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The Relationship Between Childhood Trauma and Generalized Anxiety Symptoms in a Subclinical Sample with Depressive Symptoms: Examining the Mediating Role of Dissociative Experiences

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ABSTRACT

Purpose: This study aimed to examine the relationship between childhood trauma and generalized anxiety symptoms and to determine the mediating role of dissociative experiences among university students with elevated depressive symptoms.

Methods and Materials: This applied, descriptive-correlational study was conducted among students at the University of Tabriz during the 2022–2023 academic year. Using convenience sampling, 180 students who scored 18 or higher on the Beck Depression Inventory were selected. Data were collected using the Childhood Trauma Questionnaire, the Generalized Anxiety Disorder Scale, the Dissociative Experiences Scale, and the Beck Depression Inventory. Descriptive statistics and Pearson correlation coefficients were calculated using SPSS version 25, while the hypothesized mediation model was tested through partial least squares structural equation modeling in SmartPLS version 3. The significance of direct and indirect effects was assessed using bootstrapping.

Findings: Childhood trauma was positively correlated with generalized anxiety symptoms, $r = .607$, $p < .01$, and dissociative experiences, $r = .549$, $p < .01$. Dissociative experiences were also positively correlated with generalized anxiety symptoms, $r = .613$, $p < .01$. Path analysis showed that childhood trauma had a significant direct effect on generalized anxiety symptoms, $\beta = .373$, $t = 4.004$, $p < .001$, and on dissociative experiences, $\beta = .573$, $t = 6.137$, $p < .001$. Dissociative experiences significantly predicted generalized anxiety symptoms, $\beta = .401$, $t = 4.680$, $p < .001$. The indirect effect of childhood trauma on generalized anxiety symptoms through dissociative experiences was significant, $\beta = .230$, $p < .001$, indicating partial mediation. The model explained 47.7% of the variance in generalized anxiety symptoms and 32.8% of the variance in dissociative experiences.

Conclusion: Childhood trauma was associated with greater generalized anxiety symptoms both directly and indirectly through increased dissociative experiences. These findings highlight dissociation as an important mechanism linking early adverse experiences to anxiety among students with depressive symptoms and support trauma-informed assessment and intervention.

Keywords: Childhood Trauma; Generalized Anxiety Symptoms; Dissociative Experiences; Depressive Symptoms; Mediation; University Students

1. Introduction

Childhood is a critical developmental period during which enduring patterns of emotional regulation, interpersonal trust, self-concept, stress responsiveness, and psychological adaptation are established. When children are exposed to abuse, neglect, chronic threat, inconsistent caregiving, or other overwhelming experiences, the developmental systems responsible for integrating emotional, cognitive, bodily, and autobiographical experiences may be disrupted. Childhood trauma is therefore not limited to a distressing event that occurred in the past; rather, it may function as a long-term vulnerability factor that influences the individual's interpretation of danger, management of internal distress, and response to subsequent interpersonal and environmental stressors. Emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect can each undermine a child's sense of safety and predictability, although their psychological consequences may vary according to the severity, duration, developmental timing, and relational context of exposure. Contemporary trauma research increasingly conceptualizes these experiences as transdiagnostic risk factors that may contribute to a broad range of affective, anxiety-related, dissociative, behavioral, and interpersonal difficulties. Evidence indicates that childhood trauma is associated not only with overt psychiatric disorders but also with subthreshold symptom patterns that may cause meaningful distress and functional impairment before the criteria for a specific clinical diagnosis are fulfilled (Fung et al., 2025; Pedone et al., 2025).

One of the most important psychological consequences associated with childhood trauma is heightened vulnerability to anxiety. Repeated exposure to threat during development may sensitize the individual to danger, reduce confidence in the predictability of the environment, and promote persistent monitoring for possible harm. In this context, generalized anxiety symptoms may be understood as manifestations of a cognitive-affective system that has become organized around uncertainty, threat anticipation, and difficulty controlling worry. Generalized anxiety is characterized by excessive and persistent worry across several areas of life, accompanied by symptoms such as restlessness, tension, irritability, difficulty concentrating, sleep disturbance, and a sustained sense that negative events may occur. Even when these symptoms do not meet the full diagnostic criteria for generalized anxiety disorder, they can impair academic performance, interpersonal functioning, decision-making,

and psychological well-being. Individuals with childhood trauma histories may interpret ambiguous events as threatening, overestimate the probability of adverse outcomes, and experience difficulty regulating the emotional and physiological activation elicited by uncertainty. Research examining the psychological consequences of childhood trauma has demonstrated meaningful relationships between early adverse experiences and anxiety-related manifestations, including social anxiety, appearance-related anxiety, and broader patterns of emotional dysregulation (Güler & Demir, 2022; Yöyen & Çaylak, 2023).

The relationship between childhood trauma and generalized anxiety symptoms may be particularly important among individuals who also exhibit depressive symptoms. Depression and anxiety frequently overlap at the symptom, cognitive, and functional levels. Persistent worry can intensify hopelessness, fatigue, impaired concentration, and negative self-evaluation, while depressive states can reduce perceived coping capacity and make potential threats appear more uncontrollable. In subclinical populations, this overlap may remain insufficiently recognized because individuals experience substantial symptoms without necessarily having received a formal psychiatric diagnosis. University students constitute a particularly relevant population in this regard, as they face academic demands, interpersonal transitions, financial concerns, identity development, and uncertainty about future employment and social roles. Students with elevated depressive symptoms may have fewer psychological resources available for regulating anxiety and may be more likely to respond to stress through withdrawal, rumination, avoidance, or altered states of awareness. Findings from research on major depressive disorder have shown that depression may coexist with insecure attachment patterns, traumatic experiences, and dissociative identity-related symptoms, suggesting that depressive presentations may involve more complex trauma-related processes than mood symptoms alone (Golshani et al., 2021). Similarly, childhood abuse, depression, and dissociative symptoms have been jointly associated with severe psychological outcomes, including suicidal ideation and suicide attempts, emphasizing the clinical relevance of examining their interrelationships even before individuals enter specialized treatment settings (Bertule et al., 2021).

A central mechanism that may help explain the association between childhood trauma and later psychological symptoms is dissociation. Dissociation broadly refers to disruptions in the ordinary integration of

consciousness, memory, identity, perception, emotion, bodily experience, and awareness of the environment. Dissociative experiences may include memory gaps, depersonalization, derealization, absorption, altered awareness, emotional numbing, and a sense of detachment from one's thoughts, body, or surroundings. From a trauma-informed perspective, dissociation may initially serve an adaptive function by allowing a child to psychologically distance from experiences that cannot be escaped or adequately processed. When exposure to threat is intense, recurrent, or perpetrated by a caregiver, the child may have limited opportunities to integrate fear, bodily arousal, autobiographical memory, and relational meaning into a coherent experience. Psychological detachment may therefore reduce immediate distress; however, repeated reliance on this response can become a stable pattern that persists after the original danger has ended. In later life, dissociation may be activated by internal or external cues that resemble earlier experiences, interfering with emotional processing and increasing vulnerability to anxiety, depression, and other psychiatric symptoms (Fung et al., 2025; Geng et al., 2022).

Dissociation is not necessarily restricted to formally diagnosed dissociative disorders. It occurs along a continuum and may be observed in both clinical and nonclinical populations. Mild absorption and temporary detachment may occur in ordinary life, whereas more severe forms can involve substantial disruptions in memory, identity, perception, and functioning. This dimensional character makes dissociation especially relevant to the study of subclinical samples, in which individuals may report meaningful dissociative phenomena without seeking treatment or receiving a specific diagnosis. At the same time, dissociative symptoms are often overlooked, misidentified, or attributed to other conditions because they overlap with inattention, emotional disengagement, intrusive imagery, avoidance, and cognitive difficulties. Research among psychologists has indicated that accurate identification of dissociation depends partly on clinicians' training and familiarity with its varied presentations, underscoring the possibility that dissociative symptoms remain underrecognized in routine assessment (Bestel et al., 2025). A transdiagnostic perspective is therefore needed to clarify how dissociation operates within mixed symptom presentations rather than treating it solely as a feature of a narrow diagnostic category.

The co-occurrence of dissociation and depression is especially relevant to the present study. Depression may

involve emotional numbness, impaired concentration, withdrawal, altered self-experience, and disruptions in the subjective continuity of time, all of which may overlap phenomenologically with dissociative experiences. A transdiagnostic taxonomy of subjective time has suggested that disruptions in temporal experience may help differentiate and connect psychiatric conditions, highlighting how altered continuity between past, present, and future can characterize several forms of psychological distress (Kent et al., 2023). Individuals with childhood trauma may experience distressing memories as fragmented or insufficiently integrated, while depressive symptoms may further impair access to positive autobiographical memories and future-oriented expectations. Consequently, the combination of childhood trauma, depression, and dissociation may produce a psychological context in which current stressors are experienced as uncontrollable and difficult to understand. Recent evidence has directly highlighted the relevance of childhood trauma to the co-occurrence of depression and dissociation, indicating that early adverse experiences may represent a common etiological or vulnerability pathway connecting these symptom domains (Fung et al., 2025).

Clinical intervention studies also illustrate the close relationship between dissociation and depressive symptoms. Research on individuals with dissociative disorders has indicated that intensive short-term psychodynamic psychotherapy may reduce depressive symptoms by addressing avoided emotions, defensive processes, and unresolved psychological conflicts (Mahdi Donyavi & Maryam Mohtashami, 2024). The corresponding evidence reported for short-term intensive psychodynamic treatment similarly suggests that depression in individuals with dissociative conditions may be responsive to interventions that improve emotional access and psychological integration (M. Donyavi & M. Mohtashami, 2024). These findings are relevant because they imply that depressive symptoms associated with dissociation may not be adequately understood through mood-focused explanations alone. Instead, depression may be maintained partly by disrupted emotional processing, avoidance of painful internal experiences, and fragmentation of self-related information. Although treatment findings do not establish the causal structure of the current model, they reinforce the importance of examining dissociation as a meaningful psychological process among individuals with depressive symptoms.

Dissociation may also contribute to anxiety by reducing the individual's capacity to accurately identify, tolerate, and

regulate emotional and bodily signals. When internal experiences feel unfamiliar, fragmented, or uncontrollable, ordinary physiological arousal may be interpreted as evidence of danger or psychological disintegration. The individual may then become increasingly vigilant toward bodily sensations, intrusive thoughts, shifts in awareness, or memory difficulties. This vigilance can promote worry and anticipatory anxiety, while worry itself may increase emotional overload and trigger further detachment. Thus, anxiety and dissociation may form a reciprocal cycle in which heightened arousal promotes psychological disconnection and dissociative experiences subsequently increase uncertainty and fear. In individuals with borderline personality disorder, perceived stress, depressive symptoms, dissociative experiences, and anxiety sensitivity have been found to be meaningfully interconnected, supporting the proposition that dissociation is embedded within a broader network of affective and anxiety-related vulnerability (Demirkol et al., 2020). Research involving adolescents has likewise demonstrated that anxiety presentations may coexist with dissociative and self-harm behaviors, suggesting that dissociation can complicate both symptom expression and psychological treatment (Tarakçioğlu, 2024).

The association between dissociation and anxiety is also evident across social and interpersonal contexts. Dissociation has been linked to social anxiety and difficulties in emotional awareness, while social anxiety itself may be intensified by fears of negative evaluation, loss of control, and uncertainty regarding one's own internal reactions. Among medical students, social media addiction has been examined in relation to dissociation, social anxiety, and alexithymia, illustrating how dissociative processes may be connected to anxiety and maladaptive coping within a high-demand student population (Terzioğlu & Uğurlu, 2023). Similarly, childhood trauma, emotion-regulation processes, and dissociation have been identified as predictors of social anxiety, suggesting that early adversity may affect anxiety through disruptions in both emotional regulation and psychological integration (Yöyen & Çaylak, 2023). Although social anxiety differs conceptually from generalized anxiety, these findings support a broader mechanism through which childhood trauma and dissociation may increase vulnerability to persistent anxiety across diagnostic boundaries.

Emotional regulation is a particularly important link between childhood trauma, dissociation, and anxiety. Children normally learn to identify, label, tolerate, and regulate emotions through repeated interactions with

responsive caregivers. In traumatic or neglectful environments, caregivers may be unavailable, frightening, inconsistent, or unable to help the child organize intense emotional states. As a result, the child may develop limited strategies for managing fear, shame, anger, sadness, and bodily arousal. Dissociation may then emerge as a substitute for adaptive regulation, reducing conscious contact with intolerable emotions without resolving them. In adulthood, this pattern may manifest as difficulty understanding emotional reactions, abrupt shifts in awareness, excessive absorption, emotional numbing, or depersonalization. A recent study showed that dissociative experiences mediated the effects of childhood trauma on emotion-regulation difficulty and parental child-containing function, offering evidence that dissociation can transmit the influence of early adversity to later emotional and relational functioning (Yöyen et al., 2024). These findings provide a strong conceptual basis for examining whether dissociation similarly mediates the relationship between childhood trauma and generalized anxiety symptoms.

Other contemporary mediation models further support the role of dissociation as an explanatory pathway between childhood trauma and later psychopathology. Metacognition and dissociation have been identified as mediators linking childhood trauma to psychiatric symptoms, suggesting that early adversity may contribute to psychological distress through both impaired understanding of mental states and fragmented experience (Pedone et al., 2025). A pathway involving childhood trauma and dissociation has also been found to mediate the persistence of attention-deficit/hyperactivity symptoms from childhood to adulthood across nonclinical and clinical samples, demonstrating that dissociation can function as a cross-diagnostic mechanism rather than a disorder-specific feature (Kandeger et al., 2025). In married individuals, dissociative experiences and mindfulness have been examined as mediators of the relationship between childhood traumatic experiences and phubbing behavior, showing that trauma-related dissociation may also influence everyday behavioral and interpersonal functioning (Ayvaznejad Firuzsalari et al., 2025). Collectively, these findings indicate that dissociation may be one of the mechanisms through which childhood trauma becomes expressed in diverse psychological and behavioral outcomes.

Attachment-based and interpersonal perspectives offer another explanation for the enduring effects of childhood trauma. Traumatic experiences within caregiving relationships can create conflicting internal models in which

attachment figures are simultaneously needed for safety and experienced as sources of danger, rejection, or emotional unavailability. This conflict may impair the development of stable representations of self and others, increasing vulnerability to experiential avoidance, self-silencing, emotional disconnection, and dissociation. A model of experiential avoidance based on childhood trauma and victimization demonstrated the mediating importance of insecure attachment styles, indicating that early adverse experiences may shape later avoidance by disrupting relational security (Nejad et al., 2025). Dissociation may operate alongside attachment insecurity by allowing individuals to disengage from painful emotions, relational needs, or threatening interpersonal cues. In research involving married women, self-silencing and dissociation were incorporated into a multilevel mediating model of marital conflict and depression, suggesting that dissociative processes may connect interpersonal stress with depressive outcomes (Naeem et al., 2021). These findings are especially relevant for students with depressive symptoms, who may respond to interpersonal and academic stress through both internalized distress and psychological detachment.

The trauma-dissociation pathway may also be understood in relation to deficits in emotional awareness and symbolic processing. When painful childhood experiences cannot be discussed, mentally represented, or integrated into a coherent narrative, emotions may remain encoded primarily as bodily sensations, fragmented images, action tendencies, or unformulated states. Later stress can activate these states without the individual clearly understanding their source, creating a diffuse sense of threat that is consistent with generalized anxiety. Difficulties identifying and describing emotions may further increase uncertainty about internal experience, while dissociation can interrupt the reflective processes needed to interpret emotion accurately. Research examining pathways to negative symptoms in psychosis has identified interconnected roles for trauma, attachment, dissociation, and alexithymia, demonstrating that trauma-related fragmentation and impaired emotional awareness may contribute to complex psychiatric outcomes (Grady et al., 2025). Although psychosis differs from the subclinical depressive presentation examined here, this research reinforces the transdiagnostic relevance of dissociation and emotional-processing deficits.

Cognitive processes such as rumination may further intensify the psychological effects of anxiety and trauma. Rumination involves repetitive and often passive focus on distress, its causes, and its anticipated consequences. In

individuals with elevated trait anxiety, rumination can maintain emotional activation by repeatedly directing attention toward threat, loss, or perceived inadequacy. Cross-cultural findings concerning romantic breakup distress have demonstrated that rumination plays an important role in the relationship between trait anxiety and trauma-related distress, suggesting that repetitive negative thinking may strengthen the persistence of anxiety following emotionally significant events (Arana et al., 2024). For individuals with childhood trauma histories, rumination may interact with dissociation in complex ways. Some individuals may alternate between overengagement with distressing thoughts and detachment from emotional experience. This oscillation can prevent full processing of trauma-related emotions while maintaining chronic worry and depressive affect. In a subclinical sample with depressive symptoms, such processes may be particularly pronounced because depression is already characterized by repetitive negative thinking and reduced cognitive flexibility.

Despite growing evidence connecting childhood trauma, dissociation, depression, and anxiety, several gaps remain. Much of the literature has focused on diagnosed clinical populations, specific disorders, severe trauma outcomes, or behavioral consequences rather than generalized anxiety symptoms in subclinical individuals with elevated depressive symptoms. Clinical samples are essential for understanding severe psychopathology, but they may not capture the mechanisms operating among individuals who experience substantial distress without formal diagnosis or treatment. Subclinical student populations are important because symptoms may interfere with educational functioning and quality of life while remaining unrecognized by mental health services. Furthermore, studies often examine childhood trauma, dissociation, depression, or anxiety separately, whereas their co-occurrence suggests the need for integrative models. The distinction between direct and indirect pathways is particularly important. Childhood trauma may directly increase generalized anxiety through persistent threat sensitivity and negative beliefs, while also exerting an indirect effect by increasing dissociative experiences that interfere with emotional integration and intensify uncertainty.

Clarifying the mediating role of dissociative experiences has both theoretical and practical significance. Theoretically, evidence of mediation would support developmental models in which dissociation represents an intermediate psychological mechanism linking childhood

adversity to later anxiety. Clinically, it would suggest that assessing trauma exposure alone may be insufficient when working with students who report co-occurring depressive and anxiety symptoms. Evaluation of dissociative amnesia, depersonalization–derealization, absorption, and related experiences may reveal processes that contribute to symptom persistence. Such knowledge could inform interventions that combine anxiety management with trauma-informed emotional regulation, grounding, metacognitive awareness, and integration of fragmented experiences. It may also reduce the risk of interpreting concentration problems, emotional numbing, or altered awareness solely as depressive or anxiety symptoms. Given the accumulating evidence that dissociation contributes to varied psychiatric and behavioral outcomes, its role within the relationship between childhood trauma and generalized anxiety symptoms warrants direct empirical examination in a subclinical sample characterized by depressive symptoms.

Accordingly, the aim of the present study was to examine the relationship between childhood trauma and generalized anxiety symptoms in a subclinical sample of university students with depressive symptoms and to determine the mediating role of dissociative experiences in this relationship.

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a descriptive, cross-sectional correlational design and was applied in terms of its objective. The study was conducted to investigate the relationship between childhood trauma and generalized anxiety symptoms and to determine whether dissociative experiences mediated this relationship among university students with clinically relevant depressive symptoms. The statistical population consisted of all

students at the University of Tabriz during the 2022–2023 academic year who exhibited depressive symptoms but were not necessarily receiving a formal clinical diagnosis or treatment for a depressive disorder. Participants were initially screened using the Beck Depression Inventory, and students who obtained a total score of 18 or higher were considered eligible for inclusion in the subclinical sample. The required sample size was determined according to Stevens' recommendation for multivariate regression-based studies, which suggests recruiting approximately 20 participants for each measured or predictor variable. Because structural equation modeling and path analysis

share several statistical principles with multiple regression and the proposed model contained nine measurable components, a minimum sample of 180 participants was selected. Participants were recruited through convenience sampling from eligible students who were accessible during the data-collection period. The inclusion criteria were being enrolled at the University of Tabriz during the study period, obtaining a score of at least 18 on the Beck Depression Inventory, providing informed consent to participate, and having sufficient ability to understand and complete the questionnaires. Questionnaires with substantial missing responses, inconsistent response patterns, or incomplete information required for the main analyses were excluded from the final dataset. Before data collection, the necessary administrative permissions were obtained from the relevant authorities at the University of Tabriz. Potential participants were informed about the objectives and procedures of the study, the voluntary nature of participation, the confidentiality of their information, and their right to withdraw from the study at any stage without penalty. After informed consent was obtained, participants completed the research questionnaires individually. No identifying information was recorded, and all data were stored and analyzed confidentially. Information related to the theoretical foundations and previous research was collected through a review of relevant books, peer-reviewed articles, theses, and domestic and international scientific sources, whereas the empirical data required to test the study hypotheses were collected through the field administration of standardized self-report questionnaires.

2.2. Measures

Childhood Trauma Questionnaire. Childhood trauma was assessed using the Childhood Trauma Questionnaire, developed by Bernstein and colleagues in 2003 as a retrospective self-report screening instrument for identifying experiences of childhood abuse and neglect. The questionnaire can be administered to adolescents and adults and consists of 28 items. Twenty-five items assess five principal dimensions of childhood maltreatment, including emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect, with each dimension represented by five items. The remaining three items constitute a minimization or denial scale designed to identify the possible underreporting or denial of adverse childhood experiences. Respondents indicate the extent to which each statement reflects their experiences during childhood on a

five-point Likert-type scale ranging from “never true” to “very often true.” Scores may be calculated separately for each maltreatment dimension, and a total childhood trauma score may also be derived by summing the five principal subscale scores. Higher scores represent greater exposure to childhood abuse and neglect. In the original psychometric evaluation, Cronbach’s alpha coefficients for emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect were reported as .87, .86, .95, .89, and .78, respectively. Concurrent validity coefficients obtained through comparisons with clinicians’ ratings of childhood trauma ranged from .59 to .78. The Persian version has also demonstrated satisfactory internal consistency, with Cronbach’s alpha coefficients ranging from .81 to .98 across the five principal dimensions. In the present study, the five childhood trauma dimensions were treated as indicators of the broader childhood trauma construct, and higher scores indicated more extensive or severe childhood maltreatment experiences.

Generalized Anxiety Disorder Scale. Generalized anxiety symptoms were measured using the seven-item Generalized Anxiety Disorder Scale, developed by Spitzer and colleagues in 2006. The GAD-7 is a brief self-report instrument designed to assess the frequency and severity of the principal symptoms of generalized anxiety during the previous two weeks. Its seven items address symptoms such as nervousness, excessive and uncontrollable worry, difficulty relaxing, restlessness, irritability, and fear that something unpleasant may occur. Each item is rated on a four-point scale ranging from 0, indicating “not at all,” to 3, indicating “nearly every day.” The total score therefore ranges from 0 to 21, with higher scores indicating more severe generalized anxiety symptoms. Scores of 5, 10, and 15 are commonly interpreted as approximate thresholds for mild, moderate, and severe anxiety symptoms, respectively. An additional item may be used to evaluate the extent to which anxiety-related problems interfere with occupational, academic, domestic, and interpersonal functioning; however, this impairment item is interpreted separately and is not included in the seven-item symptom total. The original validation study reported a Cronbach’s alpha coefficient of .92 and a two-week test–retest reliability coefficient of .83, indicating excellent internal consistency and satisfactory temporal stability. Evidence of convergent validity was also demonstrated through substantial correlations with other established measures of anxiety and clinical symptoms. In Iranian studies, Cronbach’s alpha coefficients of .77 and .85 have been reported, supporting the reliability of the Persian

version. In the present study, the total GAD-7 score was used as the observed indicator of generalized anxiety symptom severity.

Dissociative Experiences Scale. Dissociative experiences were assessed using the Dissociative Experiences Scale, developed by Bernstein and Putnam in 1986. The DES is a 28-item self-report instrument designed to measure the frequency of dissociative experiences in both clinical and nonclinical populations. The scale evaluates three major domains of dissociation: dissociative amnesia, depersonalization and derealization, and absorption and imaginative involvement. Dissociative amnesia refers to disruptions in the ability to recall personal information or everyday events; depersonalization and derealization refer to experiences of detachment from oneself or a sense that the external environment is unreal; and absorption and imaginative involvement refer to intense attentional engagement, fantasy, and reduced awareness of the surrounding environment. Respondents indicate the percentage of time that each experience occurs in their daily lives, typically along a continuum from 0%, indicating that the experience never occurs, to 100%, indicating that it always occurs. A total DES score is obtained by calculating the mean of the 28 item scores, with higher values indicating more frequent or intense dissociative experiences. The scale is primarily intended to assess dissociation dimensionally rather than to establish a psychiatric diagnosis. Previous psychometric investigations have demonstrated strong internal consistency and acceptable temporal stability. Carlson and Putnam reported a Cronbach’s alpha coefficient of approximately .95 and test–retest coefficients ranging from .79 to .96. Other longitudinal investigations have also reported acceptable test–retest reliability over extended follow-up periods. In Iran, a Cronbach’s alpha coefficient of .88 has been reported for the Persian version, indicating satisfactory internal consistency. In the present study, scores for dissociative amnesia, depersonalization–derealization, and absorption–imaginative involvement were used to represent the latent construct of dissociative experiences, with higher scores reflecting a greater frequency of dissociative phenomena.

Beck Depression Inventory. Depressive symptoms were assessed using the Beck Depression Inventory, originally developed by Beck and colleagues in 1961 and subsequently revised to improve its coverage of depressive symptomatology and its compatibility with contemporary diagnostic criteria. The version used in the present study consisted of 21 groups of statements, each assessing a

specific cognitive, emotional, motivational, behavioral, or somatic manifestation of depression. Each item includes four ordered statements representing increasing symptom severity and is scored from 0 to 3. Participants were instructed to select the statement within each item that most accurately described their condition during the specified assessment period. The total score is obtained by summing the scores of all 21 items and may range from 0 to 63, with higher scores indicating greater severity of depressive symptoms. The inventory was used as a screening instrument rather than as a stand-alone diagnostic procedure. In accordance with the sampling criteria established for the study, students obtaining a total score of 18 or higher were considered to have clinically relevant depressive symptoms and were eligible to enter the subclinical sample, provided that they met the other inclusion criteria. The BDI has been extensively evaluated in both clinical and nonclinical populations and has demonstrated satisfactory diagnostic validity, predictive validity, internal consistency, and test-retest reliability. A major psychometric review by Beck, Steer, and Garbin reported internal consistency coefficients ranging from .73 to .92, with a mean coefficient of .86. Iranian studies have similarly reported Cronbach's alpha coefficients of .87 and .89, indicating satisfactory reliability of the Persian version. In the present research, the instrument was administered during the initial screening stage to identify students with the level of depressive symptoms required for inclusion in the study.

2.3. Data Analysis

The collected data were analyzed at both descriptive and inferential levels using IBM SPSS Statistics version 25 and SmartPLS version 3. Before conducting the main analyses, the dataset was screened for incomplete questionnaires, data-entry errors, missing values, univariate outliers, and implausible response patterns. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were calculated to summarize the participants' characteristics and scores on childhood trauma, generalized anxiety symptoms, dissociative experiences, and depressive symptoms. SPSS was used to conduct preliminary univariate and bivariate analyses, calculate correlations among the study variables, and estimate the internal consistency of the instruments and their subscales using Cronbach's alpha coefficients. The hypothesized relationships among

childhood trauma, dissociative experiences, and generalized anxiety symptoms were then examined through partial least squares structural equation modeling in SmartPLS. The measurement model was evaluated before testing the structural model. Indicator loadings and internal consistency coefficients were examined to assess indicator reliability and construct reliability, while composite reliability and Cronbach's alpha were used to evaluate the consistency of the latent variables. Convergent validity was assessed through the average variance extracted, and discriminant validity was evaluated by examining the distinctiveness of the study constructs. After the adequacy of the measurement model had been established, the structural model was evaluated by estimating the path coefficients, coefficients of determination, predictive relevance indices, and effect sizes associated with the proposed relationships. The direct effect of childhood trauma on generalized anxiety symptoms, the direct effect of childhood trauma on dissociative experiences, and the direct effect of dissociative experiences on generalized anxiety symptoms were estimated. The mediating role of dissociative experiences in the relationship between childhood trauma and generalized anxiety symptoms was tested by calculating the indirect effect of childhood trauma on anxiety through dissociative experiences. The statistical significance of the direct, indirect, and total effects was determined through the nonparametric bootstrapping procedure available in SmartPLS. Mediation was supported when the bootstrapped indirect effect was statistically significant and its confidence interval did not include zero. All statistical tests were interpreted at a significance level of .05.

3. Findings and Results

The final sample consisted of 180 students with depressive symptoms. Of these participants, 122 (67.8%) were women and 58 (32.2%) were men. Regarding age, 24 participants (13.3%) were younger than 20 years, 81 (45.0%) were between 21 and 25 years, 51 (28.3%) were between 26 and 30 years, and 24 (13.3%) were older than 30 years. Thus, the largest age group comprised students aged 21–25 years. In terms of educational level, 66 participants (36.7%) were undergraduate students, 85 (47.2%) were master's students, and 29 (16.1%) were doctoral students, indicating that master's students constituted the largest proportion of the sample.

Table 1

Descriptive Statistics for the Study Variables

Variable	Mean	Standard Deviation	Minimum	Maximum
Generalized anxiety symptoms	14.788	4.738	7	32
Childhood trauma	54.683	12.373	25	93
Emotional neglect	12.355	3.644	5	21
Physical neglect	11.127	3.609	5	22
Emotional abuse	11.650	4.015	5	23
Physical abuse	10.583	3.666	5	22
Sexual abuse	8.966	2.650	5	17
Dissociative experiences	59.111	17.155	28	130
Dissociative amnesia	19.544	6.312	10	43
Depersonalization–derealization	17.627	6.155	8	44
Absorption and imaginative involvement	21.938	7.255	10	44

As presented in Table 1, the participants obtained a mean generalized anxiety symptom score of 14.788 (SD = 4.738), with observed scores ranging from 7 to 32. The mean total childhood trauma score was 54.683 (SD = 12.373), with scores ranging from 25 to 93. Among the dimensions of childhood trauma, emotional neglect had the highest mean score ($M = 12.355$, $SD = 3.644$), followed by emotional abuse ($M = 11.650$, $SD = 4.015$), physical neglect ($M = 11.127$, $SD = 3.609$), physical abuse ($M = 10.583$, $SD = 3.666$), and sexual abuse ($M = 8.966$, $SD = 2.650$). The mean total score for dissociative experiences was 59.111 ($SD = 17.155$), with observed scores ranging from 28 to 130. Among the dissociation dimensions, absorption and imaginative involvement had the highest mean score ($M = 21.938$, $SD = 7.255$), followed by dissociative amnesia ($M = 19.544$, $SD = 6.312$) and depersonalization–derealization ($M = 17.627$, $SD = 6.155$).

Before testing the hypothesized relationships, the statistical assumptions and adequacy of the data for correlational and structural analyses were examined. The Kolmogorov–Smirnov test was nonsignificant for generalized anxiety symptoms, $D(180) = .121$, $p = .073$, childhood trauma, $D(180) = .064$, $p = .200$, and dissociative experiences, $D(180) = .093$, $p = .112$. Therefore, no statistically significant deviations from normality were

detected for the principal study variables, supporting the use of Pearson correlation coefficients. Sampling adequacy was also supported by Kaiser–Meyer–Olkin values of .807 for childhood trauma, .880 for dissociative experiences, and .740 for generalized anxiety symptoms, all of which exceeded the recommended minimum value of .60. Bartlett’s tests of sphericity were statistically significant for childhood trauma, $\chi^2(300) = 2081.968$, $p < .001$, dissociative experiences, $\chi^2(378) = 3712.818$, $p < .001$, and generalized anxiety symptoms, $\chi^2(21) = 448.149$, $p < .001$, indicating that the correlation matrices were appropriate for factor-based analyses. Furthermore, all variance inflation factor values ranged from 1.000 to 3.319 and remained below the threshold of 5, indicating that multicollinearity did not threaten the structural model estimates. The model explained 47.7% of the variance in generalized anxiety symptoms and 32.8% of the variance in dissociative experiences. The predictive relevance values were also greater than zero for generalized anxiety symptoms ($Q^2 = .455$) and dissociative experiences ($Q^2 = .226$), demonstrating satisfactory predictive relevance. The effect sizes ranged from .183 to .489 and were therefore above the minimum acceptable value of .02. Collectively, these findings supported the adequacy of the data and the structural model for testing the study hypotheses.

Table 2

Pearson Correlations Among the Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Childhood trauma	1										
2. Emotional neglect	.678**	1									
3. Physical neglect	.761**	.314**	1								
4. Emotional abuse	.837**	.378**	.681**	1							

5. Physical abuse	.729**	.480**	.375**	.498**	1				
6. Sexual abuse	.423**	.128	.207**	.256**	.130	1			
7. Dissociative experiences	.549**	.332**	.445**	.546**	.370**	.150*	1		
8. Dissociative amnesia	.301**	.172*	.233**	.297**	.237**	.349**	.789**	1	
9. Depersonalization–derealization	.549**	.310**	.461**	.564**	.317**	.213**	.914**	.573**	1
10. Absorption and imaginative involvement	.571**	.371**	.451**	.553**	.401**	.141	.903**	.509**	.815**
11. Generalized anxiety symptoms	.607**	.413**	.501**	.504**	.413**	.249**	.613**	.434**	.579

The correlation coefficients presented in Table 2 showed that generalized anxiety symptoms were positively and significantly associated with total childhood trauma, $r = .607$, $p < .01$, and total dissociative experiences, $r = .613$, $p < .01$. Generalized anxiety symptoms were also positively related to all five dimensions of childhood trauma, with correlations ranging from .249 for sexual abuse to .504 for emotional abuse. Among the childhood trauma dimensions, emotional abuse, $r = .504$, $p < .01$, and physical neglect, $r = .501$, $p < .01$, displayed the strongest relationships with generalized anxiety symptoms. All three dimensions of dissociative experiences were positively associated with generalized anxiety symptoms, including dissociative

amnesia, $r = .434$, $p < .01$, depersonalization–derealization, $r = .579$, $p < .01$, and absorption and imaginative involvement, $r = .581$, $p < .01$. Childhood trauma was also positively associated with total dissociative experiences, $r = .549$, $p < .01$, as well as dissociative amnesia, $r = .301$, $p < .01$, depersonalization–derealization, $r = .549$, $p < .01$, and absorption and imaginative involvement, $r = .571$, $p < .01$. These findings indicated that greater exposure to childhood trauma was associated with more frequent dissociative experiences and more severe generalized anxiety symptoms. However, because the analyses were correlational, these coefficients did not independently establish causal relationships among the variables.

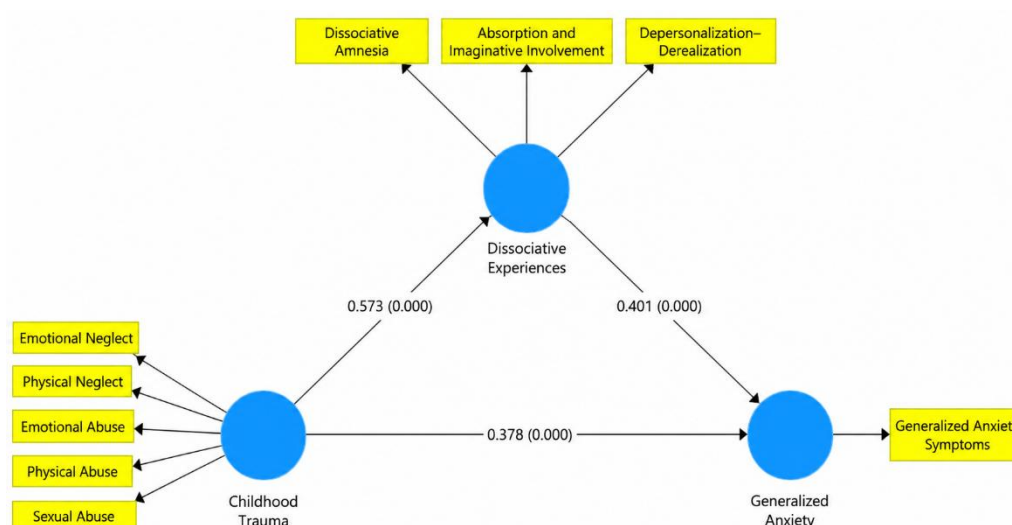
Table 3

Direct, Indirect, and Total Effects in the Structural Model

Structural Path	Standardized Effect	<i>t</i>	<i>p</i>	Result
Childhood trauma → Generalized anxiety symptoms	.373	4.004	< .001	Supported
Childhood trauma → Dissociative experiences	.573	6.137	< .001	Supported
Dissociative experiences → Generalized anxiety symptoms	.401	4.680	< .001	Supported
Childhood trauma → Dissociative experiences → Generalized anxiety symptoms	.230	—	< .001	Supported
Total effect of childhood trauma on generalized anxiety symptoms	.608	—	< .001	Supported

Figure 1

Final Model of the Study



As shown in Table 3, childhood trauma had a positive and statistically significant direct effect on generalized anxiety symptoms, $\beta = .373$, $t = 4.004$, $p < .001$, indicating that greater childhood trauma was associated with more severe generalized anxiety symptoms. Childhood trauma also had a positive and statistically significant effect on dissociative experiences, $\beta = .573$, $t = 6.137$, $p < .001$, demonstrating that participants with greater exposure to childhood trauma reported more frequent dissociative experiences. In addition, dissociative experiences had a positive and statistically significant effect on generalized anxiety symptoms, $\beta = .401$, $t = 4.680$, $p < .001$. The indirect effect of childhood trauma on generalized anxiety symptoms through dissociative experiences was positive and statistically significant, $\beta = .230$, $p < .001$. The total effect of childhood trauma on generalized anxiety symptoms was $\beta = .608$, $p < .001$. Because both the direct effect of childhood trauma on generalized anxiety symptoms and its indirect effect through dissociative experiences remained statistically significant, dissociative experiences demonstrated a partial mediating role in this relationship. Thus, childhood trauma was related to generalized anxiety symptoms both directly and indirectly through increased dissociative experiences among students with depressive symptoms.

4. Discussion and Conclusion

The present study examined the relationship between childhood trauma and generalized anxiety symptoms in a subclinical sample of university students with depressive symptoms and evaluated the mediating role of dissociative experiences. The findings supported all proposed relationships. Childhood trauma was positively and significantly associated with generalized anxiety symptoms, indicating that students who reported greater exposure to emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect also reported more severe generalized anxiety symptoms. Childhood trauma was also positively associated with dissociative experiences, and dissociative experiences were positively associated with generalized anxiety symptoms. The structural model further showed that childhood trauma had both a significant direct effect and a significant indirect effect on generalized anxiety symptoms through dissociative experiences. Because the direct pathway remained significant after the mediator was entered into the model, dissociative experiences partially mediated the relationship between childhood trauma and generalized anxiety symptoms. The model explained 32.8%

of the variance in dissociative experiences and 47.7% of the variance in generalized anxiety symptoms, suggesting that childhood trauma and dissociation jointly accounted for a meaningful proportion of individual differences in anxiety severity among students with depressive symptoms.

The first finding indicated that childhood trauma was directly and positively related to generalized anxiety symptoms. This result is consistent with previous research identifying childhood maltreatment as an important transdiagnostic vulnerability factor for anxiety, emotional dysregulation, and broader psychiatric symptoms. Yöyen and Çaylak found that childhood trauma and emotion-regulation difficulties were significant predictors of social anxiety, showing that early adverse experiences may continue to shape threat perception and anxiety responses long after the traumatic environment has ended (Yöyen & Çaylak, 2023). Güler and Demir similarly reported relationships between childhood trauma, dissociation, and social appearance anxiety, supporting the broader proposition that adverse childhood experiences are associated with persistent sensitivity to evaluation, threat, and interpersonal insecurity (Güler & Demir, 2022). Although these studies addressed forms of anxiety that differ from generalized anxiety, their findings converge with the present results by demonstrating that childhood trauma is related to elevated anxiety across different symptom domains.

The direct association between childhood trauma and generalized anxiety symptoms can be explained through the long-term effects of early threat on cognitive, emotional, and physiological regulation. Children exposed to abuse or neglect may learn that their environment is unpredictable, that important others cannot be relied upon, and that adverse events can occur without warning. These developmental conditions can foster hypervigilance, intolerance of uncertainty, persistent anticipation of danger, and an exaggerated tendency to interpret ambiguous situations negatively. In adulthood, such tendencies may be expressed as generalized and difficult-to-control worry across academic, relational, financial, health-related, and future-oriented concerns. Students with depressive symptoms may be especially vulnerable because depression can weaken perceived self-efficacy, reduce cognitive flexibility, and intensify negative expectations. Research showing that individuals with major depressive disorder report high levels of traumatic experiences, insecure attachment patterns, and dissociative identity-related symptoms supports the view that depression frequently occurs within a wider network of

trauma-related vulnerabilities (Golshani et al., 2021). Therefore, among the students examined in the present study, childhood trauma may have increased generalized anxiety both by strengthening chronic threat expectations and by reducing confidence in their capacity to manage future difficulties.

The observed relationship may also be understood through repetitive negative thinking. Individuals with a history of childhood trauma may remain cognitively preoccupied with possible rejection, loss, failure, or danger because prior experiences have taught them that harmful outcomes are plausible and difficult to control. Arana and colleagues demonstrated that rumination played an important role in the relationship between trait anxiety and distress following romantic separation across cultural groups, indicating that repetitive thinking can maintain and amplify anxiety-related suffering after emotionally significant experiences (Arana et al., 2024). In students with depressive symptoms, the combined presence of rumination and worry may create a particularly persistent cognitive cycle. Depressive rumination repeatedly directs attention toward perceived failures, losses, and personal inadequacies, while generalized worry directs attention toward uncertain future threats. Childhood trauma may provide the underlying schemas that organize both processes, such as beliefs that the self is vulnerable, the world is unsafe, and negative events cannot be prevented.

The second major finding showed that childhood trauma was positively and significantly related to dissociative experiences. This result is strongly consistent with previous investigations identifying dissociation as a common psychological response to overwhelming childhood experiences. Fung and colleagues emphasized the relevance of childhood trauma to the co-occurrence of depression and dissociation, suggesting that early adversity provides an important developmental context for understanding why these symptom domains frequently overlap (Fung et al., 2025). Bertule and colleagues also found that childhood abuse, depressive symptoms, and dissociation were interrelated and contributed to severe outcomes such as suicidal ideation and suicide attempts (Bertule et al., 2021). Similarly, Güler and Demir reported a relationship between childhood trauma and dissociative symptoms in individuals with and without aesthetic surgery experience (Güler & Demir, 2022). These findings align with the current results and indicate that the association between childhood trauma and dissociation occurs across diverse clinical and nonclinical populations.

From a developmental perspective, dissociation may initially function as a protective response when a child is unable to escape, understand, or regulate overwhelming experiences. Emotional detachment, altered awareness, absorption, depersonalization, derealization, or fragmentation of memory may temporarily reduce contact with intolerable fear, shame, pain, or helplessness. However, repeated reliance on such responses may disrupt the integration of emotional states, autobiographical memories, bodily sensations, and self-representations. The individual may then continue to use dissociative coping in response to stress even when the original threat is no longer present. Yöyen and colleagues found that dissociative experiences mediated the effect of childhood trauma on emotion-regulation difficulty and parental child-containing function, supporting the interpretation of dissociation as a mechanism linking early adversity to later emotional and relational impairment (Yöyen et al., 2024). Ayvaznejad Firuzsalari and colleagues likewise identified dissociative experiences as a mediator in the relationship between childhood traumatic experiences and phubbing behavior, illustrating how trauma-related dissociation may influence everyday coping and interpersonal behavior (Ayvaznejad Firuzsalari et al., 2025).

The relationship between childhood trauma and dissociation may also involve insecure attachment and experiential avoidance. Traumatic or neglectful caregiving can interfere with the development of a stable sense of safety and prevent children from learning to regulate distress through supportive relationships. When caregivers are simultaneously needed and feared, internal experiences connected to attachment may become difficult to integrate. Nejad and colleagues found that insecure attachment styles mediated the relationship of childhood trauma and victimization with experiential avoidance, indicating that early interpersonal adversity can contribute to avoidance-based psychological functioning through disrupted attachment security (Nejad et al., 2025). Naeem and colleagues similarly incorporated dissociation and self-silencing into a mediational model connecting marital conflict and depression, demonstrating that dissociative coping may become embedded in broader interpersonal and emotional patterns (Naeem et al., 2021). In the present sample, childhood trauma may therefore have contributed to dissociation by limiting the development of secure relational regulation and encouraging avoidance of painful internal states.

The third finding showed that dissociative experiences were positively associated with generalized anxiety

symptoms. This result is compatible with the neuropsychological perspective proposed by Geng and colleagues, who described dissociation as an important process in anxiety and depression and emphasized its role in disruptions of attention, emotional processing, memory integration, and self-experience (Geng et al., 2022). Demirkol and colleagues also reported meaningful relationships among perceived stress, dissociative experiences, depressive symptoms, and anxiety sensitivity in individuals with borderline personality disorder (Demirkol et al., 2020). Although the present study involved a subclinical student sample rather than individuals with borderline personality disorder, both findings suggest that dissociation is closely connected to heightened emotional arousal and anxious interpretations of internal experiences. Terzioğlu and Uğurlu further identified relationships among dissociation, social anxiety, alexithymia, and problematic social media use in medical students, supporting the relevance of dissociative symptoms within university populations (Terzioğlu & Uğurlu, 2023).

Dissociative experiences may intensify generalized anxiety by making internal and external experiences feel unpredictable. Depersonalization can cause individuals to feel detached from their body or mental activity, while derealization may make the surrounding environment seem unfamiliar or unreal. Dissociative amnesia can create uncertainty about one's actions or experiences, and excessive absorption may reduce awareness of ongoing events. These phenomena can themselves become sources of worry, particularly when individuals do not understand why they are occurring. Anxiety may increase as the person monitors possible changes in consciousness, memory, concentration, or self-control. In turn, heightened anxiety can increase dissociation by producing levels of arousal that exceed the person's regulatory capacity. This reciprocal process may be particularly powerful in people with depressive symptoms, because fatigue, impaired concentration, hopelessness, and reduced emotional clarity can make dissociative experiences more difficult to interpret and manage.

The connection between anxiety and dissociation is also supported by clinical reports. Tarakçioğlu documented the treatment of social anxiety disorder accompanied by dissociative and self-harm behaviors in an adolescent, showing that dissociation can complicate the presentation and treatment of anxiety symptoms (Tarakçioğlu, 2024). Bestel and colleagues demonstrated that psychologists' ability to identify dissociative symptoms accurately varies

with their training, suggesting that dissociation may often remain unnoticed or be misclassified as anxiety, depression, inattention, or emotional instability (Bestel et al., 2025). These findings are relevant to the current study because students with depressive and anxiety symptoms may seek help for low mood, worry, sleep problems, or academic impairment without spontaneously reporting experiences of detachment, memory disruption, or unreality. The significant association found here indicates that dissociative symptoms should not be treated as peripheral when evaluating anxiety among trauma-exposed individuals.

The most important finding was that dissociative experiences partially mediated the relationship between childhood trauma and generalized anxiety symptoms. This means that childhood trauma was associated with anxiety not only directly but also through its relationship with increased dissociative experiences. The result is consistent with Pedone and colleagues, who found that metacognition and dissociation mediated the relationship between childhood trauma and psychiatric symptoms (Pedone et al., 2025). Kandeger and colleagues similarly demonstrated that the childhood trauma–dissociation pathway mediated the persistence of attention-deficit/hyperactivity symptoms from childhood to adulthood in clinical and nonclinical samples (Kandeger et al., 2025). Grady and colleagues also identified interconnected pathways involving trauma, attachment, dissociation, and alexithymia in relation to negative symptoms in psychosis, reinforcing the transdiagnostic role of dissociation in converting early adversity into later psychopathology (Grady et al., 2025). Together with the current findings, these studies suggest that dissociation is not merely an accompanying symptom but may constitute an explanatory mechanism through which childhood trauma influences diverse psychological outcomes.

The partial nature of the mediation is theoretically meaningful. It indicates that dissociation explains part, but not all, of the relationship between childhood trauma and generalized anxiety symptoms. Childhood trauma may influence anxiety through several additional pathways, including insecure attachment, negative core beliefs, heightened physiological reactivity, intolerance of uncertainty, emotion-regulation deficits, experiential avoidance, rumination, and impaired metacognition. At the same time, the significant indirect effect indicates that trauma-related fragmentation of consciousness, memory, and self-experience contributes uniquely to generalized anxiety. Kent and colleagues' transdiagnostic account of

subjective time suggests that disruptions in the continuity of past, present, and future experience may distinguish and connect psychiatric symptoms (Kent et al., 2023). Childhood trauma may fragment the individual's experience of the past, dissociation may destabilize present awareness, and generalized anxiety may fill the future with anticipated threat. This temporal fragmentation may be especially relevant among depressed individuals, whose future expectations are often already characterized by pessimism and diminished hope.

The mediation finding also agrees with evidence from treatment research. Donyavi and Mohtashami reported that intensive short-term dynamic psychotherapy was effective in reducing depression among individuals with dissociative disorders, suggesting that accessing avoided emotions and integrating fragmented experiences may improve affective functioning (Mahdi Donyavi & Maryam Mohtashami, 2024). Their corresponding report of short-term intensive psychodynamic psychotherapy similarly supports the clinical importance of addressing defensive and dissociative processes in individuals presenting with depressive symptoms (M. Donyavi & M. Mohtashami, 2024). Although the present correlational study cannot determine whether reducing dissociation would directly reduce generalized anxiety, its findings suggest that dissociative processes may represent a clinically relevant intervention target. If childhood trauma contributes to anxiety partly by increasing dissociation, interventions focused only on conscious worry may be less effective when fragmentation, depersonalization, derealization, or dissociative amnesia remain unaddressed.

The findings should be interpreted in light of several limitations. The cross-sectional correlational design precludes firm conclusions regarding temporal order or causality; therefore, although the proposed model positioned childhood trauma as a predictor, dissociative experiences as a mediator, and generalized anxiety symptoms as an outcome, alternative and reciprocal pathways remain possible. Childhood trauma was measured retrospectively through self-report and may have been influenced by memory biases, current mood, minimization, or differences in participants' interpretations of early experiences. All principal variables were assessed using self-report questionnaires, which may have increased common-method variance. The sample was selected through convenience sampling from students at a single university who had elevated depressive symptoms, limiting the generalizability of the results to other universities, age groups, cultural

contexts, community populations, and individuals with formally diagnosed psychiatric disorders. The study also did not control for potentially influential variables such as current stressful events, psychiatric treatment, medication use, family functioning, attachment style, emotion-regulation difficulties, rumination, socioeconomic status, or the duration and severity of depressive symptoms.

Future studies should employ longitudinal designs to determine whether childhood trauma precedes the development of dissociative experiences and whether dissociation prospectively predicts the emergence or persistence of generalized anxiety symptoms. Multiwave studies could test whether dissociation remains stable over time or fluctuates in response to stress and depressive episodes. Research should also replicate the model in more diverse samples, including adolescents, nonstudent adults, clinical populations, and participants from different cultural and socioeconomic backgrounds. Clinical interviews, informant reports, behavioral tasks, and physiological measures should be combined with self-report instruments to reduce shared-method bias. Future models could compare the mediating effects of dissociation with those of insecure attachment, experiential avoidance, emotion dysregulation, rumination, alexithymia, intolerance of uncertainty, and metacognitive deficits. It would also be useful to examine whether particular forms of childhood trauma are more strongly related to specific dimensions of dissociation and anxiety and whether gender, depression severity, social support, or mindfulness moderates these pathways.

In practice, university counseling centers and mental health professionals should consider routine screening for childhood trauma and dissociative experiences when students present with concurrent depressive and generalized anxiety symptoms. Assessment should include clear and sensitive questions about emotional and physical neglect, abuse histories, memory gaps, depersonalization, derealization, emotional numbing, and excessive absorption. Clinicians should avoid assuming that concentration difficulties, detachment, or altered awareness are merely secondary features of depression or anxiety. Trauma-informed interventions may need to integrate anxiety-management techniques with grounding skills, emotional identification, stabilization, distress tolerance, and gradual integration of fragmented experiences. Psychoeducation can help students understand dissociative reactions without interpreting them as evidence of losing control. University-based prevention programs should also improve access to confidential counseling, train clinicians in recognizing

dissociation, and establish referral pathways for students whose trauma-related symptoms exceed the scope of brief counseling services.

Authors' Contributions

All authors significantly contributed to this study.

Declaration

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

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent.

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