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Loss Experience and Emotional Maturity: The Mediating Role of Reflective Functioning

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ABSTRACT

Objective: This study aimed to examine the mediating role of reflective functioning in the relationship between loss experience and emotional maturity among adolescents.

Methods and Materials: This descriptive correlational study was conducted with a sample of 390 high school students aged 15 to 18 from various regions of Greece, selected using multistage cluster sampling based on the Krejcie and Morgan sample size table. Participants completed the Core Bereavement Items (CBI) to measure loss experience, the Reflective Functioning Questionnaire (RFQ-8), and the Emotional Maturity Scale (EMS). Data analysis included Pearson correlation using SPSS version 27 and Structural Equation Modeling (SEM) using AMOS version 21. Model fit was evaluated using multiple indices including Chi-square, GFI, AGFI, CFI, RMSEA, and TLI.

Findings: Results revealed significant negative correlations between loss experience and both reflective functioning (r = -.41, p < .001) and emotional maturity (r = -.47, p < .001). Reflective functioning was positively correlated with emotional maturity (r = .53, p < .001). SEM findings indicated that the structural model had acceptable fit (χ^2 = 124.65, df = 48, χ^2 /df = 2.60, GFI = 0.95, AGFI = 0.92, CFI = 0.96, RMSEA = 0.064, TLI = 0.95). Direct effects were significant from loss experience to reflective functioning (β = -0.41, p < .001) and to emotional maturity (β = -0.35, p < .001), and from reflective functioning to emotional maturity (β = 0.42, p < .001). Reflective functioning partially mediated the relationship between loss experience and emotional maturity (indirect β = -0.17, p < .001).

Conclusion: Reflective functioning plays a significant mediating role in how adolescents emotionally mature following experiences of loss, suggesting that enhancing reflective abilities may be a viable intervention strategy to foster resilience and emotional growth during adolescence.

Keywords: Loss experience, Reflective functioning, Emotional maturity, Adolescents.



1. Introduction

motional maturity, as a psychological construct, reflects an individual's ability to recognize, manage, and express emotions in a balanced and socially adaptive manner. It is foundational for interpersonal functioning, selfregulation, and psychological well-being, particularly during adolescence—a period characterized by heightened emotional volatility and developmental transitions (LosII, 2023; Srivastava & Goswami, 2025). As youth encounter complex emotional experiences, their capacity to develop maturity is increasingly influenced by external and internal factors, including significant life events such as interpersonal loss and the ability to reflect on emotional experiences. The construct of reflective functioning, rooted in mentalization theory, has emerged as a critical mediating mechanism in emotional development, facilitating the interpretation of one's own and others' mental states (Nijssens et al., 2020; Tanzilli et al., 2021).

Loss experiences in adolescence—such as the death of a loved one, parental divorce, or sudden separation—can disrupt the developmental trajectory of emotional processing. While some individuals develop resilience and greater emotional depth following such events, others may with maladaptive coping struggle or emotional dysregulation (Chen et al., 2020; Kartol, 2023). The impact of loss on psychological outcomes is far from uniform, and it appears to depend significantly on both individual differences and the availability of internal cognitiveaffective resources. One such resource is reflective functioning, which enables adolescents to make meaning of emotional events and integrate them into a coherent selfnarrative (Solobutina, 2022; Tanzilli et al., 2021). Reflective functioning is linked to the broader domain of mentalization and is critical in how young people understand emotional pain, construct relationships, and regulate affect in the aftermath of trauma or bereavement (Musetti et al., 2023; Siffredi et al., 2022a).

Previous research on emotional maturity has emphasized its predictive value for social adaptation and psychological health. Adolescents with higher levels of emotional maturity typically display better academic adjustment, conflict resolution skills, and lower rates of psychopathology (Fetti & Albulescu, 2024; Setiawati & Endrastuty, 2019). Emotional maturity is not merely a trait but a developmental outcome shaped by social environments, cognitive control, and interpersonal experiences (Lazar, 2021; Nasution et al., 2018). Moreover, longitudinal studies have highlighted the

neurological underpinnings of emotional development, pointing to significant changes in prefrontal-limbic connectivity during adolescence, especially in the context of emotional processing and regulation (Chen et al., 2020; Davis et al., 2018; Morningstar et al., 2022). These neurodevelopmental changes are especially relevant when considering how adolescents internalize experiences of loss and formulate affective responses over time.

Reflective functioning, in this regard, may act as a cognitive-affective bridge between emotional experiences and mature responses. It allows individuals to form mental representations of both their own and others' internal states, thus promoting greater emotional insight and regulatory capacity (D'Aurizio et al., 2022; Tanzilli et al., 2021). Reflective functioning has been shown to buffer the adverse emotional consequences of stressful life events, mediating the relationship between insecure attachment and emotion dysregulation (Musetti et al., 2023; Nijssens et al., 2020). Furthermore, in educational and clinical contexts, deficits in reflective functioning are associated with impaired emotional adjustment, maladaptive defense mechanisms, and reduced interpersonal empathy (Sharma & Yaday, 2023; Solobutina, 2022). This underscores the potential of reflective functioning to moderate or mediate emotional maturity, especially in adolescents who have undergone profound emotional losses.

The nature and impact of loss are highly subjective, often contingent upon the adolescent's perception, cognitive maturity, and contextual support. For example, the death of a pet or prolonged separation from a primary caregiver may carry different emotional weights depending on cultural expectations and personal coping resources (Piven, 2019; Четверик-Бурчак & Матях, 2020). The internalization of these experiences, particularly without the support of reflective interpretation, can lead to heightened emotional reactivity, denial, or suppression—mechanisms often associated with emotional immaturity (Kartol, 2023; Parsakia, 2023). Conversely, reflective functioning encourages a constructive integration of grief and promotes adaptive emotional learning by supporting metacognitive awareness and emotional insight (Siffredi et al., 2022b; Xie et al., 2023).

Cultural and social factors also significantly influence both reflective functioning and emotional maturity. Research indicates that emotional regulation strategies and maturity trajectories differ across societies, particularly based on emotional socialization patterns and intergenerational learning (Hidayat & Andaryuni, 2023;



Zabrodina & Ryazanova, 2024). For instance, collectivist societies might promote emotional restraint and indirect emotional expression, which could affect how reflective functioning is developed and manifested in youth (Kabenova et al., 2024; Khaimova, 2024). Similarly, emerging research in neuroscience has revealed culturally influenced brain responses to social and emotional stimuli, highlighting how emotional maturity is not only a psychological construct but also a neurocognitive and sociocultural outcome (Vilgis et al., 2019; Xie et al., 2023). Thus, understanding the dynamic between loss experience and emotional maturity requires a multi-layered approach—one that incorporates both individual cognitive abilities and broader social frameworks.

In adolescence, where identity formation, self-concept clarity, and emotional independence are undergoing transformation, the role of reflective functioning becomes even more critical. Adolescents with strong reflective capacities tend to exhibit better coping with emotionally challenging situations and demonstrate more stable emotional reactions, which contributes to their overall emotional maturity (Siffredi et al., 2022a; Tanzilli et al., 2021). Furthermore, reflective functioning is associated with academic and behavioral competence, which are often disrupted in adolescents facing unprocessed emotional loss (LosÎI, 2023; Srivastava & Goswami, 2025). Neurological evidence also supports the developmental significance of reflective abilities, showing their correspondence with maturation in brain regions involved in executive control and social cognition (Chen et al., 2020; Morningstar et al., 2022; Wilhelm et al., 2017).

Notably, the trajectory from early emotional socialization to adolescent maturity is moderated by several factors, including family dynamics, peer relationships, and personal experiences of stress or trauma (Chen et al., 2020; Davis et al., 2018; Sharma & Yadav, 2023). Adolescents who experience loss within emotionally supportive contexts may develop greater resilience and deeper emotional insight, while those in environments lacking reflective scaffolding may be more vulnerable to emotional dysregulation and interpersonal difficulties (Musetti et al., 2023; Nijssens et al., 2020; Srivastava & Goswami, 2025). This variability highlights the importance of evaluating how reflective functioning might mediate the developmental impact of loss on emotional maturity. In doing so, we can advance a more nuanced understanding of adolescent adjustment and inform supportive interventions targeting emotional and cognitive resilience.

This study, therefore, aims to investigate the mediating role of reflective functioning in the relationship between loss experience and emotional maturity among adolescents.

2. Methods and Materials

2.1. Study Design and Participants

This study employed a descriptive correlational design to investigate the relationship between loss experience and emotional maturity, with reflective functioning as a potential mediating variable. The statistical population included adolescent students from various high schools across urban areas of Greece. Using the Morgan and Krejcie sample size table for a population of over 10,000, a sample size of 390 adolescents was determined to be sufficient for statistical analysis. Participants were selected through multistage cluster sampling to ensure diversity in demographic characteristics such as gender, age, and socioeconomic status. Inclusion criteria consisted of being aged between 15 and 18 years, currently enrolled in secondary education, and having experienced at least one significant interpersonal loss. All participants were informed about the study's purpose and confidentiality, and informed consent was obtained from both students and their legal guardians.

2.2. Measures

2.2.1. Emotional Maturity

To assess emotional maturity, the Emotional Maturity Scale (EMS) developed by Singh and Bhargava in 1990 is employed. This standardized instrument is designed to measure an individual's capacity to manage emotions adaptively across various life domains. The EMS consists of 48 items divided into five subscales: Emotional Instability, Social Maladjustment, Personality Disintegration, Lack of Independence, and Emotional Regression. Participants respond on a 5-point Likert scale ranging from "Very Much" to "Not at All," with higher scores indicating greater emotional immaturity; thus, for interpretive clarity, reverse scoring is applied to derive a total emotional maturity score where higher values denote greater maturity. The scale's reliability and validity have been consistently confirmed in various cultural and demographic contexts, with reported internal consistency coefficients exceeding 0.85 and significant correlations with related constructs such as emotional intelligence and psychological well-being (Kakolian et al., 2024; Srivastava & Goswami, 2025).



2.2.2. Reflective Functioning

Reflective functioning is measured using the Reflective Functioning Questionnaire (RFQ-8), developed by Fonagy, Luyten, and colleagues in 2016 as a concise self-report tool to assess mentalizing capacity. The RFQ-8 includes eight items and yields two key subscale scores: Certainty about Mental States (RFQ-C) and Uncertainty about Mental States (RFQ-U). Respondents rate each item on a 7-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." Scoring is algorithm-based, with specific transformations applied to the raw responses to calculate each subscale. Higher scores on RFQ-C reflect greater confidence in understanding mental states (indicative of better reflective functioning), while elevated scores on RFQ-U may reflect hypermentalizing or impaired mentalization. The RFQ-8 has demonstrated robust psychometric properties, including good test-retest reliability and construct validity, as evidenced by its associations with attachment patterns, emotional regulation, and psychopathology in both clinical and non-clinical populations (Borelli et al., 2021; Karimi Farsani & Bahramipour Isfahani, 2023; Mohammadi et al., 2023).

2.2.3. Loss Experience

Loss experience is evaluated using the Core Bereavement Items (CBI), developed by Burnett, Middleton, Raphael, and Martinek in 1997, which serves as a standardized tool to assess the psychological impact of bereavement. The CBI consists of 17 items and includes three subscales: Images and Thoughts of the Deceased, Acute Separation, and Griefrelated Emotional Responses. Participants respond using a 4-point Likert scale ranging from "Not at all" to "A lot," with higher scores indicating more intense bereavement experiences. The tool is sensitive to both recent and past losses and is widely used in research and clinical settings to capture individual differences in loss-related emotional processing. The CBI has demonstrated strong internal consistency (Cronbach's alpha values above 0.80), good test-retest reliability, and significant convergent validity

through its correlations with other grief and depression measures, making it a reliable instrument for capturing loss experience in diverse populations (Arora & Bhatia, 2023; Buckley et al., 2024; Mansoori et al., 2023; Testoni et al., 2022).

2.3. Data Analysis

Data analysis was conducted in two phases. First, descriptive statistics (mean, standard deviation, frequency, and percentage) were used to summarize participant characteristics. To examine bivariate associations between the dependent variable (emotional maturity) and the independent variables (loss experience and reflective Pearson correlation coefficients were functioning), calculated using SPSS version 27. In the second phase, to test the hypothesized mediating role of reflective functioning in the relationship between loss experience and emotional maturity, Structural Equation Modeling (SEM) was performed using AMOS version 21. Model fit indices including the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Chisquare/df ratio were used to evaluate the adequacy of the proposed model.

3. Findings and Results

The final sample comprised 390 adolescents, of whom 211 individuals (54.1%) identified as female and 179 individuals (45.9%) as male. In terms of age distribution, 126 participants (32.3%) were 15 years old, 102 participants (26.2%) were 16 years old, 87 participants (22.3%) were 17 years old, and 75 participants (19.2%) were 18 years old. Regarding educational level, 158 students (40.5%) were in the 10th grade, 131 students (33.6%) in the 11th grade, and 101 students (25.9%) in the 12th grade. Socioeconomic status, as self-reported by participants based on parental occupation and income indicators, showed that 169 participants (43.3%) came from middle-income families, 143 participants (36.7%) from low-income families, and 78 participants (20.0%) from high-income households.

Table 1Descriptive Statistics for Main Study Variables (N = 390)

Variable	Mean (M)	Standard Deviation (SD)	
Loss Experience	36.42	7.19	
Reflective Functioning	24.87	5.33	
Emotional Maturity	167.58	18.74	





The descriptive statistics presented in Table 1 show that the mean score for loss experience was 36.42 (SD = 7.19), indicating a moderate level of self-reported bereavement or emotional separation in the sample. Reflective functioning had a mean of 24.87 (SD = 5.33), suggesting a moderately strong capacity for mentalizing and emotional interpretation. Emotional maturity scores averaged at 167.58 (SD = 18.74), which, considering the scale range, reflects a fairly high level of maturity across emotional domains among participants.

Prior to conducting inferential analyses, the assumptions required for Pearson correlation and SEM were evaluated. Normality of the distribution for all continuous variables was assessed using skewness and kurtosis indices. The skewness values ranged from -0.47 to 0.21, and kurtosis values ranged from -0.35 to 0.59, indicating acceptable normality. Linearity between the variables was confirmed through scatterplots, which revealed approximately linear relationships without significant curvature. The assumption of homoscedasticity was met, as visual inspection of residual plots indicated constant variance across levels of the predictors. Multicollinearity was not a concern, with Variance Inflation Factor (VIF) values ranging from 1.07 to 1.24. Additionally, Mahalanobis distance was calculated to identify multivariate outliers, but no cases exceeded the critical χ^2 value of 16.27 (df = 3, p < 0.001), confirming the adequacy of the data for SEM.

 Table 2

 Pearson Correlation Coefficients Between Variables

Variable	1	2	3
1. Loss Experience	_		
2. Reflective Functioning	41**(p < .001)	_	
3. Emotional Maturity	47** (p < .001)	.53**(p < .001)	_

As reported in Table 2, loss experience was significantly and negatively correlated with both reflective functioning (r = -.41, p < .001) and emotional maturity (r = -.47, p < .001), indicating that higher levels of experienced loss were associated with lower levels of both reflective functioning

and emotional maturity. In contrast, reflective functioning was significantly and positively correlated with emotional maturity (r = .53, p < .001), supporting its role as a beneficial cognitive-affective mechanism in adolescent emotional development.

Table 3

Fit Indices for the Structural Equation Model

Fit Index	χ^2	df	χ²/df	GFI	AGFI	CFI	RMSEA	TLI
Value	124.65	48	2.60	0.95	0.92	0.96	0.064	0.95

The fit indices presented in Table 3 demonstrate a good fit of the structural model to the observed data. The chi-square value of 124.65 with 48 degrees of freedom produced a χ^2 /df ratio of 2.60, which falls within the acceptable range. The GFI (0.95), AGFI (0.92), and CFI (0.96) all exceeded

the conventional threshold of 0.90, indicating good model fit. The RMSEA was 0.064 and the TLI was 0.95, both within acceptable limits. Collectively, these indices confirm that the hypothesized model adequately fits the empirical data.

 Table 4

 Direct, Indirect, and Total Path Coefficients in the Structural Model

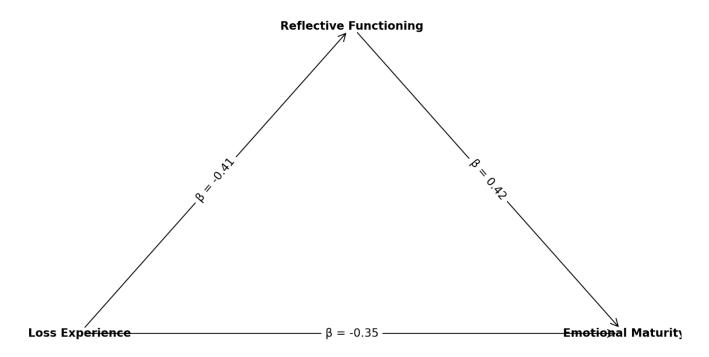
Path	В	SE	Beta	p
Loss Experience → Reflective Functioning	-0.45	0.06	-0.41	< .001
Reflective Functioning → Emotional Maturity	1.38	0.17	0.42	< .001
Loss Experience → Emotional Maturity (direct)	-1.92	0.28	-0.35	< .001
Loss Experience → Emotional Maturity (indirect via Reflective Functioning)	-0.62	0.11	-0.17	< .001
Loss Experience → Emotional Maturity (total effect)	-2.54	0.31	-0.52	< .001



Table 4 reports the path coefficients for the structural model. The direct path from loss experience to reflective functioning was significant (B = -0.45, SE = 0.06, β = -0.41, p < .001), indicating that greater loss was associated with diminished reflective functioning. Reflective functioning positively and significantly predicted emotional maturity (B = 1.38, SE = 0.17, β = 0.42, p < .001). The direct path from loss experience to emotional maturity was also significant (B

= -1.92, SE = 0.28, β = -0.35, p < .001). Importantly, the indirect path via reflective functioning was also significant (B = -0.62, SE = 0.11, β = -0.17, p < .001), indicating a partial mediating effect. The total effect of loss experience on emotional maturity was robust and significant (B = -2.54, SE = 0.31, β = -0.52, p < .001), underscoring the centrality of both direct and mediated relationships in explaining emotional development outcomes.

Figure 1
Standardized Total, Direct, and Indirect Effects in the Structural Model



4. Discussion and Conclusion

The present study investigated the association between loss experience and emotional maturity in adolescents, with reflective functioning considered as a mediating variable. Utilizing Pearson correlation and Structural Equation Modeling (SEM), the results revealed that loss experience had a significant negative correlation with emotional maturity, suggesting that adolescents who experienced more intense or unresolved interpersonal losses tended to display lower levels of emotional maturity. Additionally, reflective functioning was positively correlated with emotional maturity and significantly mediated the relationship between loss experience and emotional maturity. These findings indicate that reflective functioning serves as a psychological buffer that helps adolescents process and integrate

emotionally painful experiences, thereby facilitating the development of emotional maturity.

The observed negative correlation between loss experience and emotional maturity aligns with previous findings that suggest emotionally intense events—especially interpersonal losses—can disrupt the developmental trajectory of emotional regulation and interpersonal functioning in adolescents (Chen et al., 2020; Kartol, 2023). Adolescence is a particularly sensitive period for socioemotional development, and loss experiences during this time can create vulnerabilities in affect regulation and identity consolidation (Davis et al., 2018; Morningstar et al., 2022). The finding supports prior research indicating that unresolved grief or maladaptive coping with loss may contribute to emotional immaturity, often manifesting in impulsivity, affective instability, or withdrawal from



interpersonal relationships (LosÎI, 2023; Sharma & Yadav, 2023).

Conversely, adolescents who exhibited higher levels of reflective functioning were significantly more emotionally mature, regardless of their loss experiences. This outcome supports theoretical perspectives on the role of mentalization and reflective capacity in facilitating adaptive emotional development (Solobutina, 2022; Tanzilli et al., 2021). Reflective functioning, by enabling individuals to interpret their own and others' mental states with depth and nuance, contributes to self-awareness and self-regulation-both of which are core components of emotional maturity (Nijssens et al., 2020; Siffredi et al., 2022a). The current findings are in line with those of Musetti et al., who demonstrated that reflective functioning mitigates the adverse emotional effects of early relational trauma by promoting psychological integration and coherence (Musetti et al., 2023).

The mediating role of reflective functioning further emphasizes its critical developmental function. The results indicate that while loss experiences may pose risks to emotional development, adolescents with high reflective functioning are more likely to derive meaning from their experiences and engage in emotionally mature behaviors. This echoes the conclusions of studies that have conceptualized reflective functioning as a form of resilience in the face of adversity (D'Aurizio et al., 2022; Tanzilli et al., 2021). Nijssens et al. similarly found that reflective functioning in parents mediated the relationship between attachment security and children's social-emotional outcomes, suggesting a cross-generational and relational dimension to mentalizing abilities (Nijssens et al., 2020). In the adolescent context, this finding affirms that cognitiveaffective mechanisms like reflective functioning can play a transformative role in navigating emotional pain.

Cultural factors also likely shape the expression of both reflective functioning and emotional maturity. Adolescents in Greece, where the current study was conducted, often experience family loss or emotional separation in a context that places high cultural value on familial closeness and expressive emotionality. Prior research suggests that emotional norms and expectations within collectivist or family-centric cultures influence both the perception of loss and the processes of emotional integration (Khaimova, 2024; Zabrodina & Ryazanova, 2024). For instance, the internalization of grief may be more socially visible or publicly processed, creating more opportunities—or pressures—for reflective processing. These sociocultural

variables may explain the strength of the association between loss and emotional maturity observed in this sample, particularly when compared to research conducted in more individualistic contexts (Hidayat & Andaryuni, 2023; Piven, 2019).

Neuropsychological evidence further supports the role of reflective functioning as a developmental moderator. Studies in developmental neuroscience have found that the prefrontal cortex, responsible for self-regulation and complex emotional processing, continues maturing through adolescence and is shaped by emotionally salient experiences (Morningstar et al., 2022; Vilgis et al., 2019). Chen et al. demonstrated that early maternal emotion socialization predicted amygdala-vmPFC connectivity, which is relevant to emotion regulation in adolescence (Chen et al., 2020). This supports the neurobiological plausibility of reflective functioning as a mechanism that converts emotionally difficult experiences into maturational gains, rather than vulnerabilities. Adolescents who engage in higher-order processing of emotional stimuli may, therefore, benefit from more integrated brain-behavior profiles supportive of emotional maturity.

The positive relationship between reflective functioning and emotional maturity also resonates with research on cognitive and social correlates of maturity. Fetti and Albulescu, for instance, found that teachers with higher emotional maturity showed better alignment with their emotional style dimensions, which in turn influenced their effectiveness in classroom interactions (Fetti & Albulescu, 2024). Similarly, studies of vocational school students indicated that emotional maturity is associated with better peer relationships and academic motivation (Setiawati & Endrastuty, 2019; Srivastava & Goswami, 2025). The current study adds to this literature by demonstrating that these associations are not merely correlational but can be mediated by reflective processes that support interpretation and emotional learning following significant life events.

Interestingly, the study also speaks to findings that emphasize the importance of emotional maturity in contexts of diversity and adversity. Research on marginalized or atrisk populations—such as transgender individuals or street children—has consistently found that emotional maturity moderates the psychological impact of external stressors, facilitating better coping and adjustment (Nasution et al., 2018; Sharma & Yadav, 2023). The results here similarly suggest that, while loss is a potentially disruptive event, it can be psychologically processed in a way that promotes



maturity rather than emotional regression, provided that reflective capacities are adequately developed.

Additionally, these findings are in line with the conceptualization of emotional maturity multidimensional and developmental process influenced by self-control, cognitive flexibility, and emotional awareness (Lazar, 2021; Zabrodina & Ryazanova, 2024). Piven noted that individuals with higher emotional maturity tend to perceive parental attitudes more adaptively, suggesting that interpretation of past emotional experiences plays a crucial role in current emotional functioning (Piven, 2019). The present study's model integrates these conceptual insights and supports the argument that reflective functioning is a developmental hinge upon which the impact of emotional adversity—such as loss—can be transformed into growth.

Finally, this study contributes to the growing evidence that integrating emotional-cognitive constructs into mental health and educational frameworks can enhance adolescent development. As Xie et al. observed, social-emotional abilities are not only shaped by social exposure but are also reflected in normative brain responses, which evolve with reflective engagement in emotional content (Xie et al., 2023). Thus, interventions that strengthen reflective functioning may have broad developmental and neurological benefits that extend into other domains of functioning such as academic performance, social relationships, and psychological resilience.

5. Limitations & Suggestions

Despite its strengths, this study is not without limitations. First, the cross-sectional design restricts the ability to draw causal inferences regarding the directionality between loss experience, reflective functioning, and emotional maturity. Longitudinal research is needed to determine whether reflective functioning develops as a response to loss or whether it precedes and moderates the experience. Second, the reliance on self-report questionnaires may introduce social desirability bias or inaccurate recall, especially when assessing emotionally charged topics such as personal loss. Third, although the sample size was statistically adequate, the study focused solely on Greek adolescents, which may limit the generalizability of findings to other cultural or developmental contexts. Finally, the operationalization of loss experience did not distinguish between different types or timings of loss, which may differentially impact emotional processing and maturity.

Future research should consider employing longitudinal designs to examine developmental trajectories in emotional maturity following loss and the evolving role of reflective functioning over time. Experimental or intervention-based studies might also assess whether training in reflective functioning can moderate emotional outcomes in youth facing bereavement or separation. Additionally, qualitative or mixed-method approaches could provide richer contextual insights into how adolescents experience and process loss. Expanding research to include different cultural and socio-economic groups will also enhance the ecological validity of the findings and allow for cross-cultural comparisons. Finally, including neurobiological measures, such as functional MRI or physiological indices of emotional regulation, could deepen the understanding of the neural correlates of reflective functioning and emotional maturity.

Educational practitioners, counselors, and parents should prioritize the development of reflective functioning in adolescents, especially those who have experienced loss. Schools may consider integrating social-emotional learning programs that explicitly target reflective capacities through journaling, group discussions, or guided emotional inquiry. Mental health professionals working with bereaved adolescents can employ therapeutic techniques such as mentalization-based therapy to strengthen reflective functioning and support emotional integration. Moreover, teachers and caregivers should be trained to recognize signs of unresolved grief and emotional immaturity and refer students for appropriate support. Creating emotionally safe and reflective environments both in schools and at home is essential for promoting emotional maturity and resilience in the face of life's inevitable losses.

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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

All authors equally contributed to this article.

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