Comparative Analysis of Gender Differences in Academic Self-Efficacy, Motivation, School Climate, and Well-Being Among High School Student

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Abstract. Gender differences in academic self-efficacy, motivation, and school climate provide critical insights into variations in student learning experiences and outcomes. Therefore, this study aims to examine how these factors influence well-being among Indonesian high school student and explore the effect of gender on these relationships. Using a cross-sectional design, data were collected from 401 student aged 14–18 years across 36 public school in 16 provinces through an online questionnaire. The results showed that academic self-efficacy and school climate significantly and positively predicted well-being for both male and female student. Academic motivation showed no significant effect among males but had a positive influence among females. These results underscore the importance of strengthening student self-efficacy and creating supportive school environments. Furthermore, this study emphasizes the need for gender-sensitive approaches in educational programs that address motivational dynamics to effectively promote student well-being.

Keywords: adolescent, academic motivation, academic self-efficacy, school climate, student well-being

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Introduction

Student well-being is considered a central focus in contemporary educational studies. It serves as a comprehensive indicator of school effectiveness and student development. In general, well-being is not limited to academic achievement, but also predicts long- term psychological adjustment and social functioning. International reports show a rapid increase in publications addressing adolescent well-being, underscoring the significance in modern educational policies (WHO, 2023). According to the Programme for International Student Assessment (PISA) and Organization for Economic Co-operation and Development (OECD), school support, including attention to well-being, is a key determinant of an education system resilience during major disruptions, such as school closures due to the pandemic (OECD, 2016). Therefore, examining student well-being within the local context of Indonesia, characterized by cultural and school diversity, is essential for translating international reports into relevant national policies.

National data show that Indonesian adolescent face substantial cognitive, psychological, and social challenges. Adolescent aged 15-24 report lower happiness than adults (Badan Pusat Statistik, 2022), while OECD (2023) shows low academic performance and life dissatisfaction among student. High levels of psychological distress are also evident, including anxiety, hopelessness, and boredom (Rusdiana et al., 2021), with one in three adolescent experiencing mental health problems and 5.46% diagnosed with psychiatric disorders (I-NAMHS, 2022; UNICEF Indonesia, 2024). Social difficulties further compound these issues, as low social interaction and widespread bullying remain prevalent (Mumtaz & Dasalinda, 2024).

Student well-being differs by gender, with evidence consistently showing greater vulnerability among females. Previous studies have shown that female student experience higher levels of stress and emotional distress than males, partly due to biological sensitivity to stress and stronger orientation toward essence and self-development, which may intensify strain when expectations are unmet (Matud et al., 2022; Rohmatillah & Kholifah, 2021). In contrast, males tend to adopt more active coping strategies and derive life satisfaction from emotional support. Longitudinal evidence from Sweden further showed that female

student in high-pressure academic systems have steeper declines in psychological, cognitive, and social well-being than males, largely attributable to heightened academic expectations (Högberg et al., 2021; Klapp et al., 2024).

In Indonesia, studies on student well-being have grown substantially across educational levels and contexts over the past decade (e.g., Panjaitan et al., 2022; Prita et al., 2021; Rahma et al., 2020). However, studies specifically examining gender differences in well-being during senior high school remain limited and yield mixed results. National evidence further suggests that senior high school student experience higher levels of anxiety and stress than younger cohorts, showing increased vulnerability in late adolescence (Gusti et al., 2023; Soeli et al., 2021). WHO (2023) further reported that most mental health conditions develop before age 18. These results underscore senior high school as a critical developmental period and show persistent challenges to Indonesian student academic and psychological well-being.

Conceptually, student well-being is multidimensional, integrating cognitive, emotional, and social aspects that shape adolescent school experiences. The cognitive dimension relates to academic confidence and perceived competence. The emotional dimension comprises satisfaction, stress, and anxiety, while the social dimension includes relationships with teachers and peers. The literature suggests that these dimensions are interrelated, for example, academic confidence enhances emotional engagement and social interaction quality. An integrative approach examining the interactions between internal factors (e.g., self-efficacy and motivation) and external factors (e.g., school climate) is crucial for understanding how well-being develops and changes during adolescence (Wang et al., 2020).

Self-efficacy, defined as individuals beliefs in the capacity to manage challenging situations (Bandura, 1986), is a key psychological construct in education. Academic self-efficacy predicts student persistence, adaptive learning strategies, and emotional well-being, often mediating the effects of environmental support on academic and psychological outcomes (Kotera et al., 2022). Evidence from Indonesia similarly shows that higher self-efficacy is associated with greater motivation, well-being, and resilience to academic stress (Saputra & Affandi, 2024). Self-efficacy represents a critical internal determinant of student well- being and a promising target for school-based interventions (Yap & Baharudin, 2016). However, empirical evidence on gender differences in the effects of academic self-efficacy on senior high school student well-being remains limited, particularly across diverse school contexts, underscoring the need for further investigation.

Academic motivation is a key determinant of student well-being. Previous studies showed that intrinsic motivation is associated with deeper learning and higher well-being, while extrinsic motivation is more often connected to stress and short-term outcomes (Kotera et al., 2022). Evidence from Indonesia similarly shows strong associations between motivation, academic resilience, and psychological well-being among high school student (Susanto et al., 2024). However, motivational patterns may differ by gender, underscoring the importance of examining how male and female student motivational profiles influence well-being.

Self-Determination Theory states that motivation and well-being depend on the fulfillment of autonomy, competence, and relatedness, which may be differentially supported for male and female adolescent, leading to gender disparities in both motivation and well-being (Guo & Zhou, 2021; Ryan & Deci, 2017). Complementarily, Expectancy–Value Theory explains gendered motivational patterns through differences in self-beliefs and task values, with males typically reporting higher self-efficacy in STEM domains and females showing stronger motivation in literacy and collaborative tasks (Eccles & Wigfield, 2002; Kotera et al., 2022).

School climate, defined as shared perceptions of safety, relationships, instructional practices, and institutional support, is consistently related to student well-being and academic outcomes, with supportive climate promoting social–emotional development and engagement (Lombardi et al., 2019; Saragih, 2024; Varela et al., 2019). Considering school climate is modifiable through instructional practices, disciplinary policies, and inclusive interventions, it represents a key leverage point for enhancing student well-being. However, perceptions of school climate may vary across subgroups, particularly by gender, as experiences including bullying and teacher–student relationships differentially affect male and female student.

Self-efficacy, motivation, and school climate are theoretically central and empirically strong determinants of student well-being. It shapes student appraisal of academic demands, emotional regulation, and persistence, while motivation sustains engagement and positive affect through the fulfillment of psychological needs. School climate provides the social and institutional context that directly supports well-being and conditions the activation of student internal resources. From social-cognitive and ecological perspectives, student well-being develops from the interaction between individual capacities and

environmental conditions, underscoring the importance of examining these factors jointly.

Despite extensive evidence, studies in Indonesia have largely examined academic self-efficacy, motivation, and school climate in isolation, with limited attention to interactive effects and inconsistent results regarding gender differences. Based on Social Cognitive Theory, Ecological Systems Theory, and Self-Determination Theory, these constructs are considered complementary personal, contextual, and motivational factors that jointly shape adolescent well-being. This underscores the need for an integrative, gender-sensitive investigation to guide school-based interventions and policy efforts aimed at enhancing student well-being in diverse educational contexts.

In Indonesia, gender remains a key demographic factor shaping student access to education and well-being. Cultural norms often prioritize males as future providers and females in domestic roles, influencing family expectations and investment in schooling. Studies show that females, particularly in rural areas, are more vulnerable to early marriage and household burdens resulting in dropout, while males tend to remain in school but face pressures of achievement and competition (Subekti, 2025; UNESCO, 2022). Gender also shapes perceptions of school climate and motivation, with females reporting stronger intrinsic motivation and sensitivity to teacher support and males emphasizing extrinsic outcomes and peer competition (Tri Na'imah et al., 2025).

Ignoring gender poses a risk of obscuring these mechanisms, specifically as it intersects with socioeconomic status, urban-rural location, and cultural background (Indrahadi & Wardana, 2020; Putri & Dewi, 2023). Therefore, examining gender differences is crucial for theoretical clarity and for policies that promote equitable and inclusive educational practices.

Based on these theoretical and empirical foundations, this study aims to examine the roles of academic self-efficacy, academic motivation, and school climate as predictors of student well-being among public high school student in Indonesia, with particular attention to gender differences. Specifically, the study investigates the direct effect of these internal and external factors and compares the influence on well-being between male and female student to identify potential gender-specific pathways. By integrating predictor analysis with gender-based comparisons, the results will guide evidence-based educational policies and school practices that strengthen school climate and student psychological resources to promote well-being and academic success.

Methods

This study used a quantitative method with a cross-sectional design conducted through an online survey. The design was selected because it allows for the efficient collection of data from a large and geographically diverse sample, enabling the examination of multiple variables and group comparisons at a single point in time. Data collection was conducted in December 2023.

Sampling Technique and Study Participants

This study used a stratified cluster random sampling technique to capture proportional representation of school from both urban and rural areas across western, central, and eastern Indonesia. Provinces were randomly selected proportionate to region distribution (8 western, 6 central, 2 eastern), followed by the selection of urban and rural sites, then public senior high school. In total, 120 school were identified, with student participation recruited on a convenience basis. Data were collected through an online questionnaire distributed through Google Forms to public high school student aged 14–18 years enrolled in the eleventh grade. Permission letters and online questionnaire link were distributed through email, yielding 401 student who completed responses from 36 public high school (84 school failed to respond to the survey request) across 16 provinces, 14 cities, and 21 districts. Before completing the survey, participants were informed about the study objectives and provided informed consent. This study targeted a minimum of 380 student participants, based on Hair et al. (2019), who recommended a ratio of 10 respondents per parameter for Structural Equation Modeling, with 38 parameters of student well-being included in the tested model.

The sample was predominantly composed of female student (61.3%), with ages ranging from 14 to 18 years (M = 16.26). Most student (76.8%) did not receive scholarships or financial aid. Fathers education was mainly at the senior high school level (39.7%), while mothers education was primarily at the elementary level (32.7%). The majority of fathers worked as farmers (22.7%), and more than half of the mothers were housewives (52.1%). Most parents were native residents of local areas (fathers, 75.1%; mothers, 64.1%).

Measurement Instruments

Academic self-efficacy was assessed with the Morgan–Jinks Student Efficacy Scale, which used a four-point Likert scale (1 = strongly disagree to 4 = strongly agree) and showed good validity as well as reliability (Cronbach's α = .821, CR=.75, AVE=.50). Academic motivation was measured using the Academic Motivation Scale – High School Version (Vallerand et al., 1992), also rated on a four-point Likert scale, with

satisfactory validity and reliability (Cronbach's α = .887, CR=.79, AVE=.59). School climate was evaluated using the Socio-Educational Environment Questionnaire, which used a four-point Likert scale and showed high validity and reliability (Cronbach's α = .891, CR=.84, AVE=.52). The instruments were translated from English into Indonesian and adapted to be consistent with participant charachteristics and the study context. The instruments were selected for theoretical relevance and precise measurement of the study variables in senior high school student.

Student well-being was assessed using an instrument developed with reference to the Student Well-Being Model (Soutter et al., 2014). The model is relatively new, distinct from existing approaches, and enables analysis of interactions and causal links among well-being components. This instrument comprises seven dimensions and 36 indicators, which were operationalized into items measuring student well-being. On a four-point Likert scale (1 = strongly inappropriate to 4 = strongly appropriate), this instrument yielded excellent internal consistency (Cronbach's α = .926), validity, and reliability (CR=.99, AVE=.59).

Data Analysis

Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 26.0 for Windows and R package. Descriptive statistics were first computed to examine the data distribution of multiple indicators. Specifically, Multiple Indicators Multiple Causes (MIMIC) models with R package were used to assess gender differences in academic self-efficacy, motivation, school climate, and student well-being. Multiple linear regression analyses were then performed separately for male and female groups to examine the predictive effects of academic self-efficacy, academic motivation, and school climate on student well-being.

Given that the observed variables were measured on ordinal scales, the MIMIC model was estimated using a robust estimator appropriate for categorical data (e.g., WLSMV). This approach does not assume multivariate normality and is suitable for modeling polychoric correlations among ordinal indicators. Before structural analysis, confirmatory factor analysis (CFA) was conducted to ensure unidimensionality and adequate factor loadings of the latent constructs. Model fit was evaluated using CFI, TLI, RMSEA, and SRMR. Missing data were handled using a full-information approach, allowing all available observations to contribute to the estimation under the assumption of missing at random.

Results and Discussion

Descriptive Statistics

The mean score for academic self-efficacy was 58.08 for males and 63.36 for females (Table 1). A greater proportion of female student (54.1%) scored above the average category compared to males (25.8%). The mean scores for academic motivation were 47.24 (male) and 53.88 (female), with 54.9% of females and 34.2% of males falling above the average range statistically determined from the sample mean.

Regarding school climate, mean scores were 66.21 for males and 68.32 for females, with a higher proportion of females (44.3%) reporting above-average perceptions compared to males (36.8%). The mean student well-being scores were 64.59 (male) and 66.75 (female), with 49.6% of females and 41.9% of males in the above-average category.

Gender Differences

A MIMIC model analysis was conducted to examine the effect of gender as a covariate on academic self-efficacy, academic motivation, school climate, and student well-being. The model showed good fit, as shown by a Comparative Fit Index (CFI) of .928, a Tucker-Lewis Index (TLI) of .910, both exceeding the critical threshold of > .90, SRMR of .049 (< .08), and χ^2/df of 4.02 (Table 2). Although the RMSEA value suggested a marginal fit (.087), the convergence of multiple fit indices supports the adequacy of the model for supporting the use in interpreting gender differences across academic self-efficacy, academic motivation, school climate, and student well-being.

CFA was used to establish construct validity before testing the MIMIC model. The results showed all indicators of academic self-efficacy, academic motivation, school climate, and student well-being had factor loadings above the recommended threshold of 0.50, thereby confirming the construct validity of the measurement model (Table 3).

The MIMIC Model analysis examined the effect of gender as covariate on academic self-efficacy, academic motivation, school climate, and student well-being. The results in Table 4 show that gender exerted a significant effect on academic self-efficacy (Estimate = 2.831, p = .001, effect size = .311) and academic motivation (Estimate = 1.463, p = .005, effect size=.142). There were clear gender differences in student learning motivation and confidence in academic abilities. In contrast, gender did not significantly predict school climate (Estimate = .158, p = .459, effect size = .041) or well-being (Estimate = .252, p = .114, effect size = .082), showing that differences between male and female student in these domains were not statistically significant.

Table 1
Statistical Description of Academic Self-Efficacy, Academic Motivation, School Climate, and Student Well-being Based on Gender

	Male			Female		
Domain Variable	**n**	**Mean**	**SD**	**n**	**Mean**	**SD**
Academic Self-Efficacy	155	58.08	8.957	246	63.36	10.383
Academic Motivation	155	47.24	13.431	246	53.88	13.014
School Climate	155	66.21	13.462	246	68.32	12.948
Student Well-being	155	64.59	12.185	246	66.75	12.803

Table 2
Model Fit Test

Fit Index	**Critical threshold**	**Conclusion**
CFI = .928	≥ .90	Model fit
TLI = .910	≥ .90	Model fit
RMSEA=.087	≤ .08	Model marginal fit
SRMR=.049	≤ .08	Model fit
χ^2/df= 381.803/95=4.02	≤ 5.0	Model fit

Table 3
Measurement Model

Latent construct	**Indicators**	**Estimates**	**Critical threshold**	**Conclusion**
Academic self-efficacy	Context	.896	≥ .50	valid
	Effort	.589	≥ .50	valid
Academic motivation	Intrinsic motivation	.976	≥ .50	valid
	Extrinsic motivation	.843	≥ .50	valid
School climate	Student-teacher relationships	.733	≥ .50	valid
	Student-student relationships	.650	≥ .50	valid
	Justice climate	.760	≥ .50	valid
	Academic climate	.771	≥ .50	valid
Student well-being	Having	.677	≥ .50	valid
	Being	.770	≥ .50	valid
	Relating	.828	≥ .50	valid
	Feeling	.848	≥ .50	valid
	Thinking	.856	≥ .50	valid
	Functioning	.761	≥ .50	valid
	Striving	.638	≥ .50	valid

Regression Analysis for Male Student

Multiple regression analysis for male student showed a significant overall model ($p < .01$), with an adjusted R^2 of .580, suggesting that 58% of the variance in well-being was explained by the predictors. Academic self-efficacy and school climate had significant positive effects on student well-being, showing that higher self-efficacy and more favorable perceptions of school climate were associated with greater well-being among males. However, academic motivation did not have a significant effect on well-being (Table 5).

Regression Analysis for Female Student

The regression model for female student was also significant ($p < .01$), with an adjusted R^2 of .634, explaining 63.4% of the variance in well-being. Academic self-efficacy, motivation, and school climate were all positively associated with well-being, while mothers education level showed a negative relationship (Table 6).

Discussion

This study examined gender differences in student well-being and the key predictors, namely academic self-efficacy, motivation, and school climate, among Indonesian public senior high school student. Overall, the results show no significant differences in levels of well-being or perceptions of school climate between male and female student. This suggests that when student are exposed to comparable academic demands, learning environments, and social expectations, overall well-being tends to converge across genders. In contrast, significant gender differences were found in academic self-efficacy and motivation, with female student reporting higher levels of both. Further analyses showed that academic self-efficacy and school

Table 4
MIMIC Model Analysis

Laten~Covariates	Estimate	p	Cut-Off	Std. Estimates	Conclusion
Academic self-efficacy~gender	2.831	.000	< .05	.311	Significant
Academic motivation~gender	1.463	.005	< .05	.142	Significant
School climate~gender	.158	.459	< .05	.041	Not significant
Student well-being~gender	.252	.114	< .05	.082	Not significant

Table 5
Results of Multiple Regression Analysis among Male Student

	Student Well-being		
Domain Variable	**B**	**Beta**	**Sig**
(Constant)			.477
Age (year)	.215	.110	.833
Scholarship status (0 = not recipient; 1 = recipient)	-.542	-.200	.717
Father's education level	.209	.018	.766
Mother's education level	.293	.026	.674
Academic self-efficacy	.259	.286	.001*
Academic motivation	.072	.053	.506
School climate	.471	.520	.000*
R^2			.599
Adj R^2			.580
F			31.425
Sig			.000*

Table 6
Results of Multiple Regression Analysis among Female Student

	Student Well-being		
Domain Variable	**B**	**Beta**	**Sig**
(Constant)			.348
Age (year)	-.159	-.008	.843
Scholarship status (0 = not recipient; 1 = recipient)	1.648	.052	.208
Father's education level	-.300	-.024	.638
Mother's education level	-1.428	-.129	.013**
Academic self-efficacy	.150	.152	.007**
Academic motivation	.296	.240	.000**
School climate	.500	.506	.000**
R^2			.644
Adj R^2			.634
F			61.567
Sig			.000**

climate were significant predictors of well-being for both genders, while motivation predicted well-being only among females.

The absence of gender differences is consistent with Subjective Well-Being theory, stating that well-being is shaped by the interaction of internal and external dispositions rather than by gender alone (Diener, 1984). In line with previous Indonesian and international studies, contextual factors such as teacher support, peer relationships, and classroom interactions appear to play a more decisive role than gender in explaining student well-being (Alwi et al., 2020; Putri & Retnowati, 2019; Tian et al., 2015). Similarly, perceptions of school climate did not differ by gender, supporting School Climate Theory, which conceptualizes climate as a shared institutional experience shaped by collective practices, policies, and social norms (Cohen et al., 2009). When school foster inclusive, supportive, and safe environments, student, regardless of gender, tend to evaluate the school climate in similar ways.

The result showing that female student reported higher academic self-efficacy and motivation is consistent with previous evidence suggesting female adolescent are often more organized, mastery-oriented, and responsive to feedback and social support (Askara et al., 2024; Kotera et al., 2022). From a Social Cognitive Theory perspective (Bandura, 1997), these characteristics potentially provide female student with more frequent mastery experiences and positive reinforcement, which strengthen efficacy beliefs. However, the effect of academic self-efficacy on well-

being did not differ by gender, showing that confidence in academic capabilities serves as a universal psychological resource. Student who manage academic tasks more effectively tend to experience greater emotional regulation, resilience, and satisfaction, regardless of gender. This result reinforces earlier studies showing that the relationship between self-efficacy and well-being operates similarly across male and female student (Taheri et al., 2023; Zhen et al., 2017).

A different pattern was found for academic motivation. Although female student motivation was positively associated with well-being, motivation had no significant effect among males. This gender-specific effect can be explained through Self-Determination Theory (Deci & Ryan, 2000), stating that well-being is closely related to motivation grounded in autonomy, competence, and relatedness. Female student motivation may be more intrinsically oriented and closely tied to social connection, meaning-making, and mastery goals, making it more salient for psychological well-being. In contrast, male student may rely more on extrinsic or competitive motives, which may support performance but do not necessarily translate into enhanced well-being. This interpretation is consistent with previous studies showing that intrinsic motivation is more strongly associated with emotional well-being than extrinsic forms (Koludrović & Ercegovac, 2015; Parhiala et al., 2018; Pekrun, 2002).

School climate was identified as a consistent and significant predictor of well-being for both genders. This underscores the importance of the learning environment as a shared contextual resource. From an ecological perspective (Bronfenbrenner, 1979), school function as a central microsystem that directly shapes student emotional and behavioral development. Supportive teacher–student relationships, a sense of safety, and fair academic practices contribute to student feelings of belonging and psychological security, which in turn enhance well-being. The lack of gender differences in this relationship suggests that the benefits of a positive school climate are broadly experienced and not gender-specific, a result consistent with previous reviews and empirical studies (Konishi et al., 2017; Wang & Degol, 2016).

Several limitations should be considered when interpreting the results. The use of a cross-sectional, self-report design limits causal inference and may be subject to response bias. Although the sample included student from multiple provinces, participants were restricted to Grade 11 student in public school, limiting generalizability to other age groups and school types. In addition, the study focused on three predictors, and other influential factors such as family support, socioeconomic status, and peer dynamics were not examined. Future studies would benefit from longitudinal or mixed-method approaches, more balanced sampling, and a broader range of contextual variables to capture the complexity of student well-being.

Despite these limitations, the results offer important theoretical and practical implications. This study strengthens the integration of social-cognitive, motivational, and ecological frameworks by showing that academic self-efficacy and school climate function as universal predictors of student well-being, while academic motivation operates in gender-specific ways. Practically, school should prioritize efforts to enhance self-efficacy and foster a supportive school climate for all student. At the same time, gender-responsive strategies are needed. Interventions that nurture intrinsic motivation and manage academic pressure may be particularly beneficial for female student, while initiatives capable of strengthening self-efficacy, engagement, and social support may better address the needs of males. Collectively, these results underscore the importance of holistic, context-sensitive approaches to promoting adolescent well-being in diverse educational settings.

Conclusion

In conclusion, student well-being in Indonesia remains relatively low across several indicators and requires targeted efforts to enhance educational outcomes. Well-being is shaped by the dynamic interaction of contextual factors that influence student academic and psychological functioning. This study found no significant gender differences in overall well-being and school climate. However, female student reported higher levels of academic self-efficacy and motivation than male counterparts. Regression analyses showed that academic self-efficacy and school climate consistently and positively predicted well-being across genders. In contrast, academic motivation showed a gender-specific pattern showing significance among female student but not among males. These results suggest that although a sense of competence and a supportive school environment universally promote well-being, motivational pathways toward well-being may differ by gender.

This study contributes to the growing body of literature on adolescent well-being by providing empirical evidence from a culturally diverse developing context and showing gender-based variations in the mechanisms connecting psychological and environmental factors to well-being. The results emphaisze the critical role of self-efficacy and school climate as key levers for promoting well-being. School should foster participatory learning environments that strengthen confidence and mastery experiences through constructive feedback and inclusive classroom

practices. Guidance and counseling programs are encouraged to specifically address motivational challenges among male student. Finally, this study underscores the importance of embedding psychological well-being within holistic education frameworks. Educational policies and curricula should strive to balance academic achievement with emotional engagement, happiness, and belonging. Future studies should incorporate additional contextual variables, such as social support, family relationships, and personality traits, to build a more comprehensive understanding of the determinants of student well-being in Indonesia.

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Author Contributions

Conceptualization: [NHW, TR, LR]; Methodology: [NHW, TR, LR]; Data collection and investigation: [NHW]; Data analysis: [NHW, TR, LR]; Writing—Original Draft Preparation: [NHW, TR, LR]; Writing—Review & Editing: [NHW, TR, LR]; Supervision: [TR, LR].

Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Use of Artificial Intelligence

The authors declare that no Artificial Intelligence (AI) or AI-assisted technologies were used in the creation of this manuscript.

Ethical Clearance

The study protocol was approved The Committee on Research Ethics at the Faculty of Psychology, Universitas Indonesia number 231/FPsi.Komite Etik/PDP.04.00/2023 and all participants provided informed consent.

Data Availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

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