

The Mediating Role of Self-Injurious Thoughts in the Relationship Between Psychological Distress and Death Obsession with Suicide Attempts Among Adolescents Experiencing War Anxiety

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ABSTRACT

Objective: This study aimed to examine the mediating role of self-injurious thoughts in the relationship between psychological distress and death obsession with suicide attempts among adolescents experiencing war anxiety.

Methods and Materials: This applied study was conducted using a correlational design based on structural equation modeling. The statistical sample consisted of 215 adolescents aged 15 to 18 years living in Mahshahr, who were selected through voluntary sampling. The research instruments included the Shomali and Barkhordari War Anxiety Questionnaire, the Osman et al. Suicide Attempt Questionnaire, the Abdel-Khalek Death Obsession Scale, the Kessler et al. Psychological Distress Scale, and the Shomali and Barkhordari Self-Injurious Thoughts Questionnaire. Data were analyzed using Pearson correlation and structural equation modeling through SPSS version 27 and AMOS version 24.

Findings: The inferential results showed that the direct effects of psychological distress and self-injurious thoughts on suicide attempts were positive and statistically significant. The direct effects of psychological distress and death obsession on self-injurious thoughts were also positive and statistically significant. In addition, the indirect effects of psychological distress and death obsession on suicide attempts through self-injurious thoughts were positive and statistically significant. However, the direct effect of death obsession on suicide attempts was not significant in the final structural model. These findings confirmed the mediating role of self-injurious thoughts in the relationship between psychological distress, death obsession, and suicide attempts among adolescents experiencing war anxiety.

Conclusion: The findings indicate that self-injurious thoughts are a key cognitive-emotional mechanism linking psychological distress and death obsession to suicide attempts in adolescents exposed to war-related anxiety. Therefore, preventive and therapeutic interventions should prioritize the early identification and modification of self-injurious thoughts, especially among vulnerable adolescents experiencing psychological distress and death-related preoccupations.

Keywords: War anxiety; Suicide attempt; Self-injurious thoughts; Psychological distress; Death obsession

1. Introduction

Adolescence is a developmental period marked by rapid biological, cognitive, emotional, and social changes, during which exposure to traumatic and destabilizing events can significantly increase psychological vulnerability. War, military threat, displacement, insecurity, and persistent exposure to violent news or direct danger can disrupt adolescents' sense of safety and predictability and may intensify internalizing symptoms, maladaptive cognitive patterns, and suicide-related behaviors. Within contemporary mental health frameworks, psychological symptoms are not merely isolated clinical phenomena but are multidimensional responses shaped by developmental stage, environmental stressors, perceived threat, interpersonal resources, and cognitive-emotional regulation processes (American Psychiatric, 2023; Horwitz, 2002). Therefore, investigating suicide attempts among adolescents exposed to war-related anxiety requires attention not only to general psychological distress but also to death-related preoccupations and self-injurious cognitions that may convert distress into suicidal behavior.

War anxiety has increasingly become a critical construct in psychological research because it captures a specific form of threat-related emotional arousal associated with military conflict, insecurity, fear of harm, uncertainty about the future, and perceived danger to oneself and loved ones. Studies conducted in conflict-affected populations have shown that war exposure is associated with high levels of anxiety, depression, posttraumatic stress symptoms, sleep disturbance, and impaired psychological functioning (Aldabbour et al., 2025; Hanifa et al., 2026). Research on war-affected adolescents has similarly indicated that exposure to military threat may produce both vulnerability and resilience, depending on individual, familial, neurocognitive, and environmental factors (Haham et al., 2026; Orpaz et al., 2026). In this regard, adolescents who experience war anxiety may constitute a particularly vulnerable population because their emotion regulation systems, identity formation processes, and coping capacities are still developing, while their exposure to uncontrollable external threat may create a heightened sense of helplessness and perceived entrapment.

The psychological consequences of war are especially concerning when they are considered in relation to suicide risk. A growing body of evidence indicates that children and young people exposed to war may experience suicidal ideation, suicide attempts, and self-harm, although the

pathways leading from war exposure to suicidal behavior remain complex and insufficiently clarified (Silwal et al., 2026). During the early phase of the war in Ukraine, evidence also highlighted the emergence of suicidality and self-harm behaviors among adolescents, underscoring the urgency of examining suicide-related outcomes in war-affected youth rather than limiting research to general symptoms of trauma or anxiety (Skokauskas, 2025). In this context, suicide attempt represents one of the most severe manifestations of psychological crisis and requires multidimensional explanatory models that can identify both direct predictors and mediating mechanisms.

Psychological distress is one of the most important broad-spectrum indicators of mental health impairment and has been widely used to capture nonspecific symptoms such as anxiety, depressed mood, restlessness, hopelessness, and emotional exhaustion. The Kessler psychological distress framework conceptualizes distress as a dimensional construct that can reflect population-level mental health burden and individual-level vulnerability (Kessler et al., 2002). In crisis conditions, psychological distress may become more severe because the individual is repeatedly exposed to threat, uncertainty, loss of control, and disruption of ordinary life. Studies conducted during large-scale crises have demonstrated that psychological distress can be predicted by experiences of discrimination, coping mechanisms, and contextual stressors, suggesting that distress is both a psychological and social response to adversity (Choi et al., 2020). Among war-affected populations, psychological distress has also been linked to displacement, insecurity, and exposure to traumatic events, making it a central construct for explaining mental health outcomes in conflict settings (Szkup et al., 2026).

The relationship between psychological distress and suicide-related outcomes is supported by both theoretical and empirical evidence. Psychological distress can weaken cognitive control, intensify negative affect, reduce problem-solving capacity, and increase perceived burdensomeness or hopelessness, thereby creating conditions under which suicidal thoughts and behaviors may emerge. Studies on suicide-related constructs have shown that interpersonal and psychological factors, including loneliness, perceived social support, thwarted belongingness, and burdensomeness, are associated with suicidal behavior among Iranian students (Rashid et al., 2016). Recent research has also emphasized that psychological distress may be particularly dangerous when accompanied by maladaptive cognitive-emotional processes such as rumination, irrational beliefs, or

dysfunctional cognitions (Rosas-Fuentes et al., 2023; Shapiro et al., 2026). Accordingly, psychological distress may not necessarily lead to suicide attempts directly in all adolescents; rather, it may operate through intermediate cognitive pathways that intensify self-harm-related thoughts and behavioral risk.

Death obsession is another construct that may be highly relevant in adolescents exposed to war anxiety. Death obsession refers to persistent, intrusive, repetitive, and distressing thoughts about death, dying, or death-related themes. Although fear of death can be a normative response in contexts of real danger, death obsession involves a more intrusive and repetitive cognitive pattern that may interfere with psychological functioning. The concept has been studied across different populations and has been associated with anxiety, depression, somatic symptoms, religiosity, caregiver burden, frailty, and quality of life (Berl, 2024; Enea et al., 2024; Mohammadzadeh & Najafi, 2010; Yang et al., 2024). In the context of war anxiety, death obsession may become especially salient because adolescents are repeatedly exposed to cues of mortality, injury, destruction, and uncertainty. Such exposure may intensify death-related rumination and may make death more cognitively accessible, thereby increasing emotional dysregulation and psychological vulnerability.

The distinction between death anxiety and death obsession is important for understanding suicide risk in war-affected adolescents. Death anxiety usually reflects fear or apprehension regarding death, whereas death obsession involves persistent cognitive preoccupation with death-related content. Studies have shown that fear of COVID-19 and death anxiety may be mediated by depressive symptoms, indicating that death-related concerns often operate through broader emotional and cognitive mechanisms (Gundogan & Arpacı, 2024). Similarly, research on death obsession among older adults and clinical or caregiving populations suggests that death-related intrusive thoughts may be connected with psychological distress and somatic or functional impairment (Berl, 2024; Taghvaei Nia, 2018). In adolescents experiencing war anxiety, death obsession may therefore function not only as an emotional reaction to danger but also as a cognitive vulnerability factor that contributes to self-injurious thoughts and suicidal risk.

Self-injurious thoughts are a key mechanism in understanding how emotional distress may progress toward suicide attempts. Self-injurious thoughts refer to cognitive content related to harming oneself, imagining self-injury, or experiencing impulses or preoccupations associated with

self-harm. Research using ecological momentary assessment has shown that the intensity and duration of self-injury thoughts are important for understanding self-injurious behavior, suggesting that these thoughts are not passive symptoms but dynamic cognitive-affective states with behavioral implications (Fitzpatrick et al., 2020). In military populations, self-injurious thoughts and behaviors have been shown to differentiate individuals who attempt suicide from those who experience suicidal ideation without an attempt, indicating that self-injurious cognition and behavior may serve as proximal markers of suicide attempt risk (Naifeh et al., 2020). Therefore, in adolescents with war anxiety, self-injurious thoughts may represent a critical transitional mechanism linking generalized distress and death-related preoccupation to actual suicidal behavior.

Recent Iranian research has provided contextually relevant tools and empirical foundations for studying war anxiety, self-injurious thoughts, and suicide attempts in culturally specific adolescent and clinical populations. The construction and validation of the Iranian version of the War Anxiety Scale provided a culturally adapted instrument for assessing somatic, psychological-cognitive, and behavioral aspects of war anxiety in Iranian adolescents (Shomali Ahmadabadi & Barkhordari Ahmadabadi, 2025b). Similarly, the construction and validation of the Iranian Adolescents Self-Injurious Thoughts Questionnaire provided a specific self-report measure for evaluating self-injurious cognitions among adolescents in the Iranian context (Shomali Ahmadabadi et al., 2025). In addition, evidence on the mediating role of psychological distress in the relationship between childhood maltreatment, parent-child relationship conflict, and suicide attempts among women in less-privileged cultural contexts suggests that psychological distress can function as a key explanatory pathway in suicide-related models (Shomali Ahmadabadi & Barkhordari Ahmadabadi, 2025a). These studies support the need for culturally grounded structural models that examine suicide attempts through both psychological distress and cognition-based mediators.

The broader literature on war anxiety and adolescent mental health also suggests that suicide prevention in conflict-affected contexts requires more than symptom reduction. A study on war anxiety and emotional empathy among adolescents in Jordanian society indicated that war-related psychological reactions can influence adolescents' emotional and interpersonal functioning (Moussa & Al-Adamat, 2025). A systematic review of psychological interventions for war-affected children and adolescents

emphasized the importance of resilience-oriented and trauma-informed intervention strategies, highlighting the need to identify specific mechanisms that can be targeted in prevention and treatment (Alkhalifah et al., 2026). Peer-led models focused on emotional distress and suicide prevention have also been proposed as potentially valuable approaches, particularly when adolescents may be more willing to disclose distress to peers than to formal professionals (Smith et al., 2026). These findings imply that accurate explanatory models can inform not only theory but also practical prevention programs in schools, communities, and crisis-affected regions.

Cognitive mechanisms such as rumination, dysfunctional beliefs, and maladaptive appraisals appear to be especially important in the pathway from trauma and distress to suicide-related behavior. Studies have shown that rumination and forgiveness can predict mental health among students, suggesting that repetitive negative thinking may play an important role in psychological vulnerability (Sefidgaran et al., 2023). Research on posttraumatic stress disorder, suicidal ideation, and stress has also indicated that dysfunctional and recovery-related cognitions may moderate the relationship between stress and suicide-related outcomes (Gomes et al., 2024). Furthermore, findings among autistic adults have shown that traumatic experiences and psychological distress are associated with suicide-related behaviors, emphasizing that distress alone must be interpreted through the lens of cognitive, developmental, and contextual vulnerability (Chikaura et al., 2026). In adolescents exposed to war anxiety, self-injurious thoughts may therefore be conceptualized as a maladaptive cognitive-emotional mediator that translates psychological distress and death obsession into suicide attempt risk.

Despite the growing literature on war exposure, psychological distress, death-related cognitions, and suicide-related behaviors, several important gaps remain. First, many studies focus on general symptoms such as anxiety, depression, or posttraumatic stress, while fewer studies examine suicide attempts as a behavioral outcome among adolescents experiencing war anxiety. Second, although psychological distress and death obsession have both been linked to maladaptive outcomes, their simultaneous direct and indirect effects on suicide attempts remain insufficiently understood. Third, the mediating role of self-injurious thoughts has received limited attention in war-affected adolescent populations, particularly in culturally specific settings where war anxiety, family dynamics, social norms, and access to mental health services may shape disclosure

and risk patterns. Finally, existing evidence suggests that crisis-related distress may operate through cognitive mechanisms, but structural models testing such mechanisms among adolescents exposed to war anxiety remain limited.

Accordingly, the present study aimed to examine the mediating role of self-injurious thoughts in the relationship between psychological distress and death obsession with suicide attempts among adolescents experiencing war anxiety.

2. Methods and Materials

2.1. Study Design and Participants

This study was conducted with the aim of developing and testing a multivariate causal model within the framework of an applied study. Methodologically, the present research was non-experimental and used a correlational design. Structural equation modeling was employed to examine the simultaneous direct and indirect relationships among the constructs under study. The statistical population included all adolescents aged 15 to 18 years living in Mahshahr County during 2025–2026. Data were collected concurrently with the early stages of the military crisis involving the United States, Israel, and Iran. Sampling was conducted voluntarily by distributing the electronic questionnaire link in official virtual groups of Mahshahr County on the Bale and Eitaa messaging platforms. The data collection process was carried out over 30 days from the beginning of the war. During this period, a total of 2,789 individuals accessed the questionnaire link, of whom 918 registered initial responses. After applying the predefined screening criteria, including checking the completeness of responses, response quality, and obtaining scores above 45 on the War Anxiety Scale of Shomali and Barkhordari (2025), 215 datasets were retained for the final analysis. This sample size exceeded the minimum recommended threshold for conducting structural equation modeling, which is at least 200 participants, and provided adequate statistical power for model estimation. The inclusion criteria included residence in Mahshahr County, being within the age range of 15 to 18 years, complete completion of the questionnaires, obtaining scores above 45 on the War Anxiety Scale of Shomali and Barkhordari (2025), and providing informed consent, which was requested from the participants upon entering the questionnaire link. Incomplete, inconsistent, or careless responses were excluded from the final analysis. In terms of ethical considerations, participation in the study was voluntary, and electronic informed consent was obtained

from all participants. In addition, the design and implementation of the study were conducted in accordance with ethical considerations and the cultural and social sensitivities of the studied community. The following questionnaires were used to collect the data.

2.2. Measures

War Anxiety Scale: The 15-item War Anxiety Scale was developed and validated by Shomali and Barkhordari (2025). This scale consists of three subscales: somatic symptoms (7 items), psychological-cognitive symptoms (6 items), and behavioral symptoms (2 items). Responses are scored on a 5-point Likert scale ranging from 1 = never, 2 = rarely, 3 = sometimes, 4 = often, to 5 = always. The total score ranges from 15, indicating minimum anxiety, to 75, indicating maximum anxiety, with higher scores reflecting greater severity of war anxiety. In the study by Shomali and Barkhordari (2025), content validity was confirmed with a CVR greater than 0.60 for all items and a CVI of 0.96 for the total scale, based on the opinions of six experts. The results of exploratory factor analysis showed that the War Anxiety Scale had three factors, namely somatic, psychological-cognitive, and behavioral factors, which explained 68.694% of the variance. Confirmatory factor analysis confirmed the acceptable fit of the model (RMSEA = 0.079, GFI = 0.907, CFI = 0.949). Convergent validity was confirmed through a positive correlation with psychological distress ($r = 0.701$), and divergent validity was confirmed through a negative correlation with life satisfaction ($r = -0.339$). The reliability of the scale was obtained using Cronbach's alpha coefficient and was reported as 0.923. In the present study, the reliability of the questionnaire was also calculated using Cronbach's alpha and was obtained as 0.919.

Suicide Behaviors Questionnaire-Revised: This questionnaire was developed by Osman et al. (2001) and consists of 4 items. A higher total score indicates a higher level of suicidal tendency. The cut-off score of this questionnaire is 7, meaning that individuals who obtain a score of 7 or higher are considered to be at risk of suicide. In the study by Osman et al. (2001), Cronbach's alpha coefficient for the total questionnaire was 0.88 among adolescents with psychiatric problems and 0.87 among normal adolescents. Cronbach's alpha coefficient for the total questionnaire was also 0.76 among adults with psychiatric problems and 0.76 among normal adults. The concurrent validity of the questionnaire was evaluated and confirmed using the Beck Hopelessness Scale (Beck et al.,

1967). In the study by Rashid et al. (2016), the internal consistency of the questionnaire was calculated using Cronbach's alpha and was obtained as 0.80. In the study by Shomali et al. (2025), Cronbach's alpha coefficient was obtained as 0.878. In the present study, the reliability of the questionnaire was calculated using Cronbach's alpha and was obtained as 0.848.

Psychological Distress Questionnaire: The 10-item Psychological Distress Questionnaire was developed by Kessler et al. (2002) to assess mental disorders. Responses to the items are based on a 5-point scale, including all of the time = 4, most of the time = 3, some of the time = 2, rarely = 1, and none of the time = 0, with scores ranging from 0 to 4. The maximum score on this questionnaire is 40. The reliability of this instrument has been reported as 0.96 using Cronbach's alpha (Choi et al., 2020). Kessler et al. (2002) also reported the reliability of the questionnaire using Cronbach's alpha as 0.93. In Iran, Yaghoubi (2015) reported the validity of the questionnaire using Cronbach's alpha as 0.83 and described its reliability as desirable. In the study by Shomali et al. (2025), the reliability of the scale was calculated using Cronbach's alpha and was obtained as 0.891. In the present study, the reliability of the questionnaire was calculated using Cronbach's alpha and was obtained as 0.930.

Death Obsession Scale: To measure death obsession, the Death Obsession Scale developed by Abdel-Khalek (1998) was used. This scale contains 15 items and is scored on a 5-point Likert scale ranging from "not at all" to "very much." Abdel-Khalek (1998) reported the internal consistency coefficient of this scale as 0.90. The validity of the Death Obsession Scale was demonstrated by calculating its correlation coefficients with similar scales as evidence of concurrent validity. Accordingly, the correlation coefficient of the Death Obsession Scale was reported as 0.42 with the Death Anxiety Scale, 0.33 with general anxiety, 0.42 with general depression, and 0.35 with the neuroticism scale of the Eysenck Personality Questionnaire. In Iran, Mohammadzadeh et al. (2010) reported its concurrent validity with the Death Anxiety Scale as 0.76 and its test-retest reliability and internal consistency coefficients as 0.73, 0.57, and 0.59, respectively. Taghvaeinia et al. (2018) calculated the reliability of the questionnaire using Cronbach's alpha and reported it as 0.78. In the present study, the reliability of the questionnaire was calculated using Cronbach's alpha and was obtained as 0.911.

Self-Injurious Thoughts Questionnaire: This instrument was introduced by Shomali and Barkhordari

(2024). The Self-Injurious Thoughts Questionnaire is a unifactorial self-report measure consisting of 8 items designed to assess self-injurious thoughts during the past month. Responses to the items are scored on a 5-point scale, including never = 0, very little = 1, sometimes = 2, most of the time = 3, and always = 4. The internal consistency of the questionnaire was calculated by estimating the correlation coefficient of each item with the total questionnaire score, which ranged from 0.372 to 0.737. A significant positive relationship was found between self-injurious behaviors and self-injurious thoughts, and a significant negative relationship was found between self-esteem and self-injurious thoughts; therefore, convergent and divergent validity were confirmed. The results of confirmatory factor analysis showed factor loadings above 0.40, RMSEA = 0.079, GFI = 0.945, CFI = 0.958, and $\chi^2/df = 2.406$, supporting the construct validity of the questionnaire. Cronbach's alpha coefficient was also obtained as 0.821, indicating acceptable reliability. In the present study, the

reliability of the questionnaire was calculated using Cronbach's alpha and was obtained as 0.959.

2.3. Data Analysis

Finally, after removing outliers, the final sample included 215 participants, and their scores were analyzed using Pearson correlation and structural equation modeling through SPSS version 27 and AMOS version 24.

3. Findings and Results

Of the 215 students who participated in the study, 125 participants (58.1%) were girls and 90 participants (41.9%) were boys. In terms of educational grade, 70 participants (32.6%) were in the tenth grade, 75 participants (34.9%) were in the eleventh grade, and 70 participants (32.6%) were in the twelfth grade. The descriptive findings of the research variables are presented in Table 1.

Table 1

Descriptive Statistics of the Research Variables

Variable	Mean	Standard Deviation	Skewness	Kurtosis
War anxiety	53.07	5.559	1.852	-0.941
Suicide attempt	5.93	3.255	0.451	0.511
Psychological distress	32.37	9.665	0.098	0.709
Death obsession	42.30	15.233	1.328	0.631
Self-injurious thoughts	11.19	6.382	0.448	0.545

Based on the findings presented in Table 1, the skewness and kurtosis statistics of all variables were between -2 and +2, indicating that the distribution of the variable scores did

not deviate excessively from normality. The correlation matrix among the variables is presented in Table 2.

Table 2

Correlation Matrix Among the Research Variables

Variable	1	2	3	4
1. Suicide attempt	—			
2. Psychological distress	0.419	—		
3. Death obsession	0.396	0.469	—	
4. Self-injurious thoughts	0.721	0.267	0.272	—

Based on the findings presented in Table 2, there was a significant positive relationship between psychological distress and suicide attempt ($p < .01$); there was a significant positive relationship between death obsession and suicide attempt ($p < .01$); there was a significant positive relationship between psychological distress and suicide attempt ($p < .01$); and there was a significant positive

relationship between self-injurious thoughts and suicide attempt ($p < .01$). After examining the correlations among the research variables, the results related to the measurement models and factor analysis for all four variables were desirable. The structural model of the study is presented below.

Figure 1

Standardized Model of the Mediating Role of Self-Injurious Thoughts in the Relationship Between Psychological Distress and Death Obsession with Suicide Attempt Among Adolescents Experiencing War Anxiety

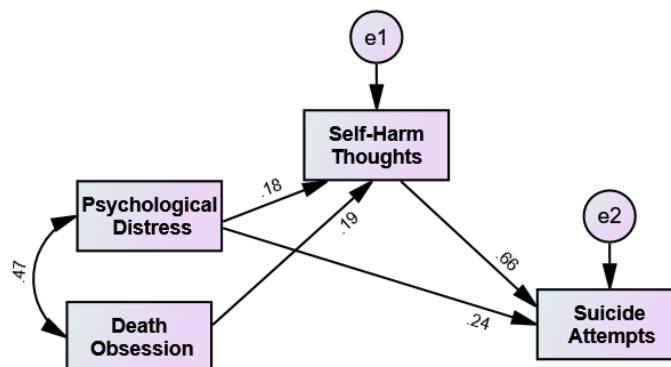


Figure 1 shows the model examining the relationships among the variables. In this model, suicide attempt was considered an endogenous variable, while psychological distress and death obsession were considered exogenous variables. Their direct effects on suicide attempt and their

indirect effects on suicide attempt through the mediating variable of self-injurious thoughts were examined. The direct and indirect coefficients of the relationships among the variables are presented in Table 3.

Table 3

Direct and Indirect Coefficients of the Research Variables Using Bootstrapping

Path	Unstandardized Coefficient	Standardized Coefficient	Standard Error	Significance Level	Result
Direct effect of psychological distress on suicide attempt	0.082	0.244	0.042	0.007	Confirmed
Direct effect of death obsession on suicide attempt	—	—	—	—	Rejected
Direct effect of self-injurious thoughts on suicide attempt	0.335	0.656	0.055	0.004	Confirmed
Direct effect of psychological distress on self-injurious thoughts	0.118	0.178	0.054	0.004	Confirmed
Direct effect of death obsession on self-injurious thoughts	0.079	0.188	0.053	0.014	Confirmed
Indirect effect of psychological distress on suicide attempt through self-injurious thoughts	0.039	0.117	0.039	0.002	Confirmed
Indirect effect of death obsession on suicide attempt through self-injurious thoughts	0.026	0.123	0.042	0.010	Confirmed

The analysis of the data obtained from the relationships among the variables through direct and indirect coefficients in Table 3 showed that the direct effect of psychological distress on suicide attempt was positive and significant ($p < .01$); the direct effect of self-injurious thoughts on suicide attempt was positive and significant ($p < .01$); the direct effect of psychological distress on self-injurious thoughts was positive and significant ($p < .01$); the direct effect of death obsession on self-injurious thoughts was positive and

significant ($p < .01$); the indirect effect of psychological distress on suicide attempt through self-injurious thoughts was positive and significant ($p < .01$); and the indirect effect of death obsession on suicide attempt through self-injurious thoughts was also positive and significant ($p < .01$). However, no direct effect of death obsession on suicide attempt was observed in the model. The model fit indices are presented in Table 4.

Table 4

Results of Structural Equation Modeling for Examining the Goodness-of-Fit Indices of the Developed Model

Fit Indices	χ^2	df	χ^2/df	<i>p</i>	RMSEA	TLI	CFI	GFI
Acceptance range	—	—	< 3	> .05	< .08	> .90	> .90	> .90
Obtained values	2.180	1	2.180	0.007	0.074	0.907	0.976	0.951

The maximum likelihood method was used to estimate the structural model. In this model, the root mean square error of approximation was RMSEA = 0.074, the goodness-of-fit index was GFI = 0.951, the comparative fit index was CFI = 0.976, and the Tucker-Lewis index was TLI = 0.907. These indices were all above 0.90, indicating that the model had acceptable fit. In addition, $\chi^2/df = 2.180$ was obtained, which also indicates desirable model fit.

4. Discussion

The present study was conducted to examine the mediating role of self-injurious thoughts in the relationship between psychological distress and death obsession with suicide attempts among adolescents experiencing war anxiety. The findings showed that psychological distress had a positive and significant direct effect on suicide attempts. This result indicates that adolescents who experienced higher levels of psychological distress were more likely to report suicide attempts. This finding is theoretically consistent with the conceptualization of psychological distress as a broad indicator of emotional dysregulation, anxiety, depressive affect, perceived helplessness, and reduced psychological functioning (Horwitz, 2002; Kessler et al., 2002). In war-related conditions, psychological distress may become intensified because adolescents are exposed to chronic uncertainty, perceived threat, fear of injury or death, disruption of daily routines, and insecurity about the future. Such conditions can weaken coping resources and increase the probability that emotional pain will be expressed through self-destructive behavior. The finding is also aligned with evidence showing that war, forced displacement, and conflict exposure are associated with anxiety, depression, posttraumatic stress symptoms, and psychological burden in affected populations (Aldabbour et al., 2025; Hanifa et al., 2026; Szkup et al., 2026). In this regard, the significant direct effect of psychological distress on suicide attempts suggests that suicide-related behavior among adolescents experiencing war anxiety should be understood as a serious consequence

of accumulated emotional strain rather than as an isolated behavioral outcome.

The direct association between psychological distress and suicide attempts is also consistent with previous findings on suicide-related vulnerability in different populations. For instance, research has shown that psychological and interpersonal constructs such as loneliness, perceived social support, thwarted belongingness, and perceived burdensomeness are associated with suicidal behavior among Iranian students (Rashid et al., 2016). Similarly, studies on suicide-related outcomes have emphasized that distress, depression, irrational beliefs, rumination, and dysfunctional cognitions can intensify suicidal ideation and behavior (Gomes et al., 2024; Rosas-Fuentes et al., 2023; Shapiro et al., 2026). In the context of the present study, psychological distress may reduce adolescents' perceived capacity to tolerate painful emotions and may increase cognitive narrowing, hopelessness, and the belief that there is no effective escape from the threatening situation. This explanation is particularly relevant in war-anxiety contexts, where external conditions are often uncontrollable and adolescents may lack adequate autonomy or resources to modify their environment. Therefore, the direct path from psychological distress to suicide attempts reflects the destructive role of sustained emotional pressure in a vulnerable developmental period.

Another major finding was that self-injurious thoughts had a positive and significant direct effect on suicide attempts. This result suggests that self-injurious thoughts are a proximal cognitive-emotional risk factor for suicidal behavior. Compared with broader emotional symptoms, self-injurious thoughts are more directly related to the imagination, rehearsal, desire, or cognitive availability of self-harm. Therefore, when such thoughts become frequent or intense, the psychological distance between distress and action may decrease. This finding is consistent with ecological momentary assessment research indicating that the intensity and duration of self-injury thoughts play an important role in self-injurious behavior (Fitzpatrick et al., 2020). It is also supported by evidence from military populations showing that self-injurious thoughts and

behaviors can differentiate individuals who attempt suicide from those who have suicidal ideation without an attempt (Naifeh et al., 2020). Accordingly, the present result highlights that, among adolescents experiencing war anxiety, the presence of self-injurious thoughts should be considered a clinically meaningful warning sign rather than a transient or secondary symptom.

The strong standardized coefficient of self-injurious thoughts in predicting suicide attempts also demonstrates the importance of cognitive mediation in suicide risk. Adolescents exposed to war anxiety may experience intense fear, intrusive images, death-related preoccupation, and perceived lack of safety. However, not all adolescents with distress or death-related concerns attempt suicide. The transition from emotional suffering to suicidal action may depend on whether the adolescent develops self-directed harmful cognitions. In this regard, self-injurious thoughts may operate as a bridge between psychological pain and suicidal behavior. This interpretation is compatible with recent Iranian work that introduced and validated a culturally appropriate measure of self-injurious thoughts among adolescents, emphasizing the relevance of this construct in the Iranian adolescent population (Shomali Ahmadabadi et al., 2025). It is also aligned with research showing that psychological distress can mediate or explain suicide-related outcomes in culturally specific and socially vulnerable populations (Shomali Ahmadabadi & Barkhordari Ahmadabadi, 2025a). Therefore, the present study extends previous evidence by showing that self-injurious thoughts are not only associated with suicide attempts but also function as an explanatory mechanism in adolescents experiencing war anxiety.

The findings further showed that psychological distress had a positive and significant direct effect on self-injurious thoughts. This result indicates that adolescents with higher psychological distress were more likely to experience thoughts of harming themselves. From a psychological perspective, distress may increase self-injurious thoughts through several mechanisms, including emotional exhaustion, impaired problem solving, rumination, self-blame, hopelessness, and reduced perceived control. When adolescents cannot regulate intense emotions or cannot change threatening external conditions, self-harm-related thoughts may emerge as maladaptive attempts to escape, communicate pain, regain control, or reduce unbearable emotional arousal. This interpretation is consistent with evidence showing the role of rumination and related cognitive patterns in mental health problems among students

(Sefidgaran et al., 2023). It is also aligned with studies indicating that dysfunctional cognitions can influence the relationship between traumatic stress and suicidal ideation (Gomes et al., 2024). Therefore, psychological distress appears to create the emotional ground on which self-injurious thoughts may develop and become more salient.

The finding that death obsession had a positive and significant direct effect on self-injurious thoughts is also noteworthy. Death obsession refers to persistent and intrusive preoccupation with death and death-related themes. In the context of war anxiety, death may become psychologically prominent because adolescents are exposed to real or symbolic reminders of mortality, including news of attacks, casualties, destruction, and threats to family safety. This heightened accessibility of death-related thoughts may increase self-injurious cognition, especially when combined with fear, helplessness, and emotional dysregulation. Previous studies have shown that death obsession is related to psychological distress, somatic symptoms, quality of life, frailty, and death anxiety in different populations (Berl, 2024; Enea et al., 2024; Mohammadzadeh & Najafi, 2010; Taghvaei Nia, 2018; Yang et al., 2024). The present finding extends these studies by showing that, among adolescents experiencing war anxiety, death obsession may be linked to self-injurious thoughts, suggesting that repetitive death-related cognition can contribute to the formation of self-destructive ideation.

At the same time, the direct effect of death obsession on suicide attempts was not observed in the final model. This finding suggests that death obsession alone may not directly lead to suicide attempts when self-injurious thoughts are included as a mediator. In other words, adolescents may experience intrusive thoughts about death without necessarily engaging in suicidal behavior, unless these death-related thoughts become internalized as self-directed harmful cognitions. This result is theoretically important because it distinguishes death-related preoccupation from suicidal action. Death obsession may increase vulnerability by making death cognitively salient and emotionally threatening, but suicide attempt appears to require a more proximal mechanism, namely self-injurious thoughts. This pattern is consistent with studies suggesting that death-related fears and obsessions often operate through intermediate emotional or cognitive processes rather than producing behavioral outcomes directly (Berl, 2024; Enea et al., 2024; Gundogan & Arpacı, 2024). Thus, the non-significant direct effect of death obsession on suicide attempts strengthens the argument that self-injurious

thoughts are a central explanatory pathway in the present model.

The indirect effects of psychological distress and death obsession on suicide attempts through self-injurious thoughts were positive and significant, confirming the mediating role of self-injurious thoughts. This finding is the central contribution of the study. It shows that psychological distress and death obsession increase suicide attempt risk partly because they increase self-injurious thoughts. In adolescents experiencing war anxiety, distress may create emotional pain, while death obsession may create intrusive mortality-related cognition; self-injurious thoughts may then transform these experiences into a more immediate risk for suicidal behavior. This mediation pattern is consistent with evidence indicating that children and young people exposed to war are vulnerable to suicidal ideation, suicide attempts, and self-harm, but that the mechanisms linking war exposure to suicidal behavior require further clarification (Silwal et al., 2026; Skokauskas, 2025). The present model contributes to this gap by identifying self-injurious thoughts as a cognitive-emotional mediator through which broader distress and death-related preoccupation may influence suicide attempts.

The findings also align with the broader literature on adolescent vulnerability and resilience in war contexts. Studies of adolescents exposed to war have shown that psychological responses to war are shaped by vulnerability and resilience factors, including pre-existing neurocognitive patterns, emotional processing, and contextual support (Haham et al., 2026; Orpaz et al., 2026). War anxiety has also been found to be related to adolescents' emotional functioning and empathy, suggesting that war-related fear affects both internal psychological states and interpersonal-emotional responses (Moussa & Al-Adamat, 2025). Within this framework, self-injurious thoughts may be understood as one maladaptive developmental response to overwhelming war-related stress. The findings further support the need for intervention models focused on trauma-informed care, resilience building, cognitive restructuring, emotional regulation, and suicide prevention among war-affected children and adolescents (Alkhalifah et al., 2026; Smith et al., 2026). Therefore, the study supports a prevention-oriented interpretation: reducing psychological distress and death obsession is important, but directly identifying and modifying self-injurious thoughts may be even more urgent for reducing suicide attempts.

5. Conclusion

Overall, the findings indicate that suicide attempts among adolescents experiencing war anxiety are best understood through an integrated model that includes psychological distress, death obsession, and self-injurious thoughts. Psychological distress directly predicted suicide attempts and also indirectly predicted them through self-injurious thoughts. Death obsession did not directly predict suicide attempts, but it indirectly predicted them through self-injurious thoughts. These results suggest that self-injurious thoughts are a decisive cognitive-emotional pathway through which internal suffering and death-related preoccupation may become translated into suicidal behavior. This conclusion is consistent with contemporary diagnostic and psychological approaches that emphasize the multidimensionality of mental health symptoms and the need to evaluate both emotional distress and specific suicide-related cognitions (American Psychiatric, 2023; Chikaura et al., 2026). Consequently, the present study provides empirical support for the importance of assessing self-injurious thoughts in adolescents exposed to war anxiety and highlights the need for preventive interventions that address both emotional distress and maladaptive self-harm cognitions.

6. Limitations & Suggestions

One of the limitations of the present study was its correlational and cross-sectional design, which restricts the possibility of making definitive causal interpretations. Although structural equation modeling was used to test direct and indirect pathways, the temporal order of psychological distress, death obsession, self-injurious thoughts, and suicide attempts cannot be fully established without longitudinal data. Another limitation was the use of voluntary online sampling, which may have increased self-selection bias and limited the representativeness of the sample. The data were also collected through self-report questionnaires, and therefore responses may have been affected by social desirability, fear of disclosure, emotional instability, or misunderstanding of sensitive items. In addition, the sample was limited to adolescents aged 15 to 18 years living in Mahshahr County, which may reduce the generalizability of the findings to adolescents in other regions, age groups, cultural settings, or levels of direct war exposure.

Future research is suggested to use longitudinal and prospective designs to clarify the temporal and causal

relationships among war anxiety, psychological distress, death obsession, self-injurious thoughts, and suicide attempts. Researchers should also examine additional mediating and moderating variables such as hopelessness, emotion regulation, family support, peer connectedness, exposure intensity, trauma symptoms, resilience, religious coping, and access to mental health services. It is also recommended that future studies compare adolescents with different levels of direct and indirect war exposure and examine whether the proposed model differs by gender, age, socioeconomic status, educational level, and family background. Mixed-method studies may also provide deeper insight into how adolescents subjectively experience war anxiety, death-related thoughts, and self-injurious cognitions. Finally, replication of the model in larger and more diverse adolescent samples would strengthen the external validity of the findings.

In terms of practical implications, the findings suggest that school counselors, clinical psychologists, crisis intervention teams, and community mental health professionals should give special attention to adolescents experiencing war anxiety, particularly those who report high psychological distress or recurrent death-related thoughts. Screening programs should include direct assessment of self-injurious thoughts, because these thoughts may represent a critical warning sign for suicide attempts. Preventive interventions should focus on reducing psychological distress, strengthening emotion regulation, improving coping skills, correcting maladaptive beliefs, and helping adolescents manage intrusive death-related thoughts. Family-based and school-based psychoeducation programs can also help parents, teachers, and peers identify warning signs and respond supportively. In crisis-affected regions, accessible, culturally sensitive, and adolescent-centered mental health services are essential for reducing suicide risk and promoting psychological safety.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

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

Transparency of Data

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

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Authors' Contributions

All authors equally contributed to this article.

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