Negative Affectivity and Maladaptive Coping Strategies in Depressed Adolescents' Family Conflict Management: The Mediating Role of Emotional Flexibility

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ABSTRACT

Objective: This study aimed to examine the direct and indirect effects of negative emotionality and maladaptive coping strategies on family conflict management among depressed adolescents, with emotional flexibility as a mediating variable.

Methods and Materials: The present research employed a descriptive–correlational design using structural equation modeling. The statistical population consisted of all female students enrolled in upper secondary education in two high schools in District 2 of Tehran during the 2024–2025 academic year, from which 234 adolescents diagnosed with mild to moderate depression were selected based on the Morgan table. Participants completed the Negative Emotionality Questionnaire, the short form of the Coping Inventory for Stressful Situations, the Emotional Flexibility Questionnaire, and the Conflict Tactics Scale. Data were analyzed using Pearson correlation coefficients and structural equation modeling in SPSS 24 and AMOS 24 after confirming normal distribution of variables through the Kolmogorov–Smirnov test.

Findings: Structural equation modeling indicated that negative emotionality exerted a significant direct negative effect on family conflict management ($\beta = -0.218$, $T = 2.845$, $p < .05$), whereas maladaptive coping strategies demonstrated a significant direct positive effect ($\beta = 0.247$, $T = 3.617$, $p < .05$). Emotional flexibility showed a significant direct negative effect on family conflict management ($\beta = -0.343$, $T = 6.604$, $p < .001$). Furthermore, negative emotionality significantly predicted emotional flexibility ($\beta = 0.244$, $T = 3.261$, $p < .01$), while maladaptive coping strategies significantly predicted emotional flexibility in a negative direction ($\beta = -0.328$, $T = 6.120$, $p < .001$). Sobel test results confirmed the mediating role of emotional flexibility in the relationships between negative emotionality and family conflict management ($Z = 2.201$, $p < .05$) and between maladaptive coping strategies and family conflict management ($Z = 2.782$, $p < .01$).

Conclusion: The findings demonstrate that emotional flexibility is a central psychological mechanism through which negative emotionality and maladaptive coping strategies influence family conflict management in depressed adolescents, suggesting that enhancing emotional flexibility may substantially improve relational functioning and emotional well-being.

Keywords: *Negative affectivity; Maladaptive coping strategies; Family conflict management; Emotional flexibility*

1. Introduction

Adolescence represents one of the most sensitive and developmentally complex periods of the human lifespan, characterized by profound biological, cognitive, emotional, and social transformations. During this stage, individuals are required to navigate rapid physiological maturation, increasing autonomy, shifting identity structures, and intensifying social demands, all while developing regulatory capacities that shape long-term psychological adjustment. Within this transitional context, emotional functioning and coping processes play a central role in determining mental health outcomes. Empirical evidence consistently indicates that failures in emotion regulation, elevated negative emotionality, and maladaptive coping strategies significantly increase vulnerability to psychological disorders, particularly depression and anxiety, among adolescents (Quarshie et al., 2020; Sadock et al., 2015; Yaghoubi Siahgourabi et al., 2024). Recent epidemiological data further demonstrate a worrying rise in depressive symptoms among adolescent girls, underscoring the urgency of identifying the emotional and cognitive mechanisms that contribute to this trend (Raposo & Francisco, 2022; Yaghoubi Siahgourabi et al., 2024).

Negative emotionality, conceptualized as a dispositional tendency toward frequent and intense experiences of negative emotions such as sadness, anger, fear, and irritability, has emerged as a powerful predictor of internalizing psychopathology across development. Longitudinal and neurodevelopmental studies indicate that heightened negative emotionality in childhood and adolescence is associated with altered emotional processing systems, increased amygdala reactivity, impaired regulatory control, and elevated risk for mood disorders (Kann et al., 2017; Villacura-Herrera et al., 2025; Yen et al., 2018). In adolescent populations, negative emotionality has been linked to problematic technology use, sleep disturbances, academic difficulties, social withdrawal, and depressive symptomatology (Mahmoodi et al., 2020; Ruzbehani & Sharifi, 2018; Zamani Zargar et al., 2023). These findings highlight negative emotionality not merely as an emotional characteristic but as a core vulnerability factor influencing multiple domains of adolescent functioning.

Parallel to emotional traits, coping strategies represent another essential determinant of psychological adaptation. Coping refers to the cognitive and behavioral efforts individuals employ to manage internal and external stressors. Adaptive coping strategies, such as problem-solving, cognitive reappraisal, and seeking social support, are consistently associated with resilience and psychological well-being. In contrast, maladaptive coping strategies—particularly emotion-focused avoidance, rumination, denial, and withdrawal—are robustly associated with depression, anxiety, substance misuse, suicidal ideation, and poor social adjustment (Kim et al., 2025; Nemati Sogoli Tapeh, 2017; Vaghee et al., 2017; Vladislav et al., 2024). Among adolescents, persistent reliance on maladaptive coping amplifies emotional distress and weakens self-regulatory capacities, thereby creating a self-perpetuating cycle of dysfunction (Pv, 2025; Simonič et al., 2024).

Within family systems, adolescents' emotional and coping patterns exert profound influence on the quality of interpersonal interactions and conflict resolution processes. Family conflict management represents a critical developmental context in which emotional regulation and coping skills are repeatedly tested and refined. Ineffective management of family conflict during adolescence is associated with increased depressive symptoms, substance use, emotional insecurity, and long-term relational difficulties (Raposo & Francisco, 2022; Thomas et al., 2019; Tsuritani & Jikihara, 2024). Research indicates that adolescents with heightened negative emotionality and maladaptive coping tendencies experience greater difficulty regulating affect during family disputes, often escalating conflicts rather than resolving them constructively (Thomas et al., 2019; Vladislav et al., 2024). Consequently, identifying the psychological mechanisms that link emotional dispositions and coping patterns to family conflict outcomes is of both theoretical and clinical importance.

One construct that has recently gained increasing attention in this domain is emotional flexibility. Emotional flexibility refers to the capacity to modulate emotional responses in a context-sensitive manner, adaptively shift between emotional states, tolerate emotional discomfort, and employ diverse regulatory strategies according to situational demands. Unlike rigid regulation styles, emotional flexibility allows individuals to maintain emotional balance while effectively engaging with environmental challenges. Empirical studies demonstrate that emotional flexibility is strongly associated with resilience, well-being, adaptive coping, and reduced psychopathology across age groups (Mera et al., 2025; Mousavi et al., 2021; Nadimi & Bana, 2021). Adolescents with higher emotional flexibility display superior emotion regulation, improved interpersonal functioning, and greater capacity for constructive problem

resolution (Buttelmann & Karbach, 2017; Weber & Lynch, 2024).

Conversely, deficits in emotional flexibility—often manifesting as emotional rigidity, impulsivity, avoidance, or emotional suppression—have been implicated in depression, anxiety, substance abuse, trauma responses, and self-harm behaviors (Quarshie et al., 2020; Simonič et al., 2024; Villacura-Herrera et al., 2025). Among depressed adolescents, impaired emotional flexibility limits their ability to disengage from negative affective states, intensifies rumination, and undermines their capacity to engage in effective conflict resolution within family relationships (Raposo & Francisco, 2022; Yen et al., 2018). This body of research suggests that emotional flexibility may operate as a central regulatory mechanism through which emotional traits and coping strategies influence broader psychosocial outcomes.

Theoretical models of emotional development increasingly emphasize dynamic regulatory processes rather than static traits. Contemporary cognitive-motivational-relational frameworks propose that emotional responses emerge from the continuous interaction between dispositional emotional tendencies, cognitive appraisals, coping strategies, and contextual influences (Kim et al., 2025; Thomas et al., 2019). Within this framework, negative emotionality and maladaptive coping are conceptualized as vulnerability factors that exert their effects on psychological functioning largely through their impact on regulatory capacities such as emotional flexibility (Mera et al., 2025; Raposo & Francisco, 2022). This perspective aligns with developmental neuroscience findings indicating that adolescence represents a critical window for the maturation of neural systems underlying emotional flexibility and executive control (Buttelmann & Karbach, 2017; Kann et al., 2017).

Despite the growing recognition of emotional flexibility as a core mechanism of adjustment, its mediating role in the relationship between negative emotionality, maladaptive coping strategies, and family conflict management among depressed adolescents remains insufficiently explored. Existing studies have largely examined these constructs in isolation or focused on adult populations. Research has demonstrated that negative emotionality predicts poor emotion regulation and problematic behaviors (Yen et al., 2018; Zamani Zargar et al., 2023), maladaptive coping predicts psychological distress and suicidal ideation (Nemati Sogoli Tapeh, 2017; Villacura-Herrera et al., 2025), and emotional dysregulation contributes to dysfunctional family

interactions (Raposo & Francisco, 2022; Tsuritani & Jikihara, 2024). However, integrative models examining how these variables interact within adolescent family contexts—particularly in clinically depressed populations—remain scarce.

Cultural context further underscores the importance of this investigation. Iranian adolescent girls exhibit rising prevalence rates of depression and anxiety, with family dynamics playing a central role in both risk and protection (Afzali Kalateh, 2020; Yaghoubi Siahgourabi et al., 2024). Social expectations, academic pressures, gender-based stressors, and limited access to psychological services exacerbate emotional burdens in this population. Understanding the emotional and coping processes that shape family conflict management within this cultural context offers valuable insight for prevention and intervention efforts.

Furthermore, contemporary intervention research suggests that strengthening emotional flexibility and adaptive coping skills can significantly improve emotional adjustment and relational functioning. Therapeutic approaches such as acceptance and commitment therapy, metacognitive therapy, and mindfulness-based interventions demonstrate efficacy in reducing depressive symptoms, enhancing emotion regulation, and improving interpersonal relationships (Feizi et al., 2017; Khosh Lahje Sedgh, 2017; Mera et al., 2025). These findings indicate that emotional flexibility may represent a particularly promising target for clinical intervention among depressed adolescents struggling with family conflict.

In summary, converging evidence indicates that negative emotionality and maladaptive coping strategies constitute major vulnerability factors for adolescent depression and relational dysfunction, while emotional flexibility serves as a key protective mechanism that facilitates adaptive adjustment. Yet, the precise pathways through which these constructs interact to influence family conflict management in depressed adolescents remain insufficiently understood. Addressing this gap is essential for advancing theoretical models of emotional development and for designing effective, culturally responsive interventions.

Therefore, the present study aims to investigate the direct and indirect effects of negative emotionality and maladaptive coping strategies on family conflict management among depressed adolescents, with emotional flexibility serving as a mediating variable.

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a correlational design in terms of data collection and was conducted through path analysis using structural equation modeling. The statistical population of the study consisted of all female students enrolled in upper secondary education at two schools in District 2 of Tehran during the 2024–2025 academic year (N = 600). Based on the Morgan sample size table and a 5% margin of error, a sample of 234 students was selected from this population. In order to reduce potential sampling bias, convenience sampling was also utilized. The inclusion criteria were: (1) diagnosis of mild to moderate depression based on the school counselor's assessment; and (2) willingness to participate in the study. The exclusion criteria were: (1) unwillingness to participate in the study and (2) incomplete completion of the questionnaires.

In order to collect the required data and to establish a valid analytical framework for examining the relationships among negative affectivity, maladaptive coping strategies, emotional flexibility, and family conflict management, both library-based and field-based instruments were employed. In the library-based phase, theoretical foundations, empirical background, and the initial research model were developed through an extensive review of authoritative Persian and international sources, including books, scientific articles, research journals, and online academic databases. This phase provided the conceptual basis for hypothesis formulation and the selection of key study variables, and facilitated the precise design of the field instruments. In the field-based phase, the primary data collection tools consisted of a set of standardized and psychometrically validated questionnaires selected in accordance with the objectives of the study. The instruments were as follows:

In accordance with the study objectives, the necessary coordination was first established with the administration of the two selected schools in District 2 of Tehran, and after obtaining the required permissions, eligible students were invited to participate in the study. The research questionnaires were designed and prepared in the form of an online link using the Porsline platform. The link to the questionnaires was distributed among the students, and they were asked to respond carefully and honestly to all items. To ensure informed consent and participants' awareness, the introductory section of the questionnaire provided detailed information about the study objectives, data confidentiality, and response procedures. After all participants completed the questionnaires, the collected data were extracted from the Porsline system and prepared for statistical analysis and reporting.

2.2. Measures

The Negative Affectivity Questionnaire developed by Waller et al. (1996) consists of 30 items and six dimensions: ability to differentiate emotions (Items 1–7), ability to share emotions (Items 8–10), ability to refrain from concealing emotions (Items 11–15), bodily self-awareness (Items 16–20), attention to others' emotions (Items 21–25), and ability to analyze emotions (Items 26–30). Responses are scored on a five-point Likert scale. The minimum score is 30 and the maximum score is 90. The total emotional awareness score is calculated as the sum of all item scores, with higher scores indicating greater emotional awareness and lower scores reflecting poorer emotional awareness. Waller et al. (1996) reported an internal consistency coefficient of α = .83 for the scale. The reliability and validity of the questionnaire were examined by Rieffe et al. (2009) on a sample of 706 Dutch children and adolescents, with subscale reliability coefficients reported as .67 for differentiation of emotions, .68 for sharing emotions, .68 for concealing emotions, .64 for bodily self-awareness, .65 for attention to others' emotions, and .65 for analysis of emotions. Rieffe et al. (2009), using factor analysis, confirmed the six-factor structure of the questionnaire. In Iran, Gholamreza and Saberi (2018) examined the psychometric properties of the scale and reported a Cronbach's alpha of .78 for the total questionnaire. They also conducted both exploratory and confirmatory factor analyses, the results of which supported the six-factor structure of the instrument.

The Short Form of the Coping Inventory for Stressful Situations (CISS) developed by Endler and Parker (1990) was also used. The original version consists of 48 items, with each set of 16 items representing one coping strategy. The instrument measures three major coping styles: task-oriented coping (active problem solving), emotion-oriented coping (emotional responses to stress), and avoidance-oriented coping (escaping the problem through social diversion or engaging in alternative activities) (Endler & Parker, 1990). The short form of the CISS (Endler & Parker, 1999) includes 21 items derived from the original scale. Each item is rated on a five-point Likert scale ranging from 1 (never) to 5 (very much). In the short form, each coping strategy is represented by seven items, with scores ranging from 7 to 35 for each subscale. In Iran, the original questionnaire was translated

by Shekary et al. (2009). Endler and Parker (1990) reported reliability coefficients for task-oriented, emotion-oriented, and avoidance-oriented coping as .92, .82, and .85, respectively, for boys, and .90, .85, and .82 for girls. Kalsbeek, Rijcken, Hanguun, and Dekker (2002), using confirmatory factor analysis of the 21-item version, confirmed the three-factor structure of the scale. Cronbach's alpha coefficients for the three coping strategies across different age groups ranged from .78 to .86. In addition, Cohen et al. (2006, as cited in Shekary, 2009) reported high reliability based on Cronbach's alpha and test–retest correlations for the subscales. In Iran, Kakabaraei, Moradi, Afrooz, Homan, and Shekary (2011) also confirmed the three-factor structure of the inventory. Convergent and discriminant validity were supported through correlations between coping strategies and the neuroticism factor of the NEO Five-Factor Personality Inventory. Cronbach's alpha coefficients for task-oriented, emotion-oriented, and avoidance-oriented coping were .80, .65, and .75, respectively.

The Conflict Tactics Scale–Parent–Child Version (CTS-PC) developed by Murray A. Straus (1999) was used to assess family conflict management. This 15-item scale measures three conflict resolution tactics within the family: reasoning, verbal aggression, and physical aggression. The items assess behaviors that individuals exhibit during conflicts with family members, and the scores represent the frequency of each behavior during the past year. The chronicity scores of conflict tactics, which are of clinical relevance, are calculated by summing the item scores. The reasoning subscale is derived from Items 1–5, verbal aggression from Items 6–10, and physical aggression from Items 11–15. Subscale scores range from 5 to 25, and the total score ranges from 15 to 75, with higher scores indicating greater use of a particular tactic (Sanai, 2008). According to the original sources, six research studies confirmed the internal consistency of the reasoning, verbal aggression, and physical aggression subscales. Alpha coefficients for the reasoning subscale ranged from .42 to .76, for verbal aggression from .63 to .88, and for physical aggression from .42 to .96. The content validity of this scale was also supported in the study by Zabli (2004, as cited in Sanai, 2008).

The Emotional Flexibility Questionnaire developed by Rashid and Bayat (2019) was employed to assess emotional flexibility. This questionnaire consists of 24 items and three components: positive emotion regulation, negative emotion regulation, and emotional communication. Responses are rated on a Likert scale, with items such as "If a romantic or emotional poem upsets me, I can quickly return myself to my normal state." The content and face validity of the instrument have been confirmed, and its internal consistency was reported with a Cronbach's alpha coefficient of .83.

2.3. Data Analysis

Data analysis consisted of both descriptive and inferential statistics. Descriptive statistics included means and standard deviations, while inferential analyses employed Pearson correlation coefficients and structural equation modeling using SPSS version 24 and AMOS version 24.

3. Findings and Results

Descriptive statistics are methods used to summarize large sets of data. Through several typical values, indices, and graphical representations, these statistics make the data understandable and interpretable for readers. Every research report must include descriptive statistics prior to conducting inferential tests in order to provide information about the sample and to describe the data. Describing the study variables is essential because the results of hypothesis testing are derived from the data and indices of these variables. The research data were measured on an interval scale. Therefore, measures of central tendency and dispersion were used to describe the study variables, as presented below.

Table 1

Descriptive indices of the research variables

Variable	Component	Minimum	Maximum	Mean	Standard Deviation
Negative Affectivity	Ability to differentiate emotions	1.00	3.00	1.709	0.584
	Ability to share emotions	1.00	3.00	1.781	0.463
	Ability to not conceal emotions	1.00	3.00	2.082	0.526
	Bodily self-awareness	1.00	3.00	1.962	0.453
	Attention to others' emotions	1.40	2.80	1.982	0.310

	Ability to analyze emotions	1.00	3.00	2.415	0.454
	Total score	1.37	2.93	1.989	0.255
Maladaptive Coping Strategies	Emotion-focused coping	2.27	4.82	3.493	0.487
	Avoidance coping	2.20	4.70	3.454	0.534
	Total score	2.43	4.67	3.474	0.429
Emotional Flexibility	Positive emotion regulation	1.80	6.00	4.347	0.656
	Negative emotion regulation	1.00	6.00	4.143	0.660
	Emotional communication	1.00	6.00	4.201	0.698
	Total score	1.33	5.96	4.242	0.532
Family Conflict Management	Reasoning	0.00	5.00	2.475	1.256
	Verbal aggression	0.00	4.60	1.752	0.908
	Violence	0.00	5.00	1.602	1.131
	Total score	0.13	4.07	1.943	0.722

In SPSS, the variables were computed based on their respective questionnaire items. The results in Table 1 indicate that the score ranges for all variables were calculated correctly, which confirms that the collected data were accurately coded, entered, and computed in the software environment, and that no outliers were present. According to the table, the mean and standard deviation of negative affectivity were 1.989 and 0.255, respectively; the mean and standard deviation of maladaptive coping strategies were 3.474 and 0.429; the mean and standard deviation of emotional flexibility were 4.242 and 0.532; and the mean and standard deviation of family conflict management were 1.943 and 0.722.

In the inferential statistics section, the Kolmogorov–Smirnov test of normality, Pearson correlation coefficient, and structural equation modeling were used.

Prior to performing statistical analyses and computing appropriate test statistics for logical inference regarding the research hypotheses, the most critical step is selecting suitable statistical methods. To this end, knowledge of the data distribution is of primary importance. A normal distribution implies that variable values are symmetrically distributed around the mean and that the distribution curve has a bell shape. If the distribution is non-normal, the curve deviates from the bell shape and becomes skewed to the left or right. Parametric tests are used when the distribution is normal; otherwise, nonparametric tests are applied. The Kolmogorov–Smirnov test was used to assess normality. The hypotheses of this test were as follows:

H_0: The data are normally distributed.
H_1: The data are not normally distributed.

If the significance level of the test is less than 0.05, the distribution is non-normal; if the significance level is greater than 0.05, the data are normally distributed.

Table 2

Results of the normality test for the study variables

Research Variable	Kolmogorov–Smirnov Statistic	Significance Level	Result
Negative affectivity	0.094	0.060	Normal
Maladaptive coping strategies	0.067	0.200	Normal
Emotional flexibility	0.070	0.180	Normal
Family conflict management	0.070	0.185	Normal

As shown in Table 2, the significance levels for all variables were greater than 0.05, indicating that the distributions of the variables were normal; therefore, parametric statistical analyses were applied.

Correlation coefficients are used to determine the degree and strength of the linear relationship between two variables. The value of the correlation coefficient ranges from −1 to +1. Values closer to +1 indicate a strong positive relationship, meaning that as one variable increases, the other also increases, and as one decreases, the other decreases. Values closer to −1 indicate a strong negative relationship, meaning that as one variable increases, the other decreases, and vice versa. This test examines the following hypotheses:

H_0: The correlation coefficient between the two variables is zero (the variables are independent).
H_1: The correlation coefficient between the two variables is not zero (the variables are related).

Table 3

Pearson correlation coefficients among the research variables

Variable	Index	Negative Affectivity	Maladaptive Coping Strategies	Emotional Flexibility	Family Conflict Management
Negative Affectivity	Correlation	1			
	Significance	.			
Maladaptive Coping Strategies	Correlation	0.296	1		
	Significance	0.000	.		
Emotional Flexibility	Correlation	0.213	−0.205	1	
	Significance	0.000	0.002	.	
Family Conflict Management	Correlation	−0.292	0.255	−0.162	1
	Significance	0.000	0.000	0.038	.

Given that the significance levels of the Pearson correlation coefficients among the study variables were computed to be below the 0.05 error level, it can be concluded that there are statistically significant correlations and relationships among all study variables.

To test the validity of the theoretical model and estimate the path coefficients, structural equation modeling (SEM) was conducted using AMOS. Structural equation modeling is a highly general and powerful multivariate analytic technique within the family of multivariate regression methods, and more precisely, an extension of the general linear model, which enables researchers to test a set of regression equations simultaneously. SEM provides a comprehensive approach for testing hypotheses and/or addressing questions about relationships among observed and latent variables. Among multivariate analytic methods, SEM is unique in that it simultaneously incorporates both multiple regression analysis and factor analysis.

What makes SEM a powerful and widely used method among researchers is that, in addition to its graphical representation that facilitates interpretation, it can estimate a set of relationships among variables concurrently. As Hair noted, none of the earlier methods could simultaneously evaluate the measurement model and estimate the causal relationships of the model. In general, SEM reveals the internal structure of relationships among variables through a set of equations similar to multiple regression. Therefore, to answer the questions of the present study, SEM was applied using AMOS. The following figure presents the research model based on standardized path coefficients.

Figure 1

Research model with standardized path coefficients
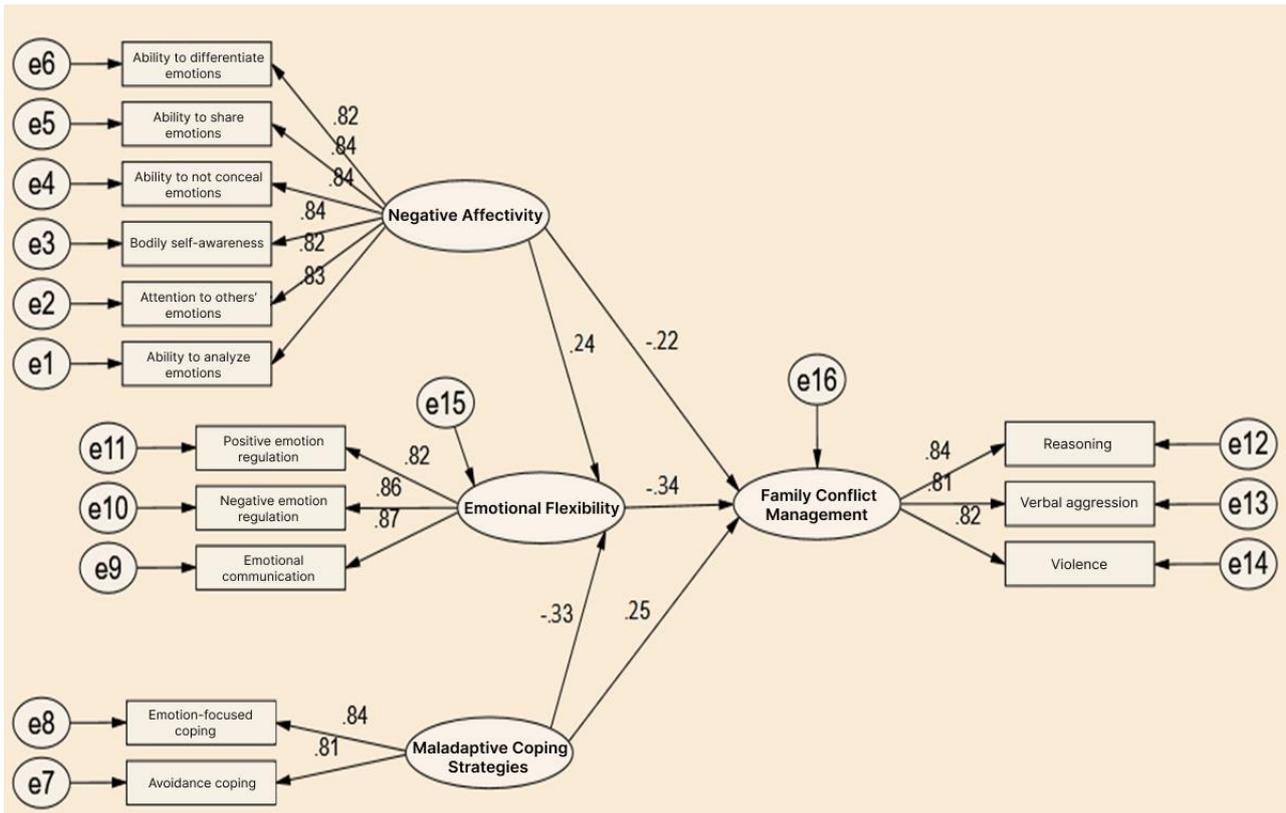
The most important part of the statistical analysis involves testing the hypotheses and addressing the questions embedded in the study. Specifically, after describing the demographic variables and the main study variables, evaluating the questionnaires, determining their distributional properties, and identifying relationships among them using Pearson correlation coefficients, this section examines the study hypotheses using SEM. Decisions regarding the acceptance or rejection of hypotheses were based on the t statistic (T-value), such that if the t value exceeded 1.96, the corresponding hypothesis was supported, whereas values below 1.96 indicated a non-significant result. After testing statistical significance, the magnitude and direction of relationships among variables must also be examined, which is determined based on standardized coefficients. Positive path coefficients indicate direct relationships between exogenous and endogenous latent variables. Conversely, negative path coefficients (negative beta) indicate inverse relationships between exogenous and endogenous latent variables. Prior to examining direct and indirect hypotheses, it is necessary to establish that the model fit indices are within acceptable ranges. The table below presents the fit indices used and their values.

Main Hypothesis: Emotional flexibility affects depressed adolescents' negative affectivity and maladaptive coping strategies in family conflict management.

Table 4

Results of model fit indices

Fit Index	Symbol	Acceptable Range	Obtained Value
Chi-square/df	χ^2/df	< 3	1.606
Root Mean Square Error of Approximation	RMSEA	< 0.08	0.051
Comparative Fit Index	CFI	> 0.90	0.98
Incremental Fit Index	IFI	> 0.90	0.98
Goodness-of-Fit Index	GFI	> 0.80	0.93

As shown in Table 4, the chi-square/df value was 1.606, which is below 3. In addition, the RMSEA value was 0.051, which is below 0.08. Moreover, the CFI, IFI, and GFI indices were all computed at acceptable levels. Overall, based on these indices, the model demonstrates good fit. Therefore, the main hypothesis of the study is supported.

Table 5

Results of the analysis of the study's direct hypotheses

Hypothesis	Direct Hypothesis	Path Coefficient	T Statistic	Direction of Relationship	Result
1	Negative affectivity → Family conflict management	−0.218	2.845	Negative, direct	Supported
2	Maladaptive coping strategies → Family conflict management	0.247	3.617	Positive, direct	Supported
3	Emotional flexibility → Family conflict management	−0.343	6.604	Negative, direct	Supported
4	Negative affectivity → Emotional flexibility	0.244	3.261	Positive, direct	Supported
5	Maladaptive coping strategies → Emotional flexibility	−0.328	6.120	Negative, direct	Supported

Regarding Hypothesis 1, because the computed t statistic for the effect of negative affectivity on family conflict management was 2.845 and exceeded 1.96, this effect was statistically significant at the 95% confidence level, with a path coefficient of −0.218. The negative standardized path coefficient ($\beta = -0.218$) indicates that a one standard deviation increase in negative affectivity is associated with a 0.218 standard deviation decrease in family conflict management. Accordingly, Hypothesis 1, positing a direct effect of negative affectivity on family conflict management, is supported.

Regarding Hypothesis 2, because the computed t statistic for the effect of maladaptive coping strategies on family conflict management was 3.617 and exceeded 1.96, this effect was statistically significant at the 95% confidence level, with a path coefficient of 0.247. The positive standardized path coefficient ($\beta = 0.247$) indicates that a one standard deviation increase in maladaptive coping strategies is associated with a 0.247 standard deviation increase in family conflict management. Accordingly, Hypothesis 2, positing a direct effect of maladaptive coping strategies on family conflict management, is supported.

Regarding Hypothesis 3, because the computed t statistic for the effect of emotional flexibility on family conflict management was 6.604 and exceeded 1.96, this effect was statistically significant at the 95% confidence level, with a path coefficient of −0.343. The negative standardized path coefficient ($\beta = -0.343$) indicates that a one standard deviation increase in emotional flexibility is associated with a 0.343 standard deviation decrease in family conflict management. Accordingly, Hypothesis 3, positing a direct effect of emotional flexibility on family conflict management, is supported.

Regarding Hypothesis 4, because the computed t statistic for the effect of negative affectivity on emotional flexibility was 3.261 and exceeded 1.96, this effect was statistically significant at the 95% confidence level, with a path coefficient of 0.244. The positive standardized path coefficient ($\beta = 0.244$) indicates that a one standard deviation increase in negative affectivity is associated with a 0.244 standard deviation increase in emotional flexibility. Accordingly, Hypothesis 4, positing a direct effect of negative affectivity on emotional flexibility, is supported.

Regarding Hypothesis 5, because the computed t statistic for the effect of maladaptive coping strategies on emotional flexibility was 6.120 and exceeded 1.96, this effect was statistically significant at the 95% confidence level, with a path coefficient of −0.328. The negative standardized path coefficient ($\beta = -0.328$) indicates that a one standard deviation increase in maladaptive coping strategies is associated with a 0.328 standard deviation decrease in emotional flexibility. Accordingly, Hypothesis 5, positing a direct effect of maladaptive coping strategies on emotional flexibility, is supported.

Based on the conceptual model of the study, in addition to the direct effects of negative affectivity and maladaptive coping strategies on family conflict management, their indirect effects through the mediating variable of emotional flexibility can also be estimated. Accordingly, the Sobel test was employed to examine these mediating effects.

Table 6

Results of the Sobel test

Hypothesis	Indirect Hypothesis	Sobel Statistic	Significance Level	Direct Effect	Indirect Effect	Total Effect	Result
6	Negative affectivity → Family conflict management (mediated by emotional flexibility)	2.201	0.041	−0.214	−0.083	−0.297	Supported
7	Maladaptive coping strategies → Family conflict management (mediated by emotional flexibility)	2.782	0.010	0.247	0.112	0.359	Supported

With regard to Hypothesis 6, the Sobel statistic for the indirect effect of negative affectivity on family conflict management was 2.201, which exceeds the critical value of |1.96|, and the significance level was less than 0.05. Therefore, at the 95% confidence level, the mediating role of emotional flexibility in the relationship between negative affectivity and family conflict management is confirmed. The magnitude of the indirect effect of negative affectivity on family conflict management is obtained by multiplying the path coefficient from the independent variable to the mediator (0.244) by the path coefficient from the mediator to the dependent variable (−0.343). Furthermore, the total effect of negative affectivity on family conflict management, which is the sum of the direct and indirect effects, was estimated to be −0.297. Thus, Hypothesis 6 is supported.

With regard to Hypothesis 7, the Sobel statistic for the indirect effect of maladaptive coping strategies on family conflict management was 2.782, which exceeds the critical value of |1.96|, and the significance level was less than 0.05. Therefore, at the 95% confidence level, the mediating role of emotional flexibility in the relationship between maladaptive coping strategies and family conflict management is confirmed. The magnitude of the indirect effect of maladaptive coping strategies on family conflict management is obtained by multiplying the path coefficient from the independent variable to the mediator (−0.328) by the path coefficient from the mediator to the dependent variable (−0.343). Furthermore, the total effect of maladaptive coping strategies on family conflict management, which is the sum of the direct and indirect effects, was estimated to be 0.359. Thus, Hypothesis 7 is also supported.

4. Discussion

The present study examined the structural relationships among negative emotionality, maladaptive coping strategies, emotional flexibility, and family conflict management in depressed adolescents. The findings revealed that negative emotionality exerted a significant direct negative effect on family conflict management, while maladaptive coping strategies demonstrated a significant direct positive effect on conflict. In addition, emotional flexibility showed a significant direct negative association with family conflict management and served as a valid mediator in the relationships between negative emotionality and maladaptive coping strategies with family conflict management. These results offer important insights into the emotional–cognitive mechanisms underlying dysfunctional family interactions in adolescent depression and provide strong empirical support for contemporary emotion regulation frameworks.

The direct negative impact of negative emotionality on family conflict management observed in this study is consistent with extensive literature indicating that adolescents with high negative emotionality experience greater difficulty modulating affect during interpersonal stress, leading to impulsive reactions, heightened reactivity, and ineffective conflict resolution (Kann et al., 2017; Yen et al., 2018; Zamani Zargar et al., 2023). Neurodevelopmental evidence suggests that adolescents characterized by elevated negative emotionality exhibit increased amygdala activation and reduced prefrontal regulatory control, which together undermine emotional regulation during social challenges (Kann et al., 2017; Villacura-Herrera et al., 2025). Such neuroaffective patterns likely impair adolescents' capacity to process disagreements calmly and constructively, thereby escalating family conflicts. Moreover, clinical models of mood disorders emphasize that persistent negative emotional states reduce cognitive flexibility and increase maladaptive interpretations of interpersonal cues, further compromising conflict management (Ruzbehani & Sharifi, 2018; Sadock et al., 2015). The present findings thus reinforce the role of negative emotionality as a core vulnerability factor in adolescent relational dysfunction.

The finding that maladaptive coping strategies positively predicted family conflict management difficulties further supports previous research demonstrating that reliance on emotion-focused avoidance, withdrawal, rumination, and denial amplifies emotional distress and interpersonal strain (Nemati Sogoli Tapeh, 2017; Simonič et al., 2024; Vaghee et al., 2017). Adolescents who habitually avoid addressing stressors or engage in emotional suppression are less likely to resolve disagreements through constructive dialogue and more likely to respond defensively or aggressively during family interactions (Thomas et al., 2019; Tsuritani &

Jikihara, 2024). Empirical studies have shown that maladaptive coping predicts increased depressive symptoms, suicidal ideation, and impaired social functioning among adolescents (Quarshie et al., 2020; Villacura-Herrera et al., 2025). These maladaptive coping tendencies appear to translate directly into dysfunctional conflict patterns within family systems, as reflected in the current results.

Importantly, emotional flexibility emerged as a central regulatory mechanism in the present model. The significant negative association between emotional flexibility and family conflict management problems indicates that adolescents who possess greater capacity to adaptively modulate emotional responses, tolerate distress, and shift regulatory strategies are better equipped to navigate family disagreements constructively. This finding aligns with research demonstrating that emotional flexibility is strongly associated with resilience, psychological well-being, and effective interpersonal functioning (Mera et al., 2025; Mousavi et al., 2021; Nadimi & Bana, 2021). Developmental studies further suggest that emotional flexibility supports adolescents' ability to disengage from rigid emotional patterns and to respond contextually to social stressors, thereby reducing conflict escalation (Buttelmann & Karbach, 2017; Weber & Lynch, 2024).

The mediating role of emotional flexibility represents one of the most theoretically significant contributions of this study. The results demonstrated that negative emotionality and maladaptive coping strategies both influenced family conflict management indirectly through their effects on emotional flexibility. This pattern is consistent with dynamic emotion regulation models proposing that emotional traits and coping strategies shape psychological outcomes primarily by altering regulatory capacities (Kim et al., 2025; Raposo & Francisco, 2022). Adolescents with high negative emotionality may experience more intense emotional arousal, which in turn undermines emotional flexibility by fostering rigid regulatory responses such as rumination and avoidance (Simonič et al., 2024; Yen et al., 2018). Similarly, maladaptive coping strategies reduce opportunities for emotional learning and adaptive regulation, gradually eroding emotional flexibility (Pv, 2025; Vladislav et al., 2024). As emotional flexibility declines, adolescents become increasingly vulnerable to emotional dysregulation during family interactions, leading to greater conflict and relational strain.

The present findings are also consistent with family systems and social–ecological perspectives emphasizing that adolescents' emotional functioning cannot be understood in isolation from their relational environments. Research indicates that family conflict both shapes and is shaped by adolescents' emotion regulation and coping capacities (Raposo & Francisco, 2022; Thomas et al., 2019). Emotional flexibility appears to function as a critical buffer in this reciprocal process by enabling adolescents to interpret parental behavior more accurately, regulate their own emotional responses, and engage in constructive communication even under stress (Mera et al., 2025; Tsuritani & Jikihara, 2024). Thus, emotional flexibility serves not only as an individual regulatory skill but also as a relational resource within family systems.

From a clinical standpoint, these findings underscore the importance of targeting emotional flexibility in interventions for depressed adolescents experiencing family conflict. Evidence-based treatments such as acceptance and commitment therapy and metacognitive therapy have been shown to improve emotion regulation and reduce depressive symptoms by enhancing psychological flexibility and adaptive coping (Feizi et al., 2017; Khosh Lahje Sedgh, 2017). Mindfulness-based and family-focused interventions similarly demonstrate effectiveness in strengthening adolescents' emotional regulation capacities and improving relational outcomes (Afzali Kalateh, 2020; Mera et al., 2025). The present study extends this literature by demonstrating that improvements in emotional flexibility may specifically reduce the negative impact of emotional vulnerability and maladaptive coping on family conflict management.

Cultural context further enriches the interpretation of these findings. Iranian adolescent girls face considerable academic, social, and familial pressures that intensify emotional distress and elevate risk for depression (Yaghoubi Siahgourabi et al., 2024). Cultural norms emphasizing obedience, emotional restraint, and family cohesion may limit opportunities for adolescents to openly express emotions and practice adaptive coping within the family, thereby increasing reliance on maladaptive strategies (Afzali Kalateh, 2020; Nadimi & Bana, 2021). Emotional flexibility may therefore represent a particularly valuable protective factor in this context, facilitating healthier emotional expression and conflict resolution while respecting cultural values.

5. Conclusion

Overall, the findings support an integrative model in which negative emotionality and maladaptive coping strategies undermine adolescents' emotional flexibility, which in turn compromises their ability to manage family conflicts constructively. This model advances existing theoretical frameworks by empirically demonstrating the mediating role of emotional flexibility in adolescent relational functioning and by highlighting its potential as a central target for intervention.

6. Limitations & Suggestions

Despite its contributions, this study has several limitations. The use of a cross-sectional design limits causal inference regarding the directionality of relationships among the study variables. The reliance on self-report measures may also introduce response bias, particularly in the assessment of emotional and coping processes. The sample consisted exclusively of female adolescents from a specific cultural and geographic context, which may restrict the generalizability of the findings to male adolescents or to other cultural populations.

Future studies should employ longitudinal designs to clarify the developmental trajectories and causal pathways linking emotional vulnerability, coping strategies, emotional flexibility, and family conflict over time. Including multi-informant data from parents and teachers, as well as behavioral and physiological measures of emotion regulation, would enhance methodological rigor. Comparative studies across genders and cultures would further illuminate contextual influences on these processes.

Intervention programs for depressed adolescents should incorporate structured training in emotional flexibility and adaptive coping skills, with active involvement of family members. School-based prevention initiatives focusing on emotional literacy and conflict resolution may help reduce emotional vulnerability before the onset of severe depressive symptoms. Clinicians should routinely assess emotional flexibility when treating adolescents presenting with depression and family conflict and integrate flexibility-enhancing strategies into treatment planning.

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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.

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Authors' Contributions

Z.A. conceived the study and coordinated data collection; M.A.T.S. designed the methodology and supervised the statistical analysis; and F.K. contributed to interpretation of results and manuscript preparation. All authors jointly participated in drafting, critical revision, and final approval of the manuscript and accept full responsibility for the content.

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