Impact of Childhood Trauma on Suicidal Ideation: The Mediating Role of Loneliness among Young Adults

S.Srikumaran [1]
K.Nagalakshmi [2]

[1] Department of Psychology, Annamalai University Chidambaram, Tamil Nadu
kumaransripsy@gmail.com

[2] Department of Psychology, Annamalai University Chidambaram, Tamil Nadu
lakshmidde@gmail.com

Abstract

Childhood trauma is a profound determinant of mental health, often leaving indelible marks on emotional well-being and predisposing individuals to challenges such as suicidal ideation. This study investigates how loneliness mediates the relationship between childhood trauma and suicidal thoughts in young adults. Data were collected from 167 young adults (80 males and 87 females) in the Cuddalore district using the Childhood Trauma Questionnaire (CTQ), UCLA Loneliness Scale, and Suicidal Ideation Scale (SIS). Results revealed significant positive correlations between childhood trauma, loneliness, and suicidal ideation, with loneliness partially mediating the association between trauma and suicidal ideation. Mediation analysis indicated that loneliness accounted for 35.9% of the total effect of childhood trauma on suicidal ideation, emphasizing its role as a crucial psychological pathway. These findings underscore the need for interventions that address both the residual effects of trauma and the isolating experiences of loneliness to mitigate suicide risks among young adults.

Introduction

Childhood is a time of growth, discovery, and emotional development, yet for many, it is also a period marked by profound adversities. Experiences of childhood trauma, such as abuse, neglect, or the loss of a caregiver, leave indelible marks on an individual's psychological well-being, influencing their thoughts, emotions, and behaviours well into adulthood. Research has consistently shown that childhood trauma significantly increases the risk of mental health issues, with suicidal ideation emerging as one of the most concerning outcomes. Suicidal ideation which comprises thoughts of self-harm and ending one's life, is a complex phenomenon often rooted in the unresolved pain of past experiences. Young adulthood is a transformative stage characterised by the search for identity, independence, and purpose. It is particularly vulnerable to the effects of unresolved trauma. Many young adults find themselves grappling with the weight of their past while navigating the uncertainties of their present, which can exacerbate feelings of isolation, despair, and hopelessness. Among these factors, loneliness- defined as a subjective feeling of social disconnection—stands out as a powerful and insidious mediator. Loneliness often amplifies the emotional void left by trauma, fostering a sense of abandonment and alienation that deepens the risk of suicidal ideation.

The interplay between childhood trauma, loneliness, and suicidal ideation warrants significant attention, particularly in regions where cultural norms and social expectations shape how individuals perceive and respond to mental health challenges. In collectivist societies, such as those found in India, familial and community relationships are crucial to an individual's sense of belonging and support. However, for many young adults who have experienced trauma, these connections may be strained or absent, intensifying feelings of loneliness and further compounding psychological distress. Despite growing awareness of mental health issues in India, the specific mechanisms linking childhood trauma to suicidal ideation through loneliness remain underexplored. Research within the Indian context, particularly among young adults, is essential for understanding how cultural, social, and personal factors intersect to shape mental health outcomes. By delving into these dynamics, we can gain deeper insights into the ways trauma and loneliness converge to influence suicidal ideation and

identify opportunities for targeted intervention. This study seeks to fill this gap by investigating the mediating role of loneliness in the relationship between childhood trauma and suicidal ideation among young adults. By focusing on this population, the research attempts to draw attention to the silent struggles faced by many and provide a foundation for culturally sensitive interventions. The findings will enhance academic understanding and have practical implications for mental health professionals, caregivers, and policymakers seeking to address the root causes of distress and promote resilience among young adults.

According to the report based on the National Crime Records Bureau (NCRB); suicides among the students were reported to be increasing in the year 2024 (National Crime Records Bureau [NCRB], 2024). Overall suicide numbers increased by 2% annually, and student suicide by 4%. In 2022, the reports revealed that male students engaged in 53% of student suicide. While between 2021 & 2022 (National Crime Records Bureau [NCRB], 2021 & 2022) male students back rooted by 6% and female student rates rose by 7%. On the basis of supporting and monitoring the schools and providing guidance to volunteer-based organizations, IC3 was developed.

Parental domains included parental support, conflicts, separation, authoritative parents and parental addictions to alcohol or any other substance were prone to suicidal ideation and behaviour. Earlier qualitative research studies carried out through interview methods reported that children who had faced conflicts, unpleasant family environments, parental dominance on decisions, and criticism from their parents, perceived themselves as victim and engaged in suicidal ideation.

Erik Erikson's psychosocial stages (Erikson, E. H. (1950)

Childhood Trauma, Developmental challenges, Suicidal Ideation and Mental Health domains are interconnected in understanding the concept of psychosocial theory by Erik Erikson. Early developmental stages are the basic foundational medium for psychological Development (i) Infancy (Trust vs Mistrust): The Child's relationship with caregivers and parents is the primary influence of Psychological Health. Experiences like trauma, neglect or abuse during this stage will cause a

crisis and develop a sense of security and independence. (ii) Adolescence (Identity Formation vs Role Confusion): Individuals who have experienced trauma might struggle to have a cohesive sense of self. In order to those traumatic experiences, a sense of shame, guilt or worthlessness may arise. Unresolved conflicts lead to feelings of Isolation and hopelessness that further tend to develop suicidal Ideations. (iii) Young Adulthood (Intimacy vs Isolation): Young adults face challenges in forming and maintaining a meaningful relationship and emotional connections. The unresolved conflicts and trauma from the earlier stages would have an impact on the intimate relationship's maintenance. Disturbance in forming and balancing connections would lead to the development of feelings of alienation, and loneliness which are highly prone risk factors for suicidal thoughts and behaviours.

Indian Cultural Context - Childhood Trauma & Suicidal Ideation

Childhood trauma and suicidal ideation are the interplaying concepts that originate as a result of unusual parent-child relationships. Based on the theoretical concepts, culture plays a vital role.

1. Attachment Theory: According to Bowlby (1969), attachment theory binds the importance of secure emotional bonds between parents and children during early development. In Indian Culture, parenting style might reflect a mixture of emotional warmth and fair discipline. Insecure attachment may develop when emotional responsiveness tends to decrease. This emotional neglect, excessive criticisms or Authoritarian Parenting leads to the development of feelings like rejection or inadequacy uplifting long-term psychological distress

2. Ecological System Theory: The ecological system theory highlights how an individual's development is influenced by interactions within the environment (Bronfenberner, 1979). Microsystem: The Individual's parent-teacher relationships are primarily influenced by Family dynamics, cultural practices and caregiving styles. Exosystem: External environment and pressures such as Societal Norms, Academic Expectations and performances impact the children through Parental Behaviours. Macrosystem: Family Hierarchy, Gender roles, stigmas and cultural

belief influences the parent-child dynamic and the development of a child's coping mechanisms. Based on this theoretical framework in Indian Culture; Indian society might demotivate open discussions regarding Mental Health, and reinforcement of suppressed emotions and trauma within the family or parent-child relationship.

Literature Review

McElroy et al. (2015) conducted a study to investigate the mediating role of loneliness in the relationship between childhood trauma and adult psychopathology. Utilizing a cross-sectional study design, the data were analysed from the Adult Psychiatric Morbidity Survey (APMS) in England, which included a sample of 7,403 adults aged 16 and older. Childhood trauma was assessed by examining aspects of sexual and physical abuse using the Child Abuse Scale, while loneliness was measured with the Social Functioning Questionnaire. Additionally, a structured interview was employed to diagnose various psychiatric disorders. The results indicated that childhood abuse was a significant predictor of both loneliness and various psychiatric disorders in adulthood.

Kealy et al. (2021) conducted a study examining social anxiety and suicidality among men, with an emphasis on the effects of loneliness and childhood trauma. The study utilized a nationally representative sample of 530 Canadian males. The results revealed that loneliness served as a significant mediator between social anxiety and suicidality. Furthermore, the findings indicated that exposure to several types of childhood trauma moderated the relationship between social anxiety and loneliness.

Snowber et al. (2022) carried out a path analysis study to investigate the association between childhood maltreatment and suicidal ideation, focusing on whether hopelessness and dissociative symptoms mediated this relationship. The study recruited 215 adult psychiatric inpatients, and data were collected using the Childhood Trauma Questionnaire, the Beck Hopelessness Scale, the Dissociative Experiences Scale, and the Columbia-Suicide Severity Rating Scale. The results indicated that sexual abuse had a direct impact on suicidal thoughts,

while emotional abuse and neglect influenced suicidal ideation indirectly through factors such as dissociation and hopelessness.

Pan et al. (2024) conducted a study that examined the relationship between abuse in childhood and suicidal ideation among Chinese college students, with a focus on the mediating roles of core self-evaluation and negative emotions. The study involved a sample of 3,103 college students from eleven universities. Data were collected using the Childhood Trauma Questionnaire, the Core Self-Evaluation Scale, the Affect Scale, and the Beck Suicidal Ideation Scale. The findings indicated that higher levels of childhood trauma were associated with suicidal ideation and that low core self-evaluation scores, coupled with higher levels of negative emotions, mediated this relationship.

Childhood trauma is a significant predictor of suicidal ideation, with numerous studies establishing its long-term psychological consequences. For instance, early experiences of abuse or neglect are associated with greater vulnerability to mental health disorders, such as depression, anxiety, and suicidal behaviours (Carr et al., 2020). Research suggests that traumatic childhood experiences disrupt emotional regulation and coping mechanisms, contributing to feelings of helplessness and despair that elevate the risk of suicidal ideation (van Harmelen et al., 2016). Furthermore, Systematic reviews highlight that individuals who have experienced childhood trauma show a greater likelihood of experiencing persistent suicidal thoughts and attempts than those who have not had such experiences (Angelakis et al., 2019).

Loneliness, characterized by a perceived lack of meaningful social connections, is increasingly recognized as a mediating factor in the relationship between childhood trauma and adverse mental health outcomes. Qualitative and quantitative studies demonstrate that individuals with a history of trauma often experience difficulties forming and maintaining relationships, which heightens feelings of isolation (Spinhoven et al., 2018). Loneliness, in turn, exacerbates psychological distress and fosters suicidal ideation, creating a vicious cycle of emotional pain and social withdrawal (Leigh-Hunt et al., 2017). Moreover, longitudinal studies suggest that loneliness not only co-occurs with trauma but

also plays a critical role in translating early adverse experiences into chronic mental health challenges (Mund et al., 2020).

Young adults are particularly vulnerable to suicidal ideation due to the transitional nature of this developmental stage. The challenges of forming an independent identity, coupled with societal pressures and unresolved trauma, significantly increase psychological distress during this period (Arnett, 2000). Studies have found that young adults who have experienced trauma in childhood are more prone to experience loneliness and suicidal thoughts, indicating the need for targeted interventions in this demographic (Fitzpatrick et al., 2022).

COVID-19 and Suicidal Ideation

Nan et al. (2023) reported that medical students during the COVID-19 pandemic experienced a heightened level of suicidal ideation. The study also found that emotional neglect, physical neglect, emotional abuse, and physical abuse significantly impacted high-risk medical students, contributing to their mental health challenges.

Farooq et al. (2021) identified primary risk factors for suicidal ideation, including poor social support, higher levels of physical and mental exhaustion, and poor physical health among medical workers. The study also highlighted sleep disturbances, quarantine, loneliness, and other mental health difficulties as significant contributors. The findings reported that suicidal ideation was notably higher during the COVID-19 pandemic within the general population.

Danzo et al. (2024) highlighted the increasing rates of anxiety and depression among youth before the coronavirus outbreak. The study further emphasized that the pandemic adversely impacted adolescent mental health. The findings underscored the importance of ongoing monitoring of mental health among youth who experienced pandemic-related stressors.

Methodology

Using a simple random sampling method data from a sample of 167 were collected in and around Cuddalore district. The collected young adults were shown self-interest and willingness to the study with informed consent. Among the total sample, 80 were males and 87 were females. The Suicidal Ideation Scale (Rudd,1989) was employed to identify the ideation of suicide and the UCLA Loneliness scale (Russell, 1978) was used to measure the level of loneliness along with the usage of the Childhood Trauma Questionnaire (Bernstein, 1998) to discover the aspect in which the individual had neglect or abuse during their childhood. Further, the Data analysis was run through SPSS of version 23

Results and Discussions

Table 1

Pearson correlation between Childhood trauma, Loneliness, and Suicidal ideation

Variables	Childhood Trauma	Loneliness	Suicidal Ideation
Childhood Trauma	1.00	0.52**	0.60**
Loneliness	0.52**	1.00	0.70**
Suicidal Ideation	0.60**	0.70**	1.00
Note. p< .01.			

In Table 1, the Correlational analysis showed the relationship between childhood trauma, loneliness and suicidal Ideation. From the analysis, it is interpreted that childhood trauma is positively correlated with loneliness ($r=0.52$, $p<0.01$) revealing that individuals with higher levels of trauma reported higher levels of loneliness. Further, childhood trauma is positively correlated with Suicidal Ideation ($r=0.60$, $p<0.01$) which indicated that experiencing higher trauma is associated with increased suicidal ideations. Loneliness is also positively correlated with suicidal Ideation ($r=0.70$, $p<0.01$) implying that feelings of Loneliness are linked to a greater risk of suicidal ideation. These findings align with earlier research findings (Liu et al., 2020 & Harmelen et al., 2010).

Table 2

Mediation analysis results for Childhood Trauma, Loneliness and Suicidal Ideation

Path	Unstandardized Coefficient (B)	Standardized Coefficient (ß)	Standard Error (SE)	p-value
Direct Effect (Childhood Trauma → Suicidal Ideation)	0.5	0.48	0.08	< 0.001
Indirect Effect (Childhood Trauma → Loneliness → Suicidal Ideation)	0.28	0.27	0.05	< 0.001
Total Effect (Childhood Trauma → Suicidal Ideation)	0.78	0.75	0.07	< 0.001
Childhood Trauma → Loneliness (Path a)	0.6	0.52	0.06	< 0.001
Loneliness → Suicidal Ideation (Path b)	0.47	0.55	0.07	< 0.001

In Table 2, mediation analysis was used to examine whether Loneliness mediates and predicts the relationship between childhood Trauma and Suicidal Ideation in Young Adults. The results revealed that Childhood Trauma significantly predicted loneliness B=0.60; beta =0.52; SE = 0.06 (p<0.001). In relation to that, Loneliness had been significantly predicted Suicidal Ideation B=0.47; beta =0.55; SE = 0.07 (p<0.001). The direct effect of Childhood Trauma on Suicidal Ideation remained significant after mediation as B=0.50; beta =0.48; SE = 0.08 (p<0.001). The total effect of Childhood Trauma on Suicidal Ideation was significant B=0.78; beta =0.75; SE = 0.07 (p<0.001). In turn, the indirect effect through Loneliness was significant B=0.28; beta =0.27; SE = 0.05(p<0.001).

Loneliness serves as a significant mediator, accounting for approximately 35.9% of the total effect of childhood trauma on suicidal ideation (calculated as the indirect effect divided by the total effect: 0.28 / 0.78). Despite this mediation, the direct effect remains significant, indicating that other unmeasured factors may also contribute to mediating the relationship between childhood trauma and suicidal ideation.

This flowchart illustrates the relationships between Childhood Trauma, Loneliness, and Suicidal Ideation, as per the results of the mediation analysis. The analysis

shows both direct and indirect effects of childhood trauma on suicidal ideation, with loneliness serving as a mediator.
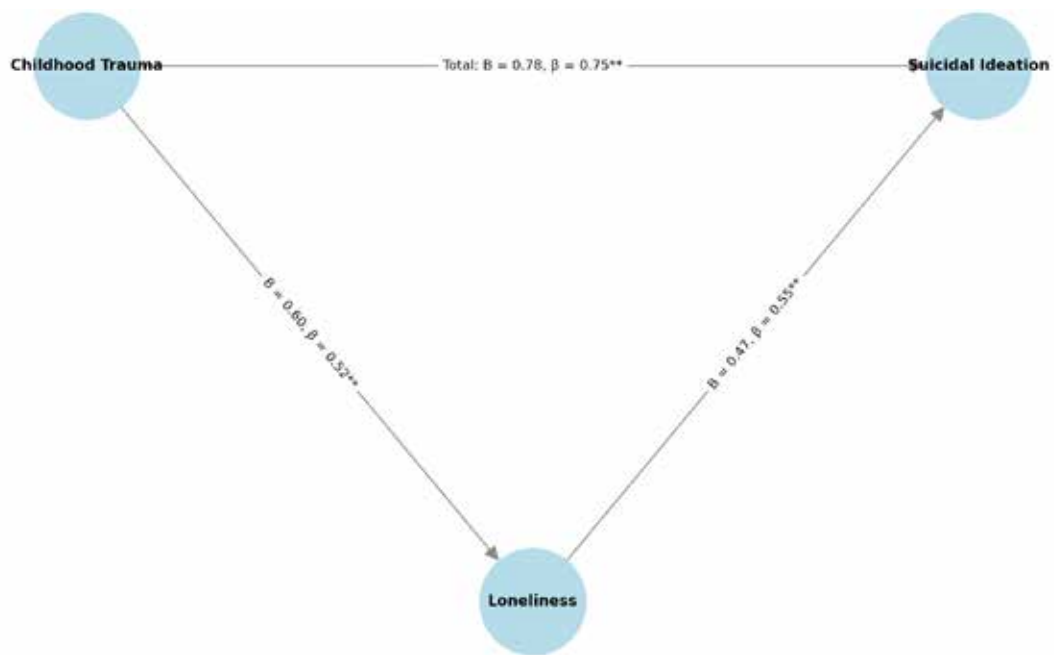
Conclusion

This study examined the intricate relationship between childhood trauma, loneliness, and suicidal ideation among young adults, with a focus on understanding the mediating role of loneliness. The findings highlight the adverse impact that childhood trauma has on mental health outcomes, particularly its strong association with both increased feelings of loneliness and heightened suicidal ideation.

Our results demonstrate that loneliness significantly mediates the relationship between childhood trauma and suicidal ideation. Specifically, childhood trauma was found to be a strong predictor of loneliness, which in turn was a substantial predictor of suicidal ideation. This suggests that loneliness plays a crucial role in the emotional distress experienced by individuals with a history of trauma, exacerbating their vulnerability to suicidal thoughts and behaviours.

Furthermore, while the direct impact that childhood trauma exerts on suicidal ideation remains significant, the indirect effect through loneliness suggests that interventions targeting loneliness may help mitigate the risk of suicidal ideation in individuals with childhood trauma histories. These findings underline the

importance of addressing both the emotional and social aspects of mental health in therapeutic settings, particularly for young adults who are at an increased risk of experiencing these adverse outcomes.

Discussion

The present study suggests a direct and indirect pathway in which childhood trauma influences suicidal ideation through loneliness. This mediation reveals that Childhood Trauma has a profound impact on Psychological well-being, challenging the feelings of Loneliness. Early studies recognized Loneliness as a mediator in relationship to childhood Trauma and Depressive symptoms (Liu et. al., 2020). The findings of the present study have evidence that loneliness also mediates the pathway towards suicidal Ideation. Another relevant study found that Childhood Trauma significantly predicted emotional dysregulation that indirectly had an impact on Suicidal behaviours with Loneliness and Hopelessness (Shevlin et. al., 2015). The present findings explored the parallel mechanisms by indicating the vitality of loneliness as a mediator. Based on the cultural context; Indian cultural factors such as family structure, and social norms might influence the pathway. In relation to the Microsystems, macrosystem, mesosystem disruption at any level leads to the development of childhood trauma; diminished sense of belonging and increased loneliness (Bronfenbrenner,1978) has been proposed in the theory Ecological Systems Theory supporting the present finding.

Limitations and Recommendations for future studies

The present study focused on young adults in and around the Cuddalore district, with basic demographic data such as age, gender, and place of residence collected. A sample of 167 participants (80 males and 87 females) was randomly selected based on their willingness to participate. However, several limitations were noted. The study's geographic focus was narrow, and the sample size could be expanded in future research. Additionally, broader populations at risk for suicidal ideation could be included to improve the generalizability of the findings. Further studies should consider incorporating a larger and more diverse sample size and include wider geographical areas. Elevated demographic factors, such as family income, marital status, birth order, and schooling mode, could also

be relevant to consider, depending on the population. Further exploration of various mental health factors, including resilience and self-esteem, may provide valuable insights. Finally, researchers might contribute to the development of coping mechanism models or interventions for childhood trauma and suicidal ideation in future studies.

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