

DETERMINANT FACTORS OF NON-SUICIDAL SELF INJURY AMONG UNIVERSITY STUDENTS: A LITERATURE REVIEW

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Abstract

Non-suicidal self-injury (NSSI) is increasingly observed in higher education settings with approximately 20% reporting lifetime engagement in such behaviors. Objective: This literature review aim to synthesizes recent research (2015- 2025) on determinant factors contributing to NSSI among college/university students, including risk and protective factors and implications for prevention strategies. Methods : Through a comprehensive analysis of studies from multiple databases including Scopus, PubMed, PsycINFO, this review identifies key psychological, social, environmental, and demographic factors that influence NSSI behaviors. Results: The findings reveal that determinants cluster across individual (emotion dysregulation; sleep irregularity; cognitive styles), interpersonal (cybervictimization; social exclusion; minority stress; family dysfunction), and contextual domains (recent negative life events). Protective factors include self compassion, self efficacy and social support. Conclusion : The review concludes with implications for prevention and intervention strategies, highlighting the need for multi-level approaches including screening at matriculation for prior NSSI/mental disorders, addressing sleep regularity, emotion-regulation treatment, social supports, tackling cybervictimization and minority stress, and building self compassion and resistance self efficacy and environmental modifications.

Keywords: college students; determinant factors; non-suicidal self injury (NSSI); university students.

INTRODUCTION

Non-suicidal self-injury, which is defined as the intentional infliction of physical harm onto oneself without any suicidal ideation, constitutes a considerable public health issue, particularly among the adolescent and young adult population [1]. This conduct, which includes behaviors such as cutting, scratching, hitting, or burning, is frequently utilized as a maladaptive strategy for coping with severe emotional turmoil [2]. The prevalence of Non-Suicidal Self-Injury (NSSI) within the demographic of college and university students is significantly elevated, with reported prevalence rates typically fluctuating between 14% and 38%; however, certain research findings indicate varies depending on the type of study and population [3]. Approximately 20% of students report lifetime NSSI at college entry, with substantial variation across different populations and geographic regions [4]. A study of 2,600 respondents aged 15–35 years in Singapore revealed that the lifetime likelihood of self-harm was significantly higher

among individuals aged 15–29 years, and that females were more likely to engage in self-harm than males [5].

The transition to higher education presents unique stressors and developmental challenges that may contribute to the initiation or continuation of self-injurious behaviors. Individuals with a history of NSSI are more likely to experience suicidal thoughts compared to those without such a history [6]. Understanding the determinant factors of NSSI among college and university students is crucial for developing effective prevention and intervention strategies.

This literature review aims to synthesize current research on the determinant factors of NSSI among college and university students, with a focus on studies published between 2015 and 2025. By examining the most recent evidence, this review provides an updated understanding of the complex factors that contribute to NSSI in higher education populations and offers insights for future research and practice.

RESEARCH METHOD

This literature review was conducted through a comprehensive search of multiple academic databases, including Scopus, PubMed, PsycINFO. The search strategy employed targeted keywords related to non-suicidal self-injury, college students, university students, and determinant factors. Studies were limited to those published between 2015 and 2025 to ensure the inclusion of the most recent research findings. Studies were selected based on their relevance to NSSI in college populations, methodological quality, and contribution to understanding determinant factors. Both quantitative and qualitative studies were included to provide a comprehensive overview of the current research landscape.

RESEARCH RESULTS

Review

The determinant factors of NSSI among college students are complex and multifaceted, involving the interaction of psychological, social, environmental, and demographic variables. This section organizes empirically supported determinants into four primary categories based on recent research findings from 2015-2025 studies.

Psychological Factors

Psychological factors are among the most consistently recognized contributors to NSSI in college students. These factors frequently interact with one another and with external stressors, thereby heightening the risk of self-injurious behavior. Emotion regulation difficulties is one of psychological factors that contribute to increase a person to more likely to engage in NSSI [7]. Research has shown that emotion dysregulation interacting with trait impulsivity predicts higher NSSI trajectories in clinical adolescent populations [8]. The inability to effectively regulate emotional responses appears to drive individuals toward self-injury as a maladaptive coping mechanism.

Another psychological factor of NSSI is mental health problems. Depression and anxiety are strongly associated with NSSI. Students with concurrent depressive and anxiety disorders are at a higher risk [9]. Network analyses among college students consistently identify depressive symptoms and dysregulation nodes as strongly linked to NSSI [10,11].

Furthermore, low self-esteem and self-efficacy also play important role in NSSI risk. A study conducted to 1,153 undergraduate students at Midwestern public university revealed that factors associated with significantly higher likelihood of NSSI and suicidal ideation include

low self-esteem and self-efficacy [12]. Another study also stated that high distress and low self-efficacy relate to greater NSSI engagement [13].

Social Factors

Social factors play a critical role in both the development and maintenance of NSSI behaviors among college students. A Meta-analytic research has found a small but consistent negative association between social support and NSSI, with emotional regulation serving as a mediator in first-year students [14]. This finding highlights the protective role of social connections and suggests that interventions targeting social support may be effective in reducing NSSI risk. Social exclusion (discrimination) and rumination also contribute to NSSI behavior. A cross sectional study among 674 Chinese college students found that college students' social exclusion can directly affect the occurrence of NSSI ([15]. Perceived exclusion and interpersonal conflicts were mediators between psychological distress and self-injury [16].

Family factors and early adverse experiences also play a significant role in the risk of NSSI. Dysfunctional family dynamics - especially a weak father-child bond - greatly heighten the likelihood of NSSI [17]. Similarly, perceived parental pressure has been linked to a higher tendency to engage in NSSI, as studies indicate that stronger feelings of parental pressure correlate with an increased risk of self-injury [18]. Family conflict, poor parental communication, and low cohesion contribute to increased emotional distress and greater likelihood of NSSI [19] Childhood trauma is an early adverse experience that has been shown to be a significant predictor of NSSI [17].

Peer relationship also influence NSSI behavior among university students. Research consistently indicates that negative peer experiences such as bullying, rejection, and victimization substantially increase the risk of NSSI. For example, a cross-sectional study conducted to 2163 university students found that peer rejection and a diminished sense of social belonging are major predictors of NSSI onset during the transition to university, underscoring how social isolation increases vulnerability to self-injurious behaviors [20]. Similarly, a meta-analysis demonstrated that bullying and low social support are among the most prominent social risk factors for NSSI in young adults [21].

Bullying victimization during childhood is linked to higher NSSI risk. A cross-sectional study involving 95,833 students from 63 universities provided strong evidence that emotional abuse in childhood has a profound impact, elevating the risk of NSSI among both depressed and non-depressed individuals [22].

Environmental and Digital Factors

The modern college environment includes significant digital components that may influence NSSI risk. Specific environmental and digital factors that contribute to self-injurious behaviors including Cybervictimization and Online Harassment. Systematic reviews have established positive links between cyberbullying, cybervictimization, and NSSI in youth populations [23]. The digital nature of modern college life means that students may be exposed to online harassment and cybervictimization, which can contribute to NSSI risk.

Digital behavior and smartphone usage have also been shown to contribute to an increase in NSSI behaviors. Pioneering research employing objective measurements revealed that excessive smartphone screen time (≥ 63 hours per week) and frequent device unlocks (≥ 400 per week) are linked to a higher likelihood of NSSI among college students across multiple centers [14]. This represents one of the first studies to use objective digital measures to examine the relationship between technology use and NSSI.

Perceived academic and interpersonal pressures within university settings—such as high workload, competitive environments, and lack of stress-buffering relationships—were shown to exacerbate self-injurious behaviors, particularly when students lack adaptive coping strategies or access to supportive networks [24].

Behavioral Predictors

Longitudinal meta-analyses demonstrated that impulsivity, aggression, and risk-taking behaviors predict future NSSI engagement. Routine behaviors like substance use, physical aggression and risky experimentation are high-risk predictors. Emotional impulsivity, in particular, was highlighted as an intrinsic vulnerability to dysregulated coping [24]. Cigarette smoking also is significant factors for NSSI risk [9]. Poor sleep quality, including shorter sleep duration and the use of hypnotic medications, is associated with higher NSSI scores. A cross-sectional study involving 454 participants found a positive association between sleep duration and NSSI [17]. Another behavior factor for NSSI is passive coping strategies, such as self-blame, increase the risk of NSSI [25].

Demographic and Contextual Factors

Sexual and gender minority students face unique stressors and discrimination that may contribute to NSSI risk. Several study has revealed that Non-heterosexual students are at a higher risk for NSSI [9,10,12]Contextual factors of NSSI including life Events and Trauma. Negative life events consistently increase NSSI risk, with sex and mental health factors serving as moderators in college samples [26]. The accumulation of stressful life events can overwhelm coping resources and lead to engagement in self-injurious behaviors.

Protective Factors

Protective factors are conditions, attributes, or behaviors that reduce the likelihood of developing mental health problems or enhance a person's ability to cope with stress and adversity. They act as buffers against risk factors and help promote psychological well-being and recovery. In the context of NSSI, protective factors encompass emotional regulation and self-compassion. Higher resilience, self-compassion and forgiveness are protective factors for self-injury [27].Research indicates that self-compassion—characterized by self-kindness, mindfulness, and a sense of shared humanity—serves as a crucial buffer against NSSI by enhancing emotional resilience and recovery [28].

DISCUSSION

Social and family support represent another crucial component of protective factors against NSSI. Consistent evidence highlights social connectedness as a vital protective mechanism. A study found that peer and family support can buffer the impact of peer victimization on NSSI among Indonesian students [29]. Likewise, another study reported that resilience, self-esteem, and social support together help lessen vulnerability to NSSI associated with stress [5]. Moreover, adequate sleep and successful academic adjustment are also key components of protective factors against NSSI. Research has shown that good sleep quality and regular sleep patterns function as moderating factors that help stabilize mood and diminish intrusive self-injurious urges. Similarly, educational settings that foster emotional literacy and promote positive coping strategies serve as additional protective buffers [17].

Synthesis and Implications for Intervention

Across more than twenty international studies, NSSI among university students is identified as a complex behavioral pattern influenced by emotional fragility, exposure to risks,

and the presence of protective support systems. Core mediating factors—such as self-esteem, resilience, and social support—consistently mitigate tendencies toward self-harm. Consequently, interventions should encompass: programs that teach emotional regulation and self-compassion; early assessments to detect impulsive aggression and trauma experiences; resilience-enhancing initiatives involving families and peers; and comprehensive campus-based strategies that foster social connectedness and healthy sleep habits.

CONCLUSION

The findings reveal that determinants cluster across individual (emotion dysregulation; sleep irregularity; cognitive styles), interpersonal (cybervictimization; social exclusion; minority stress; family dysfunction), and contextual domains (recent negative life events). Protective factors include self compassion, self efficacy and social support.

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