Tarbiyah wa Ta'lim: Jurnal Penelitian Pendidikan dan Pembelajaran November, 2026. Vol. 13, No. 3
https://journal.iain-samarinda.ac.id/index.php/Tarbiyawat/index p-ISSN: 2338-4530
e-mail: jtarbiyahwatalim@gmail.com e-ISSN: 2540-7899
pp. 237-252

The Effect of Self-Efficacy on Qur'an Memorization among Gen Z in Islamic Boarding Schools

[1*]Taufikur Rohman, [2]Humaida Humaida
[1,2]Universitas Kutai Kartanegara*
**Corresponding E-mail: taufikurrohman@unikarta.ac.id*

Abstract

This study examines the contribution of self-efficacy to Qur'an memorization ability among Generation Z students in East Kalimantan Islamic Boarding Schools. A quantitative ex post facto design involved 157 students from three junior high schools: SMP Bilingual Miftahul Ulum Tenggarong, SMP Muhammadiyah 5 Samarinda, and SMP IT Insan Mulia Balikpapan. Self-efficacy was measured using a five-point Likert questionnaire, whereas Qur'an memorization ability was assessed by tahfidz teachers through a performance rubric covering tajwid, tahfizh, and fashahah. Descriptive statistics and simple linear regression were applied after normality and linearity assumptions were met. The results demonstrate that self-efficacy positively and significantly contributes to Qur'an memorization ability ($R = 0.738$; $R^2 = 0.544$; $B = 0.612$; $p < 0.001$). Students' beliefs in starting memorization, persisting through difficulty, and applying confidence across learning situations appear to support tahfidz achievement. The study offers conceptual novelty by framing magnitude, strength, and generality as psychological dimensions for strengthening Gen Z tahfidz learning in boarding school contexts.

Keywords: Generation Z, Islamic Boarding School, Qur'an Memorization Ability, Self-Efficacy, Tahfidz

How to Cite: Rohman, T., & Humaida, H. (2026). The Effect of Self-Efficacy on Qur'an Memorization among Gen Z in Islamic Boarding Schools. *Tarbiyah wa Ta'lim: Jurnal Penelitian Pendidikan dan Pembelajaran*, 13 (3), 237-254. doi: https://doi.org/10.21093/twt.v13i3.12954

https://doi.org/10.21093/twt.v13i3.12954

Copyright© 2026, Rohman T., & Humaida
This is an open-access article under the CC-BY License.

INTRODUCTION

Qur'an memorization is a central practice in Islamic education because it combines spiritual formation, disciplined learning, and long-term character development. In Islamic Boarding Schools, tahfidz is not positioned merely as an additional religious activity, but as a structured educational program that shapes students' daily routines, learning discipline, and religious identity (Arrasyidin & Azani, 2025; M. A. H. Siregar & Tumiran, 2025). However, memorizing the Qur'an requires more than repetition and instructional technique. It also demands psychological readiness, self-regulation, emotional control, and confidence that students can complete memorization targets despite repeated correction and gradual difficulty (Bandura, 1997; Schunk & Pajares, 2002; Zimmerman, 2000). Foundational perspectives on self-efficacy and achievement motivation also show that belief systems influence behavior, learning choices, and persistence in academic tasks (Bandura, 1977, 1986; Pajares & Schunk, 2001; Wigfield & Eccles, 2000).

The psychological dimension becomes more critical when tahfidz learning is experienced by Generation Z students. This generation learns in a digital ecosystem marked by fast information flow, multimedia exposure, and frequent distraction,

while at the same time requiring recognition, feedback, and meaningful interaction in learning (Antons et al., 2025; Darussalam et al., 2026; Martin et al., 2025; Taba et al., 2022). In the tahfidz context, these characteristics can create tension: students are expected to maintain attention and repetition for long periods, whereas their everyday digital habits tend to train rapid shifts of attention. Therefore, memorization achievement among Generation Z students needs to be understood through the interaction between instructional practice and internal psychological strength. Studies on digital identity and internet-generation behavior further indicate that Generation Z learners are shaped by online self-presentation, rapid media interaction, and changing patterns of attention (Kollárová & Niklová, 2025; Nurlaila et al., 2024; Schwarze et al., 2025). Qur'anic literacy research also shows that digital disruption can affect how students strengthen religious identity through literacy practices (Pangesti, 2026).

The need for this perspective appeared in the research setting. Initial screening of tahfidz performance in the three participating schools showed a wide score range, from 48 to 96, indicating that students entered the memorization program with uneven levels of mastery. Teachers also reported that some students were able to submit memorization regularly, while others needed repeated correction, additional muraja'ah, and reassurance before presenting their memorization. This variation suggests that the problem is not limited to method or practice frequency. It also concerns students' belief that they are able to begin memorizing, survive difficulty, and maintain memorization under different learning conditions (Asmardi & Rudi, 2026; Rinalya, 2023; Swasono, 2024). This regional relevance is consistent with earlier East Kalimantan research showing that adversity quotient and self-efficacy are related to students' Qur'an memorization ability (Rohman, 2023).

Self-efficacy offers a useful theoretical lens for explaining this issue. (Bandura, 1997) defines self-efficacy as a person's belief in their capability to organize and perform actions required to attain certain outcomes. In learning, self-efficacy affects how students choose tasks, regulate effort, respond to failure, and persist when they face obstacles (Bandura, 2012; Honicke & Broadbent, 2016; Talsma et al., 2018). Applied to Qur'an memorization, self-efficacy refers to students' confidence that they can memorize verses, correct mistakes, repeat muraja'ah, and continue the process even when targets become more difficult. The operational use of magnitude, strength, and generality also follows the academic self-efficacy tradition and Bandura's guidance for constructing self-efficacy scales (Bandura, 2006; Pajares, 1996).

Students with stronger self-efficacy are more likely to treat memorization difficulties as manageable learning challenges, not as proof of inability. They tend to invest effort, accept feedback, and continue practicing after errors in recitation submission. Conversely, students with weaker self-efficacy may avoid difficult verses, become anxious during setoran, or stop trying after several unsuccessful attempts (Artino, 2012; Komarraju & Nadler, 2013; Naqiyah, 2022; Panadero et al., 2017). This distinction is important because tahfidz learning is cumulative: small failures in confidence can accumulate into inconsistent practice, while repeated mastery experiences can strengthen both belief and performance. This interpretation is also supported by motivation theories that emphasize competence, autonomy, goal orientation, and internalized motivation in sustaining learning effort (Deci & Ryan, 2000; Pintrich, 2000; Ryan & Deci, 2020).

Islamic Boarding Schools provide a unique environment for examining this relationship. Their structured routines, teacher supervision, peer culture, and religious atmosphere can support memorization, yet the same structure may also create pressure for students who lack confidence or emotional readiness (Encung & Rusydi, 2026; Hendra et al., 2024; Jiang et al., 2026; Salim & Pohan, 2025). Thus, self-efficacy should not be treated as a marginal variable. It functions as a psychological bridge between the boarding school system and students' ability to transform that system into consistent tahfidz performance. In tahfidz boarding-school contexts, resilience has likewise been identified as a psychological resource that helps memorization students maintain effort under demanding routines (Luthfia & Kawuryan, 2026).

Previous studies have shown that self-efficacy is related to learning persistence, achievement, and memorization outcomes (Broadbent & Poon, 2015; Hendra et al., 2024; Pohan, 2023; Richardson et al., 2012; Rohman et al., 2026). Nevertheless, most discussions of tahfidz achievement remain method-centered, while the psychological mechanism through which students sustain memorization in formal Islamic boarding schools has received less conceptual attention. Moreover, many studies on self-efficacy use general academic outcomes, whereas Qur'an memorization requires a specific combination of cognitive accuracy, oral performance, discipline, and spiritual commitment.

The novelty of this study is therefore not only contextual but also conceptual. Contextually, it focuses on Generation Z junior high school students in Islamic Boarding Schools in East Kalimantan. Conceptually, it positions Bandura's three dimensions of self-efficacy—magnitude, strength, and generality—as an explanatory framework for tahfidz performance. Magnitude explains students' confidence when facing memorization tasks of different levels of difficulty; strength explains how firmly they maintain belief when errors, anxiety, or delayed targets occur; and generality explains whether confidence can be transferred across varying memorization situations. This framing extends earlier work by linking self-efficacy dimensions directly to the practical structure of tahfidz learning.

Based on this analytical gap, this study aims to examine the contribution of self-efficacy to the Qur'an memorization ability of Generation Z students in Islamic Boarding Schools in East Kalimantan. The findings are expected to enrich Islamic educational psychology by showing how students' internal beliefs contribute to religious learning outcomes. Practically, the study offers guidance for tahfidz teachers, school administrators, and parents in designing memorization strategies that combine discipline with psychological support, gradual targets, constructive feedback, and emotionally safe recitation submission.

RESEARCH METHODOLOGY

This study used a quantitative approach with an ex post facto design because the research examined the contribution of self-efficacy to Qur'an memorization ability based on naturally occurring conditions, without experimental treatment or manipulation of the learning environment (Creswell & Poth, 2018; Rohwer, 2022; D. A. Siregar, 2022). The study was conducted from January to April 2026 in three junior high school Islamic Boarding Schools in East Kalimantan: SMP Bilingual Miftahul Ulum Tenggarong, SMP Muhammadiyah 5 Samarinda, and SMP IT Insan Mulia Balikpapan. These institutions were selected because they implement structured

tahfidz programs within a boarding school system and have regular memorization submission, muraja'ah, and teacher supervision.

The accessible population consisted of 258 Generation Z junior high school students participating in tahfidz programs at the three schools, distributed as follows: 92 students at SMP Bilingual Miftahul Ulum Tenggarong, 84 students at SMP Muhammadiyah 5 Samarinda, and 82 students at SMP IT Insan Mulia Balikpapan. The sample size was calculated using the Yamane formula with a 5% margin of error, resulting in 157 respondents. The sample was then allocated proportionally across the three schools, namely 56 students from SMP Bilingual Miftahul Ulum Tenggarong, 51 students from SMP Muhammadiyah 5 Samarinda, and 50 students from SMP IT Insan Mulia Balikpapan. Respondents were selected through simple random sampling to give each eligible student an equal chance of being included (Krejcie & Morgan, 1970; Rahman et al., 2022; Stratton, 2023; Yamane, 1967).

Data collection used two instruments. First, students' self-efficacy was measured through a five-point Likert questionnaire administered offline, ranging from strongly disagree to strongly agree. The questionnaire consisted of 20 items developed from the dimensions of magnitude, strength, and generality. Second, Qur'an memorization ability was not measured by a self-report questionnaire; it was assessed by tahfidz teachers using a performance rubric covering tajwid accuracy, tahfizh fluency, and fashahah. This rubric-based assessment was used because memorization ability is a demonstrable performance and should be evaluated through recitation, teacher observation, and scoring criteria rather than by students' perceptions alone (Boateng et al., 2018; Hossan et al., 2025; Taber, 2018).

The research procedure was conducted systematically. Instrument indicators were first reviewed by experts in Islamic education and educational measurement, followed by a pilot test on 30 students with similar characteristics to the research sample. The validity test used corrected item-total correlation, with an r-table value of 0.361 at a 5% significance level. The self-efficacy questionnaire obtained calculated r values ranging from 0.382 to 0.726, while the Qur'an memorization rubric obtained calculated r values ranging from 0.418 to 0.694; therefore, all items and rubric indicators were declared valid. Reliability was examined using Cronbach's Alpha. The self-efficacy instrument obtained an alpha of 0.775, and the Qur'an memorization rubric obtained an alpha of 0.643. These values were considered acceptable for educational field research because alpha values above 0.60 are commonly interpreted as sufficient for exploratory measurement, while values above 0.70 indicate stronger internal consistency (Hair et al., 2019; Taber, 2018).

The collected data were coded, tabulated, and analyzed using descriptive and inferential statistics. Descriptive statistics were used to present the distribution of scores, while inferential statistics were applied through simple linear regression to test whether self-efficacy contributed to Qur'an memorization ability (Field, 2018; Nada et al., 2025; Stapor, 2020). Before regression analysis, prerequisite tests were performed, including residual normality and linearity tests. Hypothesis testing was conducted at a significance level of 0.05, with p values below 0.001 interpreted as very strong evidence of statistical significance in this study.

RESULTS

Before the hypothesis was tested, the instruments were examined to ensure that both variables were measured accurately and consistently. This stage was especially important because the independent variable was measured using a self-efficacy

questionnaire, whereas the dependent variable was assessed through a teacher-rated tahfidz performance rubric. Therefore, the first result presented concerns the validity and reliability of the instruments.

Table 1. Validity and Reliability Test Results

Variable	Number of Items	Validity Test Results	Cronbach's Alpha	Description
Self-Efficacy	20	Valid; rcalculated = 0.382-0.726 > rtable = 0.361; p < 0.05	0.775	Reliable
Qur'an Memorization Ability	10 rubric indicators	Valid; rcalculated = 0.418-0.694 > rtable = 0.361; p < 0.05	0.643	Acceptable reliability

Table 1 indicates that all self-efficacy questionnaire items and all Qur'an memorization rubric indicators met the validity criteria. The self-efficacy questionnaire obtained corrected item-total correlations ranging from 0.382 to 0.726, which exceeded the r-table value of 0.361, with a Cronbach's Alpha of 0.775. The Qur'an memorization rubric obtained corrected item-total correlations ranging from 0.418 to 0.694, also exceeding the r-table value, with a Cronbach's Alpha of 0.643. These results show that the instruments were adequate for collecting field data, while also responding to the need to distinguish between questionnaire-based psychological measurement and rubric-based memorization performance assessment.

After the instruments were declared feasible, descriptive analysis was conducted to understand the score distribution of each variable. This description provides an initial empirical picture of students' self-efficacy and Qur'an memorization performance before the relationship between the two variables is examined through regression analysis.

Table 2. Statistical Description of Research Variables

Variable	Mean	Std. Deviation	Minimum	Maximum
Self Efficacy	68,32	8,599	48	88
Qur'an Memorization Ability	70,71	9,819	48	96

The descriptive results in Table 2 show that the self-efficacy variable had a mean of 68.32, a standard deviation of 8.599, a minimum score of 48, and a maximum score of 88. Meanwhile, Qur'an memorization ability had a mean of 70.71, a standard deviation of 9.819, a minimum score of 48, and a maximum score of 96. These values indicate that students' memorization performance was slightly higher on average than their self-efficacy score, but both variables showed considerable variation. This

variation supports the assumption that differences in psychological readiness may contribute to differences in tahfidz performance.

The variation in self-efficacy was then examined through each indicator. This analysis was needed because the total mean alone does not show whether students' confidence is evenly distributed across the dimensions of magnitude, strength, and generality. Accordingly, Table 3 presents the percentage distribution of responses for each self-efficacy item.

Table 3. Percentage of Responses to the Self Efficacy Questionnaire

Indicator	Item	SS	S	R	TS	STS
Magnitude	1	16,6	40,8	29,9	11,5	1,3
	2	13,4	42,7	36,9	5,1	1,9
	3	3,2	33,1	28	30,6	5,1
	4	20,4	41,4	30,6	5,7	1,9
	5	12,7	43,3	36,9	5,7	1,3
	6	11,5	22,9	22,3	37,6	5,7
	7	9,6	49,7	28	11,5	1,3
Strength	8	4,5	19,1	24,2	42,7	9,6
	9	7	35	19,7	34,4	3,8
	10	25,5	57,3	11,5	5,1	0,6
	11	3,2	15,3	15,9	49	16,6
	12	8,9	15,3	29,9	36,9	8,9
	13	43,9	44,6	5,7	5,1	0,6
	14	7,6	21	18,5	43,9	8,9
Generality	15	8,3	19,1	22,9	42	7,6
	16	20,4	44,6	31,2	3,2	0,6
	17	8,3	20,4	27,4	36,9	7
	18	34,4	43,3	15,9	5,1	1,3
	19	19,7	49	14,6	14	2,5
	20	9,6	24,2	28,7	26,8	10,8

Table 3 shows that students' responses varied across the three dimensions of self-efficacy. In the magnitude dimension, items 1, 2, 4, 5, and 7 were dominated by positive responses, whereas items 3 and 6 still showed relatively large proportions of disagreement. This indicates that students were more confident in ordinary memorization tasks than in tasks perceived as difficult. In the strength dimension, the variation was more visible: items 10 and 13 reflected strong agreement, while items 8, 11, 12, and 14 showed higher disagreement. This pattern suggests that some students' confidence weakened when they encountered correction, pressure, or delay in reaching targets. In the generality dimension, positive responses appeared in items 16, 18, and 19, but items 15, 17, and 20 revealed that confidence was not always transferred across different learning situations. Overall, students' self-efficacy was not yet equally strong across all psychological dimensions.

Because regression analysis requires certain assumptions, the next stage tested the normality of residuals and the linearity of the relationship between self-efficacy and Qur'an memorization ability. These tests were conducted to ensure that the regression model was appropriate for estimating the contribution of self-efficacy to memorization performance.

Table 4. Prerequisite Test Results

Statistical test		Decision
Kolmogorov-Smirnov		Fulfilled
Linearity	Deviation from Linearity Sig. = 0.126 > 0.05	Fulfilled

Table 4 shows that the prerequisite tests for regression analysis were fulfilled. The Kolmogorov-Smirnov test produced an Asymp. Sig. value of 0.200, indicating that the residuals were normally distributed. The linearity test also showed that the Deviation from Linearity value was greater than 0.05, meaning that the relationship between self-efficacy and Qur'an memorization ability could be treated as linear. Therefore, the data met the requirements for simple linear regression analysis.

The relationship between the two variables was then observed visually through a scatter plot. This visual examination helped identify whether the empirical pattern of the data supported the statistical assumption of a positive and linear relationship. The following figure presents the partial regression plot between self-efficacy and Qur'an memorization ability.

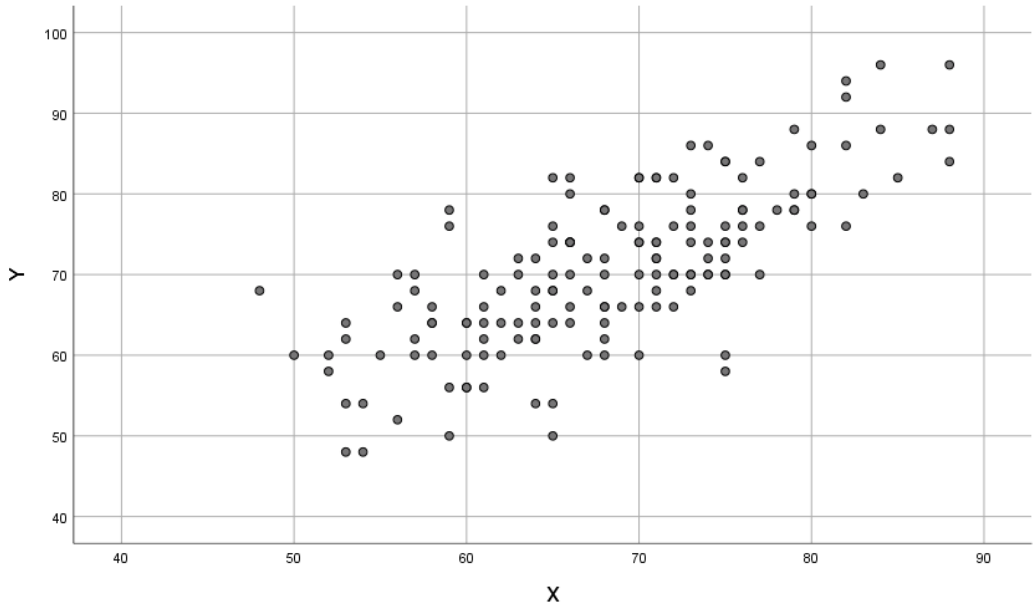


Figure 1. Partial Regression Plot Graph (Y vs X)

Figure 1 shows that the points tend to rise from the lower-left area toward the upper-right area. This pattern indicates that students with higher self-efficacy scores generally obtained higher Qur'an memorization performance scores. Although a few points were dispersed outside the main cluster, the overall pattern still supports a positive and reasonably linear relationship. This visual evidence strengthens the prerequisite test and provides an initial basis for interpreting the regression results.

After the assumptions were met and the visual pattern supported a positive relationship, the regression model was analyzed to determine the strength of the relationship and the proportion of variance explained by self-efficacy. The model summary is presented in Table 5.

Table 5. Model Summary of Simple Linear Regression Analysis

Model	R	R^2	Adjusted R^2	RMSE
1	0,738	0,544	0,541	6,652

Table 5 shows an R value of 0.738, indicating a strong positive relationship between self-efficacy and Qur'an memorization ability. The R^2 value of 0.544 means that 54.4% of the variation in Qur'an memorization ability can be explained by self-efficacy, while the remaining 45.6% is related to other factors outside the model, such as learning motivation, parental support, peer environment, teacher feedback, discipline, or tahfidz learning methods. The Adjusted R^2 value of 0.541 indicates that the model had stable explanatory power, with an RMSE value of 6.652.

The next analysis examined the regression coefficient to determine the direction and magnitude of the effect. This test also established whether the contribution of self-efficacy to Qur'an memorization ability was statistically significant.

Table 6. Regression Coefficients and Significance Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3,042	4,309		0,706	0,481
Self Efficacy	0,612	0,07	0,536	8,715	$p < 0.001$

Based on Table 6, the regression equation was Y = 3.042 + 0.612X. The constant value of 3.042 indicates the predicted Qur'an memorization score when self-efficacy is held constant, while the coefficient of 0.612 means that every one-unit increase in self-efficacy is followed by a 0.612-point increase in Qur'an memorization ability. The t value of 8.715 and $p < 0.001$ indicate that self-efficacy has a positive and statistically significant contribution to Qur'an memorization ability among Generation Z students in Islamic Boarding Schools in East Kalimantan.

These results show that self-efficacy is not merely a supporting psychological attribute, but a measurable contributor to tahfidz performance. Students who believe they can start memorizing, withstand difficulty, and apply confidence across learning situations tend to demonstrate stronger Qur'an memorization ability. Thus, the findings confirm that psychological reinforcement should be integrated into tahfidz learning strategies, especially for Generation Z students in boarding school environments.

DISCUSSION

This study demonstrates that self-efficacy positively and significantly contributes to Qur'an memorization ability among Generation Z students in East Kalimantan Islamic Boarding Schools. The result is indicated by R = 0.738, R^2 = 0.544, B = 0.612, t = 8.715, and $p < 0.001$. These figures show that self-efficacy explains more than half of the

variation in memorization performance. Therefore, the main finding is not simply that the two variables are related, but that students' belief in their own capability functions as an important psychological resource for achieving tahfidz outcomes.

This finding is consistent with social cognitive theory, which explains that perceived capability affects students' choices, effort, persistence, and emotional reactions when facing demanding tasks (Bandura, 1997, 2012; Schunk & DiBenedetto, 2020). Qur'an memorization is a task that requires repeated practice, oral accuracy, correction, and delayed achievement. When students believe that they can manage these demands, they are more likely to continue practicing even after errors occur. This interpretation also corresponds with Zimmerman's view that self-efficacy supports self-regulated learning because learners who trust their ability tend to monitor progress and adjust strategies more actively (Zimmerman, 2000; Zimmerman & Moylan, 2009).

Compared with previous studies, the present findings align with at least six streams of research. Hendra et al. (2024), Pohan (2023), Rosadi et al. (2025), (Rohman et al. (2026), Honicke & Broadbent (2016), and Talsma et al. (2018) similarly show that self-efficacy is linked to stronger learning persistence and academic or memorization performance. Richardson et al. (2012) also identified self-efficacy as one of the strongest psychological correlates of academic performance, while Panadero et al. (2017) demonstrated that self-assessment activities can improve self-efficacy and self-regulated learning. The consistency across these studies indicates that students' belief in their capability is not a peripheral factor, but a central mechanism in sustained learning.

The similarity between this study and previous research may be explained by the nature of mastery experience. In tahfidz learning, every successful setoran, correction, and muraja'ah session can become evidence for students that memorization is achievable. This repeated evidence strengthens confidence, which then encourages greater effort in the next memorization task. Such a reciprocal process is similar to the model proposed by Talsma et al. (2018), in which self-efficacy and performance influence each other over time. In boarding schools, the cycle may become stronger because students experience daily routines, teacher feedback, peer comparison, and repeated performance evaluation.

Nevertheless, this study also differs from much of the existing literature. Many previous studies examined self-efficacy in general academic learning, online learning, or university contexts (Broadbent & Poon, 2015; Komarraju & Nadler, 2013; Richardson et al., 2012), whereas this study focuses on Qur'an memorization as an oral, religious, and performance-based learning activity. In addition, the dependent variable in this study was assessed through a tahfidz performance rubric rather than a perception questionnaire. This methodological distinction is important because memorization ability must be demonstrated through recitation quality, fluency, and accuracy, not merely reported by students.

The context of Generation Z also explains why self-efficacy becomes highly relevant. Digital media exposure can fragment attention and make sustained repetition more difficult, while tahfidz requires patience, focus, and consistency (Antons et al., 2025; Martin et al., 2025; Taba et al., 2022). Students with stronger self-efficacy may be better able to manage this tension because they interpret memorization as an achievable challenge. By contrast, students with weaker self-

efficacy may experience correction or repeated failure as psychological pressure, especially in a boarding school system that emphasizes discipline and target completion.

The indicator-level findings provide a more detailed explanation. The magnitude dimension shows whether students feel capable of handling memorization tasks with different levels of difficulty. Positive responses on several magnitude items indicate that many students felt capable of memorizing ordinary material, but disagreement on other items suggests hesitation when the task became more demanding. This means that teachers should not only assign targets, but also arrange memorization difficulty gradually so that students can accumulate mastery experiences before facing more complex verses.

The strength dimension reveals the firmness of students' belief when obstacles occur. In this dimension, several items showed stronger disagreement, indicating that some students' confidence decreased when they faced mistakes, pressure, or delayed target achievement. This finding is important because tahfidz success depends heavily on endurance. Students may initially believe that they can memorize, but if that belief is fragile, they may withdraw when corrected. Therefore, teacher feedback should be firm enough to maintain accuracy but supportive enough to prevent students from interpreting correction as personal failure.

The generality dimension shows whether students' confidence can operate across different learning situations. Some students may feel confident when accompanied by a teacher, when memorizing short passages, or when practicing with peers, but may feel less capable during formal setoran or when facing unfamiliar verses. This finding suggests that self-efficacy strengthening should include varied learning situations: individual memorization, peer muraja'ah, guided correction, and independent recitation. Such variation helps students transfer confidence from one situation to another.

Taken together, the three dimensions of self-efficacy offer the conceptual novelty of this study. Rather than treating self-efficacy as a single general confidence score, this research shows that magnitude, strength, and generality can be used to read the psychological structure of tahfidz learning. Magnitude explains confidence in task difficulty, strength explains resilience under pressure, and generality explains transfer of confidence across contexts. This framework contributes to Islamic educational psychology by translating social cognitive theory into the specific practice of Qur'an memorization in boarding schools.

The statistical contribution of 54.4% also has practical meaning. It implies that strengthening self-efficacy can be a strategic entry point for improving tahfidz performance, although it is not the only factor. Other variables such as motivation, parental support, peer culture, teacher guidance, learning discipline, and memorization methods still need attention. This finding therefore invites a balanced interpretation: self-efficacy is strong enough to matter substantially, but tahfidz achievement remains a multidimensional outcome shaped by psychological, pedagogical, familial, and institutional factors.

The practical implications are clear for tahfidz teachers. Teachers should provide gradual targets, visible progress records, constructive feedback, and opportunities for successful recitation. Such practices help students build mastery experiences, which are the most influential source of self-efficacy (Bandura, 1997; Usher & Pajares, 2008). Teachers also need to normalize mistakes as part of the memorization process,

because anxiety during setoran can weaken confidence and reduce performance. In this way, tahfidz instruction becomes not only corrective but also empowering.

For boarding school administrators, the findings imply that discipline should be balanced with psychological support. A structured tahfidz schedule is beneficial, but it should be accompanied by mentoring, peer support, motivational guidance, and communication with parents. For parents, the implication is that emotional encouragement at home remains important even when students live in boarding schools. Students need to feel that memorizing the Qur'an is a progressive journey, not a burden measured only by the number of pages or juz completed.

Academically, this study advances the discussion of tahfidz learning by integrating social cognitive theory with performance-based Qur'an memorization assessment. It fills a gap between method-centered tahfidz studies and psychological studies of self-efficacy by showing that the success of memorization is shaped by both external learning structures and internal beliefs. This contribution is especially relevant for Islamic education research because it offers a model for examining religious learning outcomes through empirically measurable psychological constructs.

At the policy level, the findings suggest that tahfidz programs in Islamic Boarding Schools should include self-efficacy-building activities in their curriculum and supervision system. Schools may design staged memorization targets, teacher feedback standards, peer muraja'ah groups, and student reflection sheets that help learners recognize progress. Future research should test whether interventions based on mastery experience, verbal persuasion, and self-regulated learning strategies can increase self-efficacy and improve memorization performance over time.

Overall, the discussion confirms that self-efficacy is a substantial psychological contributor to Qur'an memorization ability among Generation Z students in Islamic Boarding Schools. The finding is meaningful because it explains why students exposed to similar routines and learning systems may still achieve different memorization outcomes. Effective tahfidz learning therefore cannot rely solely on schedules, methods, or targets. It also requires systematic efforts to build students' confidence, persistence, and adaptability as the psychological foundation of sustained memorization.

CONCLUSION AND RECOMMENDATIONS

Based on the results, it can be concluded that self-efficacy positively and significantly contributes to Qur'an memorization ability among Generation Z students in Islamic Boarding Schools in East Kalimantan. The regression results show $R = 0.738$, $R^2 = 0.544$, $B = 0.612$, and $p < 0.001$, meaning that students with stronger self-efficacy tend to demonstrate better memorization performance. This finding confirms that tahfidz success is not determined only by method, repetition, and boarding school routines, but also by students' confidence in beginning memorization, persisting through difficulty, and applying their capability across learning situations.

This study contributes conceptually by positioning the dimensions of magnitude, strength, and generality as a framework for understanding tahfidz performance among Generation Z students. Practically, tahfidz teachers, boarding school administrators, and parents are advised to strengthen students' self-efficacy through gradual targets, constructive feedback, emotionally safe setoran, peer muraja'ah, and visible records of progress. Future research should test intervention models that

combine self-efficacy training with tahfidz learning strategies and should include other variables such as motivation, parental support, peer environment, discipline, and teacher feedback to obtain a more comprehensive explanation of Qur'an memorization achievement.

ACKNOWLEDGMENTS

The authors express their gratitude to SMP Bilingual Miftahul Ulum Tenggarong, SMP Muhammadiyah 5 Samarinda, and SMP IT Insan Mulia Balikpapan for granting permission and supporting data collection. Appreciation is also extended to the tahfidz teachers who assisted in rubric-based memorization assessment and to the Institute for Research and Community Service (LPPM) of Universitas Kutai Kartanegara for institutional support during the implementation of this research.

REFERENCES

Antons, S., Müller, S. M., & Brand, M. (2025). The Digital Media Use Effects Scales for Adolescents (d-MUES). *Computers in Human Behavior Reports*. https://www.sciencedirect.com/science/article/pii/S2451958825000363

Arrasyidin, A., & Azani, M. Z. (2025). Boarding School Program for Strengthening Qur'anic Knowledge and Character: Program Sekolah Berasrama untuk Memperkuat Pengetahuan dan Karakter Qur'ani. *Halaqa: Islamic Education Journal*, *9*(2), 43–50.

Artino, A. R. (2012). Academic Self-Efficacy: From Educational Theory to Instructional Practice. *Perspectives on Medical Education*, *1*(2), 76–85. https://doi.org/10.1007/s40037-012-0012-5

Asmardi, A., & Rudi, H. (2026). Problems of Students in Memorizing the Quran in Islamic Boarding School in Koto Kampar Hulu District. *Indonesian Journal Education*, *5*(1), 53–60.

Bandura. (1997). *Self Efficacy - The Exercise of Control*. W.H. Freeman & Company.

Bandura, A. (1977). Social Learning Theory. *Englewood Cliffs*.

Bandura, A. (1986). *Social Foundations Of Thought And Action: A Social Cognitive Theory*. Prentice Hall.

Bandura, A. (2006). Guide For Constructing Self-Efficacy Scales. In *F. Pajares & T. Urdan (Eds.), Self-efficacy beliefs of adolescents (pp. 307-337). Information Age Publishing* (pp. 307–337). Information Age Publishing.

Bandura, A. (2012). On The Functional Properties Of Perceived Self-Efficacy Revisited. *Journal of Management*, *38*(1), 9–44. https://doi.org/10.1177/0149206311410606

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quinonez, H. R., & Young, S. L. (2018). Best Practices For Developing And Validating Scales For Health, Social, And Behavioral Research. *Frontiers in Public Health*, *6*, 149.

https://doi.org/10.3389/fpubh.2018.00149

Broadbent, J., & Poon, W. L. (2015). Self-Regulated Learning Strategies And Academic Achievement In Online Higher Education Learning Environments: A Systematic Review. *The Internet and Higher Education*, *27*, 1–13. https://doi.org/10.1016/j.iheduc.2015.04.007

Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (4th ed.). SAGE Publications.

Darussalam, H., Rismawanti, R., Susanti, S., & Herliyani, R. (2026). Digital Education Innovation for Generation Z: Building Tech-Literate Society. *International Journal of Instructional Technology and Educational Studies*, *7*(1), 1–7.

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

Encung, E., & Rusydi, I. (2026). Implementation of Philosophy of Religion Principles In Islamic Education of Islamic Boarding School. *Tafkir: Interdisciplinary Journal of Islamic Education*, *7*(2), 415–431.

Field, A. (2018). *Discovering statistics using IBM SPSS Statistics (5th ed.)*. SAGE.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis (8th ed.)*. Cengage Learning.

Hendra, S. H., Darmila, L., & Banurea, S. (2024). Rumah Tahfidz: Pembentukan Sistem Pembelajaran Islam Berbasis Hafalan dan Dampak Psikologis pada Anak Didik. *ARINI: Jurnal Ilmiah Dan Karya Inovasi Guru*, *1*(2), 78–87.

Honicke, T., & Broadbent, J. (2016). The influence of academic self-efficacy on academic performance: A systematic review. *Educational Research Review*, *17*, 63–84. https://doi.org/10.1016/j.edurev.2015.11.002

Hossan, D., Wolfs, B., & Petkovic, M. (2025). Questionnaire validity and reliability: A review with practical guidelines. *Journal of Entrepreneurship, Business and Economics*, *13*(1), 135–186.

Jiang, Y., Zhang, L., Govindasamy, P., Mohd Isa, N. J., Zaremohzzabieh, Z., Roslan, S., Che Amat, M. A., Binti Puad Mohd Kari, D. N., & Du, L. (2026). The impact of perceived stress on school adjustment among Chinese boarding students in rural junior high school: a moderated mediation model of teacher support and self-esteem. *Educational Studies*, *52*(2), 209–229.

Kollárová, S., & Niklová, M. (2025). *The Digital Identity of Generation Z*. Poldruk sc Poland.

Komarraju, M., & Nadler, D. (2013). *Self-efficacy and academic achievement: Why do implicit beliefs, goals, and effort regulation matter? Learning and Individual*

Differences, 25, 67-72. https://doi.org/10.1016/j.lindif.2013.01.005

Krejcie, R. V, & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*(3), 607–610. https://doi.org/10.1177/001316447003000308

Luthfia, A., & Kawuryan, F. (2026). Resilience Development in Qur'an Memorization Students at an Islamic Boarding School. *Edunesia: Jurnal Ilmiah Pendidikan*, *7*(1), 344–358.

Martin, F., Sun, T., & Westine, C. D. (2025). Digital distractions in education: A systematic review of research and framework. *Educational Technology Research and Development*. https://doi.org/10.1007/s11423-025-10550-6

Nada, F. Q., Lateh, M., & Hermawan, Z. (2025). Shaping student religiosity: The combined effect of peer interaction and akidah akhlak. *Educazione: Journal of Education and Learning*, *2*(2), 108–120.

Naqiyah, N. (2022). Positive behavior values to improve student self-efficacy: A case study in Islamic boarding schools. *Open Access Macedonian Journal of Medical Sciences*, *10*(A), 1577–1584.

Nurlaila, C., Aini, Q., Setyawati, S., & Laksana, A. (2024). Dinamika perilaku Gen Z sebagai generasi internet. *Konsensus: Jurnal Ilmu Pertahanan, Hukum Dan Ilmu Komunikasi*, *1*(6), 95–102.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, *66*(4), 543–578. https://doi.org/10.3102/00346543066004543

Pajares, F., & Schunk, D. H. (2001). Self-beliefs and school success: Self-efficacy, self-concept, and school achievement. In *R. Riding & S. Rayner (Eds.), Perception (pp. 239-266). Ablex* (pp. 239–266). Ablex.

Panadero, E., Jonsson, A., & Botella, J. (2017). Effects of self-assessment on self-regulated learning and self-efficacy: Four meta-analyses. *Educational Research Review*, *22*, 74–98. https://doi.org/10.1016/j.edurev.2017.08.004

Pangesti, M. U. D. (2026). Quranic Literacy Culture as a Strategy for Strengthening Students' Religious Identity in Higher Education During Digital Disruption. *Journal of Blended and Technical Education*, *2*(1), 1–14.

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In *M. Boekaerts, P. Pintrich, & M. Zeidner (Eds.), Handbook of self-regulation (pp. 451-502). Academic Press* (pp. 451–502). Academic Press. https://doi.org/10.1016/B978-012109890-2/50043-3

Pohan, A. D. C. (2023). *Pengaruh Dukungan Sosial dan Optimisme Terhadap Self Efficacy Siswa dalam Menghafal Al-Quran di Smpit Al-Fakhri Sunggal*. Universitas Medan Area.

Rahman, M. M., Tabash, M. I., Salamzadeh, A., Abduli, S., & Rahaman, M. S. (2022). Sampling techniques (probability) for quantitative social science researchers: a conceptual guidelines with examples. *Seeu Review*, *17*(1), 42–51.

Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin*, *138*(2), 353–387. https://doi.org/10.1037/a0026838

Rinalya, N. (2023). *Pengaruh Efikasi Diri dan Daya Juang terhadap Prestasi Belajar Tahfidz Qur'an Siswa di Madrasah Tsanawiyah Pondok Pesantren Anshor Al-Sunnah Kabupaten Kampar*. Universitas Islam Negeri Sultan Syarif Kasim Riau.

Rohman, T. (2023). *Pengaruh Adversity Quotient dan Self Efficacy terhadap Kemampuan Menghafal Al-Qur'an Siswa SMP di Kalimantan Timur*. PAI Pascasarjana UINSI Samarinda.

Rohman, T., Ilyasin, M., & Suratman, S. (2026). The Influence of Adversity Quotient and Self-Efficacy on Students' Qur'an Memorization Ability. *Tafkir: Interdisciplinary Journal of Islamic Education*, *7*(2), 510–523.

Rohwer, D. (2022). Designing ex post facto and experimental studies. In *Inquiry in Music Education* (pp. 230–252). Routledge.

Rosadi, K., Ilyasin, M., & Julaiha, S. (2025). Tahfidz Al-Qur'an Learning Strategies from Bandura's Perspective in Islamic Educational Institutions in Bontang City. *Khazanah Pendidikan Islam*, *7*(2), 149–164.

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, *61*, 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

Salim, A., & Pohan, S. (2025). Cultivation of character education in the boarding school system: Case study of the tahfiz qur'an islamic islamic boarding school tanjung morawa. *At Turots: Jurnal Pendidikan Islam*, 24–33.

Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, *60*, 101832.

Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. In *A. Wigfield & J. S. Eccles (Eds.), Development of achievement motivation (pp. 15-31). Academic Press* (pp. 15–31). Academic Press. https://doi.org/10.1016/B978-012750053-9/50003-6

Schwarze, V., Börsting, J., & Eimler, S. C. (2025). Facing a Fast-Paced, Digital World: Gen Z's Perception of Social (Media) Groups. *Journal of Adult Development*, 1–19.

Siregar, D. A. (2022). Ex Post Facto dari Implementasi Program Tahfiz Al-Qur'an dengan Metode Talaqqi dan Musyafahah melalui Target Harian di SMP IT Ad-Durrah. *Jurnal Tinta*, *4*(2), 39–51.

Siregar, M. A. H., & Tumiran, T. (2025). The Relevance of the Tahfidz Program in Shaping Students Qur'anic Morality in the Era of Modernization at Islamic Boarding Schools. *Al-Fikru: Jurnal Ilmiah*, *19*(2), 266–279.

Stapor, K. (2020). Descriptive and inferential statistics. In *Introduction to probabilistic and statistical methods with examples in R* (pp. 63–131). Springer.

Stratton, S. J. (2023). Population sampling: Probability and non-probability techniques. *Prehospital and Disaster Medicine*, *38*(2), 147–148.

Swasono, P. A. (2024). *Manajemen Tahfizh Al-Qur'an Berbasis Kurikulum Integratif Dalam Meningkatkan Prestasi Hafalan Santri Ma'had El-Hijaz Ciracas, Jakarta Timur*. Institut PTIQ Jakarta.

Taba, M., Allen, T. B., Caldwell, P. H. Y., Skinner, S. R., Kang, M., McCaffery, K., & Scott, K. M. (2022). Adolescents' self-efficacy and digital health literacy: A cross-sectional mixed methods study. *BMC Public Health*, *22*, 1223. https://doi.org/10.1186/s12889-022-13599-7

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, *48*, 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Talsma, K., Schüz, B., Schwarzer, R., & Norris, K. (2018). I believe, therefore I achieve (and vice versa): A meta-analytic cross-lagged panel analysis of self-efficacy and academic performance. *Learning and Individual Differences*, *61*, 136–150. https://www.sciencedirect.com/science/article/abs/pii/S104160801730211X

Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of Educational Research*, *78*(4), 751–796. https://doi.org/10.3102/0034654308321456

Wigfield, A., & Eccles, J. S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology*, *25*(1), 68–81. https://doi.org/10.1006/ceps.1999.1015

Yamane, T. (1967). *Statistics: An introductory analysis (2nd ed.)*. Harper and Row.

Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, *25*(1), 82–91. https://doi.org/10.1006/ceps.1999.1016

Zimmerman, B. J., & Moylan, A. R. (2009). Self-regulation: Where metacognition and motivation intersect. In *D. J. Hacker, J. Dunlosky, & A. C. Graesser (Eds.), Handbook of metacognition in education (pp. 299-315). Routledge* (pp. 299–315). Routledge.