



## Body Dissatisfaction and Depressive Symptoms in Youth: The Mediating Role of Self-Criticism

Diana. Rodrigues da Silva<sup>1</sup>, Grace. Mwangi<sup>2\*</sup>

<sup>1</sup> Insight - Piaget Research Center for Human and Ecological Development, Escola Higher de Education Jean Piaget, Almada, Portugal

<sup>2</sup> Department of Educational Psychology, University of Nairobi, Nairobi, Kenya

\* Corresponding author email address: [grace.mwangi@uonbi.ac.ke](mailto:grace.mwangi@uonbi.ac.ke)

### Article Info

#### Article type:

Original Research

#### How to cite this article:

Rodrigues da Silva, D., & Mwangi, G. (2025). Body Dissatisfaction and Depressive Symptoms in Youth: The Mediating Role of Self-Criticism. *Journal of Adolescent and Youth Psychological Studies*, 6(9), 1-10.

<http://dx.doi.org/10.61838/kman.jayps.4503>



© 2025 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

### ABSTRACT

**Objective:** This study aimed to investigate the relationship between body dissatisfaction and depressive symptoms among adolescents, with a particular focus on the mediating role of self-criticism.

**Methods and Materials:** A descriptive correlational design was employed, with 388 adolescents recruited from educational institutions in Kenya. The sample size was determined using the Morgan and Krejcie table to ensure representativeness and statistical power. Participants completed standardized self-report instruments measuring body dissatisfaction, self-criticism, and depressive symptoms. Data analysis was conducted in two stages. Pearson correlation coefficients were calculated using SPSS version 27 to examine the associations between body dissatisfaction, self-criticism, and depressive symptoms. Structural Equation Modeling (SEM) was subsequently performed in AMOS version 21 to test the hypothesized mediating role of self-criticism in the link between body dissatisfaction and depressive symptoms. Model fit was assessed using multiple indices, including the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA).

**Findings:** Pearson correlations indicated significant positive associations between body dissatisfaction and depressive symptoms ( $r = .46, p < .001$ ), between body dissatisfaction and self-criticism ( $r = .41, p < .001$ ), and between self-criticism and depressive symptoms ( $r = .52, p < .001$ ). SEM results supported a partial mediation model, demonstrating that self-criticism significantly mediated the relationship between body dissatisfaction and depressive symptoms (indirect effect = .21,  $p < .001$ ). The model demonstrated good fit ( $\chi^2/df = 2.14$ , CFI = .94, TLI = .92, RMSEA = .051), confirming the robustness of the mediational pathway.

**Conclusion:** These findings highlight the critical role of self-criticism in linking body dissatisfaction to depressive symptoms among adolescents.

**Keywords:** Adolescents; Body dissatisfaction; Self-criticism; Depressive symptoms

## 1. Introduction

Adolescence is a sensitive developmental stage characterized by profound biological, psychological, and social changes that can increase vulnerability to various mental health difficulties. Among these, depressive symptoms have emerged as one of the most prevalent and pressing issues affecting youth worldwide, with long-lasting consequences on psychosocial adjustment, educational outcomes, and overall quality of life (Gu et al., 2024; He et al., 2025). Understanding the complex predictors and mechanisms that underlie the onset and persistence of depressive symptoms in adolescents is therefore a vital priority for contemporary psychological research and mental health policy. Increasing evidence indicates that self-critical tendencies and dissatisfaction with one's body represent two important psychological vulnerabilities linked to depression in youth populations (Gao et al., 2023; Nariswari & Muttaqin, 2023). Examining these associations and the potential mediating role of self-criticism is essential for clarifying the pathways to depression and guiding effective interventions.

Adolescent depression is multifactorial, often arising from the interaction of family dynamics, social experiences, and individual cognitive-emotional tendencies. For example, parental negative control and poor school climate have been associated with increased depressive symptoms, with depression itself mediating the effects of family variables on school adjustment (He et al., 2025). Similarly, childhood trauma has been shown to exert long-term effects on adolescent depression through complex pathways involving borderline personality traits and deficits in self-control (Zhong et al., 2024). These findings highlight the layered and mediational structures through which environmental adversity translates into psychological vulnerability. Depression in adolescents is not only shaped by familial factors but also by cultural and social elements, such as social withdrawal, peer relationships, and community integration (Gao et al., 2022; Lee & Lee, 2023).

Family relationships and parental functioning constitute a foundational context for adolescent mental health. Research has shown that family functioning interacts with individual variables such as self-esteem and peer relationships to shape adolescent depression (Huang et al., 2022). More specifically, family adaptability and supportive parenting practices are protective, while dysfunctional family dynamics exacerbate the risk of depressive symptomatology (Chang et al., 2023; Lin et al., 2024). Studies have also

linked childhood parenting styles to long-term difficulties in adult interpersonal functioning among depressed patients, underscoring how early family environments leave enduring imprints on emotional regulation and interpersonal competence (Chang et al., 2023). Moreover, negative parental affect and family distress have been observed to spill over into adolescents' problematic behaviors such as pathological gaming, with depressive symptoms mediating these effects (Piao et al., 2022). Taken together, these studies suggest that familial environments operate both directly and indirectly in shaping adolescents' depressive vulnerabilities.

Beyond the family, the peer environment and broader social context play equally important roles in influencing adolescent depression. Social withdrawal and relational aggression victimization have consistently been linked to higher depressive symptoms, with self-critical tendencies amplifying the negative effects of such experiences (Lee & Lee, 2023; Nariswari & Muttaqin, 2023). Similarly, delinquent experiences increase vulnerability to self-injurious behavior, partly through depression and mediated by negative self-perceptions (Park & Yoo, 2024). Gender identity has also emerged as a salient factor, with evidence suggesting that depressive symptoms are moderated by self-efficacy and family functioning among adolescents struggling with identity formation (Hou et al., 2024). Social networks, too, can play paradoxical roles: while they provide avenues for connection, excessive or objectifying use has been shown to foster self-objectification and body dissatisfaction, which in turn contribute to depressive symptoms (Tang et al., 2024).

Body dissatisfaction is particularly significant in adolescence due to heightened sensitivity to appearance, peer comparison, and identity formation. Social media exposure, body ideals, and self-objectification processes amplify dissatisfaction with one's physical appearance, which has been directly tied to depressive symptoms (Tang et al., 2024). Research has demonstrated that adolescents experiencing high levels of body dissatisfaction are at greater risk for developing negative affect, internalizing problems, and maladaptive coping strategies (Yu et al., 2023). Moreover, body dissatisfaction is not only a direct risk factor but also interacts with mediating constructs such as self-esteem and resilience, which can either buffer or intensify depressive trajectories (Gu et al., 2024; Yu et al., 2023). These findings underscore the need to conceptualize body dissatisfaction not in isolation but within the broader psychosocial context of adolescence.

Self-criticism has been identified as a central cognitive vulnerability associated with depression across developmental stages. Adolescents who exhibit heightened self-critical tendencies are more likely to experience depressive symptoms and related psychopathologies such as nonsuicidal self-injury (Gao et al., 2023). Self-criticism may function both as a mediator and as a moderator: for example, in adolescents experiencing relational victimization, self-criticism exacerbates the link to depression (Nariswari & Muttaqin, 2023), while in contexts of parental criticism, it intensifies neural and affective responses associated with depression (Lisanne et al., 2023). Furthermore, values and emotional regulation strategies interact with self-critical tendencies, influencing adolescents' capacity for emotional adjustment (Liu et al., 2023). Research suggests that high self-criticism may reduce self-compassion and self-esteem, weakening protective factors against depression and amplifying vulnerability (Gao et al., 2023; Gu et al., 2024).

Recent scholarship emphasizes the need for integrative models that capture both mediators and moderators of depression in adolescents. For instance, collective integration has been identified as a mediator between sleep duration and depression, showing how lifestyle factors exert indirect psychological effects (Gao et al., 2022). Similarly, self-concept mediates the relationship between childhood traumatic experiences and depression, suggesting that identity-related processes serve as crucial explanatory mechanisms (Hu et al., 2024). Depression also serves as a mediator in various contexts, such as in the relationship between parental negative control and school climate (He et al., 2025), or between suicidal ideation and self-injury among adolescents with major depressive disorder (Kang et al., 2022). These findings indicate that depression both explains and is explained by complex psychosocial pathways. Within this expanding framework, self-criticism has consistently emerged as a pivotal mediator that translates environmental adversity and body dissatisfaction into heightened depressive symptoms.

The majority of recent studies have emphasized that cultural and contextual factors shape the pathways to adolescent depression. For instance, research conducted in East Asian contexts has revealed that collective integration and family adaptability play particularly salient roles in predicting depressive symptoms (Gao et al., 2022; Lin et al., 2024). In Indonesia, self-control has been identified as a mediator linking internet addiction and depression, suggesting that cultural values around self-discipline and behavior regulation significantly influence adolescent well-

being (Buntaran et al., 2025). Similarly, evidence from China has highlighted the mediating effects of resilience and self-esteem in the link between screen time and depression (Yu et al., 2023). These cross-cultural findings underscore the importance of considering contextualized vulnerabilities and protective factors, while at the same time highlighting the universality of self-criticism and body dissatisfaction as central risk mechanisms.

Despite the wealth of research exploring predictors of adolescent depression, there remain critical gaps in understanding the interplay between body dissatisfaction, self-criticism, and depressive symptoms. While body dissatisfaction has been strongly associated with depression, the precise mechanisms through which this relationship operates are less clearly delineated. Emerging evidence suggests that self-criticism may serve as a mediating pathway, translating dissatisfaction with one's body into pervasive negative self-evaluations and subsequent depressive symptomatology (Gao et al., 2023; Nariswari & Muttaqin, 2023). However, few studies have explicitly tested this mediating model in diverse adolescent populations. Given that adolescence is marked by both heightened concerns about body image and increased susceptibility to self-critical cognitions, investigating this mediating relationship is both theoretically and clinically significant.

Accordingly, the present study aims to examine the relationships between body dissatisfaction, self-criticism, and depressive symptoms among adolescents.

## 2. Methods and Materials

### 2.1. Study Design and Participants

This study employed a descriptive correlational design to investigate the relationships between body dissatisfaction, self-criticism, and depressive symptoms among youth. A total of 388 participants were recruited from educational institutions in Kenya, with the sample size determined using the Morgan and Krejcie sample size table, which ensures adequate statistical power for medium effect sizes. Participants were selected using stratified random sampling to capture variation across gender and age groups. Inclusion criteria required participants to be between 15 and 24 years old, currently enrolled in secondary or tertiary education, and willing to provide informed consent. Exclusion criteria included diagnosed psychiatric disorders under current treatment or refusal to consent.

## 2.2. Measures

The Beck Depression Inventory-II (BDI-II), developed by Beck, Steer, and Brown in 1996, is one of the most widely used self-report instruments for assessing depressive symptoms. The tool consists of 21 items that cover cognitive, affective, and somatic aspects of depression. Each item is scored on a 4-point Likert scale ranging from 0 to 3, with higher total scores indicating greater severity of depressive symptoms. The BDI-II provides an overall severity score but does not contain separate subscales, as it was designed to capture the multidimensional experience of depression in a single index. Numerous studies have confirmed its high internal consistency (Cronbach's alpha values typically above 0.85) and test-retest reliability, as well as its strong convergent and discriminant validity across adolescent and youth populations.

The Body Shape Questionnaire (BSQ), created by Cooper, Taylor, Cooper, and Fairburn in 1987, is a standard tool for evaluating body dissatisfaction, particularly concerns related to body shape, weight, and self-perception. The most common version includes 34 items, though shorter validated forms (such as BSQ-16) are also available. Respondents rate the frequency of their body-related concerns over the past four weeks on a 6-point Likert scale ranging from "never" (1) to "always" (6). The questionnaire provides a global score reflecting overall dissatisfaction with body shape, without distinct subscales. The BSQ has demonstrated strong psychometric properties, including high internal consistency (Cronbach's alpha values above 0.90) and well-established validity across different cultures and age groups, making it a reliable instrument for research on adolescents and young adults.

The Levels of Self-Criticism Scale (LOSC), developed by Thompson and Zuroff in 2004, is a validated self-report instrument designed to measure self-critical tendencies. The LOSC consists of 22 items grouped into two subscales: Internalized Self-Criticism (which reflects the harsh self-evaluative standards and negative self-judgments) and Comparative Self-Criticism (which captures feelings of inferiority when comparing oneself to others). Each item is rated on a Likert scale from 1 ("not at all true of me") to 7

("very true of me"), with higher scores indicating higher levels of self-criticism. The LOSC has demonstrated excellent internal consistency for both subscales (Cronbach's alpha values typically ranging from 0.80 to 0.90) and has been validated in adolescent and youth populations. Its reliability and construct validity have been confirmed in multiple cross-cultural studies, making it a suitable tool for investigating the mediating role of self-criticism.

## 2.3. Data Analysis

Data were analyzed in two stages. First, descriptive statistics including means, standard deviations, frequencies, and percentages were computed to summarize participant characteristics and study variables. Pearson's correlation coefficients were then calculated using SPSS version 27 to assess the bivariate relationships between depressive symptoms (dependent variable) and each independent variable (body dissatisfaction and self-criticism). Finally, a Structural Equation Modeling (SEM) approach was applied using AMOS version 21 to test the hypothesized mediating role of self-criticism in the relationship between body dissatisfaction and depressive symptoms. The SEM model fit was evaluated using multiple indices, including the Chi-square statistic, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA). A significance threshold of  $p < .05$  was adopted for all inferential analyses.

## 3. Findings and Results

Of the 388 participants, 201 (51.8%) were female and 187 (48.2%) were male. The age distribution showed that 142 participants (36.6%) were between 15–17 years, 163 participants (42.0%) were between 18–20 years, and 83 participants (21.4%) were aged 21–24 years. Regarding educational level, 167 participants (43.0%) were in secondary school, 142 (36.6%) were in undergraduate programs, and 79 (20.4%) were in diploma or technical training. The majority of participants, 278 (71.6%), reported residing in urban areas, while 110 (28.4%) came from rural areas.

**Table 1***Descriptive Statistics of Study Variables (N = 388)*

Variable	M	SD	Min	Max
Body Dissatisfaction	72.41	15.82	34	118
Self-Criticism	89.57	17.46	45	128
Depressive Symptoms	21.83	10.37	5	49

As shown in Table 1, the mean score for body dissatisfaction was 72.41 (SD = 15.82), indicating a moderate to high level of appearance concerns among adolescents. The mean score for self-criticism was 89.57 (SD = 17.46), suggesting considerable variability in negative self-evaluation across participants. Depressive symptoms were also present, with a mean score of 21.83 (SD = 10.37). The distribution of scores across all variables fell within expected ranges given the standardized measures used, confirming sufficient variability for correlational and structural equation analyses.

Prior to analysis, the assumptions for correlation and SEM were assessed. Normality was examined using skewness and kurtosis values, which for all variables ranged

between -0.84 and 1.02, falling within the acceptable range of -2 to +2. Linearity was evaluated through scatterplots, which indicated approximately linear relationships between body dissatisfaction, self-criticism, and depressive symptoms. Homoscedasticity was confirmed using Levene's test for equality of variances, which was nonsignificant for all variables (all  $p > .12$ ). Multicollinearity was assessed through tolerance values (all  $> 0.42$ ) and Variance Inflation Factors (all  $< 2.3$ ), indicating that multicollinearity was not a concern. Outlier detection using Mahalanobis distance revealed no cases exceeding the critical chi-square value at  $p < .001$ , suggesting the data met the assumptions for subsequent analyses.

**Table 2***Pearson Correlation Matrix Between Study Variables*

Variable	1	2	3
1. Body Dissatisfaction	—		
2. Self-Criticism	.41*** ( $p < .001$ )	—	
3. Depressive Symptoms	.46*** ( $p < .001$ )	.52*** ( $p < .001$ )	—

Table 2 presents the Pearson correlations among the study variables. Body dissatisfaction was significantly correlated with self-criticism ( $r = .41$ ,  $p < .001$ ) and depressive symptoms ( $r = .46$ ,  $p < .001$ ). Self-criticism also showed a significant positive correlation with depressive symptoms ( $r$

$= .52$ ,  $p < .001$ ). These results suggest that adolescents who experience higher body dissatisfaction also report higher levels of self-criticism and depressive symptoms, providing initial support for the hypothesized mediation model.

**Table 3***Fit Indices of the Structural Equation Model*

Fit Index	Value	Recommended Threshold
$\chi^2$	132.87	—
df	62	—
$\chi^2/df$	2.14	$< 3.00$
GFI	.93	$\geq .90$
AGFI	.91	$\geq .90$
CFI	.94	$\geq .90$
TLI	.92	$\geq .90$
RMSEA	.051	$\leq .08$

As shown in Table 3, the SEM model demonstrated a good overall fit to the data. The chi-square statistic was

132.87 with 62 degrees of freedom, yielding a  $\chi^2/df$  ratio of 2.14, well below the recommended cutoff of 3.00.



Additional indices indicated adequate to strong fit: GFI = .93, AGFI = .91, CFI = .94, TLI = .92, and RMSEA = .051. Collectively, these results confirm that the hypothesized

structural model adequately represented the observed relationships among body dissatisfaction, self-criticism, and depressive symptoms.

**Table 4**

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

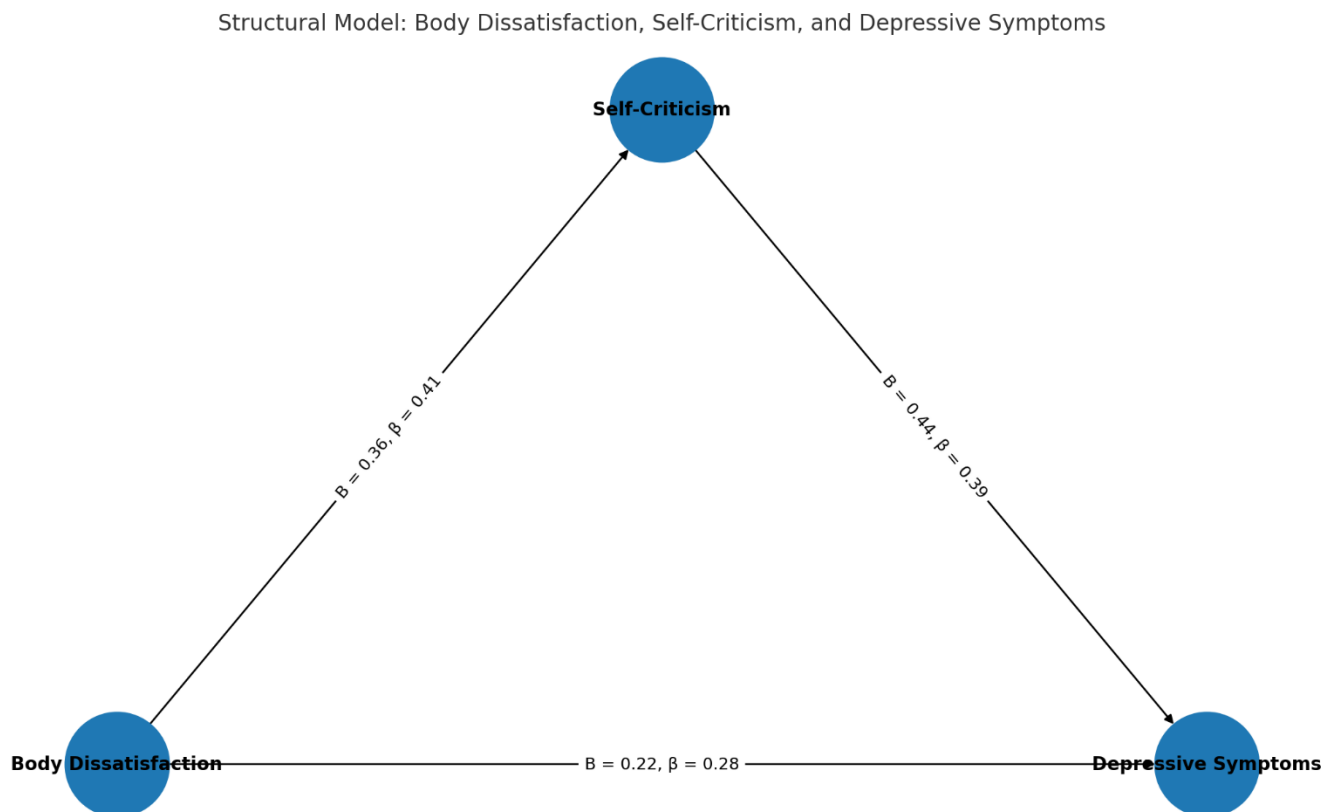
Path	B	S.E.	$\beta$	p
Body Dissatisfaction → Self-Criticism	0.36	0.07	0.41	< .001
Self-Criticism → Depressive Symptoms	0.44	0.08	0.39	< .001
Body Dissatisfaction → Depressive Symptoms (Direct)	0.22	0.06	0.28	< .001
Body Dissatisfaction → Depressive Symptoms (Indirect via Self-Criticism)	0.21	0.05	0.16	< .001
Body Dissatisfaction → Depressive Symptoms (Total)	0.43	0.07	0.44	< .001

Table 4 presents the direct, indirect, and total effects of the study variables. Body dissatisfaction significantly predicted self-criticism ( $B = 0.36$ ,  $\beta = 0.41$ ,  $p < .001$ ). Self-criticism, in turn, significantly predicted depressive symptoms ( $B = 0.44$ ,  $\beta = 0.39$ ,  $p < .001$ ). In addition, body dissatisfaction maintained a significant direct effect on depressive symptoms ( $B = 0.22$ ,  $\beta = 0.28$ ,  $p < .001$ ). The

indirect effect of body dissatisfaction on depressive symptoms via self-criticism was also significant ( $B = 0.21$ ,  $\beta = 0.16$ ,  $p < .001$ ), supporting partial mediation. The total effect ( $B = 0.43$ ,  $\beta = 0.44$ ,  $p < .001$ ) indicates that both direct and indirect pathways contribute substantially to depressive symptoms, confirming the mediating role of self-criticism in the model.

**Figure 1**

*Structural Model of The Study*



#### 4. Discussion and Conclusion

The present study examined the relationship between body dissatisfaction and depressive symptoms among adolescents, focusing on the mediating role of self-criticism. Using correlational analysis and structural equation modeling, the findings confirmed that body dissatisfaction significantly predicted depressive symptoms, and that self-criticism partially mediated this relationship. This suggests that while dissatisfaction with body image directly contributes to depressive affect, its impact is magnified when accompanied by harsh self-critical cognitions. Adolescents who perceive their bodies negatively are more prone to internalize these concerns, leading to persistent self-criticism and subsequent depressive symptoms.

The finding that body dissatisfaction is strongly linked to depressive symptoms aligns with extensive literature documenting the negative consequences of appearance concerns during adolescence. Tang and colleagues (Tang et al., 2024) demonstrated that social network use fosters self-objectification, which in turn heightens body dissatisfaction and contributes to depression, echoing the current study's observation that dissatisfaction with physical appearance constitutes a potent predictor of depressive symptoms. Similarly, Yu et al. (Yu et al., 2023) found that increased screen time predicts depressive symptoms in Chinese adolescents, with self-esteem and resilience serving as mediators. Their results reinforce the present study by suggesting that dissatisfaction or vulnerability in self-concept domains, whether body image or self-worth, can translate into depressive outcomes.

The mediating role of self-criticism revealed in this study resonates with findings by Gao et al. (Gao et al., 2023), who highlighted that adolescents high in self-criticism and low in self-compassion reported more depressive symptoms and nonsuicidal self-injury. Our results corroborate this by showing that self-critical tendencies represent an important pathway through which body dissatisfaction exerts its effects. Self-criticism, as a maladaptive cognitive style, may intensify negative body perceptions by amplifying internal judgments, leading adolescents to perceive themselves as inadequate not only physically but globally. This echoes Nariswari and Muttaqin (Nariswari & Muttaqin, 2023), who reported that self-criticism mediated the relationship between relational aggression victimization and depression, suggesting that self-critical cognition is a transdiagnostic

mechanism that links adverse experiences to depression across contexts.

The results are also consistent with neurocognitive evidence. Lisanne and colleagues (Lisanne et al., 2023) demonstrated that adolescents with depression exhibit heightened affective and neural responses to parental criticism, suggesting that criticism—whether external or internalized as self-criticism—triggers depressive cognitions. The current study's findings align with this perspective, indicating that self-criticism functions as an internalized form of persistent evaluative threat that perpetuates depressive states. Moreover, Liu et al. (Liu et al., 2023) found that emotional adjustment among adolescents is shaped by values and emotion regulation strategies, highlighting how cognitive-emotional processes influence depression. Self-criticism, as shown here, may undermine adaptive regulation by perpetuating negative self-focus.

The findings further extend work on family influences and interpersonal experiences. Research has shown that poor family functioning, lack of adaptability, and parental negative control significantly increase depressive symptoms in adolescents (He et al., 2025; Huang et al., 2022; Lin et al., 2024). Our study complements these findings by indicating that adolescents from unsupportive or critical family environments may internalize these experiences, developing self-critical tendencies that mediate the pathway toward depression. Similarly, Chang, Huang, and Wang (Chang et al., 2023) reported that negative parenting styles predict interpersonal difficulties in adulthood, highlighting how early relational patterns contribute to later vulnerability. Hu et al. (Hu et al., 2024) also demonstrated that self-concept mediates the link between childhood trauma and adolescent depression, paralleling our finding that self-criticism mediates the effect of body dissatisfaction. Both findings emphasize the role of cognitive self-evaluations in explaining how adverse experiences evolve into depressive symptoms.

The results also complement evidence from studies on cultural and lifestyle factors. Gao et al. (Gao et al., 2022) reported that collective integration mediated the association between sleep duration and depression among adolescents, underscoring that mediational processes are central to understanding depressive pathways. Likewise, Buntaran and colleagues (Buntaran et al., 2025) demonstrated that self-control mediates the link between internet addiction and depression among Indonesian adolescents. These findings align with the current study in showing that adolescents' cognitive-emotional processes—whether self-control, self-

concept, or self-criticism—serve as crucial mediators that transform vulnerabilities into depressive outcomes.

Our findings support integrative models that emphasize mediational and moderational dynamics in adolescent depression. For example, Hou et al. (Hou et al., 2024) revealed that the relationship between gender identity and depressive symptoms was moderated by self-efficacy and family functioning. Similarly, Park and Yoo (Park & Yoo, 2024) found that delinquent experiences increased self-injury through depression, with negative self-perceptions playing a mediating role. Kang and colleagues (Kang et al., 2022) further demonstrated that the severity of depression mediates the relationship between suicidal ideation and self-injury in adolescents with major depressive disorder. Together with our results, these findings confirm that depression does not emerge from linear pathways but from layered interactions between risk experiences, cognitive vulnerabilities, and moderating protective factors.

The unique contribution of the present study is the identification of self-criticism as a mediating mechanism between body dissatisfaction and depressive symptoms. While prior work has highlighted mediators such as resilience, self-esteem, self-concept, and self-control (Gu et al., 2024; Hu et al., 2024; Yu et al., 2023; Zhong et al., 2024), fewer studies have directly tested self-criticism in this role. By establishing self-criticism as a mediator, the findings underscore the importance of internalized evaluative processes in transforming dissatisfaction with one's body into depressive experiences. This insight adds to the literature on cognitive vulnerability by emphasizing self-criticism as a pivotal target for intervention.

The results provide important theoretical implications. First, they reinforce cognitive-behavioral perspectives that conceptualize depression as maintained by maladaptive thought patterns such as self-criticism (Gao et al., 2023). Second, they contribute to developmental psychopathology frameworks by demonstrating how a normative developmental issue—body dissatisfaction—can escalate into depression through maladaptive cognitive processes. Third, they enrich cultural psychology perspectives by highlighting parallels with mediational mechanisms found in diverse contexts, such as collective integration in China (Gao et al., 2022) and self-control in Indonesia (Buntaran et al., 2025). These theoretical implications collectively advance the understanding of adolescent depression as a multifaceted phenomenon shaped by both contextual vulnerabilities and cognitive mediators.

## 5. Limitations & Suggestions

Despite its contributions, the study has several limitations that warrant acknowledgment. First, the use of a cross-sectional design precludes causal inferences; while self-criticism mediated the relationship between body dissatisfaction and depressive symptoms, longitudinal studies are needed to confirm the temporal order of these relationships. Second, the data relied on self-report measures, which may be influenced by response biases such as social desirability or inaccurate self-perception. Third, the sample, while adequate in size, was drawn from a specific national context (Kenya), which may limit generalizability to adolescents in other cultural settings where body image norms and self-critical tendencies may differ. Fourth, potential moderating factors such as gender, socioeconomic status, and family functioning were not extensively analyzed, though prior research has shown their relevance (Hou et al., 2024; Huang et al., 2022). Finally, while structural equation modeling provided robust insights, the model did not include other relevant mediators such as self-esteem, resilience, or social support, which have been shown to play critical roles in adolescent depression (Gu et al., 2024; Lin et al., 2024; Yu et al., 2023).

Future research should address these limitations by employing longitudinal designs to establish causal pathways and clarify how body dissatisfaction, self-criticism, and depressive symptoms interact over time. Multi-method approaches, including behavioral tasks, interviews, and neurocognitive measures, could reduce reliance on self-report data and provide richer insights. Cross-cultural studies comparing adolescents across different contexts would be valuable for examining whether self-criticism mediates the body dissatisfaction–depression link universally or whether cultural factors moderate these relationships. Future work should also explore gender differences in greater depth, as female adolescents often report higher body dissatisfaction and self-critical tendencies. Moreover, incorporating additional mediators (e.g., resilience, peer support, and emotion regulation strategies) and moderators (e.g., family functioning, socioeconomic status, identity development) would help build more comprehensive models of adolescent depression. Finally, experimental or intervention-based studies that aim to reduce self-criticism or body dissatisfaction could provide direct evidence of their causal roles in alleviating depressive symptoms.



From a practical standpoint, the study highlights the importance of addressing self-criticism in prevention and intervention programs for adolescent depression. School-based mental health initiatives should incorporate psychoeducation about self-critical thoughts, teaching adolescents to challenge and reframe negative self-perceptions. Counseling interventions should focus on fostering self-compassion and body acceptance as protective factors against depression. Parents and teachers should be trained to reduce critical communication patterns and encourage supportive feedback, thereby minimizing the internalization of negative self-views. Public health campaigns could also address body dissatisfaction by promoting diverse body ideals and healthy self-concept development. Importantly, interventions should be culturally sensitive, tailoring approaches to the sociocultural contexts in which adolescents develop.

### 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 equally contributed to this article.

### References

- Buntaran, F. A. A., Kadir, N. B. A., & Zakaria, S. M. (2025). The Mediating Role of Self-Control in the Link Between Internet Addiction and Depression Among Indonesian Adolescents. *E-Bangi Journal of Social Science and Humanities*, 22(1). <https://doi.org/10.17576/ebangi.2025.2201.27>
- Chang, J., Huang, K., & Wang, W.-d. (2023). The Influence of Parenting Style in Childhood on Adult Depressed Patients' Interpersonal Relationships in the Period of Youth. *Frontiers in psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1169311>
- Gao, M., Li, X., Lee, C. Y., Ma, H., Chen, T., Zhang, S., & Chiang, Y. C. (2022). Sleep Duration and Depression Among Adolescents: Mediation Effect of Collective Integration. *Frontiers in psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1015089>
- Gao, Y., Liu, X., Liu, J., & Wang, H. (2023). The Effects of Self-Criticism and Self-Compassion on Adolescents' Depressive Symptoms and Nonsuicidal Self-Injury. *Psychology research and behavior management*, Volume 16, 3219-3230. <https://doi.org/10.2147/prbm.s417258>
- Gu, H., Zhang, P., & Li, J. (2024). The Effect of Self-Esteem on Depressive Symptoms Among Adolescents: The Mediating Roles of Hope and Anxiety. *Humanities and Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-024-03249-1>
- He, J., Xiao, H., Mao, J., Zhong, P. L., Wei, J., Gu, W., & Nie, Y. (2025). The Mediating Role of Depression and Moderating Role of Self-Consciousness in the Relationship Between Parental Negative Control and Adolescents' Perceived School Climate. *Child and adolescent psychiatry and mental health*, 19(1). <https://doi.org/10.1186/s13034-025-00896-3>
- Hou, C.-H., Yan, H., Xiang, Z., Leng, C., Tao, H., Liu, Z., & Lei, H. (2024). The Relationship Between Gender Identity and Depressive Symptoms in Adolescents: A Moderated Mediation Model of Self-Efficacy and Family Functioning. <https://doi.org/10.21203/rs.3.rs-4949530/v1>
- Hu, Y., Yang, Y., He, Z., Wang, D., Xu, F., Zhu, X., & Wang, K. (2024). Self-Concept Mediates the Relationships Between Childhood Traumatic Experiences and Adolescent Depression in Both Clinical and Community Samples. *BMC psychiatry*, 24(1). <https://doi.org/10.1186/s12888-024-05671-w>
- Huang, X., Hu, N., Yao, Z., & Peng, B. (2022). Family Functioning and Adolescent Depression: A Moderated Mediation Model of Self-Esteem and Peer Relationships. *Frontiers in psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.962147>
- Kang, B., Hwang, J., Woo, S.-i., Hahn, S. W., Kim, M., Kim, Y., Jin, H., Jeon, H. J., & Lee, Y. J. (2022). The Mediating Role of Depression Severity on the Relationship Between Suicidal Ideation and Self-Injury in Adolescents With Major Depressive Disorder. *Journal of Korean Academy of Child and Adolescent Psychiatry*, 33(4), 99-105. <https://doi.org/10.5765/jkacap.220014>
- Lee, D., & Lee, S. M. (2023). The Influence of Social Withdrawal and Depression on the Self-Esteem of Female Adolescents: The Mediating Effect of Grit. *PLoS One*, 18(7), e0288530. <https://doi.org/10.1371/journal.pone.0288530>
- Lin, Y., Jia, G., Zhao, Z., Li, M., & Cao, G. (2024). The Association Between Family Adaptability and Adolescent Depression: The Chain Mediating Role of Social Support and Self-Efficacy. *Frontiers in psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1308804>
- Lisanne, A. E. M. v. H., Wever, M. C., Schie, C. C. v., Janssen, L., Wentholt, W. G. M., Tollenaar, M. S., Will, G. J., & Elzinga, B. M. (2023). Sticky Criticism? Affective and Neural Responses to Parental Criticism and Praise in Adolescents

- With Depression. *Psychological medicine*, 54(3), 507-516.  
<https://doi.org/10.1017/s0033291723002131>
- Liu, P., Mo, B., Yang, P., Li, D., Liu, S., & Cai, D. (2023). Values Mediated Emotional Adjustment by Emotion Regulation: A Longitudinal Study Among Adolescents in China. *Frontiers in psychology*, 14.  
<https://doi.org/10.3389/fpsyg.2023.1093072>
- Nariswari, A. A., & Muttaqin, D. (2023). Relational Aggression Victimization and Depression: Testing Self-Compassion and Self-Criticism as Moderator and Mediator. *Humaniora*, 14(1), 59-68. <https://doi.org/10.21512/humaniora.v14i1.8318>
- Park, Y. S., & Yoo, J. Y. (2024). The Effect of Delinquent Experience on Self-Injury Behavior in Adolescents: Moderated Mediating Effect of Negative Self-Perception by Depression. *Correct Welf Soc Korea*, 87, 57-85.  
<https://doi.org/10.35422/cwsk.2024.87.57>
- Piao, M. Y., Jeong, E. J., & Kim, J. A. (2022). Mental Health of Parents and Their Children: A Longitudinal Study of the Effects of Parents' Negative Affect on Adolescents' Pathological Gaming. *Healthcare*, 10(11), 2233.  
<https://doi.org/10.3390/healthcare10112233>
- Tang, Y., Xu, M., Zhong-wei, T., & Liu, Y. (2024). The Impact of Social Network Use on Adolescent Depression: The Chain Mediation Between Self-Objectification and Body Satisfaction. *Frontiers in psychology*, 15.  
<https://doi.org/10.3389/fpsyg.2024.1347858>
- Yu, J., Liu, W., She, X., Wang, H., Wang, M., Abbey, C., Singh, M. K., Rozelle, S., & Tong, L. (2023). How Self-Esteem and Resilience Mediate the Association Between Screen Time and Depression Symptoms in Chinese Adolescents.  
<https://doi.org/10.21203/rs.3.rs-3232916/v1>
- Zhong, Y., Hu, Q., Chen, J., Li, Y., Chen, R., Li, Y., Cong, E., & Xu, Y. (2024). The Impact of Childhood Trauma on Adolescent Depressive Symptoms: The Chain Mediating Role of Borderline Personality Traits and Self-Control. *BMC psychiatry*, 24(1). <https://doi.org/10.1186/s12888-024-05829-6>