems among adolescents. This result is consistent with emotional security theory, which proposes that adolescents' confidence in the stability, predictability, and safety of family relationships is a central regulatory resource. When adolescents perceive family relationships as dependable and believe that conflict will not threaten the continuity of important emotional bonds, they are less likely to experience prolonged fear, vigilance, helplessness, or dysregulated behavior. In contrast, emotional insecurity may heighten sensitivity to interpersonal stress and interfere with the regulation of attention, emotion, and behavior. Previous research has similarly shown that emotional insecurity is associated with maladaptive psychological outcomes across different family structures and relational contexts (O'Hara et al., 2023). The present findings therefore extend this evidence by showing that emotional security is directly related to a broad range of adolescents' emotional and behavioral symptoms.

This finding is also aligned with evidence indicating that supportive coparental behavior contributes to the development of children's emotional security. Cooperative, coordinated, and emotionally responsive parenting may provide adolescents with repeated evidence that the family can remain stable even when disagreements occur, whereas hostile or undermining coparental interactions may weaken their confidence in the family system (Dragomir, 2024).

Emotional security may consequently serve as a protective mechanism that reduces the likelihood of somatic complaints, anxiety, depressive symptoms, obsessive-compulsive tendencies, paranoid ideation, and behavioral dysregulation. The negative direct path found in the present study suggests that emotional security has a protective function that extends beyond the immediate experience of conflict and is related to adolescents' general psychological adaptation.

The finding is further supported by preventive intervention studies showing that emotional insecurity is modifiable. Family-based interventions have produced enduring improvements in multiple components of adolescents' emotional security, suggesting that the emotional consequences of family conflict are not fixed and may be reduced through changes in parenting and family interaction patterns (Dennis et al., 2024). Similarly, intervention-related improvements in adolescents' emotional insecurity have been linked to stronger attachment to fathers, highlighting the interdependence of adolescents' sense of security and the quality of specific parent-adolescent relationships (Hoegler et al., 2022). These findings help explain why emotionally secure adolescents may exhibit fewer emotional and behavioral difficulties: they are more likely to perceive caregivers as available, regulate distress effectively, and maintain adaptive expectations about the continuity of family relationships.

The second finding indicated that perceived family dysfunction had a significant positive direct effect on adolescents' emotional and behavioral problems. In the scoring system used in the present study, higher family-functioning scores reflected greater dysfunction; therefore, the positive coefficient indicated that poorer perceived family functioning was associated with more severe psychological problems. This result is consistent with systemic perspectives that conceptualize adolescents' symptoms as embedded within family interaction patterns rather than as isolated individual phenomena. Family functioning encompasses problem solving, communication, roles, affective responsiveness, affective involvement, behavior control, and general relational functioning. Deficits across these domains can create an environment characterized by ambiguity, emotional disconnection, inconsistent expectations, and inadequate support, thereby increasing adolescents' vulnerability to distress.

This result is consistent with research demonstrating significant relationships between systemic family dynamics and mental health problems among high school and

university students (Yang et al., 2021). It also corresponds with mixed-methods evidence from community and clinical samples showing that dysfunctional family functioning is closely related to adolescents' psychological symptoms (Demetriou, 2025). Adolescents depend on the family not only for instrumental support but also for emotional containment, guidance, validation, and opportunities to learn adaptive coping. When family members cannot communicate clearly, resolve problems collaboratively, or respond effectively to emotional needs, adolescents may have fewer resources for managing developmental stressors. Consequently, family dysfunction may contribute directly to internalizing symptoms and may also foster maladaptive behaviors as attempts to escape, regulate, or express distress.

The direct relationship between family dysfunction and emotional and behavioral problems is also compatible with evidence linking poor family functioning to severe psychological outcomes. Family dysfunction has been associated with psychological distress and suicidal tendencies among adolescents, indicating that its consequences may range from general symptoms to life-threatening forms of maladjustment (Setordzi & Adjorlolo, 2025). Similarly, family-functioning problems have been associated with smartphone addiction and phubbing, suggesting that adolescents may seek compensatory forms of emotional regulation or interpersonal engagement when their family environment lacks responsiveness or cohesion (Kim et al., 2024). These studies support the interpretation that ineffective family processes can impair both emotional well-being and behavioral self-regulation.

The present finding may also be explained through intrapersonal mechanisms shaped by the family environment. Previous research has shown that self-esteem mediates the association between family functioning and adolescent anxiety (Farmakopoulou et al., 2024). Dysfunctional family relationships may undermine adolescents' sense of worth, competence, and interpersonal security, making them more susceptible to anxiety and other symptoms. Moreover, emotion regulation is closely associated with adolescents' subjective well-being, and the family is a primary context in which emotion-regulation strategies are modeled, supported, or disrupted (Martínez-Líbano et al., 2025). Families characterized by poor affective responsiveness or inconsistent behavioral control may provide fewer opportunities for adolescents to identify emotions, tolerate distress, and regulate reactions constructively.

The third finding showed that negative cognitive appraisal of interparental conflict directly predicted greater emotional and behavioral problems. Adolescents who perceived parental conflict as frequent, intense, unresolved, threatening, or personally caused reported more psychological difficulties. This result supports cognitive-contextual models of interparental conflict, according to which the developmental impact of conflict depends substantially on the meaning that adolescents assign to it. Conflict exposure alone does not determine outcomes; rather, perceived threat, self-blame, coping efficacy, and interpretations of conflict properties influence emotional and behavioral responses. When adolescents believe that conflict may lead to separation, harm, loss of support, or family instability, they may experience sustained anxiety, sadness, anger, or physiological arousal. When they blame themselves, they may additionally experience guilt, shame, and helplessness.

The present result is consistent with longitudinal evidence showing that interparental conflict and negative family climate are associated with threat appraisals, which in turn predict later psychopathology risk (Fosco et al., 2023). This suggests that negative conflict appraisals may become relatively stable interpretive patterns that shape adolescents' expectations about relationships and safety. Repeated threat appraisal can reinforce hypervigilance and biased attention toward signs of conflict, while self-blame may create a persistent sense of responsibility for events that are beyond the adolescent's control. Over time, these processes may contribute to anxiety, depression, somatic distress, and other emotional and behavioral symptoms.

The association between conflict appraisal and psychological problems is also consistent with evidence that interparental conflict affects adolescents' emotional and physiological reactivity. The relationship between conflict and youth reactivity may be nonlinear, indicating that the intensity and pattern of conflict exposure influence its effects (Davies et al., 2020). Cognitive appraisal may help explain this variability. Two adolescents exposed to similar conflict may respond differently because one perceives the disagreement as manageable and temporary, whereas the other interprets it as severe, uncontrollable, and threatening. Thus, the direct effect observed in this study underscores the importance of adolescents' subjective interpretations rather than relying only on objective or parental reports of conflict.

The role of interparental conflict also extends across different family and social contexts. Emotional security in the face of interparental conflict has been shown to be

relevant across family structures, indicating that adolescents' responses depend on relational processes rather than on a single household configuration (O'Hara et al., 2023). Interparental conflict has also been related to distress among adolescent siblings in military families, suggesting that conflict can influence multiple children within the same family while still producing individual differences in response (Quichocho & Lucier-Greer, 2021). Such differences may arise from variations in appraisal, emotional security, age, family position, and coping resources. The current findings support cognitive appraisal as one mechanism that may account for this variability.

The fourth finding showed that emotional security negatively predicted adolescents' cognitive appraisal of interparental conflict. Adolescents with higher emotional security were less likely to interpret conflict as threatening, severe, or self-relevant. This relationship is theoretically expected because emotional security provides a stable interpretive framework through which family events are evaluated. Emotionally secure adolescents may trust that disagreements can be resolved, that caregivers will remain available, and that the family system will continue to provide protection. Therefore, even when conflict occurs, they may be less inclined to catastrophize its consequences or assume personal responsibility for it.

This interpretation is compatible with the literature on preventive interventions and emotional insecurity. Improvements in family processes can produce long-term reductions in emotional insecurity (Dennis et al., 2024), and stronger attachment relationships may support adolescents' capacity to interpret family stress in less threatening ways (Hoegler et al., 2022). In addition, supportive coparental behavior may communicate stability and cooperation, thereby reducing children's need to monitor parental relationships for danger (Dragomir, 2024). The negative path found in the present study therefore suggests that emotional security is not only directly protective but also shapes the cognitive meaning assigned to interparental conflict.

The fifth finding showed that perceived family dysfunction positively predicted negative appraisal of interparental conflict. Adolescents who perceived communication, problem solving, roles, emotional responsiveness, and behavioral control within the family as ineffective were more likely to interpret parental conflict as threatening and problematic. This finding is understandable because the broader family climate provides the context within which specific conflict episodes are evaluated. In a

cohesive and effectively functioning family, adolescents may observe that disagreements are contained, discussed, and resolved. In a dysfunctional family, however, conflict may appear more likely to escalate or remain unresolved because the family lacks effective mechanisms for regulation and repair.

This result aligns with the conceptualization of family functioning as the family's ability to adapt, coordinate responsibilities, communicate, and sustain members' well-being (Zhang, 2018). When these capacities are weak, adolescents may reasonably infer that the family is unable to manage interparental disagreements. The finding also corresponds with research linking family climate and interparental conflict to threat appraisals (Fosco et al., 2023). Thus, negative appraisal appears to emerge not solely from the conflict episode itself but from the adolescent's cumulative experience of the family's general functioning.

Most importantly, the results confirmed the mediating role of cognitive appraisal of interparental conflict. Emotional security indirectly reduced adolescents' emotional and behavioral problems by decreasing negative conflict appraisal. This finding indicates that part of the protective effect of emotional security operates through adolescents' interpretations of parental conflict. Emotional security may reduce the perception of threat, discourage self-blame, and strengthen expectations of conflict resolution. These cognitive responses may then protect adolescents from emotional distress and behavioral dysregulation. This mediation finding integrates emotional security theory with the cognitive-contextual framework by demonstrating that affective security and cognitive interpretation operate as connected processes.

The mediation result is consistent with research showing that interparental conflict, family climate, threat appraisal, and later psychopathology form a developmental sequence (Fosco et al., 2023). It is also supported by findings that conflict influences adolescents across family structures through emotional-security processes (O'Hara et al., 2023). The current study extends this literature by indicating that emotional security may precede and shape cognitive appraisal, which then contributes to emotional and behavioral outcomes. This pathway provides a more precise explanation than a simple direct association between emotional security and symptoms.

Cognitive appraisal also mediated the relationship between perceived family dysfunction and emotional and behavioral problems. Poorer perceived family functioning was associated with more negative appraisal of interparental

conflict, which in turn was associated with greater psychological difficulties. This indirect pathway suggests that dysfunctional family processes may affect adolescents partly by shaping how they understand and evaluate conflict. In families with ineffective communication and poor problem solving, adolescents may perceive disagreements as uncontrollable and threatening. In families characterized by emotional disengagement or inconsistent roles, they may be more likely to assume responsibility for restoring stability. These appraisals can intensify distress and contribute to maladaptive behavior.

The mediating role of appraisal is consistent with broader evidence showing that family variables often affect adolescent mental health through psychological mechanisms such as self-esteem, emotion regulation, and threat interpretation (Farmakopoulou et al., 2024; Martínez-Líbano et al., 2025). It is also compatible with family-systems research suggesting that interparental conflict may involve adolescents through triangulation and impaired differentiation, thereby increasing vulnerability to self-harm and other serious outcomes (Wang, 2026). When adolescents feel drawn into parental conflict, their appraisals of threat and self-blame may become especially intense.

5. Conclusion

The model's explanation of 32% of the variance indicates that emotional security, perceived family functioning, and cognitive appraisal represent substantial but not exhaustive determinants of adolescent emotional and behavioral problems. Adolescence includes biological, cognitive, interpersonal, and contextual changes that may also affect psychological adjustment. Pubertal hormonal changes can influence mood and cognition (Li, 2024), while peer relationships, school stress, socioeconomic conditions, and individual temperament may contribute additional variance. The multifactorial nature of adolescent mental health is also emphasized in broader reviews and national survey findings (Kumar et al., 2024; Labib et al., 2024; Nebhinani & Jain, 2019). Familial clustering of emotional problems further suggests that shared genetic, environmental, and relational factors may operate simultaneously (Jordan et al., 2024). Nevertheless, the amount of variance explained by the current model supports the clinical and developmental significance of the examined family and cognitive processes.

6. Limitations & Suggestions

Several limitations should be considered when interpreting the findings. First, the cross-sectional correlational design does not permit firm causal conclusions or confirmation of the temporal ordering of emotional security, family functioning, cognitive appraisal, and psychological problems. Second, all variables were assessed through adolescents' self-reports, which may have increased common-method variance and introduced recall, social-desirability, or perceptual biases. Third, the sample was limited to students from lower- and upper-secondary schools in one district of Tehran, which restricts the generalizability of the findings to adolescents from other regions, cultures, socioeconomic groups, school settings, or clinical populations. Fourth, the study did not assess potentially influential factors such as parental psychopathology, parenting styles, conflict frequency, socioeconomic status, family structure, peer relationships, or pubertal status. Finally, the use of broad composite scores may have obscured distinct relationships involving specific dimensions of emotional security, family functioning, conflict appraisal, and psychological symptoms.

Future studies should employ longitudinal and prospective designs to determine the temporal sequence of the proposed relationships and examine whether cognitive appraisal predicts changes in emotional and behavioral problems over time. Experimental and family-based intervention studies could further evaluate whether improvements in emotional security and family functioning lead to changes in conflict appraisal and subsequent symptom reduction. Researchers should use multi-informant assessments involving adolescents, parents, teachers, and clinicians and combine questionnaires with observational measures of family interaction and interparental conflict. Replication is recommended in culturally diverse, rural, clinical, and high-risk populations. Future models should also investigate moderators and additional mediators, including gender, age, family structure, coping efficacy, self-esteem, emotion regulation, attachment, differentiation of self, parental mental health, and social support. Examining symptom-specific pathways may clarify whether threat appraisal and self-blame have different implications for anxiety, depression, somatic symptoms, aggression, and other behavioral outcomes.

The findings suggest that prevention and treatment programs for adolescent emotional and behavioral problems should incorporate both family-level and adolescent-level

components. Family interventions should strengthen communication, collaborative problem solving, emotional responsiveness, role clarity, consistent behavioral control, and constructive management of interparental disagreements. Parents should be helped to prevent adolescents from becoming involved in conflict, reassure them that they are not responsible for parental disagreements, and demonstrate that conflicts can be resolved without threatening family stability. At the adolescent level, counselors and psychologists should identify catastrophic threat interpretations, self-blaming beliefs, and feelings of helplessness related to parental conflict and replace them with more balanced appraisals and effective coping strategies. School-based screening and psychoeducation may also facilitate the early identification of adolescents experiencing emotional insecurity or family-related distress and enable timely referral to family counseling and mental health services.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Authors' Contributions

All authors have equally contributed to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

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