

Rethinking growth mindset: socioeconomic resources, academic resilience, and self-efficacy in vocational education

Authors :

Abdul Wahid
Muhammad Syaifulloh
Slamet Bambang Riono
Dumadi
Ari Kristiana

Affiliations :

Management Study Program,
Universitas Muhadi Setiabudi,
Indonesia

Corresponding email:

afidian.fijayanto@mhs.unsoed.ac.id

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Abstract

Self-efficacy is essential for vocational students' academic achievement and readiness for higher education and employment. However, the roles of socioeconomic conditions, family support, and academic resilience in shaping self-efficacy through growth mindset remain insufficiently explored in rural vocational education. This study examines the direct and indirect effects of family economic background, family support, and academic resilience on students' self-efficacy, with growth mindset as a mediating variable. Using a quantitative explanatory design, data were collected from 322 students across seven private vocational high schools in Ketanggungan District, Brebes Regency, Indonesia. The data were analyzed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS. Results indicate that family economic background and academic resilience positively and significantly influence both growth mindset and self-efficacy. Conversely, family support has no significant direct effect on either variable. Growth mindset neither significantly predicts self-efficacy nor mediates the relationships examined. The model explains 58.8% of the variance in self-efficacy. These findings highlight the importance of socioeconomic resources and academic resilience in strengthening students' confidence and inform targeted interventions in rural vocational education.

INTRODUCTION

Human resource development is a fundamental requirement for improving national competitiveness in an era of globalization and technological transformation. Education plays a strategic role in developing knowledge, skills, and adaptive capabilities that enable individuals to respond effectively to changing labor market demands. Human resources are therefore recognized as essential determinants of national productivity and competitiveness (Indriyani, 2020). Previous studies have emphasized that human resource development improves individuals' ability to respond to environmental and occupational challenges (Sucipto et al., 2021), while human resource competencies contribute to individual and organizational performance (Hannisa et al., 2023). Within this framework, vocational high schools (*Sekolah Menengah Kejuruan*, SMK) play an important role in preparing graduates for employment, entrepreneurship, and higher education. However, vocational education must develop not only technical competencies but also students' psychological readiness to navigate academic and career challenges.

Indonesia continues to face challenges in educational participation and the transition from vocational education to employment or higher

education. The Directorate General of Higher Education (2024) identified economic constraints, limited scholarship information, and inadequate career guidance as barriers to continuing education. According to Puslapdik (2024), higher education participation among individuals aged 19-23 reached only 31.45%, below the 38.04% target of the 2025-2029 National Medium-Term Development Plan. Reports from Kompas (2024) and PDDIKTI (2024) indicated that approximately 12.3% of vocational high school graduates continued to higher education. Statistics Indonesia (BPS, 2024) also reported school participation rates of 73.42% among individuals aged 16-18 and 28.96% among those aged 19-23. Furthermore, the open unemployment rate among vocational graduates reached 9.01%, highlighting persistent challenges in graduate employability. These indicators emphasize the importance of strengthening students' confidence and preparedness for educational and occupational transitions.

One psychological factor associated with students' educational readiness is self-efficacy, defined as individuals' beliefs in their ability to organize and execute actions required to achieve specific goals (Bandura, 1997). In vocational education, self-efficacy influences academic persistence, decision-making, and confidence in pursuing employment or further education. Affa

and Mulyana (2024) found that vocational students with higher self-efficacy demonstrated stronger career optimism and readiness for continuing education. Similarly, Nabilah and Ulya (2025) identified self-efficacy as an important predictor of employment readiness and career orientation. These findings suggest that developing self-efficacy is essential for helping vocational students respond effectively to academic demands and future career uncertainties.

Family economic background represents an important external factor associated with students' self-efficacy. Household financial resources influence access to learning facilities, educational materials, digital technology, and opportunities for further education. Students from economically advantaged families may experience fewer financial barriers and greater opportunities to develop academic competencies. Conversely, economic limitations may restrict educational participation and confidence in pursuing future opportunities. Abdillah and Wulandari (2025) found that socioeconomic background significantly influenced academic self-efficacy among vocational students, while Sriyono and Megawati (2021) emphasized its importance in determining educational access and academic decisions. Preliminary observations involving Grade XII students at a vocational high school in Ketanggungan District also indicated lower learning participation among students from low-income households than among those from middle-income families. This local phenomenon highlights the relevance of examining economic circumstances within rural vocational education.

Beyond economic conditions, family support contributes to students' educational experiences through emotional encouragement, informational assistance, recognition, and practical resources. Supportive family environments may strengthen motivation and help students manage academic challenges. Saud et al. (2023) emphasized the importance of emotional, informational, and instrumental support in fostering positive psychological conditions, while Junalia et al. (2022) identified supportive parent-child communication as relevant to students' self-efficacy. Haidar (2020) and Ramadani and Ninghardjanti (2023) similarly highlighted the relationship between family involvement, academic confidence, and educational development. Nevertheless, the effectiveness of family support may depend on students' ability to translate encouragement into meaningful

learning experiences.

Academic resilience is another psychological resource that may shape self-efficacy. It refers to students' capacity to recover from setbacks, adapt to academic pressures, and maintain constructive learning behaviors despite difficulties. Students with stronger academic resilience are more likely to persist when facing examinations, demanding assignments, and limited educational resources. Their ability to overcome challenges may reinforce confidence in handling future academic tasks. Academic resilience is particularly relevant for vocational students who must balance theoretical learning, practical training, and preparation for employment. Accordingly, examining academic resilience alongside socioeconomic conditions and family support provides a more comprehensive perspective on students' self-efficacy.

Growth mindset may represent a psychological mechanism connecting these factors with self-efficacy. According to Dweck (2006), growth mindset reflects the belief that intelligence and abilities can be developed through effort, effective strategies, and learning experiences. Such beliefs may encourage students to interpret academic difficulties as opportunities for improvement. Economic resources, supportive family environments, and academic resilience may contribute to the development of growth-oriented beliefs. However, believing that abilities can improve differs conceptually from believing that one can successfully complete specific tasks. Therefore, whether growth mindset mediates the relationships between family economic background, family support, academic resilience, and self-efficacy remains an empirical question.

Previous studies have examined socioeconomic background, family support, and academic resilience as determinants of students' academic confidence, but their findings and theoretical emphases remain varied. Abdillah and Wulandari (2025) emphasized socioeconomic influences, whereas Paramitha et al. (2023) highlighted family-related factors and academic resilience. However, empirical evidence simultaneously examining these three antecedents through growth mindset as a mediating variable remains limited, particularly among vocational students in rural Indonesia. Addressing this gap, the present study investigates the direct and indirect relationships between family economic background, family support, academic resilience, and self-efficacy through growth mindset among students

attending seven private vocational high schools in Ketanggungan District, Brebes Regency. Using partial least squares structural equation modeling (PLS-SEM), the study contributes to vocational education research by integrating socioeconomic and psychological perspectives and provides practical insights for strengthening students' academic confidence and educational readiness.

LITERATURE REVIEW

Family Economic Background

Family economic background refers to the financial and socioeconomic circumstances that determine a household's capacity to provide resources supporting children's educational development. This concept extends beyond household income to encompass financial stability, the ability to meet essential needs, and the availability of resources required to sustain educational participation (Rochani & Suharsono, 2023). Differences in family economic conditions may influence students' access to learning materials, digital technology, educational facilities, and opportunities for further education.

From the perspective of Human Capital Theory, Becker (1993) conceptualized education as a long-term investment that enhances individuals' knowledge, skills, and productive capabilities. Families play an important role in this investment process by allocating financial resources to educational activities. Accordingly, students from economically advantaged households may benefit from greater educational opportunities and fewer financial constraints, whereas those from disadvantaged backgrounds may encounter barriers that limit their academic experiences.

Family economic background may also be associated with students' psychological development. Adequate educational resources can facilitate successful learning experiences, potentially strengthening students' beliefs in their academic capabilities. Conversely, financial difficulties may increase uncertainty regarding educational opportunities and future career pathways. Therefore, family economic background is considered an important contextual factor in understanding students' growth mindset and self-efficacy, particularly within vocational education.

Family Support

Family support refers to the emotional,

informational, instrumental, and appraisal assistance provided by family members to facilitate students' educational and psychological development. Such support may include encouragement, academic guidance, recognition of achievements, financial assistance, and involvement in educational decision-making. A supportive family environment can provide students with psychological security and motivation when confronting academic difficulties.

The theoretical foundation of family support can be explained through Ecological Systems Theory developed by Bronfenbrenner (1979). This theory proposes that individual development occurs through interactions within interconnected environmental systems, including the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The family occupies a central position within the microsystem because it represents one of the most immediate environments influencing children's attitudes, behaviors, and learning experiences.

Within this framework, supportive family relationships may foster positive academic attitudes and strengthen students' confidence in managing educational responsibilities. Emotional encouragement can help students respond constructively to setbacks, while informational and instrumental support may facilitate access to learning opportunities. However, the influence of family support may vary depending on the quality of family interactions and students' perceptions of the assistance received. Consequently, family support is examined as an external social resource potentially associated with both growth mindset and self-efficacy.

Academic Resilience

Academic resilience refers to an individual's capacity to withstand, recover from, and adapt effectively to challenges encountered during the learning process. It involves maintaining academic motivation, emotional stability, and constructive learning behaviors despite setbacks or unfavorable circumstances. Nadeak (2024) emphasized that academic resilience encompasses persistence, optimism, and the ability to remain focused when confronting examination failures, demanding assignments, and limited educational resources.

The development of academic resilience involves interactions between internal and external factors. Internal factors include self-confidence, emotional regulation, achievement

motivation, and optimism, whereas external factors involve family support, school environments, and peer relationships (Faturrohman & Sagita, 2022). These resources may help students develop adaptive coping strategies and maintain their commitment to educational goals.

Academically resilient students are more likely to interpret difficulties as manageable challenges rather than insurmountable obstacles. Through persistence and adaptive problem-solving, they may accumulate experiences that strengthen their confidence in completing future academic tasks. Academic resilience may also be associated with growth mindset because both constructs emphasize constructive responses to setbacks. Nevertheless, resilience concerns the capacity to adapt under adversity, whereas growth mindset concerns beliefs about the potential development of abilities. This distinction supports examining academic resilience as an independent psychological factor associated with students' growth mindset and self-efficacy.

Growth Mindset

Growth mindset refers to the belief that intelligence, abilities, and competencies can be developed through sustained effort, effective learning strategies, feedback, and experience (Dweck, 2006). Individuals with a growth mindset tend to regard academic challenges as opportunities for improvement and interpret setbacks as part of the learning process rather than evidence of permanent limitations.

Herlina et al. (2024) suggested that beliefs about the developability of abilities encourage students to adopt effective learning strategies, including self-reflection, planning, and performance evaluation. These behaviors may promote persistence and facilitate more constructive responses to academic difficulties. In vocational education, growth mindset is particularly relevant because students must continuously acquire technical competencies, adapt to technological developments, and respond to changing occupational requirements.

Growth mindset may also provide a conceptual connection between students' educational environments and their self-efficacy. Economic resources and family encouragement may create opportunities for learning and improvement, while academic resilience may reinforce students' willingness to persist after setbacks. However, growth mindset and self-efficacy represent distinct psychological

constructs. Growth mindset concerns whether abilities are perceived as developable, whereas self-efficacy concerns whether individuals believe they can successfully perform particular tasks. Drawing on Bandura's (1997) explanation of efficacy beliefs, successful learning experiences may strengthen self-efficacy, but a growth-oriented belief does not necessarily produce confidence in task performance. Accordingly, the potential mediating role of growth mindset requires empirical examination rather than theoretical assumption.

Self-Efficacy

Self-efficacy refers to individuals' beliefs in their capacity to organize and execute the actions necessary to achieve specific outcomes (Bandura, 1997). As a central concept within Social Cognitive Theory, self-efficacy reflects the interaction between personal characteristics, environmental influences, and behavioral experiences. Unlike general self-confidence, self-efficacy concerns perceived capability in relation to particular activities or performance requirements.

In educational settings, self-efficacy influences students' academic choices, effort, persistence, and responses to learning difficulties. Students with stronger self-efficacy are generally more willing to undertake challenging assignments and maintain their efforts when encountering obstacles. Conversely, students with weaker efficacy beliefs may avoid demanding activities or interpret setbacks as evidence of limited personal capability.

Hidayatullah et al. (2023) identified a positive relationship between self-efficacy and self-regulated learning, particularly students' ability to plan, monitor, and evaluate their learning activities independently. Similarly, Schunk, as cited in Pramisyayanti and Khoirunnisa (2022), emphasized that self-efficacy influences how individuals interpret experiences and evaluate their capacity to manage challenging situations.

For vocational high school students, self-efficacy is particularly important because academic responsibilities are closely connected to practical competencies and future career preparation. Students must develop confidence not only in completing academic assignments but also in applying knowledge, mastering vocational skills, and making decisions regarding employment or higher education. Their efficacy beliefs may be associated with the economic resources available within their families, the

support they receive from significant others, and their capacity to overcome academic difficulties.

Based on these theoretical perspectives, self-efficacy is positioned as the dependent variable, while family economic background, family support, and academic resilience serve as its proposed antecedents. Growth mindset is examined as a potential mediating variable to assess whether beliefs about the development of abilities help explain the relationships between these antecedents and students' self-efficacy.

METHODS

This study employed a quantitative explanatory research design to examine the relationships among family economic background, family support, academic resilience, growth mindset, and students' self-efficacy. The explanatory approach was adopted to test the hypothesized direct and indirect relationships among the variables using numerical data (Creswell, 2014; Sugiyono, 2024). Family economic background, family support, and academic resilience were specified as independent variables, self-efficacy as the dependent variable, and growth mindset as the mediating variable. The proposed relationships were analyzed using partial least squares structural equation modeling (PLS-SEM), which allows the simultaneous assessment of measurement properties and structural relationships (Hair et al., 2019).

The study was conducted at seven private vocational high schools in Ketanggungan District, Brebes Regency, Indonesia: SMK Islam Bustanul Ulum, SMK Karya Medika, SMK Ma'arif NU 01, SMK Mitra Karya Mandiri, SMK Nurul Hayah, SMK Telekomunikasi Harapan Kita, and SMK Wiyata Bangsa. The study population comprised 1,637 actively enrolled students. The sample size was determined using Slovin's formula with a 5% margin of error, resulting in a minimum sample of approximately 321 respondents. A total of 322 students were included in the study. Proportionate stratified random sampling was applied to ensure that students from each school were represented according to their proportion of the total population (Riyanto & Hatmawan, 2020).

Primary data were collected through a structured questionnaire developed from theoretical indicators representing the five research constructs. Responses were measured using a 10-point scale ranging from 1 (*strongly disagree*) to 10 (*strongly agree*). Prior to the main survey, the questionnaire underwent preliminary

validity and reliability testing involving respondents outside the research sample. Nonparticipant observations and semi-structured interviews with school guidance and counseling teachers were also conducted to provide supplementary contextual information. These supplementary data were used to support the interpretation of the research setting rather than as inputs to the statistical model.

Data analysis was performed using SmartPLS software. PLS-SEM was selected because it supports the estimation of models involving multiple latent constructs and mediating relationships and does not require the strict multivariate normality assumptions associated with covariance-based SEM (Hair et al., 2019). The analysis consisted of two main stages. First, the measurement model (*outer model*) was evaluated through convergent validity, discriminant validity, and internal consistency reliability. Convergent validity was assessed using indicator loadings above 0.70 and average variance extracted (AVE) values above 0.50. Discriminant validity was examined using the Fornell-Larcker criterion and the heterotrait-monotrait ratio (HTMT), while composite reliability values above 0.70 were considered acceptable (Hair et al., 2019; Kline, 2016).

Second, the structural model (*inner model*) was evaluated using the coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2). Hypothesis testing was conducted through bootstrapping to estimate the significance of path coefficients and specific indirect effects. Statistical significance was determined using a two-tailed criterion of t greater than 1.96 and p less than 0.05 at the 5% significance level (Hair et al., 2019). The mediating role of growth mindset was assessed by examining the significance of the indirect relationships between each independent variable and students' self-efficacy.

RESULT

Respondent Characteristics

The study involved 322 vocational high school students in Ketanggungan District, Brebes Regency, Indonesia. Female students accounted for 62.1% (200 respondents), while male students represented 37.9% (122 respondents). Regarding age, most respondents were 17-18 years old (61.2%), followed by those aged 15-16 years (28.6%) and above 18 years (10.2%). The majority were Grade XII students (59.9%).

Regarding family socioeconomic characteristics, 57.1% of respondents had parents whose highest educational attainment was elementary or junior secondary school. Most parents worked in informal occupations, including agricultural labor, farming, and small-scale trading (81.4%), while 91.3% of respondents came from low- to middle-income households. Furthermore, 84.4% lived with their parents. These characteristics provide relevant socioeconomic context for examining the relationships among family economic background, family support, academic resilience, growth mindset, and students' self-efficacy.

Measurement Model Assessment (Outer Model)

The measurement model was evaluated to assess convergent validity, discriminant validity, and internal consistency reliability. The initial convergent validity assessment indicated that most indicators had outer loadings above the recommended threshold of 0.70. Two indicators, DK3 (0.632) for family support and LBE11 (0.669) for family economic background, were removed because their loadings fell below this threshold. Following these modifications, the final measurement model satisfied the reported convergent validity criteria.

All constructs demonstrated average variance extracted (AVE) values exceeding 0.50, indicating adequate convergent validity, as presented in Table 1.

Table 1. Average Variance Extracted (AVE)

Construct	AVE
Family Economic Background	0.731
Family Support	0.774
Academic Resilience	0.779
Growth Mindset	0.716
Self-Efficacy	0.811

Source: SmartPLS Output (2026).

Discriminant validity was evaluated using the Fornell-Larcker criterion. The results indicated that the square root of each construct's AVE exceeded its correlations with other constructs,

supporting discriminant validity. Furthermore, composite reliability values exceeded 0.70 for all constructs, indicating satisfactory internal consistency. Overall, the reported measurement model results supported proceeding to the structural model assessment.

Structural Model Assessment (Inner Model)

The structural model was evaluated using the coefficient of determination (R^2), effect size (f^2), and predictive performance (Q^2_{predict}). The R^2 value for growth mindset was 0.540, indicating that family economic background, family support, and academic resilience collectively explained 54.0% of its variance. Meanwhile, the R^2 value for self-efficacy was 0.588, indicating that the proposed predictors explained 58.8% of its variance.

The Q^2_{predict} values were 0.510 for growth mindset and 0.561 for self-efficacy, suggesting positive out-of-sample predictive performance relative to the prediction benchmark used. The f^2 results indicated that academic resilience (0.106) and family economic background (0.091) contributed the largest reported effect sizes to growth mindset, although both remained within the small-effect range. The effects of family support and growth mindset on self-efficacy were also reported to be small.

Table 2. Coefficients of Determination and Predictive Performance

Construct	R^2	Adjusted R^2	Q^2_{predict}
Growth Mindset	0.540	0.535	0.510
Self-Efficacy	0.588	0.583	0.561

Source: SmartPLS Output (2026).

Hypothesis Testing

Hypotheses were tested using the bootstrapping procedure, applying a two-tailed significance threshold of t greater than 1.96 and p less than 0.05. The direct relationship estimates are presented in Table 3.

Table 3. Direct Effects and Hypothesis Testing

Structural Path	β	t-statistic	p-value	Decision
Family Economic Background → Growth Mindset	0.335	2.974	0.003	Supported
Family Support → Growth Mindset	0.067	0.705	0.481	Not supported
Academic Resilience → Growth Mindset	0.390	3.362	0.001	Supported
Family Economic Background → Self-Efficacy	0.313	2.568	0.011	Supported

Family Support → Self-Efficacy	0.138	1.915	0.056	Not supported
Academic Resilience → Self-Efficacy	0.284	2.872	0.004	Supported
Growth Mindset → Self-Efficacy	0.124	1.122	0.262	Not supported

Source: SmartPLS Output (2026).

The results revealed that family economic background had significant positive relationships with growth mindset ($\beta = 0.335, p = 0.003$) and self-efficacy ($\beta = 0.313, p = 0.011$). Academic resilience also demonstrated significant positive relationships with growth mindset ($\beta = 0.390, p = 0.001$) and self-efficacy ($\beta = 0.284, p = 0.004$).

In contrast, family support was not significantly associated with either growth mindset ($\beta = 0.067, p = 0.481$) or self-efficacy ($\beta = 0.138, p = 0.056$). Although the reported total effect of family support on self-efficacy was statistically significant

($\beta = 0.147, t = 2.047, p = 0.041$), this finding does not establish a significant mediating mechanism. Growth mindset itself was not significantly associated with self-efficacy ($\beta = 0.124, p = 0.262$).

Overall, four of the seven hypothesized direct relationships were statistically supported.

4.1.5. Mediation Analysis

The mediating role of growth mindset was examined using the bootstrapped specific indirect effects. The results are presented in Table 4.

Table 4. Specific Indirect Effects

Mediation Path	β	t-statistic	p-value	Decision
Family Economic Background → Growth Mindset → Self-Efficacy	0.042	0.981	0.327	Not supported
Family Support → Growth Mindset → Self-Efficacy	0.008	0.494	0.621	Not supported
Academic Resilience → Growth Mindset → Self-Efficacy	0.048	1.022	0.307	Not supported

Source: SmartPLS Output (2026).

None of the three specific indirect effects reached statistical significance. The indirect relationship between family economic background and self-efficacy through growth mindset was not significant ($\beta = 0.042, p = 0.327$). Similarly, the indirect effects of family support ($\beta = 0.008, p = 0.621$) and academic resilience ($\beta = 0.048, p = 0.307$) on self-efficacy through growth mindset were not significant.

These findings indicate that growth mindset did not demonstrate a statistically significant mediating role in any of the three proposed relationships. Thus, although family economic background and academic resilience were significantly associated with growth mindset, these associations did not translate into statistically significant indirect relationships with students' self-efficacy through the proposed mediator.

DISCUSSION

The findings provide empirical insights into the relationships among family economic background, family support, academic resilience, growth mindset, and self-efficacy among vocational high school students in Ketanggungan District. Four of the seven direct relationships were statistically significant, while none of the

proposed indirect relationships through growth mindset received empirical support. These results highlight the different roles of socioeconomic resources, family environments, and psychological characteristics in explaining students' self-efficacy.

Family Economic Background and Self-Efficacy

Family economic background demonstrated a positive and statistically significant relationship with students' self-efficacy ($\beta = 0.313, t = 2.568, p = 0.011$). This finding suggests that students from economically advantaged households tend to report stronger beliefs in their academic capabilities. Greater financial resources may facilitate access to educational materials, digital technology, supplementary learning opportunities, and more stable learning environments. Such conditions can provide opportunities for students to develop competencies and experience academic success.

This finding is consistent with Vierintino et al. (2023), who highlighted the relationship between parental socioeconomic status and self-efficacy. Similar conclusions were reported by Manik (2023), Nilamsari and Lubis (2024), and R. Sari and Rusdarti (2020), emphasizing the relevance of family economic circumstances to individuals'

efficacy beliefs. From the perspective of Human Capital Theory (Becker, 1993), household investment in education may create opportunities for developing knowledge and competencies. The present findings extend this perspective by suggesting that family economic resources are also associated with students' perceptions of their academic capabilities.

Family Support and Self-Efficacy

Family support did not demonstrate a statistically significant direct relationship with self-efficacy ($\beta = 0.138$, $t = 1.915$, $p = 0.056$). Although the estimated coefficient was positive, the relationship did not meet the conventional 5% significance threshold. This finding indicates that greater perceived family support was not independently associated with significantly higher self-efficacy after accounting for the other predictors in the model.

One possible explanation is that general emotional encouragement and practical assistance may not always translate into students' confidence in completing specific academic tasks. Self-efficacy may depend more strongly on successful learning experiences, demonstrated competence, and opportunities to overcome challenges. This interpretation is broadly consistent with Rahmi et al. (2024), R. Sari and Rusdarti (2020), Wardani and Nugraha (2021), and Rahmawati et al. (2025), who emphasized the complexity of family-related influences on students' psychological and educational outcomes.

Although the reported total effect of family support on self-efficacy was statistically significant ($\beta = 0.147$, $p = 0.041$), the specific indirect effect through growth mindset was not significant. Therefore, the findings do not establish growth mindset as a mediating mechanism or provide sufficient evidence to identify an alternative mediator. Further research is needed to investigate other possible pathways linking family support with students' self-efficacy.

Academic Resilience and Self-Efficacy

Academic resilience demonstrated a positive and statistically significant relationship with self-efficacy ($\beta = 0.284$, $t = 2.872$, $p = 0.004$). Students who reported greater capacity to adapt to academic difficulties and recover from setbacks also tended to demonstrate stronger confidence in their abilities.

This finding is consistent with Andriani and

Suryana (2025), Ramadani and Ninghardjanti (2025), Jannah et al. (2026), and Tazky et al. (2025), who reported positive relationships between academic resilience and self-efficacy. From the perspective of Social Cognitive Theory (Bandura, 1997), successful experiences in overcoming challenges can contribute to the development of efficacy beliefs. Academically resilient students may be better positioned to accumulate such experiences through persistence, adaptive coping strategies, and sustained engagement with learning activities.

In vocational education, this relationship is particularly relevant because students must manage both theoretical and practical learning demands. The findings suggest that academic resilience represents an important psychological resource associated with students' confidence in managing educational challenges.

Family Economic Background and Growth Mindset

Family economic background was positively and significantly associated with growth mindset ($\beta = 0.335$, $t = 2.974$, $p = 0.003$). This finding indicates that students from economically advantaged households tended to report stronger beliefs that their abilities could be developed through learning and effort.

Economic resources may provide access to diverse educational experiences, learning facilities, and opportunities for skill development. These experiences may encourage students to perceive their abilities as improvable rather than fixed. The finding is consistent with D. A. K. Sari and Setiawan (2023), Riandari et al. (2023), Rahmania and Utami (2024), and Arham and Azizah (2026), whose studies highlighted the relevance of socioeconomic and educational environments to students' learning orientations.

Nevertheless, economic advantages should not be interpreted as a prerequisite for developing a growth mindset. The observed relationship indicates an association within the study sample rather than a deterministic influence of household financial resources on students' beliefs.

Family Support and Growth Mindset

Family support was not significantly associated with growth mindset ($\beta = 0.067$, $t = 0.705$, $p = 0.481$). This result suggests that perceived family support, as measured in the present study, was not a significant independent predictor of

students' beliefs about the development of their abilities.

One possible explanation is that the quality and content of family encouragement may be more important than the overall level of support. For example, encouragement emphasizing effort, learning strategies, and improvement may be more relevant to growth mindset than general expressions of care or assistance. However, these specific forms of communication were not separately tested in the present model.

The finding is broadly consistent with Atika (2025), Fitri et al. (2025), and Maatuil et al. (2025), who discussed the potentially indirect or context-dependent relationships between social support and psychological development. Within Bronfenbrenner's (1979) Ecological Systems Theory, family environments remain important developmental contexts, but their influence may depend on interactions with individual characteristics and educational experiences. Accordingly, the absence of a significant direct relationship should not be interpreted as evidence that family support is irrelevant to students' development.

Academic Resilience and Growth Mindset

Academic resilience demonstrated a positive and statistically significant relationship with growth mindset ($\beta = 0.390$, $t = 3.362$, $p = 0.001$). This was the largest standardized coefficient among the predictors of growth mindset, indicating that students with stronger academic resilience tended to report stronger beliefs in their capacity for improvement.

Resilient students may be more willing to interpret academic difficulties as manageable challenges and to persist when initial learning strategies are unsuccessful. Such responses are conceptually compatible with growth mindset, which emphasizes the possibility of developing abilities through sustained effort and effective learning strategies.

This finding is consistent with Prayudy et al. (2025), Ardi et al. (2024), Asyadique and Nurullah (2026), and Prawita et al. (2025), who highlighted the relationship between adaptive responses to challenges and growth-oriented learning beliefs. The result suggests that academic resilience and growth mindset are related but distinct psychological resources that may jointly characterize students' approaches to academic difficulties.

Growth Mindset and Self-Efficacy

Contrary to the proposed relationship, growth mindset was not significantly associated with self-efficacy ($\beta = 0.124$, $t = 1.122$, $p = 0.262$). This finding is particularly important because growth mindset was proposed as the psychological mechanism linking family economic background, family support, and academic resilience with self-efficacy.

A possible explanation lies in the conceptual distinction between the two constructs. Growth mindset reflects the belief that abilities can be developed, whereas self-efficacy concerns confidence in performing particular tasks successfully. Students may believe that improvement is possible without necessarily feeling capable of completing current academic requirements. According to Bandura (1997), mastery experiences represent an important source of efficacy beliefs. Therefore, growth-oriented beliefs may be insufficient to strengthen self-efficacy unless accompanied by opportunities to acquire competencies and experience successful task performance.

This interpretation is broadly consistent with Alkatiri and Susilarini (2025), Fitri et al. (2025), and Maatuil et al. (2025), who discussed the complexity of relationships among growth-oriented beliefs, psychological resources, and educational outcomes. The findings suggest that growth mindset should not automatically be treated as a direct predictor of self-efficacy across all educational contexts.

The Mediating Role of Growth Mindset

The mediation analysis revealed that growth mindset did not significantly mediate the relationships between family economic background and self-efficacy ($\beta = 0.042$, $p = 0.327$), family support and self-efficacy ($\beta = 0.008$, $p = 0.621$), or academic resilience and self-efficacy ($\beta = 0.048$, $p = 0.307$). Accordingly, none of the three proposed mediation hypotheses received empirical support.

These findings indicate that although family economic background and academic resilience were significantly associated with growth mindset, their indirect relationships with self-efficacy through this construct were not statistically significant. In contrast, both variables demonstrated significant direct relationships with self-efficacy. This pattern suggests that the proposed growth mindset mechanism does not adequately explain the associations observed in the present sample.

The results can be considered alongside

studies by Warid (2025), Anne (2025), Angelene and Puspitowati (2024), Ariani (2025), Erlinda and Respati (2026), Putranta and Sigit (2026), Laeli (2025), Erni (2025), and Himmah (2025), which address psychological mechanisms and the relationships among resilience, family-related factors, and efficacy beliefs. However, differences in research contexts and model specifications should be considered before interpreting these studies as direct confirmation of the present mediation findings.

The absence of significant mediation may reflect the distinction between believing that abilities can improve and possessing confidence in one's current academic capabilities. Other mechanisms, such as mastery experiences, academic engagement, perceived competence, or self-regulated learning, may warrant investigation in future studies. These explanations remain theoretical possibilities and were not directly examined in the present research.

Theoretical and Practical Implications

The findings contribute to vocational education research by demonstrating that family economic background and academic resilience were significantly associated with both growth mindset and self-efficacy, whereas family support and growth mindset did not show significant direct relationships with self-efficacy. Theoretically, the results suggest that socioeconomic resources and adaptive psychological capabilities may have distinct relationships with students' efficacy beliefs. They also highlight the importance of distinguishing growth mindset from self-efficacy rather than assuming that the former necessarily translates into the latter.

Practically, vocational schools may consider strengthening academic resilience through structured problem-solving activities, constructive feedback, and opportunities for students to overcome progressively challenging tasks. Schools may also support students facing financial barriers by improving access to educational resources and information about scholarships or further education. Growth mindset initiatives could be integrated with practical learning activities that provide opportunities for demonstrable progress and successful task completion.

Nevertheless, these recommendations should be interpreted cautiously. Because the study employed a cross-sectional survey design, the findings establish statistical associations rather than causal effects or the effectiveness of specific

interventions. Future longitudinal or experimental research would be valuable for examining whether changes in educational resources, academic resilience, and growth-oriented learning experiences lead to improvements in students' self-efficacy.

CONCLUSION

This study examined the mediating role of growth mindset in the relationships between family economic background, family support, academic resilience, and self-efficacy among vocational high school students in Ketanggungan District, Indonesia. The findings revealed that family economic background and academic resilience were positively and significantly associated with both growth mindset and self-efficacy, whereas family support showed no significant direct relationships with either construct. Growth mindset was not significantly associated with self-efficacy and did not mediate any of the proposed relationships. These findings highlight the importance of socioeconomic resources and academic resilience in understanding students' self-efficacy, suggesting that practical educational support and resilience-building initiatives may be more relevant than growth mindset interventions alone. Nevertheless, this study has several limitations, including its cross-sectional design, reliance on self-reported questionnaire data, and geographical restriction to seven private vocational high schools, which limit causal interpretation and generalizability. Future research should employ longitudinal or mixed-method approaches, include more diverse educational settings, and examine alternative mediating mechanisms, such as intrinsic motivation, grit, and self-regulated learning. Incorporating broader social, cultural, and individual factors may also provide a more comprehensive understanding of the mechanisms underlying students' self-efficacy in vocational education.

REFERENCE

- Abdillah, A., & Wulandari, S. S. (2025). Pengaruh self-efficacy, status sosial ekonomi, dan perspektif teman sebaya terhadap minat melanjutkan pendidikan ke perguruan tinggi pada siswa SMK Ketintang Surabaya. *Jurnal Edukasi dan Riset Pendidikan*.
- Affa, A. F., & Mulyana, O. P. (2024). Hubungan antara efikasi diri akademik dengan optimisme karier pada siswa SMK.

- Character: Jurnal Penelitian Psikologi, 11(3), 1453-1462.
- Alkatiri, S. H., & Susilarini, T. (2025). Hubungan kecerdasan emosional dan growth mindset dengan self-efficacy pada siswa kelas XI SMAN 4 Jakarta. *IKRA-ITH Humaniora*, 9(2).
- Andriani, D., & Suryana, A. (2025). Pengaruh efikasi diri dan resiliensi akademik terhadap kemampuan berpikir reflektif IPA. *Alfarisi: Jurnal Pendidikan*.
- Angelene, H., & Puspitowati, I. (2024). Peran efikasi diri sebagai mediator penentu intensi berwirausaha. *Jurnal Muara Ilmu Ekonomi dan Bisnis*, 8(2).
- Anne, H. (2025). Kontribusi growth mindset dan openness to experience dengan perilaku kerja inovatif pada generasi Z [Karya ilmiah, Universitas Islam Negeri Raden Intan Lampung].
- Ardi, Z., Putra, A. H., & Mulia, F. D. (2024). Resiliensi akademik: Fondasi sukses pendidikan.
- Arham, A. B., & Azizah, E. N. (2026). Determinasi ekologis, growth mindset, dan adaptabilitas karier mahasiswa. *Kartika: Jurnal Studi Keislaman*.
- Ariani, D. W. (2025). Peran self-efficacy dalam memediasi work life balance dan work motivation terhadap employee engagement. *MES Management Journal*.
- Asyadique, M. A., & Nurullah, M. (2026). Membangun ketahanan akademik: Tinjauan literatur sistematis tentang pola pikir berkembang dan motivasi siswa. *Journal of Educational Psychology*.
- Atika, S. C. (2025). Mental toughness ditinjau dari growth mindset dan dukungan sosial teman sebaya pada mahasiswa rantau [Karya ilmiah, Universitas Islam Negeri Raden Intan Lampung].
- Badan Pusat Statistik. (2024a). *Badan Pusat Statistik 2024*.
- Badan Pusat Statistik. (2024b). *Statistik pendidikan Indonesia 2023-2024*.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education (3rd ed.)*. University of Chicago Press.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Direktorat Jenderal Pendidikan Tinggi. (2024). *Laporan tahunan PLP 2024: Pemerataan akses dan pembiayaan pendidikan tinggi*. Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
- Erlinda, C. B. D., & Respati, P. P. (2026). Pengaruh pendidikan kewirausahaan, kecerdasan adversitas, dan dukungan sosial terhadap intensi berwirausaha. *Jurnal Lentera Bisnis*.
- Erni, Y. (2025). Self efficacy terhadap subjective well being dimediasi oleh resiliensi pada siswa SMA [Karya ilmiah, Universitas Medan Area].
- Faturrohman, A., & Sagita, D. D. (2022). Resiliensi akademik siswa sekolah menengah pertama dalam mengikuti pembelajaran tatap muka terbatas di DKI Jakarta. *Bulletin of Counseling and Psychotherapy*, 4(1), 167-178.
- Fitri, A., Najib, M., & Tahir, M. I. T. (2025). Analisis peran growth mindset, self-efficacy dan dukungan sosial melalui kreativitas wirausaha sebagai variabel moderator. *Jurnal Pendidikan*.
- Haidar, A. (2020). Peran dukungan orang tua terhadap efikasi diri dan keputusan karier siswa. *Jurnal Bimbingan dan Konseling Terapan*, 4(2), 115-128.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications.
- Hannisa, N. N., Dumadi, & Ernitawati, Y. (2023). Pengaruh kompetensi sumber daya manusia terhadap kualitas laporan keuangan. *Jurnal EMA*, 8(1), 40-50.
- Herlina, E., Syamfithriani, T. S., & Ahdiyat, A. N. (2024). Peningkatan kemampuan pola pikir growth mindset pada anak sekolah. *Journal of Innovation and Sustainable Empowerment*, 3(2), 84-88.
- Hidayatullah, M. F., Suryaningrum, C., & Prasetyaningrum, S. (2023). Hubungan efikasi diri dengan self-regulated learning siswa SMA dalam pembelajaran daring. *Cognicia*, 11(1), 54-60.
- Himmah, F. (2025). Pengaruh growth mindset terhadap resiliensi melalui peer support pada siswa SMK Telekomunikasi Darul Ulum Jombang [Karya ilmiah, Universitas Islam Negeri Maulana Malik Ibrahim Malang].
- Indriyani, A. (2020). Manajemen sumber daya manusia dalam meningkatkan kualitas pelayanan. *Syntax Idea*, 2(5), 1-10.

- Jannah, M., Riany, Y. E., & Latifah, M. (2026). Academic resilience of students: The role of academic self-efficacy. *Jurnal Bimbingan dan Konseling*.
- Junalia, E., Setiawan, A., & Fitriani, P. (2022). Pentingnya komunikasi orang tua-anak terhadap self-efficacy anak usia sekolah. *Jurnal Keperawatan Terpadu (Integrated Nursing Journal)*, 2(2), 53-61.
- Kemendikbudristek RI. (2024). Laporan pendidikan vokasi dan transisi SMK ke pendidikan tinggi tahun 2024.
- Kline, R. B. (2016). *Principles and practice of structural equation modeling*. Guilford Press.
- Kompas. (2024). Hanya 10,20 persen penduduk Indonesia tamat perguruan tinggi, tantangan peningkatan APK masih besar.
- Laeli, A. W. (2025). Hubungan growth mindset dengan goal setting pada mahasiswa dimediasi oleh atribusi controllability [Karya ilmiah, Universitas Islam Negeri Raden Intan Lampung].
- Maatuil, R. A., Bungkaes, M., & Djole, D. L. (2025). Membaca mindset wirausaha: Analisis determinan minat berwirausaha pada mahasiswa generasi Z. *Indonesia Entrepreneurship Journal*.
- Manik, J. G. (2023). Pengaruh self efficacy, status sosial dan kedisiplinan terhadap kesiapan kerja siswa. *Jurnal Generasi Ceria Indonesia*.
- Nabilah, S., & Ulya, L. L. (2025). Self-efficacy as a predictor of work readiness among vocational high school students. *Edukasi*, 19(1), 20-29.
- Nilamsari, N., & Lubis, T. A. (2024). Pengaruh kondisi sosial ekonomi keluarga terhadap keberhasilan melalui efikasi diri. *Jurnal Manajemen Terapan*.
- Paramitha, A. S., Minarni, M., & Aditya, A. M. (2023). Pengaruh coping stres terhadap resiliensi akademik pada mahasiswa selama pembelajaran daring di Kota Makassar. *Jurnal Psikologi Karakter*, 3(2), 469-476.
- Pramisjayanti, D. P., & Khoirunnisa, R. N. (2022). Hubungan antara self-efficacy dengan student engagement pada siswa SMP selama pandemi COVID-19. *Character: Jurnal Penelitian Psikologi*, 9(1), 46-55.
- Prawita, E., Handayani, M., & Pertiwi, D. S. (2025). Growth mindset sebagai mediator pada hubungan antara grit dan resiliensi. *Psikodimensia*.
- Prayudy, R., Makaria, E. C., & Sulistiyana, S. (2025). Hubungan growth mindset dengan resiliensi pengurus BEM FKIP ULM. *Jurnal Edukasi Riset*, 6(3).
- Puslapdik. (2024). Laporan tahunan 2024: Pemerataan akses dan partisipasi pendidikan tinggi di Indonesia. Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.
- Rahmania, A. M., & Utami, D. N. (2024). Gambaran growth mindset pada siswa pesisir Surabaya. *Insight: Jurnal Pemikiran dan Penelitian Psikologi*.
- Rahmawati, A. M., Faressya, D., & Hartinah, D. (2025). Family support and self-efficacy in the management of diabetes mellitus among the elderly. *Journal of Bionursing*.
- Rahmi, D., Rikayoni, R., & Putri, T. H. (2024). Hubungan dukungan suami terhadap self efficacy ibu menyusui. *Jurnal Kesehatan Meditory*.
- Ramadani, F. A., & Ninghardjanti, P. (2025). Family social support, self-efficacy, and academic resilience among MPLB students at SMKN 1 Karanganyar. *JIKAP (Jurnal Informasi dan Komunikasi Administrasi Perkantoran)*, 9(3), 312-320.
- Riandari, F., Alesha, A., & Sihotang, M. (2023). Measuring the position of human intelligence in influencing its success. *Ministries and Theology Journal*.
- Riyanto, S., & Hatmawan, A. (2020). Metode penelitian kuantitatif. Penerbit ANDI.
- Rochani, S., & Suharsono, N. (2023). Pengaruh prestasi belajar, status sosial ekonomi keluarga, dan minat berwirausaha terhadap kesiapan berwirausaha siswa SMK. *Jurnal Pendidikan Ekonomi Undiksha*, 15(1), 9-20.
- Rohmawati, L. I. S., Indreswari, H., & Flurentin, E. (2023). Dukungan orang tua, ekspektasi karier dan hubungannya dengan motivasi belajar siswa di SMK Negeri 5 Malang. *Jurnal Pembelajaran, Bimbingan, dan Pengelolaan Pendidikan*, 3(3), 252-262.
- Sari, D. A. K., & Setiawan, E. P. (2023). Literasi baca siswa Indonesia menurut jenis kelamin, growth mindset, dan jenjang pendidikan: Survei PISA. *Jurnal Pendidikan dan Kebudayaan*.
- Sari, R., & Rusdarti. (2020). Pengaruh motivasi dan lingkungan keluarga melalui self efficacy terhadap minat menjadi guru. *Business and Accounting Education Journal*.
- Sriyono, S., & Megawati, A. (2021). Pengaruh status ekonomi orang tua dan sosialisasi keluarga terhadap prestasi belajar. *Jurnal Educatio FKIP UNMA*, 7(3), 1154-1162.

- Sucipto, H., Mukson, & Syaifulloh, M. (2021). Pengaruh pengembangan sumber daya manusia, disiplin kerja dan lingkungan kerja terhadap kinerja. *Fair Value: Jurnal Ilmiah Akuntansi dan Keuangan*, 4(2), 795-805.
- Sugiyono. (2024). *Metode penelitian kuantitatif, kualitatif, dan R&D (Edisi revisi)*. Alfabeta.
- Tazky, A., Arifiana, I. Y., & Efendy, M. (2025). Resiliensi akademik mahasiswa: Peranan self-regulated learning dan efikasi diri. *Innovative: Journal of Social Science*.
- Vierintino, C., Febianti, Y. N., & Herawan, E. (2023). Pengaruh self efficacy dan status sosial ekonomi orang tua terhadap minat berwirausaha siswa. *Jurnal Profit*.
- Wardani, V. K., & Nugraha, J. (2021). Pengaruh pendidikan kewirausahaan dan lingkungan keluarga terhadap intensi berwirausaha melalui self-efficacy. *Jurnal Ekonomi Pendidikan dan Kewirausahaan*.