KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 16 December 2025
Revised 04 March 2026
Accepted 12 March 2026
Published online 10 July 2026

Journal of Adolescent and Youth Psychological Studies

Open peer-review report

E-ISSN: 2981-2526

Classifying Nonsuicidal Self-Injury Risk Based on Childhood Trauma, Emotion Dysregulation, Peer Rejection, and Depressive Symptoms Using a Support Vector Machine

Jean-Claude. Niyonsenga[1], Daniel. Miller[2*]

[1] Department of Clinical Psychology, University of Rwanda, Huye, Rwanda
[2] Department of Community Psychology, Trent University, Peterborough, Canada

*** Corresponding author email address**: danielmiller@trentu.ca

Editor	Reviewers
Muhammad Rizwan Associate Professor, Department of Psychology, Haripur University, Islamabad, Pakistan muhammad.rizwan@uoh.edu.pk	**Reviewer 1:** Sara Nejatifar Department of Psychology and Education of People with Special Needs, Faculty of Educational Sciences and Psychology, University of Isfahan, Isfahan, Iran. Email: s.nejatifar@edu.ui.ac.ir **Reviewer 2:** Kamdin. Parsakia Department of Psychology and Counseling, KMAN Research Institute, Richmond Hill, Ontario, Canada. Email: kamdinarsakia@kmanresce.ca

1. Round 1

1.1. Reviewer 1

Reviewer:

In the paragraph stating that “Childhood trauma represents one of the most consistently reported developmental antecedents of NSSI,” the manuscript should clarify whether childhood trauma is conceptualized as a cumulative total score, five separate maltreatment dimensions, or both. The Methods later indicates that the five domains were entered separately, whereas the Introduction often discusses trauma as a unitary construct. The theoretical justification for separating emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect should be strengthened, particularly because these dimensions are likely to be correlated and may contribute differently to the classifier. The authors should also specify whether differential hypotheses were formulated for emotional versus physical forms of maltreatment.

In the Introduction paragraph beginning “Peer rejection constitutes a further developmental risk factor,” the manuscript uses the terms peer rejection, peer problems, bullying victimization, exclusion, relational aggression, and negative peer relationships almost interchangeably. These constructs overlap but are not psychometrically identical. The authors should define the precise construct measured in the present study and explain how it differs from peer victimization, low peer acceptance, social exclusion, and broader interpersonal difficulties. This distinction is necessary because the selected instrument appears to assess

both rejection and victimization indicators, while the manuscript repeatedly labels the resulting composite only as "peer rejection."

In the measurement paragraph, the authors state that "the domain scores were used as model inputs to preserve clinically meaningful information." This decision increases the number of correlated predictors and may affect model stability. The manuscript should report the exact number of features entered into each model and provide diagnostics for multicollinearity or redundancy, even though support vector machines do not require the same assumptions as linear regression. Correlation matrices, variance inflation indicators for the comparator model, or feature-clustering analyses would help readers determine whether permutation importance was distorted by strongly correlated variables.

The depressive-symptom measure is described as the Children's Depression Inventory–Second Edition, with the self-harm item removed "to prevent criterion contamination." The authors should specify how the modified score was calculated and whether the psychometric properties of the altered scale remained adequate. Removing an item changes the scale's scoring range, potentially affects norm-based interpretation, and may invalidate comparisons with established clinical cutoffs. The authors should report the reliability of the modified score, justify the handling of the omitted item, and clarify whether raw scores or standardized scores were used.

Authors uploaded the revised manuscript.

1.2. Reviewer 2

Reviewer:

In the "Study Design and Participants" paragraph, the manuscript reports that participants were recruited from "18 schools located in Ontario, British Columbia, Alberta, and Quebec" through a multistage cluster-sampling procedure. Substantially more detail is required to evaluate sampling quality and generalizability. The authors should report how provinces, school boards, schools, and classrooms were selected; how many schools were approached and declined; whether recruitment was proportional to provincial population size; and whether public, private, urban, rural, English-language, and French-language schools were represented. The present description does not establish that the final sample was representative of Canadian adolescents.

In the same Methods paragraph, the authors state that "parental or guardian consent was obtained when required by provincial regulations, school-board policies, and institutional ethical guidelines." This wording is too vague for a study involving minors and sensitive questions about trauma, depression, self-injury, and possible suicidality. The manuscript should specify whether active parental consent, passive parental consent, mature minor consent, and adolescent assent were used, and under what circumstances. The exact research ethics board name, approval number, approval date, and procedures for protecting confidentiality from parents and school personnel should also be reported.

In the Methods sentence stating that adolescents with "an acute psychiatric condition requiring immediate clinical intervention were not included," the exclusion procedure is unclear and potentially introduces selection bias. The authors should explain how acute psychiatric status was determined before questionnaire completion, who made that judgment, and whether adolescents identified as high risk during screening were excluded from analysis or retained after safety intervention. Excluding the most clinically severe participants could artificially improve classification performance and reduce the applicability of the model to the population in which an NSSI screening tool would be most needed.

In the "Data Collection Tools" paragraph, NSSI status was defined as "at least one episode of intentional self-injury without suicidal intent during the previous 12 months." The authors should justify this threshold. A single episode may differ substantially from repetitive NSSI in clinical significance, behavioral reinforcement, medical severity, and underlying function. At minimum, sensitivity analyses should compare classification using alternative outcomes, such as any past-year NSSI, repetitive NSSI, clinically significant NSSI, and frequency-based categories. The manuscript should also explain how ambiguous intent, mixed suicidal and nonsuicidal intent, and uncertain responses were adjudicated.

The description of the Inventory of Statements About Self-Injury requires stronger psychometric and procedural detail. The sentence "Responses that indicated uncertain or possible suicidal intent were reviewed according to the study's safety protocol"

JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

does not identify who conducted the review, whether reviewers were blinded to predictor scores, or how final classification decisions were made. The authors should report inter-rater agreement if clinical adjudication was used. In addition, reliability coefficients, evidence of validity in adolescent populations, language-version validation, and any adaptations made for Canadian English or French respondents should be presented.

Authors uploaded the revised manuscript.

2. Revised

Editor's decision after revisions: Accepted.
Editor in Chief's decision: Accepted.

JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526