

CULTURAL INFLUENCES ON NON-SUICIDAL SELF-INJURY IN ADOLESCENTS: A CROSS-CULTURAL PERSPECTIVE

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ZENELAJ Besmira (1), ALIKAJ Valbona (2)

(1) Child and Adolescent Psychiatrist, National Therapeutic and Rehabilitation Center for Children, e-mail: zenelajbesmira1@gmail.com, <https://orcid.org/0009-0006-1126-7618>

(2) Associate Professor, Lecturer, Department of Neuroscience, Medical University, Tirana, Albania, e-mail: alikaljv@yahoo.com, <https://orcid.org/0000-0001-5849-0557>

Address correspondence to: Besmira ZENELAJ, National Therapeutic and Rehabilitation Center for Children, "Haki Stermilli" Street, Tirana, 1001, Albania; E-mail: zenelajbesmira1@gmail.com Ph: +355693658237

Abstract

Objectives. This study examines how cultural frameworks influence the prevalence, manifestation, and interpretation of Non-Suicidal Self-Injury (NSSI) in adolescents. A brief comparative reference is made to the Albanian context as part of the broader spectrum of collectivist cultures.

Material and Methods. A narrative literature review was conducted using international databases to identify 13 empirical studies, reviews, and theoretical models addressing cultural aspects of NSSI. Frameworks such as cultural psychiatry and the Functional Model of NSSI were used to interpret the findings.

Results. NSSI is a globally observed behavior with prevalence estimates ranging from 4.3% to 29% among adolescents, but cultural variables significantly impact its disclosure, interpretation, and treatment. In some individualistic cultural contexts (for example, the United States, Canada, Western Europe), NSSI may be more frequently recognized as a mental health concern and understood in terms of psychological needs such as emotion regulation and identity formation. In contrast, certain collectivist cultural settings (for example, in Asia, the Middle East, and parts of Eastern Europe) may interpret NSSI within moral or social paradigms, viewing it as a form of deviance, familial shame, or dishonor. These cultural interpretations may delay help-seeking and reduce access to appropriate care.

Conclusions. Cultural context is a critical factor in understanding and responding to adolescent NSSI. Mental health practitioners must adopt culturally sensitive approaches that recognize the influence of societal norms, stigma, and family systems.

Keywords: non-suicidal self-injury, adolescents, stigma, cross-cultural psychiatry

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Introduction

In recent years, scholarly attention toward non-suicidal self-injury (NSSI) among adolescents has markedly increased, paralleled by a rise in empirical investigations into its prevalence and correlates. Current literature indicates an upward trend in the lifetime prevalence of NSSI in adolescent populations. A recent meta-analysis reported a global lifetime prevalence of 22.0% among non-clinical adolescent samples (Xiao et al., 2022), contrasting with earlier estimates by Swannell et al. (2014), who found a pooled prevalence of 17.2% in community-based samples.

Prevalence rates of NSSI demonstrate considerable variability across countries (Xiao et al. 2022). In China, a nationwide study involving 15,623 adolescents from rural regions found that 29% had engaged in NSSI at least once in the past year (Tang et al. 2018). In the United States, the 2015 CDC Youth Risk Behavior Surveillance System survey estimated that 6.4% to 30.8% of high school students reported NSSI (Monto et al., 2018). Similarly, a cross-sectional study encompassing 12,068 adolescents from 11 European countries reported a lifetime prevalence of 27.6% for direct self-injurious behavior (D-SIB), with 19.7% of cases classified as occasional and 7.8% as repetitive. Lifetime prevalence in these countries ranged from 17.1% to 38.6 % (Brunner et al., 2014).

Despite these variations, many studies indicate that NSSI is a common concern across diverse adolescent populations. Adolescence is a sensitive and vulnerable period of time in which a person learns methods of internalizing and externalizing emotions, and a wide range of problematic behaviors can develop as a result of learning unhealthy coping mechanisms (Lanfredi et al., 2021).

Sometimes, adolescents do express their feelings; however, parents in some cases may take a critical or neglectful attitude, which is more likely to lead to the child toward NSSI behavior (Holden et al., 2021). Other factors may also increase the likelihood of NSSI. For example, peer pressure may lead teenagers to self-mutilate in order to obtain a sense of identity and achievement. These same actions may also lead a teenager to feel embarrassment or inferiority to people around them. An adolescent may hide self-injury behavior and scars in order to avoid recalling the painful experience of the past (Burke et al., 2020).

Based on the current evidence, adolescents today may engage in NSSI through a variety of methods, which are repetitive and intentional, and moderate and severe injuries are gradually increasing. In terms of the types of NSSI, in the past, cutting was one of the main ways of self-injury, but the first three types of NSSI in this study were banging/hitting, pinching, and pulling hair. Some studies reported higher rates among adolescents with siblings or from single-parent households (Xiao et al., 2022).

Besides (neuro-) biological elements, social factors seem to play an important role in the onset and maintenance of NSSI. These factors can include parent–child or sibling relationships, peer-relationships, as well as experiences with social media or at school. Although cultural differences may influence the prevalence and nature of NSSI, research on NSSI in many non-Western countries remains limited (Brown & Witt. 2019). In a study conducted in Singapore, deliberate self-harm (DSH) was positively associated with female gender, depressive disorders, alcohol use, and forensic history, but not with smoking behavior, living arrangement, parental marital status, past abuse or family history of psychiatric illness (Lauw et al., 2018). In some Western studies, parental relationships appear to be an important factor associated with NSSI. A study conducted in 2019 in the US showed that Parental harsh punishment, low parental monitoring, and poor quality of attachment to parents predicted increased odds of subsequent adolescent NSSI onset, whereas positive parenting behaviors reduced the odds of next year NSSI onset (Victor et al., 2019).

Despite the link between culture and self-harming behaviors, the research literature on NSSI has been dominated by publications from Western countries, such as the United States, Canada, Europe and Australia, many of which focus predominantly on Caucasian samples (Chesin et al., 2013, Gratz et al., 2012).

Despite increasing recognition of the role of sociocultural frameworks in shaping adolescent self-injurious behavior, research on NSSI in South-Eastern European countries—including Albania—is still in its early stages. The purpose of this study is to review how cultural norms, values, and stigma influence the prevalence, expression, and interpretation of NSSI in adolescents. Drawing upon global literature, it highlights the ways in which cultural expectations and institutional responses may influence vulnerability or support resilience, depending on context. A brief comparative lens is applied to the Albanian context as a representative example of collectivist cultural models.

Material and Methods

Search strategy

As part of this narrative literature review, a broad search strategy was applied to identify relevant studies examining non-suicidal self-injury (NSSI) in adolescents and young adults aged 10 to 25 years, with a particular emphasis on cultural influences. Priority was given to original empirical studies and systematic reviews published in English in peer-reviewed journals between 2015 and 2025. The search keywords were: “Non-suicidal self-injury” OR “NSSI”, “Adolescents” OR “Youth” OR “Teenagers”, “Cross-cultural” OR “Social factors”, “Balkan” OR “South-Eastern Europe” OR “Albania” OR “Western Countries” OR “Non-Western Countries”, “Prevalence” OR “Risk factors” OR “Protective factors”. Studies included in this review originate from Asia, Europe, and North America, but the distribution reflects gaps in the field rather than a balanced global representation.

Inclusion and exclusion criteria

Although the search process was not strictly systematic, studies were included based on their relevance to the research objectives and their contribution to understanding NSSI across diverse cultural settings. Only articles published in English in peer-reviewed journals between 2015 and 2025 were considered, with a specific focus on empirical studies or systematic reviews examining adolescents or young adults aged 10 to 25 years. To be included, studies had to report data related to NSSI prevalence, motives, cultural interpretations, or contextual factors, and to provide identifiable cultural or regional frameworks. Studies were excluded if they focused exclusively on suicidal behavior, lacked methodological detail, or did not present empirical or theoretically relevant findings. Duplicate entries were also removed.

Data extraction and synthesis

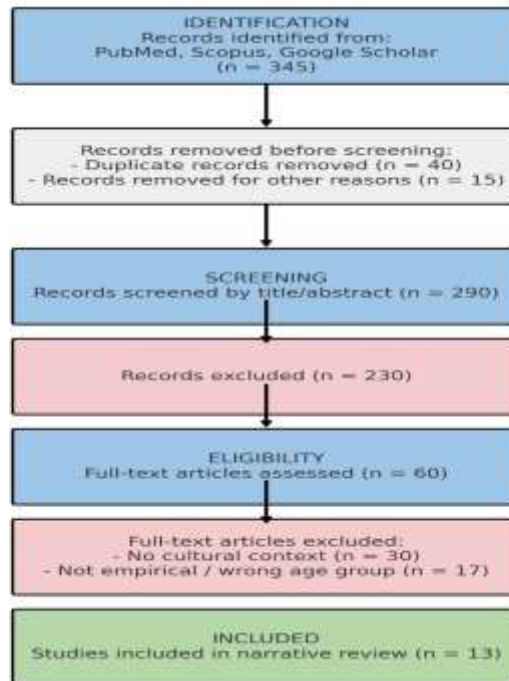
Key elements extracted from the literature included the country of origin, sample characteristics (age, gender, and population type), reported prevalence of NSSI (lifetime or 12-month), functional motivations, gender or cultural variations, and the use of theoretical frameworks or assessment instruments.

Preference was given to studies indexed in databases such as PubMed and Scopus to ensure credibility. In several cases, the original articles provided limited information about sampling procedures, representativeness, or methodological rigor, making cross-study comparisons challenging.

For this reason, a narrative synthesis approach was used, acknowledging that heterogeneity in study design and regional coverage restricts the generalizability of findings.

Figure 1

PRISMA Flow Diagram



Note. Study selection process for the narrative literature review on cultural influences in adolescent non-suicidal self-injury (NSSI). The diagram specifies the number of records retrieved from database searches (PubMed, Scopus, and Google Scholar), the number of duplicates and ineligible records excluded, the full-text articles assessed, and the final set of studies included (n = 13). Reasons for exclusion at each stage are detailed, including absence of cultural framing, lack of empirical data, or irrelevance to the targeted adolescent age range.

Table 1

Summary of Included Studies on Cultural Influences in Adolescent NSSI

Authors & Year	Country	Sample Size	Prevalence (NSSI)	Cultural Insight	Frameworks
Xiao et al. (2022)	Global	264,638	22.0% (lifetime prevalence)	Cross-cultural variation in NSSI linked to social norms and stigma	Global epidemiological meta-analysis across diverse cultures
Tang et al. (2018)	China	15,623	29.0% (past-year prevalence)	Collectivist rural norms, family hierarchy, and high stigma influence NSSI risk	Epidemiological framework focused on rural Chinese sociocultural

					context
Monto et al. (2018)	United States	CDC sample	6.4–30.8%	Individualistic U.S. norms, lower stigma, and greater emotional openness influencing NSSI patterns	Large-scale U.S. survey framework analyzing NSSI patterns through demographic and sociocultural determinants
Brunner et al. (2014)	Europe	12,068	27.6% (lifetime prevalence)	Cultural norms around family cohesion, emotional expression, and social pressure shape NSSI prevalence	Cross-country comparative framework within varied European cultural norms
Laukkanen et al. (2009)	Finland	3,185	16.0%	Finnish/Nordic cultural context—emotional reserve, autonomy, and limited disclosure of distress	Population-based framework within a Nordic cultural context
Nock (2010)	Global	No sample size, Narrative review	13% – 45%	Global theoretical perspective notes cultural and social variability in NSSI patterns and help-seeking	Integrative psychosocial risk framework within a global cultural context
Kokaliari et al. (2016)	USA & Greece	1,062	(27%) Greek student's prevalence (17%) United States students' prevalence	Individualism (U.S.) vs. collectivism and stigma (Greece) shaping NSSI patterns	Comparative sociocultural framework
Radanović et al. (2022)	Serbia	2,792	4.3% (lifetime)	Family cohesion, stigma, and social pressure influence NSSI risk	Nationally representative framework within a Serbian cultural context
Kostić et al. (2019)	Southeast Serbia	50	The study did not report prevalence rates because its objective was not epidemiological ; the sample	Gender roles, family dynamics, regional disparity	Ecological stressors and gendered coping in regional Balkan contexts

			included 50 adolescents who have been engaged in NSSI behaviors		
Chen et al. (2021)	China	25	Qualitative study based on semi-structured interviews	Collectivist norms, academic pressure, sex-bias roles, and stigma	Cultural-ecological framework identifying how cultural norms and school pressures influence NSSI
Alikaj et al. (2016)	Albania	194	Not epidemiological	Clinical Albanian context, stigma and external emotion regulation prominent	Intrapersonal and interpersonal functions of NSSI
Weedage et al. (2025)	Global	4,767	The 38.8% NSSI proportion reflects sample composition across included studies, not population prevalence	Explores resilience as a protective factor for NSSI	Integrative resilience theory
Zenelaj & Alikaj (2023)	Albania	356	15.9%	Stigma and emotional regulation in Albanian youth	Context-specific clinical–community framework within Albanian sociocultural settings

Results

Results 1

Overview of Prevalence Trends Across Cultural Contexts

The findings from the reviewed studies reaffirm that non-suicidal self-injury (NSSI) is a significant global mental health concern among adolescents, with notable variation in prevalence across different sociocultural environments. The minimum reported prevalence was 4.3% in a recent study conducted in Serbia (Radanović et al., 2022), while the maximum reported prevalence was estimated at 29% in a recent study conducted in China (Tang et al., 2018).

In terms of overall global prevalence (Xiao et al., 2022), in one of the most comprehensive meta-analyses to date, estimated a global lifetime prevalence of 22.0% in non-

clinical adolescent samples, encompassing over 264,000 participants across East Asia, North America, and Europe.

Several country-specific studies report prevalence rates that align closely with or exceed this global estimate. For instance, Tang et al. (2018) found a past-year prevalence of 29.0% among 15,623 adolescents in rural China, suggesting that in some contexts collectivist norms and academic pressure may contribute to internalized coping mechanisms such as NSSI. Similarly, Brunner et al. (2014) reported a lifetime prevalence of 27.6% across 11 European countries, showing that self-injury is reported across diverse contexts, including those with higher mental health awareness—perhaps owing to emotional distress being expressed in more visible forms.

In contrast, lower reported prevalence in some South-Eastern European studies may relate to contextual factors such as stigma, limited mental health literacy, or underreporting; however, these interpretations should be viewed with caution as the evidence remains limited. For example, Radanović et al. (2022) identified a lifetime prevalence of only 4.3% in a nationally representative Serbian adolescent sample. This difference may reflect factors such as underreporting or cultural barriers to disclosure; however, these interpretations remain tentative due to the limited evidence available. Zenelaj and Alikaj (2023) reported a 15.9% prevalence of NSSI within a mixed community–clinical cohort of Albanian adolescents. While this rate approximates global estimates, it remains indicative of potential underreporting, possibly influenced by stigma or limited mental health literacy in the Albanian context.

The wide spectrum of prevalence rates—from 4.3% in Serbia to 29.0% in China—highlights the need to interpret prevalence data in relation to cultural norms, emotional expressiveness, and help-seeking behaviors, while acknowledging significant variability across contexts. These findings align with earlier research by Muehlenkamp et al. (2012), who found significant differences in NSSI prevalence between Western and non-Western countries included in the review, attributing some of the variance to methodological issues and cultural reporting biases.

Results 2

Comparative Analysis of Prevalence Variation across Countries

Global Patterns

The lifetime prevalence of adolescent NSSI as documented by Xiao et al. (2022) in a meta-analysis is approximately 22.0% (95% CI: 17.9–26.6), closely aligned with other large-scale reviews that estimate around 18–22% globally (Esposito et al., 2023).

High-Prevalence Contexts: China, Singapore, and Europe

China: Past-year NSSI prevalence was notably high at 29.0%, which authors interpret as potentially reflecting elevated internalized distress where adolescent with higher levels of loneliness were found to be more likely to engage in NSSI (Tang et al., 2018). The same authors have conducted other research in the field and have found that emotional management ability, coping style and suicidal behaviors may impact the risk of NSSI. In an earlier study, Tang et al. (2011) reported that NSSI was associated with suicide attempts after adjustment for sex, age, depressive symptoms and suicidal ideation. In a later study, Tang et al. (2016) further demonstrated that stressful life events were significantly associated with less risk of NSSI in those who had good emotional management ability.

Singapore (2025 survey): Lifetime prevalence was 25.0%, with a past-year rate of 6.8%, indicating relatively high engagement and possible cessation over time among older youth. The

lower 12-month prevalence compared to the lifetime prevalence observed in this study could be attributed to older participants who had ceased engaging in NSSI, perhaps through professional intervention or learning of healthier coping methods with increasing maturity. While repetitive NSSI occurred less frequently (prevalence of 11.6%) amongst youths (Chang et al., 2025) the finding from a study by Daukantaitė et al. (2021) showed that both repetitive NSSI and even occasional engagement in NSSI during adolescence predicted negative mental health outcomes in young adulthood.

Europe: Across 11 countries, lifetime prevalence reached 27.6%, with cross-national variation spanning 17.1% to 38.6% (Brunner et al., 2014). In a Western cultural context, a four-factor model has been used to explain the psychological function of NSSI. Basically, this model posits that NSSI is used in one of four ways: (a) to regulate a negative emotional/cognitive state such as reducing sadness or a distressing thought, (b) to avoid or manage an unpleasant social/interpersonal situation, (c) to induce a positive inner state or (d) to elicit attention or support from others (Gholamrezaei et al., 2015).

These higher prevalence rates reported in some East Asian and European studies contrast with findings from other regions, suggesting possible socio-cultural influences such as, academic pressure, and emotional regulation styles, although the strength of these associations varies. The study conducted by Chen et al. (2021) found that sex-bias discrimination, overly high expectations, and inappropriate parenting styles may contribute to NSSI in China.

Low-Prevalence Contexts and Potential Underreporting: Southeast Europe

Serbia (Radanović et al., 2022): Lifetime prevalence was reported at 4.3%, potentially reflecting high stigma, cultural suppression, and limited research as was found in this study. The mental healthcare system in Serbia has many disadvantages and stigma related to mental health problems is still prevalent among the public (Lecic-Tosevski et al., 2010) Bilić and Georgaca (2007, p. 181) analyzed the contents of Serbia's daily press and found that newspapers stigmatized people with mental health problems and presented them “as dangerous and passive sufferers of medical conditions”.

Despite its importance, the NSSI did not get sufficient attention from researchers in Serbia. Only a few studies about NSSI in Serbian samples have been published.

The low reported prevalence should be interpreted cautiously, as it may reflect underreporting in a context where stigma toward mental health remains high. Research on NSSI in Serbia is still limited, and the few available studies likely represent only an initial insight rather than a full picture of the phenomenon. These factors suggest that the findings may be shaped by disclosure barriers and emerging research infrastructure rather than true prevalence.

Albania: Prevalence climbed to 15.9% in combined community-clinical samples (Zenelaj & Alikaj, 2023).

The 15.9% prevalence in Albania likely reflects the mixed nature of the sample (community and clinical) and increased awareness and disclosure among adolescents. Because NSSI research in Albania is still developing, this figure should be considered an early estimate rather than a representative national rate.

Table 2*Regional Variation in NSSI Prevalence, Gender Trends, and Cultural Influences*

Region/Country	Lifetime prevalence (%)	12-month prevalence (%)	Gender trend	Cultural notes
Global (meta-analytic)	22.0	~20–23	Female > Male (NA/EU)	Broad global
China	–	29.0	Not specified	Collectivism, academic stress
Singapore	25.0	6.8	Female > Male	Age-related cessation noted
Europe (multicountry)	27.6	–	Female > Male	Cultural openness + stigma effects
Finland	~16	–	Female > Male	Emotional reserve in Nordic culture
Albania	15.9	–	Female > Male	Albanian stigma and low literacy
Serbia	4.3	–	Not specified	High underreporting potential
USA (CDC)	varies (6.4–30.8)	–	Female > Male	Individualism, gender differences
Canada	~17	–	Female > Male	Western standard prevalence

Note. This table summarizes the lifetime and 12-month prevalence rates of non-suicidal self-injury (NSSI) among adolescents across different regions and countries. It highlights gender trends and provides brief cultural insights influencing NSSI expression and reporting. The data illustrate significant cross-cultural variation, with higher prevalence observed in several Western and East Asian contexts, and lower reported rates in Southeastern Europe—likely due to stigma and underreporting.

Results 3

Functional Motives and Cultural Interpretation of NSSI

Functional Models: Emotion Regulation and Social Signaling

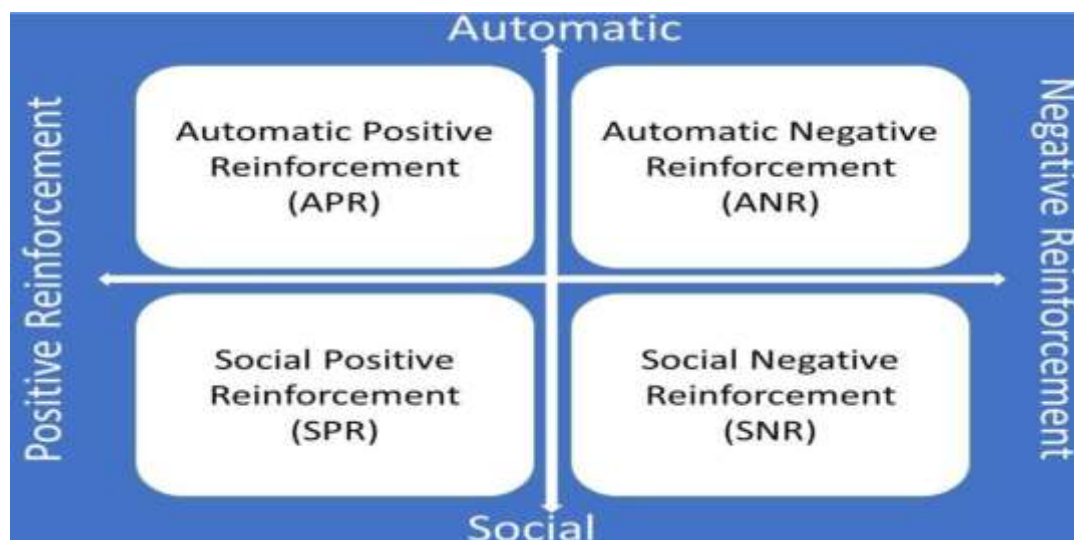
Many studies identify the role of NSSI as a maladaptive yet intentional coping mechanism. The Functional Model of NSSI, originally articulated by Nock & Prinstein (2004), identifies four primary functions: intrapersonal negative reinforcement (for example, relief from negative emotions), intrapersonal positive reinforcement (for example, feeling something when emotionally numb), interpersonal negative reinforcement (for example, escaping interpersonal demands), and interpersonal positive reinforcement (for example, gaining attention or help).

This model was applied explicitly or implicitly in multiple studies reviewed here. For example, Xiao et al. (2022) and Weedage et al. (2025) support the finding that intrapersonal motives are frequently reported across diverse samples—particularly emotion regulation—as

central to NSSI behavior globally. In Zenelaj and Alikaj (2023) findings from Albanian youth further highlight the functional use of NSSI to manage feelings of isolation, shame, or unexpressed anger.

Figure 2

Four-Function Model of NSSI



Note. This figure presents the Four-Function Model of NSSI as formulated by Nock and Prinstein (2004), which distinguishes between intrapersonal (automatic) and interpersonal (social) functions, each further divided into positive and negative reinforcement. Subsequent empirical and meta-analytic work consistently shows that intrapersonal functions (both ANR and APR) are reported more frequently than interpersonal functions, highlighting the frequent role of emotion regulation and self-related internal motives in NSSI literature.

Cross-Cultural Expression of Motives

Srinivasan Venkatesan (2024), in a narrative review on socio-cultural factors, explains that NSSI can be understood from two distinct perspectives: as an individual or private psychological act; and, as a common or shared social phenomenon.

As an individual psychological act, it is viewed as a symptom of underlying mental health issues, such as depression, anxiety, borderline personality disorder, or trauma-related disorders.

Individuals engage in NSSI as a way to cope with emotional pain, express feelings, or exert control over their bodies. It serves as a release mechanism for overwhelming emotions. As a social phenomenon, this behavior manifests within a broader socio-cultural framework, influenced by cultural, societal, and environmental determinants. Social factors, such as peer influence, societal norms, or media exposure contribute to the prevalence of such behaviors in certain groups. Different cultures interpret NSSI in varied ways. Societal attitudes impact how individuals perceive their SH behaviors and the support they receive.

Tang et al. (2018) note use self-injury to cope with family-induced pressures and that disclosure is sometimes avoided due to fear of dishonoring one’s family.

Some studies from the U.S. and Canada suggest that adolescents may view self-injury as a communication tool—ways to signal distress, draw attention, or express identity within peer groups. Monto et al. (2018) interpret NSSI not only as emotion regulation but also as a socio-relational strategy, particularly among female youth exposed to interpersonal trauma or marginalization.

Clinical vs. Community Samples: Differences in Function

Studies also reveal differences in function depending on the setting of the adolescent population. Clinical samples (Kostić et al., 2019) report multiple co-occurring motives, including trauma response, emotional numbness, and learned behavior from peers or institutional exposure. Community-based studies (for example, Brunner et al. (2014) are more likely to cite singular motives, emotion regulation, without deeper psychopathology. Weedage et al. (2025), in their systematic review, emphasize that resilience capacity and coping strategies differ significantly depending on exposure to supportive environments such as schools, families, or peer networks.

Grounded Theories and Culture-Specific Interpretations

Table 3

Cultural Interpretations and Functional Models of Adolescent NSSI

Study	Cultural Framework	Dominant Function of NSSI	Theoretical Basis
Nock (2010); Xiao et al. (2022)	Global	Emotion regulation	Functional Model of NSSI
Tang et al. (2018)	China – Collectivism	Relief from emotional pressure	Confucian norms, emotion suppression
Monto et al. (2018)	USA – Individualist	Expression of distress	Functional + sociocultural model
Chen et al. (2021)	China – Educational pressure	Silent suffering, pressure relief	Grounded theory, institutional neglect
Zenelaj & Alikaj (2023)	Albania – High stigma culture	Shame and isolation management	Stigma theory, adapted functional model
Weedage et al. (2025)	Global synthesis	Emotion regulation, resilience	Resilience and stress-buffering frameworks

Note. This table outlines key studies examining the dominant functions and cultural interpretations of non-suicidal self-injury (NSSI) among adolescents. Across global and country-specific contexts, NSSI is most commonly associated with emotion regulation (Nock, 2010; Weedage et al., 2025; Xiao et al., 2022), though social and cultural stressors shape its meaning and function. Studies from China and Albania suggest that NSSI is linked to emotional suppression, familial shame, and institutional neglect (Chen et al., 2021; Tang et al., 2018; Zenelaj & Alikaj, 2023).

Results 4

Help-Seeking Behaviors, Access to Services, and Clinical Implications in Cultural Contexts

One challenge noted across several studies is the hesitation to seek professional help, particularly in certain non-Western settings where stigma or limited mental health literacy have

been reported. While in some Western contexts such as Canada, the United States, and parts of Northern Europe, psychological help-seeking is more normalized among youth, some studies from Southeastern Europe and parts of Asia describe more restrictive help-seeking patterns. Alikaj et al. (2016), in a clinical sample from Tirana, Albania, described the help-seeking process among children and adolescents as delayed, stigmatized, and primarily mediated by crisis events rather than early recognition.

On the other hand, studies from high-resource Western countries, such as Monto et al. (2018) in the U.S. and Brunner et al. (2014) in Europe, show greater openness to disclosing NSSI, especially among adolescent girls.

Results 5

Gender, Family Dynamics, and Cultural Moderators in Adolescent NSSI

The intersection of gender roles, family dynamics, and cultural expectations may influence how adolescents engage in and interpret non-suicidal self-injury (NSSI). Many Western studies report higher NSSI rates among female adolescents. For instance, Xiao et al. (2022) report that, within North American and Western European contexts, the prevalence of NSSI is consistently higher among female adolescents compared to their male counterparts.

In their review, Gholamrezaei et al., 2015 show how family dynamic and other factors influence engagement in NSSI behaviors.

Unlike many Western studies that report higher NSSI rates among girls, some research from the Balkans shows a smaller gender difference. This may relate to context-specific factors that shape how boys and girls express or report distress, as well as how families and schools interpret these behaviors. As noted by Gholamrezaei et al. (2015), family communication patterns and culturally shaped coping styles can influence both the visibility and recognition of NSSI. In the Balkan samples reviewed, these cultural and relational dynamics may contribute to a narrower observed gender gap, though further research is needed to clarify these patterns.

Table 4

Psychological, Behavioral, and Social Correlates of NSSI Across Countries

Correlates / Risk Factors	Number of Studies	Findings	Country
Abuse/neglect history	5	History of physical, emotional and/or sexual childhood abuse and neglect identified as risk factor	Turkey, Indonesia, Taiwan, Japan
Anxiety	1	Anxiety is closely related to NSSI	China
Depressive symptoms	5	Elevated depressive symptoms identified; one study found depression not predictive after controlling for emotion regulation	Turkey, Japan, China
Dissociation	3	Strong relationship between dissociation and NSSI	Turkey, Japan
Tobacco use	3	Close correlation between tobacco use and NSSI	Japan, China

Alcohol use	5	Close correlation between alcohol use and NSSI	Japan, Turkey, China, Taiwan
Substance use	3	Substance use associated with NSSI	India, Japan, Turkey
Negative body image	1	Negative perceptions of body image associated with NSSI	China
Behavioural impulsivity	1	Higher impulsivity distinguished NSSI + SA group from NSSI group	China
Cognitive/behavioural competency	1	Higher cognitive/behavioral competency associated with NSSI	Hong Kong
Internet addiction	1	Internet addiction associated with NSSI	China
Overlap with suicide attempt	5	Strong correlation between NSSI and suicide attempt	China, Hong Kong, Indonesia, Turkey
Low SES	2	Inconsistent findings on association with low SES	China, Hong Kong
Education of father	1	Father's education (senior middle school) correlated with repeated NSSI	China
Remarried parents	1	Having remarried parents associated with NSSI	Hong Kong
Only child	2	No significant relationship between 'only child' status and NSSI	China

Note. This table presents key correlates and risk factors associated with non-suicidal self-injury (NSSI) in adolescents across various Asian countries. The most frequently identified risk factors include childhood abuse/neglect, depressive symptoms, alcohol use, and overlap with suicide attempts—each supported by findings from multiple studies. Other psychological (for example, anxiety, dissociation, and impulsivity) and behavioral factors (for example, tobacco use, substance use, internet addiction) also show significant associations with NSSI. Some sociocultural variables, such as father's education or remarried parents, were less frequently studied but showed potential links. Conversely, being an only child and low socioeconomic status (SES) produced inconsistent or non-significant findings. The data underline the multifactorial nature of NSSI and the importance of context-specific psychosocial screening.

Conclusions

This cross-cultural analysis of non-suicidal self-injury (NSSI) among adolescents reveals that, while NSSI is a globally prevalent behavior, its expression, visibility, and interpretation may be shaped by cultural norms, gender roles, family dynamics, and societal stigma.

Lifetime prevalence rates vary widely—from 4.3% in the Serbian sample to over 29% in the Chinese sample—and these differences may reflect cultural and methodological influences on disclosure and reporting rather than true differences in incidence.

Across all settings, the most frequently cited functional motive for NSSI remains emotion regulation, rooted in adolescents' difficulty articulating distress within interpersonal or institutional settings. This aligns with the Functional Model of NSSI; however, our findings also

demonstrate that cultural contexts mediate both the emotional experience and the meaning ascribed to self-injury.

Research on cultural frameworks suggests that in some contexts characterized by collectivist values—such as strong family interdependence or expectations of emotional restraint—adolescents may be less likely to openly express distress, which could influence the visibility or disclosure of NSSI. In contrast, studies conducted in contexts with more individualistic orientations have noted that some adolescents describe NSSI in relation to identity, autonomy, or peer dynamics.

Gender differences, while well-established in Western research (girls showing higher likelihood in several Western studies), are not universal. In several Asian and Balkan studies, the gender gap narrows or disappears, and in some cases, boys surpass girls in reported prevalence—likely due to differing norms of masculinity, expression, and emotional containment.

A central barrier to recovery includes limited help-seeking in some settings, shaped by cultural stigma and limited access to age-appropriate mental health services. This underlines the need for culturally responsive prevention efforts, particularly in schools, where early detection and non-stigmatizing support can be provided. Furthermore, public health policies must evolve to embed adolescent mental health into national priorities, combat stigma through education campaigns, and build multi-sectoral alliances between schools, clinics, families, and communities.

For researchers, these findings point to the necessity of context-sensitive methodologies, such as grounded theory, community-based participatory research, and mixed-methods designs that illuminate hidden narratives of self-injury. Regionally tailored investigations, especially in under-researched areas like the Balkans, Middle East, and Sub-Saharan Africa, are needed to fill significant gaps in our global understanding.

In conclusion, NSSI may be viewed both as an individual response to distress and as a behavior whose meaning is shaped by cultural and social contexts. Addressing NSSI requires not only evidence-based clinical tools, but also cultural sensitivity, interdisciplinary collaboration, and a genuine commitment to listening to young people—particularly those who have felt unheard due to stigma, fear, or limited support. Such integrative and person-centered approaches offer a pathway toward developing care systems that are more inclusive, effective, and equitable.

Limits and future directions

This review has several limitations. The search strategy was narrative rather than systematic, so some relevant studies may not have been included. The studies varied widely in design, samples, and assessment methods, which limits direct comparison and the coherence of findings. Information about sampling and representativeness was often incomplete, making it difficult to judge how accurately the results reflect local populations. Evidence was also uneven across regions, with more studies available from Western and East Asian contexts and far fewer from South-eastern Europe and other non-Western regions. In addition, some cultural interpretations were based on authors' analyses rather than adolescents' own perspectives, which may introduce bias. Because of these factors, the conclusions should be interpreted cautiously and viewed as indicative rather than definitive.

Competing interests

The authors declare no competing interests.

Ethical Approval

Ethical approval was not required for this study because it is based exclusively on previously published literature.

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