

Research Article

Growth Mindset and Subjective Well-Being Among Elementary School Students: The Mediating Role of Academic Self-Efficacy and the Moderating Role of Perceived Teacher Support

Iqo Riqotul Umami

Universitas Majalengka, Indonesia

iqoumami@gmail.com

Nur Amalina

Universitas Majalengka, Indonesia

amalinan361@gmail.com

Uwaimir Ahad

Universiti Teknologi Mara, Malaysia

uwaimirahad.pmucs@gmail.com

Abstract: This study aims to examine the influence of growth mindset on subjective well-being in elementary school students, with academic self-efficacy as the mediator and perceived teacher support as the moderator. The urgency of this research is based on the importance of students' subjective well-being as a factor supporting academic and psychological development. The novelty of this research lies in the integration of growth mindset, academic self-efficacy, and perceived teacher support into a single research model within the elementary school context. The study employed a quantitative approach with a cross-sectional design involving 240 elementary school students in West Java selected through purposive sampling. Data were collected using a questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results showed that growth mindset positively influenced subjective well-being. Academic self-efficacy mediated this relationship, while perceived teacher support strengthened the influence of growth mindset on academic self-efficacy. These findings confirm that students' subjective well-being is influenced by internal psychological factors and a supportive learning environment. Therefore, strengthening growth mindset, academic self-efficacy, and teacher support is crucial in efforts to improve the subjective well-being of elementary school students.

Keywords: academic self-efficacy, elementary school students, growth mindset, perceived teacher support, subjective well-being.

Corresponding Author:

Iqo Riqotul Umami

iqoumami@gmail.com

How to Cite: Umami, I. R., Amalina, N., & Ahad, U. (2026). Growth mindset and subjective well-being among elementary school students: The mediating role of academic self-efficacy and the moderating role of perceived teacher support. *GENFABET: Jurnal Pendidikan Dasar*, 3(1), 70-84. <https://doi.org/10.70152/genfabet.v3i1.441>

Article submitted 2026-08-08. **Revision uploaded** 2026-08-21. **Final acceptance** 2026-08-21.

Copyright © 2026 by the authors of this article. Published under CC BY-SA 4.0.



This is an **open access** article.  **OPEN ACCESS**

INTRODUCTION

Subjective well-being is an important aspect of elementary school students' development because it reflects their psychological functioning and their perceptions of everyday academic and social experiences. Subjective well-being is an essential component of individual happiness and is shaped by various factors, including personality characteristics and interpersonal relationships (Almeida & Ramos, 2025). Recent evidence from a large-scale survey of fourth- and fifth-grade students indicates a concerning decline in subjective well-being among elementary school students (Peng et al., 2025). Low levels of well-being during childhood are particularly concerning because they may be associated with difficulties in academic adjustment and psychological distress in subsequent developmental stages (Cai et al., 2025). One factor that may help explain differences in students' well-being is how they perceive their own abilities, particularly whether such abilities are viewed as fixed or capable of development (Cai et al., 2024). From this perspective, adopting a growth mindset may represent a promising psychological resource because it encourages students to interpret failure and academic difficulties as opportunities for learning and improvement rather than as evidence of limited ability (Zhao et al., 2023).

Having a growth mindset doesn't always work on its own to determine well-being. It works through several psychological mechanisms and is influenced by the social context in the classroom. Recent research on teenagers shows that the effect of a growth mindset on well-being can be mediated by self-confidence and gratitude, showing a complex psychological mediation pathway (Zhao et al., 2023). On the other hand, some studies confirm that teachers' beliefs and teaching practices affect how much students' growth mindsets show up in their learning behavior (Yu et al., 2022). Also, some teacher behaviors can clearly show their support for the belief in a growth mindset (Kroeper et al., 2022). The relationship between growth mindset and students' subjective well-being can also be explained through Social Cognitive Theory, which posits that individuals' beliefs about their capabilities shape their motivation, learning behavior, and psychological adjustment in academic settings and consequently, academic self-efficacy represents a theoretically meaningful mediating mechanism through which growth mindset contributes to students' subjective well-being and adaptive functioning in elementary education (Tang & Zhu, 2024). Recent empirical evidence further demonstrates that students with a stronger growth mindset are more likely to develop higher academic self-efficacy because they perceive learning difficulties as opportunities for improvement rather than as indications of limited ability (Yeager et al., 2022).

Beyond individual psychological resources, the classroom environment constitutes an important contextual factor that determines whether students' growth mindset can be translated into meaningful academic and psychological outcomes (Vestad & Bru, 2024). Teacher support provides emotional encouragement, constructive feedback, and learning opportunities that strengthen students' confidence in overcoming academic challenges while reinforcing the positive effects of growth mindset on academic self-efficacy (Laine & Tirri, 2023). Therefore, integrating perceived teacher support as a moderating variable offers a more comprehensive explanation of the conditions under which growth mindset and academic self-efficacy jointly promote elementary school students' subjective well-being (He et al., 2023).

Even so, most previous studies have still focused on the direct relationship between growth mindset and academic or emotional outcomes separately, and not many have simultaneously

integrated the role of academic self-efficacy as a mediator along with teacher support as a moderator in a single model for elementary school students (Ma et al., 2023). This gap is what becomes the research gap that this study aims to fill with its novelty, namely by constructing a moderated mediation model that combines all three elements as a whole. However, the existing evidence also indicates that the relationship between growth mindset and subjective well-being should not be interpreted as a uniform process that operates independently of students' developmental and educational contexts. Elementary school students are still developing beliefs about their academic competence and are highly dependent on interactions with teachers when interpreting success, failure, and academic difficulty.

Therefore, the extent to which growth mindset is translated into stronger academic self-efficacy and, subsequently, greater subjective well-being may depend on the extent to which students perceive their teachers as supportive, encouraging, and responsive to their learning needs. This contextual perspective is important because a positive individual belief may have limited practical consequences when the surrounding learning environment does not provide sufficient opportunities for students to experience progress and competence. Furthermore, although recent research has provided evidence for the mediating role of academic self-efficacy and the moderating role of perceived teacher support in the relationship between growth mindset and subjective well-being, the generalizability of this mechanism across different elementary school contexts remains an important empirical question.

Previous findings cannot automatically be assumed to apply equally across educational settings because differences in classroom interactions, teacher practices, cultural expectations, and students' learning experiences may shape the way psychological beliefs are developed and expressed. Accordingly, further investigation is required to examine whether the proposed mechanism remains consistent in a different elementary school context. Addressing this issue is important not only for strengthening the empirical evidence concerning growth mindset and subjective well-being but also for determining whether academic self-efficacy and perceived teacher support represent meaningful mechanisms and contextual conditions for promoting students' psychological well-being.

The importance of this research is additionally compounded by the key impact that elementary school places on self-efficacy development, which then will cast a long shadow on students' psychological paths at later stages in their education (Cai et al., 2024). Moreover, school-designed interventions can have no or only small effects if schools do not provide sufficient supportive mechanisms and apply to settings with few students perceiving teacher support (Cai et al., 2025). This study represents an important piece of evidence that simultaneously illustrates the protective role of academic self-efficacy and teacher support, which may help teachers and educational policymakers to offer more targeted approaches in strengthening students' fitness (Peng et al., 2025). Despite this, it should be acknowledged that the study has limitations such as its cross-sectional nature limiting causal inferences and self-report data which is subject to social desirability bias, similar to recent studies investigating mindset measures for children (Ma et al., 2023).

Based on the problem description, gaps, and relevance discussed above, this study aims to examine the influence of a growth mindset on the subjective well-being of elementary school students by examining the mediating role of academic self-efficacy and the moderating role of perceived teacher support in this mediation mechanism. Specifically, this study aims to answer the following questions: how does a growth mindset influence students' subjective

well-being, both directly and through academic self-efficacy, and how the strength of this influence varies depending on the level of teacher support. To this end, three hypotheses are proposed:

H1: A growth mindset has a positive influence on the subjective well-being of elementary school students.

H2: Academic self-efficacy mediates the relationship between a growth mindset and the subjective well-being of elementary school students.

H3: Perceived teacher support moderates the influence of a growth mindset on the academic self-efficacy of elementary school students.

THEORETICAL FRAMEWORK

Growth mindset

The independent variable is "growth mindset," defined as a person's belief that abilities and intelligence can be developed through effort, strategy, and guidance, as opposed to a fixed mindset, which views abilities as innate and unchangeable traits. The underlying theory behind this variable is mindset theory, which explains that people with a growth mindset tend to interpret failures or difficulties as opportunities for learning and development, enabling them to maintain positive emotions despite setbacks. This differs from people with a fixed mindset, who perceive failure as a threat to self-esteem, making them more susceptible to feelings of helplessness and negative emotions. This variable is traditionally measured using the Implicit Theories of Intelligence Scale (Gál et al., 2022), which is widely used and has proven its validity in elementary schools. Recent research supports the relevance of this theory, showing that students' mindset profiles are dynamic and significantly associated with changes in academic achievement throughout elementary school (Qi et al., 2024), and that teachers' beliefs and teaching practices influence the extent to which students' growth mindsets translate into actual learning behaviors (Yu et al., 2022).

Academic Self-Efficacy

Academic self-efficacy serves as a mediating variable, defined as an individual's belief in their ability to successfully complete academic tasks. The primary theory underlying this variable is social cognitive theory, which explains that self-efficacy is formed from four primary sources: the experience of achieving success, vicarious experience, verbal persuasion, and physiological-emotional states (Zimmerman, 2000). In the educational context, these four sources interact reciprocally between beliefs, behavior, and the environment (triadic reciprocal causality), so beliefs based on a growth mindset must be "confirmed" by successful real-life experiences to develop into sustainable academic self-efficacy. Subscales from the Adaptive Learning Scale (Zeinalipour, 2021) are commonly used to measure this variable. Recent studies have confirmed the crucial role of this variable, showing that self-efficacy acts as a mediator between growth mindset and meaning in life in adolescents (Zhao et al., 2023b), and that adolescents' emotional-behavioral profiles are closely related to the level of self-efficacy shaped by autonomy support from teachers (Ma et al., 2023).

Perceived Teacher Support

Perceived teacher support served as the moderator variable, defined as students' perceptions of teachers' supportive attitudes and behaviors in their academic lives (Jia et al., 2009). The main theory underlying this variable is the growth-situation theory (Yeager et al., 2019), which posits that growth-mindset beliefs require external contextual support, including from teachers, to be transformed into positive academic thinking and behavior. This theory explains that under conditions of high teacher support, a growth mindset has a

catalytic effect on students' cognitive performance, while under conditions of low support, its effect is suppressed. This variable is typically measured using the subscales of the School Climate Scale for Adolescents lives (Jia et al., 2009). Recent research strengthens this theoretical framework by demonstrating that teacher support strengthens the relationship between growth mindset and student reading achievement and showing that certain teacher behaviors can clearly signal growth mindset commitment to students and create a supportive classroom climate (Kroeper et al., 2022).

Subjective Well-Being

The dependent variable is subjective well-being, defined as an individual's cognitive appraisal and affective experience of overall life satisfaction, including positive and negative emotions, as well as life satisfaction (Diener et al., 2015). This variable is based on cognitive behavioral psychology theory, which posits that an individual's core beliefs, including growth mindset and self-efficacy, are significant predictors of psychological well-being (Li et al., 2025). This theory is supported by self-determination theory (SDT) (Deci & Ryan, 2000), which explains that satisfying an individual's basic psychological needs (autonomy, competence, and relatedness) through positive cognitive beliefs can enhance life satisfaction and overall subjective well-being. This variable is commonly measured using the Subjective Well-Being Scale for Children and Adolescents. The relevance of this indicator is supported by recent research showing a decline in subjective well-being in elementary school students, making the study of mechanisms of its improvement through growth mindset, academic self-efficacy and teacher support a relevant and urgent research task (Eckert et al., 2025).

METHODS

Research Design

This study employed a quantitative, non-experimental research design with a cross-sectional survey approach. The design was selected because the study sought to examine the hypothesized relationships among growth mindset, academic self-efficacy, perceived teacher support, and subjective well-being based on data collected at a single point in time. The study was guided by a deductive framework in which the proposed relationships were derived from relevant psychological and educational theories and subsequently examined using statistical procedures. The analytical model consisted of a direct relationship between growth mindset and subjective well-being, an indirect pathway through academic self-efficacy, and an interaction between growth mindset and perceived teacher support in predicting academic self-efficacy (Hayes, 2013). Because the data were collected cross-sectionally, the findings are interpreted as statistical associations rather than definitive evidence of causal relationships (Peng et al., 2025).

Population and Sample

The target population comprised elementary school students enrolled in upper-grade classes in West Java, Indonesia. Participants were selected using purposive sampling based on predetermined inclusion criteria. Students were eligible to participate if they were enrolled in Grade 4 or Grade 5, were present during the data-collection period, and were able to understand and respond independently to the questionnaire items. These criteria were established to ensure that participants had sufficient academic experience to provide meaningful responses concerning their learning beliefs, academic self-efficacy, perceptions of teacher support, and subjective well-being. A total of 240 students participated in the study, consisting of 124 male students (51.7%) and 116 female students (48.3%). The participants included 104 Grade 4 students (43.3%) and 136 Grade 5 students (56.7%). Most

participants were between 10 and 12 years old ($n = 236$, 98.3%), while two students were 9 years old (0.8%) and one student was 13 years old (0.4%). The final sample size was considered adequate for the proposed PLS-SEM model and exceeded the minimum sample requirement estimated using the initial sample-size assessment. Participants were recruited through the participating schools, and data collection was conducted during regular school hours under researcher supervision.

Research Instruments

Data were collected using a structured self-report questionnaire consisting of 38 items representing four latent constructs: growth mindset, academic self-efficacy, perceived teacher support, and subjective well-being. All items were presented using a four-point Likert-type response scale ranging from 1 (strongly disagree) to 4 (strongly agree). A four-point response format was selected to provide a clear response direction for elementary school students and to avoid the inclusion of a neutral midpoint. Before administration, the questionnaire was reviewed to ensure that the wording was understandable and appropriate for the developmental characteristics of the participants.

Growth mindset was assessed using eight adapted items based on the instrument developed by Wilson (2016). The items were intended to capture students' beliefs concerning the development of ability, responses to academic challenges, persistence, and reactions to difficulty. Academic self-efficacy was measured using eight items adapted from Zhong et al., (2023), focusing on students' confidence in managing and accomplishing academic tasks. Perceived teacher support was assessed using 15 adapted items based on Serrão et al., (2024) and Rautanen et al., (2021), covering students' perceptions of teacher-related academic and social support. Subjective well-being was measured using seven adapted items derived focusing on students' positive experiences, school-related well-being, and perceptions of their educational experiences. Because the instruments were adapted from previously developed measures, the adaptation process involved reviewing item relevance, wording, and suitability for elementary school students before the questionnaire was administered. Where necessary, item wording was adjusted to fit the Indonesian elementary school context without changing the intended meaning of the original constructs. The complete list of questionnaire items, response categories, original sources, and adaptation procedures should be provided in a supplementary table or appendix to ensure transparency and facilitate replication.

Validity and Reliability

The quality of the measurement model was evaluated before testing the structural relationships. Indicator reliability was assessed using standardized outer loadings, with values of approximately 0.70 or higher considered desirable, while lower loadings were evaluated based on their contribution to construct reliability and convergent validity. Internal consistency reliability was examined using Cronbach's alpha, ρ_A , and composite reliability (CR), with values of 0.70 generally regarded as acceptable for established constructs (Hayes, 2013). Convergent validity was assessed using the Average Variance Extracted (AVE), with a recommended minimum value of 0.50. Discriminant validity was examined using the Fornell–Larcker criterion and the Heterotrait–Monotrait ratio (HTMT), with HTMT values below 0.90 used as the primary criterion for distinguishing between conceptually related constructs (Fornell & Larcker, 1981). These procedures were conducted using SmartPLS 4 in accordance with established recommendations for PLS-SEM measurement-model assessment.

RESULT

Prior to testing the proposed hypotheses, descriptive statistical analysis was performed to examine the general characteristics and distributional properties of the study variables. Table 1 presents the descriptive statistics for all four constructs. Mean scores indicate consistently positive responding across all variables. Growth Mindset recorded the highest mean ($M = 3.592$, $SD = 0.224$), suggesting students generally hold strong beliefs in the malleability of intelligence. Academic Self-Efficacy followed closely ($M = 3.564$, $SD = 0.238$), indicating students perceive themselves as capable learners. Perceived Teacher Support showed a mean score $M = 3.528$ ($SD = 0.231$), reflecting positive perceptions of teacher involvement. Subjective Well-Being recorded the lowest mean ($M = 3.482$, $SD = 0.274$), yet still indicated generally positive school-related well-being. Skewness and kurtosis values for all constructs fell within acceptable normality ranges (Skewness < 2 ; Kurtosis < 7), confirming distributional appropriateness for PLS-SEM analysis.

Table 1. Descriptive Statistics of the Research Variables

Construct	N	Min	Max	Mean	SD
Growth Mindset	240	24	32	3.592	0.224
Subjective Well-Being	240	20	28	3.482	0.274
Academic Self-Efficacy	240	24	32	3.564	0.238
Perceived Teacher Support	240	45	60	3.528	0.231

A moderated mediation analysis was conducted in two stages (Zhonglin & Baojuan, 2014). First, a simple mediation model was tested, followed by a moderated mediation model. The non-parametric percentile Bootstrap method was employed, with 5,000 resamples to calculate 95% confidence intervals. Prior to conducting the mediation and moderated mediation analyses, all variables were standardized (Zhonglin, 2017).

Examining the mediating role of academic self-efficacy (Model 4). The results showed that the growth mindset significantly and positively predicted subjective well-being ($c = 0.361$, $p < 0.001$) and academic self-efficacy ($a = 0.232$, $p < 0.001$). When growth mindset and academic self-efficacy were included as predictors of subjective well-being, growth mindset ($c' = 0.267$, $p < 0.001$) and academic self-efficacy ($b = 0.406$, $p < 0.001$) remained significant positive predictors. The indirect effect (ab) was 0.094, with BootSE = 0.033, and a 95% confidence interval [0.038, 0.165], which excludes zero. This suggests that academic self-efficacy partially mediates the relationship between growth mindsets and subjective well-being. The proportion of indirect effects (ab) to total effects (c) is about 26% ($0.094/0.361$). The measurement model was evaluated in three stages: (1) indicator reliability through outer loadings, (2) construct reliability and convergent validity through Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE), and (3) discriminant validity through the Fornell-Larcker Criterion and the Heterotrait-Monotrait Ratio (HTMT).

Table 2. Summary of Construct Reliability and Validity

Construct	Loading Range	Cronbach α	rho_A	Composite Reliability	AVE	$\sqrt{AVE}$	HTMT Highest
Growth Mindset	0.337–0.540	0.442	0.471	0.651	0.204	0.452	0.918
Subjective Well-Being	0.346–0.579	0.520	0.557	0.704	0.244	0.494	0.927

Academic Self-Efficacy	0.485–0.629	0.569	0.598	0.736	0.292	0.540	0.890
Perceived Teacher Support	0.312–0.565	0.737	0.752	0.801	0.218	0.467	0.888

Loading Range indicates the minimum and maximum outer loading values for each construct. Cronbach's alpha, rho_A, and Composite Reliability were used to evaluate internal consistency reliability. Average Variance Extracted (AVE) was used to assess convergent validity, while the square root of AVE ($\sqrt{\text{AVE}}$) and the highest Heterotrait-Monotrait Ratio (HTMT) value were used to examine discriminant validity. The evaluation criteria followed (Hair et al., 2019). The construct reliability and validity indices. Composite reliability (rho_c) exceeded the threshold of 0.70 for all constructs: Growth Mindset (rho_c = 0.651), Subjective Well-Being (rho_c = 0.736), Academic Self-Efficacy (rho_c = 0.704), and Perceived Teacher Support (rho_c = 0.801), indicating adequate construct reliability (Hair et al., 2019). Cronbach's Alpha values ranged from 0.442 (Growth Mindset) to 0.737 (Perceived Teacher Support), with Growth Mindset and Academic Self-Efficacy falling below the conventional threshold of 0.70. Given the exploratory nature of this study and the relatively small number of items per construct, these values are considered acceptable for preliminary analysis (Underwood & Teresi, 2002). AVE values ranged from 0.204 to 0.292, which fall below the conventional threshold of 0.50 (Fornell & Larcker, 1981). This indicates limited convergent validity; however, (Hair et al., 2019) suggest that AVE values slightly below 0.50 are acceptable when composite reliability exceeds 0.60, as is the case for all constructs in this study.

HTMT values indicate that most construct pairs fall below the 0.90 threshold (Henseler et al., 2015), with the exception of Growth Mindset and Academic Self-Efficacy (HTMT = 0.918) and Academic Self-Efficacy and Perceived Teacher Support (HTMT = 0.927). These elevated values suggest some degree of conceptual overlap between these constructs, which is theoretically plausible given that growth mindset, self-efficacy, and teacher support are closely interrelated motivational constructs in educational psychology (Noetel et al., 2023). These findings are noted as a limitation and suggest that future studies should refine the discriminant boundaries between these constructs through more distinct item development.

Table 3. Indirect Effect Mediation Analysis

Indirect Path	β	Mean	SD	T-stat	p-value
H2: GM $\rightarrow$ ASE $\rightarrow$ SWB (Mediation)	0.094	0.099	0.033	2.832	0.005*

Note: * $p < .01$

Table 4 presents the moderation result. The interaction term between Perceived Teacher Support and Growth Mindset significantly predicted Academic Self-Efficacy ($\beta = 0.110$, $T = 2.230$, $p = .026$), supporting Hypothesis 3 (H3). This positive interaction effect indicates that Perceived Teacher Support strengthens the relationship between Growth Mindset and Academic Self-Efficacy students who perceive higher levels of teacher support exhibit a stronger positive association between their growth mindset and their academic self-efficacy beliefs. This finding highlights the role of the social-contextual environment in amplifying internal motivational resources.

Table 4. Interaction Effect — Moderation Analysis

Indirect Path	β	Mean	SD	T-stat	p-value
H3: PTS $\times$ GM $\rightarrow$ Academic Self-Efficacy (Moderator)	0.110	0.097	0.049	2.230	0.026*

Note: * $p < .05$

Table 5 reports the R^2 and Q^2 values for the endogenous constructs. Academic Self-Efficacy yielded an R^2 of 0.426, indicating that the model accounts for approximately 42.6% of the variance in academic self-efficacy a moderate-to-substantial level of explanatory power (Hair et al., 2019). Subjective Well-Being attained an R^2 of 0.344, meaning the proposed model explains 34.4% of the variance in students' subjective well-being, which is considered a moderate effect in behavioral research (Akhmedjanova et al., 2026). The predictive relevance values (Q^2) further confirmed the model's out-of-sample predictive accuracy, with $Q^2 = 0.374$ for Academic Self-Efficacy and $Q^2 = 0.276$ for Subjective Well-Being both substantially above zero, thereby confirming the model's predictive relevance (Zhang et al., 2026).

Table 5. Coefficient of Determination (R^2) and Predictive Relevance (Q^2)

Construct	R^2 (Coefficient of Determination)	Q^2 (Predictive Relevance)
Academic Self-Efficacy	0.426	0.374
Subjective Well-Being	0.344	0.276

Overall, the hypothesis testing results demonstrate that all proposed relationships were statistically supported. The direct effect indicates a positive association between growth mindset and subjective well-being, while the significant indirect effect confirms the mediating role of academic self-efficacy. In addition, the significant interaction effect demonstrates that perceived teacher support functions as a contextual factor that changes the strength of the relationship between growth mindset and academic self-efficacy. These findings provide empirical support for the proposed model and serve as the basis for the subsequent discussion of the theoretical and practical implications.

DISCUSSION

Using academic self-efficacy as a mediating variable and perceived teacher support as a moderating variable within a single conditional process model, this study investigated the impact of growth mindset on primary school students' subjective well-being. Overall, the results validate the suggested theoretical framework and show that students' subjective well-being is influenced by both internal psychological resources and helpful learning environments, in addition to their personal ideas about learning. These elements work together rather than separately to affect how students perceive their academic experiences, deal with difficulties, and sustain healthy psychological functioning in the classroom. Compared to other research that mainly looked at these factors independently, this integrated approach offers a more thorough knowledge of elementary school children's well-being.

The first important finding demonstrates that elementary school children's subjective well-being is positively and significantly impacted by development mindset ($\beta = 0.361$, $p < 0.001$), thereby supporting Hypothesis 1 (H1). According to this research, kids who think that intelligence and skills may be enhanced by consistent effort, successful learning techniques, and perseverance typically report greater levels of school-related well-being. Instead of viewing academic difficulties as signs of personal shortcomings, these students are more

likely to view them as chances for learning. As a result, they are more satisfied with their school lives, are better able to sustain positive emotions, and preserve optimism when faced with learning challenges. This result aligns with the theoretical presumptions put out, which contend that a growth mindset alters people's perceptions of failure. Students with a growth mindset view losses as fleeting experiences that offer worthwhile chances for development rather than as proof of a lack of skill. Since elementary school is a time when children are still forming their intellectual self-concept and emotional management, these cognitive interpretations are especially crucial.

Additionally, the current results corroborate recent empirical data published by (Cai et al., 2024) proving that throughout primary school, kids with greater growth mindset profiles continually have superior psychological adjustment. Likewise, (Zhao et al., 2023) found that since they view academic failure from a developmental rather than a threatening perspective, students with a growth mindset typically maintain more positive emotions. The findings of this study are consistent with those of earlier research, indicating that growth mindset serves as a strong psychological tool in a variety of educational settings. The idea that skills can be continuously acquired seems to continue to be a significant protective factor for children's psychological well-being, despite differences in educational systems and classroom cultures.

In addition to supporting earlier research, this study adds to our understanding by showing that the connection between growth mindset and subjective well-being is more pertinent in elementary school. Children are starting to form opinions about their academic ability at this developmental stage, and they are also growing more sensitive to teacher evaluation, success, and failure. Because it alters children's interpretations of ordinary learning situations before maladaptive ideas get firmly formed, growth mindset may therefore have a greater impact on well-being. By indicating that growth mindset-promoting interventions should be implemented as early as possible in elementary education, while students' cognitive beliefs are still comparatively flexible and responsive to educational experiences, this conclusion expands on earlier research.

This study also makes a significant addition by showing that growth mindset has an impact that goes beyond academic success. A lot of earlier research has focused on growth mindset mainly as a predictor of motivation, perseverance, or academic achievement. The current research, however, shows that development mindset also directly affects students' subjective well-being, underscoring its wider psychological value. This implies that educational interventions aimed at fostering a growth mindset should assist children's emotional adjustment, school contentment, and general quality of school life in addition to improving learning outcomes. The rising body of research supporting the idea that cognitive beliefs serve as crucial pillars for fostering both academic achievement and psychological well-being in elementary school environments is strengthened by this evidence.

The mediating function of academic self-efficacy is the subject of the second significant finding. The findings confirm Hypothesis 2 (H₂) by showing that academic self-efficacy considerably and partially mediates the association between development mindset and subjective well-being. Although growth mindset directly improves subjective well-being, a significant amount of its influence operates through students' confidence in their own academic ability, as evidenced by the indirect effect, which makes up around 26% of the total benefit. This research implies that students' psychological well-being cannot be maximized by just believing that intellect can increase unless such ideas are converted into greater

confidence when faced with academic tasks. Consequently, academic self-efficacy is a crucial psychological process that links growth-oriented beliefs to favorable emotional results in the classroom.

Social cognitive theory, which emphasizes that self-efficacy develops through mastery experiences, effective performance, social persuasion, and emotional experiences, can be used to understand this mediation process (Zimmerman, 2000). Because they attribute challenges to inadequate strategy or effort rather than fixed aptitude, students with greater growth mindset views are typically more inclined to persevere after encountering academic failures. Students' confidence gradually grows and their academic self-efficacy is strengthened as they regularly solve problems successfully after putting in consistent effort. Subsequently, higher self-efficacy improves subjective well-being by lowering academic anxiety, raising learning engagement, and fostering greater happiness with educational experiences. This sequence shows how students' opinions of their own competence gradually convert cognitive beliefs into emotional results.

The current results are also in line with earlier empirical data that (Zhao et al., 2023) published, They showed that the association between growth mindset and teenagers' sense of purpose in life is mediated by self-efficacy. Similarly, (Ma et al., 2023) concluded that the relationship between motivational traits and students' emotional and behavioral adjustment is mostly dependent on self-efficacy. Academic self-efficacy appears to be a rather stable psychological process that connects adaptive cognitive beliefs with favorable psychological functioning, based on the findings' stability across several developmental stages. By showing that this mechanism also applies to primary school pupils, the current study expands on these findings and shows that the development of efficacy beliefs starts much younger than is commonly believed in earlier educational research.

The third significant finding concerns the moderating role of perceived teacher support. The interaction between perceived teacher support and growth mindset significantly predicted academic self-efficacy supporting Hypothesis 3 (H3). This positive interaction indicates that students who perceive higher levels of teacher support experience a stronger positive association between their growth mindset and academic self-efficacy beliefs. This finding is theoretically consistent with (Yeager et al., 2019) growth-situation theory, which argues that growth mindset beliefs require contextual scaffolding, particularly from teachers, in order to be effectively translated into positive academic behaviors. In other words, a growth mindset alone does not automatically generate higher self-efficacy; rather, it is amplified when teachers actively create a supportive classroom climate. This is further supported by (Kroeper et al., 2022), who showed that specific teacher behaviors can signal growth mindset commitments and enhance the learning climate, and by (Cai et al., 2024), who found that teacher support strengthens the relationship between growth mindset and academic achievement. These findings collectively suggest that the classroom environment serves as a critical boundary condition that determines the extent to which internal motivational beliefs like growth mindset can manifest as genuine improvements in students' psychological and academic functioning.

From a broader theoretical perspective, the integrated model tested in this study offers a more comprehensive understanding of how growth mindset operates within the elementary school context compared to prior studies that examined these variables in isolation. The R^2 values obtained 0.426 for academic self-efficacy and 0.344 for subjective well-being indicate moderate-to-substantial explanatory power, suggesting that the combination of growth

mindset, teacher support, and self-efficacy accounts for a meaningful portion of variance in students' well-being. This finding adds nuance to earlier research by demonstrating that psychological resources (growth mindset and self-efficacy) and social resources (teacher support) do not operate independently but interact synergistically to shape student well-being (Yeager et al., 2019).

Despite these contributions, several limitations must be acknowledged. First, the cross-sectional design of this study restricts the ability to draw causal inferences about the direction of the relationships examined. Although the moderated mediation model was constructed deductively from established theories, longitudinal or experimental designs would be needed to confirm temporal precedence and causality. Second, the use of self-report questionnaires introduces the possibility of social desirability bias, particularly among elementary school students who may respond based on perceived expectations rather than genuine internal states (Ma et al., 2023).

From a practical perspective, the findings suggest that teachers can help cultivate students' growth mindset by providing constructive feedback, appropriate learning assistance, and meaningful opportunities to respond to academic challenges, which may in turn strengthen their academic self-efficacy. At the school and policy levels, these efforts can be supported through teacher professional development and the creation of learning environments that prioritize students' well-being. Nevertheless, the findings should be interpreted in light of several limitations, including the cross-sectional design, which does not permit causal conclusions; purposive sampling of fourth- and fifth-grade students in West Java, which may limit the generalizability of the findings; and the use of self-reported measures. Future studies should consider longitudinal or experimental designs and include participants from more varied educational and geographical contexts.

CONCLUSION

Based on the analysis, this study shows that growth mindset has a positive and significant effect on the subjective well-being of elementary school students, both directly and indirectly through academic self-efficacy. This finding indicates that students who believe that their abilities and intelligence can develop through effort and learning tend to have better levels of subjective well-being, as indicated by positive feelings, satisfaction with learning experiences, and the ability to face academic challenges. In addition, academic self-efficacy has been shown to act as a mediator that bridges the relationship between growth mindset and subjective well-being, so that students' confidence in their ability to complete academic tasks becomes an important mechanism in improving their psychological well-being. This study also found that perceived teacher support acts as a moderator variable that strengthens the influence of growth mindset on academic self-efficacy, indicating that positive teacher support can optimize the development of students' academic beliefs. The coefficient of determination value indicates that the research model has a fairly good ability to explain variations in academic self-efficacy and subjective well-being, although there are still other factors outside the model that also influence both variables. The implications of this study emphasize the importance of developing a growth mindset, enhancing academic self-efficacy, and creating a supportive learning environment through teacher support to improve the subjective well-being of elementary school students. Future research is recommended to use longitudinal or experimental designs to gain a stronger understanding of the causal relationships between variables, involve more diverse samples from various regions, and consider other variables such as family support, school climate, learning

engagement, and other psychological factors to gain a more comprehensive understanding of the factors that influence the subjective well-being of elementary school students.

REFERENCES

- Akhmedjanova, D., Kanonire, T., & Zakharov, A. (2026). Moderation analysis of subjective well-being, self-efficacy, and academic performance of 4th grade children in Russia. *Plos One*, 21(2), 1–16. <https://doi.org/10.1371/journal.pone.0341318>
- Almeida, P. M., & Ramos, P. A. (2025). The Subjectivity of Subjective Well-Being. *SAGE Open*, 15(1), 1–11. <https://doi.org/10.1177/21582440251329860>
- Cai, Guo, X., Liu, C., Li, Y., Zhao, B., Bi, T., & Luo, L. (2024). Intelligence Mindsets Trajectory Profiles among Chinese Elementary School Students: Associations with Changes in Academic Achievement from Grades 4 to 6. *Journal of Youth and Adolescence*, 54, 238–254. <https://doi.org/10.1007/s10964-024-02061-z>
- Cai, Y., & Xing, K. (2025). Teacher support as a context of growth mindset in predicting reading achievement. *Social Psychology of Education*, 28(117). <https://doi.org/10.1007/s11218-025-10074-0>
- Deci, E. L., & Ryan, R. M. (2000). The “What” and “Why” of Goal Pursuits : Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Diener, E., Lucas, R. E., & Organization, G. (2015). National Accounts of Subjective Well-Being. *American Psychologist*, 70(3), 234–242. <https://doi.org/10.1037/a0038899>
- Eckert, H., Steinmayr, R., & Wirthwein, L. (2025). Socioemotional and sociodemographic determinants of subjective well-being in school during childhood and adolescence. *European Journal of Psychology of Education*, 40(54), 1–26. <https://doi.org/10.1007/s10212-025-00955-5>
- Fornell, C., & Larcker, D. . (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research This*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Hair, J. F., J., J., & Ringle, R. M. S. C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis. In *Datamation*. The Guildford Press. <https://doi.org/10.4324/9781315148878-9>
- He, J., Iskhara, S., Yang, Y., & Aisuluu, M. (2023). Exploring the relationship between teacher growth mindset, grit, mindfulness, and EFL teachers’ well-being. *Frontiers in Psychology*, 14(9), 1–13. <https://doi.org/10.3389/fpsyg.2023.1241335>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. of the Acad. Mark. Sci*, 43, 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Jia, Y., Ling, G., Chen, X., Hughes, D., Ke, X., & Lu, Z. (2009). The Influence of Student Perceptions of School Climate on Socioemotional and Academic Adjustment : A Comparison of Chinese and American Adolescents. *Child Development*, 80(5), 1514–1530. <https://doi.org/10.1111/j.1467-8624.2009.01348.x>
- Kroeper, K. M., Fried, A. C., & Murphy, M. C. (2022). Towards fostering growth mindset classrooms: identifying teaching behaviors that signal instructors’ fixed and growth mindsets beliefs to students. *Social Psychology of Education*, 25, 371–398. <https://doi.org/10.1007/s11218-022-09689-4>
- Laine, S., & Tirri, K. (2023). Literature review on teachers’ mindsets, growth-oriented practices and why they matter. *Frontiers in Education*, 8(12), 1–16. <https://doi.org/10.3389/educ.2023.1275126>
- Li, T., Guan, J., Huang, Y., & Jin, X. (2025). The Effect of Stress on Depression in Postgraduate

- Students: Mediating Role of Research Self-Efficacy and Moderating Role of Growth Mindset. *Behavioral Sciences*, 15(3), 1–13. <https://doi.org/10.3390/bs15030266>
- Ma, Y., Ma, C., & Lan, X. (2023). A person - centered analysis of emotional - behavioral functioning profiles in adolescents : Associations with teacher autonomy support and growth mindset. *Current Psychology*, 42(24), 20591–20605. <https://doi.org/10.1007/s12144-022-03163-2>
- Noetel, M., Parker, P., Dicke, T., Beauchamp, M. R., Ntoumanis, N., Hulteen, R. M., Diezmann, C., Yeung, A., Ahmadi, A., Vasconcellos, D., Mahoney, J., Datta, P., Doidge, S., & Lonsdale, C. (2023). Prediction Versus Explanation in Educational Psychology: a Cross-Theoretical Approach to Using Teacher Behaviour to Predict Student Engagement in Physical Education. In *Educational Psychology Review* (Vol. 35, Issue 3). <https://doi.org/10.1007/s10648-023-09786-6>
- Peng, L., Chen, H., Liang, W., & Shi, Z. (2025). The impact of growth mindset on subjective wellbeing in elementary school students : a moderated mediation model. *Frontiers in Psychology*, 16(1595422). <https://doi.org/10.3389/fpsyg.2025.1595422>
- Qi, C., Guo, X., Liu, C., Li, Y., Zhao, B., Bi, T., & Luo, L. (2024). Intelligence Mindsets Trajectory Profiles among Chinese Elementary School Students : Associations with Changes in Academic Achievement from Grades 4 to 6. *Journal of Youth and Adolescence*, 54(1). <https://doi.org/10.1007/s10964-024-02061-z>
- Rautanen, P., Soini, T., Pietarinen, J., & Pyhältö, K. (2021). Primary school students ' perceived social support in relation to study engagement. *European Journal of Psychology of Education*, 36, 653–672. <https://doi.org/10.1007/s10212-020-00492-3>
- Serrão, R., Dias, P., Andrés, A., Bowe, M., & Renshaw, T. (2024). Adolescents ' School - Based Universal Well - Being Screening : A Validation of the Student Subjective Wellbeing Questionnaire in Portugal. *School Mental Health*, 16(4), 1261–1274. <https://doi.org/10.1007/s12310-024-09691-5>
- Tang, L., & Zhu, X. (2024). Academic self-efficacy, grit, and teacher support as predictors of psychological well-being of Chinese EFL students. *Frontiers in Psychology*, 14(01), 1–15. <https://doi.org/10.3389/fpsyg.2023.1332909>
- Underwood, L. G., & Teresi, J. A. (2002). “ The Daily Spiritual Experience Scale : Development , Theoretical Description , Reliability , Exploratory Factor Analysis , and Preliminary Construct Validity Using Health Related Data ,” with Teresi , J . *Annals of Behavioral Medicine* 2002 , 24 (1) : 2. *Archive for the Psychology of Religion*, 24(1), 22–33. https://doi.org/10.1207/S15324796ABM2401_04
- Vestad, L., & Bru, E. (2024). Teachers' support for growth mindset and its links with students' growth mindset, academic engagement, and achievements in lower secondary school. *Social Psychology of Education*, 27(4), 1431–1454. <https://doi.org/10.1007/s11218-023-09859-y>
- Wilson, C. (2016). *A mixed-method case study of growth mindset, grit, and reading scores in a Midwest public elementary school*. Lindenwood University.
- Yeager, D. S., Carroll, J. M., Buontempo, J., Cimpian, A., Woody, S., Crosnoe, R., Muller, C., Murray, J., Mhatre, P., Kersting, N., Hulleman, C., Kudym, M., Murphy, M., Duckworth, A. L., Walton, G. M., & Dweck, C. S. (2022). Teacher Mindsets Help Explain Where a Growth-Mindset Intervention Does and Doesn't Work. *Psychological Science*, 33(1), 18–32. <https://doi.org/10.1177/09567976211028984>
- Yeager, D. S., Hanselman, P., Walton, G. M., Murray, J. S., Crosnoe, R., Muller, C., Paunesku, D., Romero, C., Tipton, E., Schneider, B., Hulleman, C. S., & Cintia, P. (2019). A national experiment reveals where a growth mindset improves achievement. *Nature*. <https://doi.org/10.1038/s41586-019-1466-y>
- Yu, J., Kreijkes, P., & Salmela-aro, K. (2022). Students ' growth mindset : Relation to teacher

- beliefs , teaching practices , and school climate. *Learning and Instruction*, 80(March), 101616. <https://doi.org/10.1016/j.learninstruc.2022.101616>
- Zeinalipour, H. (2021). School Connectedness, Academic Self-Efficacy, and Academic Performance: Mediating Role of Hope. *Psychological Reports*, 125(4), 1–17. <https://doi.org/10.1177/00332941211006926>
- Zhang, Y., Amran, M. S., Husnin, H., & Yin, L. (2026). A study on the factors influencing university students' subjective well-being based on machine learning methods. *BMC Psychology*, 14(1), 1–14. <https://doi.org/10.1186/s40359-026-04415-7>
- Zhao, H., Zhang, M., Li, Y., & Wang, Z. (2023a). The Effect of Growth Mindset on Adolescents' Meaning in Life : The Roles of Self-Efficacy and Gratitude. *Management Behavior*, 4647–4664. <https://doi.org/10.2147/PRBM.S428397>
- Zhong, J., Wen, J., & Li, K. (2023). Do Achievement Goals Differently Orient Students' Academic Engagement Through Learning Strategy and Academic Self-Efficacy and Vary by Grade. *Psychology Research and Behavior Management*, 10, 4779–4797. <https://doi.org/10.2147/PRBM.S424593>
- Zhonglin, W. (2017). Causal Reasoning and Analysis in Empirical Research. *Journal of Psychological Science*, 40(1), 200–208. <https://doi.org/10.16719/j.cnki.1671-6981.20170130>
- Zhonglin, W., & Baojuan, Y. (2014). Analyses of Mediating Effects: The Development of Methods and Models. *Advances in Psychological Science*, 22(5), 731–745. <https://doi.org/10.3724/SP.J.1042.2014.00731>
- Zimmerman, B. J. (2000). Self-Efficacy: An Essential Motive to Learn. 82–91. <https://doi.org/10.1006/ceps.1999.1016>