

Elastic Net Regression for Predicting Psychological Well-Being among Adolescents from Resilience, Self-Compassion, Gratitude, and Perceived Social Support

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E d i t o r	R e v i e w e r s
Sergii Boltivets ¹  Chief Researcher of the Department of Scientific Support of Social Formation of Youth. Mykhailo Drahomanov University, Ukraine sboltivets@ukr.net	Reviewer 1: Zahra Yousefi ¹  Assistant Professor, Department of Psychology, Khorasgan Branch, Islamic Azad University, Isfahan, Iran. Email: yousefi1393@khuif.ac.ir Reviewer 2: Faranak Saboonchi ¹  Assistant Professor, Department of Psychology, Payam Noor University, Tehran, Iran. Email: faranaksaboonchi@pnu.ac.ir

1. Round 1

1.1. Reviewer 1

Reviewer:

The paragraph beginning with “Resilience, defined as the capacity to adapt successfully to adversity and recover from stress” would benefit from a deeper discussion of the mechanisms through which resilience influences psychological well-being. Specifically, the authors should clarify whether resilience is conceptualized as a trait, process, or outcome, as these distinctions have important implications for predictive modeling and interpretation of findings.

The sentence “Self-compassion, defined as the tendency to treat oneself with kindness, acknowledge common humanity, and maintain mindfulness during periods of suffering” introduces a multidimensional construct; however, the manuscript does not explain whether the six components of self-compassion were examined separately or only as a total score. A justification for aggregating the dimensions is needed.

In the paragraph discussing gratitude, the authors state that gratitude “serves as a cognitive-emotional resource that promotes positive reframing of challenges.” This assertion would be strengthened by presenting a more detailed theoretical pathway linking gratitude to psychological well-being, particularly within adolescent developmental contexts.

The manuscript states that “Statistical significance was evaluated at the .05 level.” Since Elastic Net Regression is fundamentally a predictive rather than inferential technique, the authors should clarify how statistical significance was determined and whether p-values were calculated, as this is not standard practice for penalized regression models.

Authors uploaded the revised manuscript.

1.2. Reviewer 2

Reviewer:

The paragraph on perceived social support argues that “family cohesion, peer acceptance, and school connectedness collectively enhance adolescents’ resilience, self-compassion, and gratitude.” Given the centrality of this claim, the authors should discuss the potential overlap among predictors and explain how theoretical redundancy was addressed before model construction.

The manuscript claims that “multicollinearity among these constructs presents methodological challenges for traditional regression approaches.” However, no empirical evidence of multicollinearity (e.g., variance inflation factors, tolerance values, condition indices, or correlation thresholds) is reported. The authors should provide quantitative diagnostics supporting the need for Elastic Net Regression.

The sentence “A multistage cluster sampling strategy was used to ensure representation from urban and suburban educational settings” requires greater methodological detail. The manuscript should specify the number of schools selected, the number of clusters at each stage, cluster sizes, and the response rate to allow assessment of sampling adequacy and representativeness.

In the Participants section, the authors indicate that adolescents with “documented psychiatric conditions” were excluded. The manuscript should clarify how these conditions were identified, whether diagnosis was self-reported or verified through records, and whether exclusion may have introduced selection bias into the sample.

The description of the Ryff Psychological Well-Being Scale notes that “Cronbach’s alpha coefficients generally exceeding .80” have been reported previously. However, reliability coefficients for the current Malaysian sample are not provided. Internal consistency estimates for all instruments should be reported using the present dataset.

Across the Measures section, extensive information is provided regarding previous psychometric evidence, but there is no indication that confirmatory factor analysis or construct validity testing was conducted in the current sample. Given the multicultural Malaysian context, evidence of measurement validity should be reported.

In the Data Analysis section, the authors report that missing data “represented less than 3% of all observations and were handled using multiple imputation procedures.” The manuscript should specify the imputation algorithm, number of imputations, convergence assessment procedures, and variables included in the imputation model.

The sentence “The dataset was randomly divided into training (80%) and testing (20%) subsets” requires additional justification. The authors should explain why a single holdout split was chosen instead of repeated cross-validation or nested cross-validation, which would provide more robust estimates of model generalizability.

Authors uploaded the revised manuscript.

2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.