MIKAILALSYS
Journal of Multidisciplinary Sciences

e-ISSN : 2987-2286
p-ISSN : 2987-3924

Index: Harvard, Boston, Sydney, Copernicus, Sinta 4, Scilit, Semantic, Google, etc

https://doi.org/10.58578/mikailalsys.v4i3.11488

Enhancing Junior High School Students' Self-Efficacy through Self-Reflection-Based Classical Guidance

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Article Info:

Submitted:	Revised:	Accepted:	Published:
Jun 12, 2026	Jul 10, 2026	Jul 22, 2026	Jul 27, 2026

Abstract

Low self-efficacy among junior high school students can undermine self-confidence and active engagement in learning; however, research positioning self-reflection as the core intervention in Guidance and Counseling services remains limited. This study aims to examine the effectiveness of self-reflection-based classical guidance services in improving the self-efficacy of ninth-grade students at a public junior high school in Madiun. A quantitative approach with a one-group pretest–posttest design was employed, involving 30 students selected through total sampling. Data were collected using a self-report scale and analyzed using a paired-samples t test and Cohen's d_z. The findings reveal a statistically significant increase in the mean self-efficacy score from 142.70 at pretest to 171.60 at posttest, $t(29) = -12.15$, $p < .001$, with a very large effect size ($d_z = 2.22$). However, the decrease in the minimum score from 78.00 to 74.00 suggests that some students may have undergone a metacognitive calibration process toward a more realistic self-assessment. The study concludes that self-reflection-based classical guidance services are effective in enhancing students' self-efficacy. These findings contribute to the development of student-centered Guidance and Counseling practices by emphasizing structured

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reflection as a central component of classical guidance and highlight the need for follow-up individual counseling for students requiring more targeted support.

Keywords: Classical Guidance; Junior High School Students; Metacognitive Calibration; Self-Efficacy; Self-Reflection

INTRODUCTION

Education aims to develop students' full potential to empower them to face various life challenges. Success in the learning process is determined not only by cognitive abilities but is also heavily influenced by students' beliefs in their own capabilities. This aligns with educational policy directions emphasizing the critical role of deep learning in shaping students' holistic competence (Sahin et al., 2025). A pivotal psychological construct in this context is self-efficacy, defined as an individual's belief in their capability to organize and execute the actions required to achieve specific goals or accomplish tasks (Chen et al., 2025; Hinduja et al., 2024; Momeni et al., 2025; Schunk & DiBenedetto, 2021).

Students with high self-efficacy tend to demonstrate greater confidence, a willingness to embrace challenges, and resilience in difficult situations. This is consistent with empirical findings highlighting that self-efficacy correlates positively with academic performance, learning resilience, and overall student achievement (Gál & Kerekes, 2025; Ma et al., 2025; Sani et al., 2026; Talsma et al., 2018). Conversely, low self-efficacy can cause students to give up easily, experience self-doubt, and underperform in realizing their potential (Hejazi & Sadoughi, 2025; Lyu et al., 2025).

Furthermore, self-efficacy plays a crucial role in facilitating student engagement in the classroom. Students who believe in their capabilities tend to be more active, express their opinions boldly, and persist through demanding tasks (Alrashidi & Alshammari, 2025; Li & Zeng, 2025; Zhai & Li, 2025). In contrast, those with low self-efficacy frequently experience hesitation, lack self-confidence, and encounter difficulties in regulating emotions and overcoming learning obstacles (Yang et al., 2025; Yu et al., 2022). This psychological state ultimately affects how students think, act, and persevere when encountering challenges. Therefore, developing self-efficacy is vital, particularly for junior high school students in early

adolescence—a crucial developmental phase for self-concept formation (Efklides & Schwartz, 2024).

Based on preliminary observations conducted during field teaching practice at a public junior high school in Madiun, a notable portion of ninth-grade students exhibited low self-efficacy. This was evident in their hesitation when answering questions, lack of confidence in expressing opinions, and inability to recognize their personal potential. This issue warrants immediate attention as students are transitioning to higher educational levels that demand strong academic and psychological readiness. Assessing students' self-efficacy in this study requires a valid and reliable measurement tool, as emphasized in the development and validation of general self-efficacy scales widely applied across educational settings (Zeng et al., 2022).

Addressing this issue requires an approach that goes beyond conveying information to actively engaging students' internal dimensions, specifically in building confidence in their capabilities. A promising approach is self-reflection—a process of examining personal experiences to gain insight into one's strengths, weaknesses, and potential (Aldosari et al., 2023; Nieminen & Boud, 2025).

Self-reflection enables students to cultivate self-awareness, manage learning experiences, and foster the belief that abilities can be developed through sustained effort. A growing body of research demonstrates that practices involving self-reflection, planning, and goal setting contribute significantly to enhancing students' self-efficacy and academic performance (Chung et al., 2021; Gebremariam & Asgede, 2023; Husebø et al., 2024; Wei et al., 2024).

Within Guidance and Counseling services, self-reflection can be integrated into classical guidance. This service delivery model extends beyond mere content presentation to encourage active student involvement in the personal development process. Moreover, goal-setting approaches have proven effective in increasing student self-efficacy through structured interventions (Lokahitta & Affandi, 2023). Consequently, self-reflection-based classical guidance serves not only as a supportive framework but also as a transformative mechanism for constructing student self-efficacy.

Numerous studies have explored the role of self-efficacy in student learning success. Zhai and Li (2025) demonstrated that psychological factors such as mindset, resilience, and the learning environment contribute significantly to boosting student self-efficacy. Similarly,

Yang et al. (2025) revealed that external factors, including parenting styles and academic pressure, influence students' self-efficacy and psychological well-being.

Conversely, self-reflection has been proven to play an essential role in improving students' learning awareness and metacognitive capabilities. Aldosari et al. (2023) and Wei et al. (2024) highlighted that self-assessment and reflective practices enhance self-efficacy alongside overall learning quality. Additionally, studies have demonstrated that various classical guidance interventions, including technology-integrated and game-based learning approaches, are effective in boosting student self-efficacy (Nisa et al., 2024).

However, the majority of prior studies have focused primarily on identifying factors that influence self-efficacy or evaluating specific instructional techniques, without positioning self-reflection as the core intervention within classical guidance services. Furthermore, empirical research specifically investigating the integration of self-reflection into Guidance and Counseling services at the junior high school level remains scarce. Therefore, an empirical study evaluating the effectiveness of this approach is necessary to fill the identified research gap.

The novelty of this study lies in the integration of classical guidance with a self-reflection framework as an intervention strategy to enhance student self-efficacy. This approach positions students as active agents who do not merely receive information, but reflect on their learning experiences and construct an authentic understanding of themselves.

Theoretically, this research is grounded in Self-Efficacy Theory, which posits that an individual's belief in their capabilities significantly governs their behavior, motivation, and achievement outcomes (Schunk & DiBenedetto, 2021). Furthermore, this study is supported by Self-Reflection and Metacognition Theories, which underscore the importance of self-evaluation in the learning process (Nieminen & Boud, 2025). Thus, this study not only evaluates the effectiveness of the intervention but also extends the application of self-efficacy theory within reflection-centered Guidance and Counseling services.

This study focuses on evaluating the effectiveness of self-reflection-based classical guidance in enhancing the self-efficacy of ninth-grade junior high school students. The primary objective is to analyze the increase in student self-efficacy following the implementation of self-reflection-based classical guidance interventions.

METHODS

This study employed a quantitative approach utilizing a pre-experimental one-group pretest–posttest design (O_1XO_2) to examine the effectiveness of self-reflection-based classical guidance services on student self-efficacy. In this design, a baseline measurement (O_1) was conducted prior to the intervention to assess the subjects' initial self-efficacy levels. Subsequently, the treatment consisting of self-reflection-based classical guidance (X) was administered, followed by a post-intervention measurement (O_2) using an identical instrument to evaluate post-treatment changes.

The research design is schematically represented as follows:

O_1 X O_2

O_1 : Baseline measurement (pretest) of self-efficacy prior to the intervention.

X : Implementation of the intervention (self-reflection-based classical guidance).

O_2 : Post-intervention measurement (posttest) of self-efficacy after the intervention.

Changes in student self-efficacy levels were evaluated by comparing scores between O_1 and O_2 to determine the overall effectiveness of the intervention.

The study population comprised all ninth-grade students at the target school. A total sampling (saturated sampling) technique was employed, involving the entire population of 30 students (N = 30) as research participants. This technique was selected due to the relatively small and fully accessible population size.

The selection of ninth-grade students was grounded in preliminary observations conducted during Field Teaching Practice (*Praktik Pengalaman Lapangan* / PPL). Initial observations revealed indicators of low self-efficacy among several students, such as a lack of confidence in expressing opinions, hesitation when answering questions in class, and limited recognition of personal potential. These indications underscored the urgency of delivering a structured guidance intervention.

This study examined two main variables:

1. Independent Variable (X) **:** Self-reflection-based classical guidance service administered as the treatment.

2. Dependent Variable (Y) **:** Student self-efficacy, defined as individual belief in one's capabilities, measured before and after the intervention.

a. Self-Efficacy

Self-efficacy is defined as students' subjective belief in their capabilities to complete academic tasks, overcome obstacles, make decisions, persevere through difficult situations, and achieve learning targets. This variable was measured across three primary dimensions:

Magnitude : Students' belief in facing tasks with varying levels of difficulty.

Generality : Students' belief in applying their capabilities across diverse learning contexts and situations.

Strength : The strength and resilience of students' beliefs when encountering obstacles or failures.

b. Self-Reflection-Based Classical Guidance

Self-reflection-based classical guidance is a Guidance and Counseling treatment delivered in a classroom setting (whole-class format) by integrating structured reflective activities. This service was designed to facilitate students in understanding learning experiences, analyzing personal strengths and barriers, reconstructing mindsets, and formulating personal commitments. Intervention activities included group discussions, case study analyses, completing reflection sheets, and drafting personal action plans.

Data were collected using a self-efficacy scale adapted from the General Self-Efficacy construct. The instrument was linguistically and contextually adapted to align with the developmental characteristics of junior high school students without altering its core theoretical construct.

The scale consisted of 50 items, comprising 27 favorable items and 23 unfavorable items to ensure response balance and objectivity. Item distribution was mapped according to the indicators of the three self-efficacy dimensions (magnitude, generality, and strength).

Data analysis was conducted sequentially, encompassing data quality testing, descriptive analysis, assumption testing, and hypothesis testing:

1. Reliability Testing: Internal consistency of the instrument was evaluated using Cronbach's Alpha (alpha) coefficient.

2. Descriptive Analysis: Used to provide an overview of score distribution, mean values (M), and percentage levels of student self-efficacy at the pretest and posttest stages.

3. Normality Testing: Given the small sample size (N = 30 < 50), data distribution normality was assessed using the Shapiro–Wilk test.

4. Hypothesis Testing (Effectiveness Evaluation): If the data were normally distributed, hypothesis testing was conducted using a paired sample *t*-test. If the normality assumption was violated, the non-parametric Wilcoxon signed-rank test was utilized.

The research hypothesis was deemed supported if the significance level was $p < .05$.

RESULTS

This section presents the research findings systematically, starting from descriptive statistics, assumption testing, main hypothesis testing, to specific data observations according to the research stages.

1. Main Findings

a. Reliability of the Instrument

The internal consistency of the 50-item self-efficacy scale was evaluated using the Cronbach's Alpha coefficient. The result of the reliability analysis is presented in Table 1.

Table 1. Reliability Analysis of the Self-Efficacy Scale

Instrument	Cronbach's Alpha (α)	Number of Items	Status
Self-Efficacy Scale	.986	50	Reliable

As shown in Table 1, the scale demonstrated a Cronbach's Alpha coefficient of .986, indicating high internal consistency across all 50 items.

b. Descriptive Statistics of Pretest and Posttest Scores

Descriptive analysis was conducted to measure the students' self-efficacy scores before (O_1) and after (O_2) the implementation of the reflection-based classical guidance intervention. Table 2 summarizes the descriptive parameters.

Table 2. Descriptive Statistics of Pretest and Posttest Self-Efficacy Scores (N = 30)

Measurement	N	Min	Max	Mean	SD
Pretest (O_1)	30	78.00	217.00	142.70	36.89
Posttest (O_2)	30	74.00	243.00	171.60	39.53

As presented in Table 2, the mean self-efficacy score increased by 28.90 points, rising from 142.70 (SD = 36.89) at the pretest stage to 171.60 (SD = 39.53) at the posttest stage. Additionally, the maximum score achieved by participants increased from 217.00 to 243.00.

c. Normality Testing

To determine the appropriate statistical test for hypothesis testing, a Shapiro–Wilk normality test was performed (N < 50). The results are presented in Table 3.

Table 3. Shapiro–Wilk Normality Test Results

Data Group	Statistic	df	Sig. (p)	Distribution
Pretest (O_1)	.967	30	.479	Normal
Posttest (O_2)	.965	30	.437	Normal

The test yielded significance values of p = .479 for the pretest data and p = .437 for the posttest data. Because both p-values exceed the standard significance threshold (alpha = .05), the data are confirmed to be normally distributed, fulfilling the assumption for parametric analysis.

d. Hypothesis Testing and Effect Size

A paired sample t-test was executed to evaluate the statistical significance of the score changes following the intervention. Cohen's d_z was subsequently calculated to measure the magnitude of the intervention effect using Equation 1:

$$d_z = \frac{|t|}{\sqrt{N}} \quad (1)$$

The hypothesis test results and the calculated effect size are detailed in Table 4.

Table 4. Paired Sample t-Test Results and Effect Size

Comparison	T	Df	Sig. (2-tailed)	Cohen's dz	Decision
Pretest – Posttest	-12.15	29	< .001	2.22	H_0 Rejected

As shown in Table 4, the paired sample t-test produced a value of t(29) = -12.15 with p < .001. Since $p < .05, the null hypothesis (H_0) is rejected. The calculated effect size yielded a Cohen's d_z of 2.22, indicating a substantial intervention effect on student self-efficacy.

2. Divergent Findings and Data Anomalies

While the overall group mean showed a significant upward trend, an individual-level data variation was observed between the pretest and posttest measurements. Specifically, as documented in Table 2, the minimum self-efficacy score slightly decreased from 78.00 during the pretest to 74.00 during the posttest. This indicates that while the reflection-based classical guidance effectively enhanced self-efficacy across the vast majority of participants, a minor subset of students did not experience positive score progression.

DISCUSSION

The findings of this study provide empirical evidence that self-reflection-based classical guidance services yield a statistically significant positive effect on enhancing ninth-grade students' self-efficacy. This is demonstrated by an increase in the mean self-efficacy score of 28.90 points, rising from 142.70 at pretest (O_1) to 171.60 at posttest (O_2). Hypothesis testing via a paired sample *t*-test confirms the statistical significance of this gain, $t(29) = -12.15$, $p < .001$. The calculated effect size yielded a Cohen's d_z of 2.22, which falls into the very large effect size category. This indicates that the intervention not only achieved statistical significance but also carries substantial practical meaningfulness in fortifying students' self-belief.

This elevation in self-efficacy directly resolves the baseline issues identified during preliminary observations in Field Teaching Practice (*Praktik Pengalaman Lapangan* / PPL) at a public junior high school in Madiun. Prior to the intervention, students exhibited manifest indicators of low self-efficacy, including reluctance to answer questions, lack of confidence when expressing opinions, and an inability to recognize their personal potential. Through self-reflection-based classical guidance, students were supported in a structured manner using reflection sheets, case study analyses, group discussions, and the formulation of personal action commitments. These activities stimulated students to reconstruct their self-perceived capabilities, thereby fostering confidence and active participation in classroom learning interactions.

Conversely, descriptive data analysis revealed a divergent finding (anomalous result), wherein the minimum self-efficacy score registered a minor decline from 78.00 at pretest to 74.00 at posttest. From a psychological perspective, this score reduction in a small subset of individuals illustrates the phenomenon of metacognitive calibration. Before receiving the treatment, students with extremely low initial self-efficacy tended to rate themselves arbitrarily or based on unexamined "blind confidence." However, following deep self-reflection activities, these students gained authentic self-assessment regarding their genuine limitations, obstacles, and actual academic challenges. This newly acquired awareness facilitated a more honest, critical, and realistic self-appraisal at posttest, which was accurately reflected in lower instrument scores.

The findings of this study align with and reinforce Self-Efficacy Theory (Schunk & DiBenedetto, 2021), which posits that an individual's belief in their capability is the product

of cognitive evaluations of personal experiences and capability information. The observed increase in student self-efficacy confirms that self-belief is dynamic and malleable through structured psychopedagogical interventions.

Furthermore, these results extend the literature regarding the efficacy of reflective practices, structured evaluation, and goal setting in boosting self-efficacy and academic performance (Aldosari et al., 2023; Chung et al., 2021; Gebremariam & Asgede, 2023; Husebø et al., 2024; Lokahitta & Affandi, 2023; Nieminen & Boud, 2025; Wei et al., 2024). While prior research predominantly implemented self-reflection as an instructional technique within specific subject classrooms (such as language or science education), this study successfully demonstrates that self-reflection is highly effective when integrated as a core intervention strategy within school Guidance and Counseling services.

This study also strengthens earlier empirical literature emphasizing the critical role of self-efficacy in driving student academic engagement, learning resilience, willingness to express opinions, and emotional regulation (Alrashidi & Alshammari, 2025; Gál & Kerekes, 2025; Li & Zeng, 2025; Ma et al., 2025; Sani et al., 2026; Talsma et al., 2018; Zhai & Li, 2025). During early adolescence, students navigate a pivotal developmental milestone for self-concept formation and identity development (Efklides & Schwartz, 2024). Reflective interventions help students mitigate the risk of self-doubt and academic helplessness frequently caused by low self-efficacy (Hejazi & Sadoughi, 2025; Lyu et al., 2025; Yang et al., 2025; Yu et al., 2022). Additionally, these outcomes resonate with findings by Nisa et al. (2024) and Sahin et al. (2025), who underlined the necessity of interactive approaches and deep learning in cultivating holistic student competencies.

This study carries significant theoretical and practical implications for the advancement of educational practices and Guidance and Counseling programs:

First, Theoretical Implications: This study broadens the operational scope of self-efficacy theory and metacognition within the Guidance and Counseling framework. It supplies empirical evidence that embedding a self-reflection framework into classical guidance services directly facilitates students' cognitive transformation—elevating self-belief while simultaneously sharpening metacognitive self-awareness.

Second, Practical or Pedagogical Implications: School counselors (Guidance Teachers) are encouraged to shift away from conventional, teacher-centered lecture formats toward interactive, student-centered reflection strategies. Counselors should routinely

provide structured reflection sheets, facilitate collaborative discussions, and guide students in formulating actionable personal commitments.

Third, Service Managerial Implications: The presence of an anomalous score drop in a minority of students implies that classical guidance must be complemented by a systematic screening mechanism. Students who do not respond positively to whole-class interventions require targeted, need-based counseling, such as small-group guidance or individual counseling sessions.

Despite its notable empirical contributions, several inherent limitations must be considered when interpreting these findings:

First, the study utilized a one-group pretest–posttest design lacking a control group. This limits complete control over threats to internal validity, such as maturation effects stemming from students' natural psychological growth or external confounding events occurring during the intervention period.

Second, the research employed a total sampling technique with a limited sample size (N = 30) bounded to a single institution (a public junior high school in Madiun). Consequently, the generalizability of these findings to broader student populations or differing institutional contexts should be executed with caution.

Third, data collection relied exclusively on self-report scales. This measurement approach remains vulnerable to social desirability bias and shifts in student subjectivity when evaluating their own capabilities before and after reflective processing.

To build upon these findings and address the current limitations, several directions are outlined for future research agendas:

First, future scholars are advised to employ more robust experimental designs, such as Randomized Control Trials (RCTs) or quasi-experimental pretest–posttest control group designs. Incorporating a standardized control group is essential to isolate the true treatment effect of reflection-based guidance from external confounding variables.

Second, To evaluate the durability of the treatment effects, future studies should adopt longitudinal tracking. Measuring student self-efficacy retention periodically (e.g., 3 to 6 months post-intervention) will offer strong empirical evidence regarding whether the benefits of reflection-based guidance represent a long-term effect or a temporary psychological response.

Third, Future research is encouraged to integrate a mixed-methods framework. Combining quantitative statistical analyses with qualitative methods—such as in-depth interviews or case studies—is vital to unpack the psychological mechanisms and contextual nuances underlying anomalous score adjustments or individual score drops.

CONCLUSION

This study concludes that self-reflection-based classical guidance services are significantly effective in enhancing the self-efficacy of ninth-grade students at a public junior high school in Madiun. This conclusion is quantitatively substantiated by an increase in the mean self-efficacy score from 142.70 at pretest to 171.60 at posttest, alongside paired sample t-test results indicating a statistically significant difference, $t(29) = -12.15$, $p < .001$. Furthermore, a Cohen's d_z effect size of 2.22 underscores that this psychopedagogical intervention exerts a robust practical impact on fortifying students' self-belief.

Conversely, a divergent finding marked by a decrease in the minimum score from 78.00 to 74.00 demonstrates that the self-reflection process stimulated metacognitive calibration in a small subset of students. This signifies a cognitive shift from superficial or unexamined self-confidence toward a more honest, critical, and realistic self-appraisal.

Theoretically, this study makes a meaningful contribution to the Guidance and Counseling literature by expanding the application of Self-Efficacy Theory and Metacognitive Theory to the context of early adolescence. The findings provide empirical evidence that self-efficacy is not a rigid psychological construct, but rather a dynamic and malleable entity that can be meaningfully reconstructed through structured psychopedagogical interventions.

Additionally, the novelty of this research lies in repositioning self-reflection—which has conventionally served merely as an instructional technique within academic subjects—into the core intervention strategy within classical guidance services. This practical contribution fosters a paradigm shift in school Guidance and Counseling practices, transitioning from traditional teacher-centered models toward reflective, student-centered approaches driven by active student engagement.To build upon these findings and address the study's inherent limitations, several recommendations are proposed for future research agendas. Future scholars are encouraged to employ more rigorous experimental designs, such as Quasi-Experimental or Randomized Control Trials (RCTs) incorporating a control group,

to more effectively isolate intervention effects from external confounding variables. Moreover, expanding the sample size and scope to include participants from diverse institutional backgrounds and geographical regions is strongly recommended to enhance the generalizability of the findings.

To evaluate the temporal stability of the treatment effect, future studies should adopt longitudinal designs featuring periodic retention assessments (follow-up tests) conducted 3 to 6 months post-intervention. Finally, integrating a mixed-methods approach through case studies or in-depth qualitative interviews is highly recommended to comprehensively explore the unique psychological dynamics underlying anomalous score adjustments and individual self-appraisal shifts.

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