Volume 5 Number 2 (2023)
May-August 2023
Page: 888-906

E-ISSN: 2656-4491
P-ISSN: 2656-4548
DOI: 10.37680/scaffolding.v5i2.2877

SCAFFOLDING
Jurnal Pendidikan Islam dan Multikulturalisme

ACADEMIC EFFICACY SCALE OF JUNIOR HIGH SCHOOL STUDENTS IN INDONESIA

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Submitted: 19/02/2023 Revised: 22/04/2023 Accepted:20/06/2023 Published:14/08/2023

Abstract

This study aims to determine the effectiveness of an academic self-efficacy instrument for junior secondary school students in Indonesia. This research is important to understand the extent to which students at the junior high school level feel confident in facing academic demands. The type of research in this study used a quantitative approach. The population obtained amounted to 564 eighth-grade students from several provinces in Indonesia. The sampling technique used was convenience sampling, and a sample size of 300 students was determined. Primary data in this study were obtained from the results of students' instrument answers with the filling method circling the most appropriate answer. At the same time, secondary data is obtained from searching journals related to the research. The data collection technique was a fill-in sheet given to 300 grade 8 students in several provinces in Indonesia. Then, the data analysis used was quantitative data analysis carried out by descriptive analysis and verification analysis (hypothesis testing with t-test). Furthermore, based on the data obtained from junior high school students, the instrument was tested for validity and reliability using SPSS version 25. Based on the results of the study, it was found that the instrument used to measure the academic self-efficacy of junior high school students in Indonesia has good validity and reliability. The instrument consists of 49 valid items and has a reliability coefficient of 0.861. Then, to determine the effectiveness of the instrument made, a t-test was conducted, and obtained the result that H0 was rejected, which means that the instrument is effective in measuring academic self-efficacy for junior high school students in Indonesia. Thus, it can be concluded that the instrument is effective in measuring the academic self-efficacy of junior high school students in Indonesia.

Keywords Academic Efficacy Scale; Junior High School; Students

INTRODUCTION

Self-efficacy in learning plays an important role in motivating students to achieve optimal learning outcomes (Shin, 2018). Bandura also emphasized that self-efficacy plays an important role in academic activities to support learning activities in obtaining school achievements. The interest in learning students will be low if there is no good self-efficacy in him. This low self-efficacy can result in students not having confidence in themselves so that they can achieve optimal learning outcomes (Riyanto & Mariani, 2019).

Each student has the potential for success in the academic field. This success is greatly influenced by the role of teachers in providing opportunities for students to experience success, making them focused and actively involved in the learning process (Utami, 2017).

The results of research from Paradewari (2017) explain the important role of self-efficacy in academics. In addition, the results of the study showed that self-efficacy also affects individual reading skills. It was also revealed by Perin et al. (2017) that low self-efficacy rates can be used to predict comprehension and assess the quality of one's writing. Research from Hayat et al. (2020) also revealed that academic self-efficacy can indirectly be used as a means of detecting one's academic achievement. When a person has the belief of being able to do a certain activity, the belief will affect the feelings he has. The main factor that affects student performance is the feelings of students over themselves. They further state that the success or failure of learners in school is determined by the way they form and develop true beliefs about themselves.

The academic self-efficacy of students can influence their mindset. These influences can be helpful or also hinder learning behavior. Often students' dislike for a lesson arises from the thought that the lesson is difficult or boring. The brain records dislikes as threats. As a result, the brain is difficult to accept and rejects this. The intended goal can be to achieve a certain value or a certain level of mastery over certain knowledge or skills. Tambunan (2022) states that self-efficacy possessed by students can influence behavior to achieve achievements, such as task selection, effort, and perseverance. Low self-efficacy in participants will have a major influence on the learning process. This will make students: (1) avoid challenging tasks, (2) believe that difficult situations and tasks are beyond ability, (3) easily give up in the face of difficult tasks and situations, (4) do not have strong efforts to improve achievement, and (5) low participation rates in the activities carried out.

Self-efficacy is based on the framework of cognitive social theory. This theory assumes that the results of human achievement are determined by the relationship between individual behavior,

patterns of thought and belief, and environmental situations. The social cognitive theory describes individual behavior as a reciprocal process between personal, behavioral, and environmental factors with various challenges arising from actions that have been carried out before. This process provides opportunities for individuals to set limits for their ability to set goals (self-direction).

The individual and the environment are mutually influencing factors in the reciprocal process. This concept changes the perception that humans are not merely seen as objects that can be controlled by the environment or mindset that controls themselves (Bandura, 2019). The following is put forward the definition of efficacy by psychologists. Stephen N. Elliott, Thomas R. Kratochwill, and Joan Littlefield Cook (2000) suggest self-efficacy means individual confidence because of the ability to control their lives: competence pairs. Good efficacy can also motivate a person toward a better life (Naqiyah et al., 2020). Self-efficacy, according to Deng et al. (2022), provides a more complete definition. Namely, self-efficacy relates to the evaluation of the extent to which individuals can organize and carry out the necessary actions when dealing with uncertain, unpredictable, and mind-draining conditions. Efficacy can be seen from perseverance, high motivation, mind, and cognition to improve one's life quality (Naqiyah et al., 2018).

Self-efficacy is considered by Sullivan and Mahalik as cognitive structures formed from various learning experiences that lead to the belief or expectation that individuals can complete certain tasks or activities (Nurhikmah, 2019). Efficacy Based on Bandura's exposure means an individual's assessment of the ability possessed in organizing and taking action in completing certain goals (Abdullah, 2019). Self-efficacy according to Warner & French (2020) defines self-efficacy as a form of individual confidence in their ability to do tasks or achieve goals. Overall, it can be said that efficacy is not related to the skills mastered by the individual but the confidence possessed to achieve a goal in various ways that can be done. Self-efficacy also affects how much effort a person makes in trying something new and his tenacity to overcome obstacles that arise.

Based on the description above, it can be concluded that self-efficacy can be interpreted as an individual's confidence in his ability to complete a task for a certain purpose. Self-efficacy exists in many areas of life, including in academics. Zajacova defines academic self-efficacy refers to students' confidence in their ability to complete academic tasks, such as preparing for exams and making written work (Schunk & DiBenedetto, 2016). Academic self-efficacy refers to (Walker 2023) as a belief that individuals have that can be used as a basis for behavior to obtain success in academics. In other words, academic self-efficacy can be explained as an individual's self-confidence

about his abilities that is shown through various behaviors carried out to achieve success.

Dimensions of Academic Efficacy

Self-efficacy has distinctive characteristics according to the demands and situations faced (Sintya, 2019). A person may be able to have high self-confidence in certain situations but not in others. Self-efficacy is also contextual that can adjust to the situation at hand. In the academic background, this is in line with research produced by Schunk & DiBenedetto (2021), which found academic self-efficacy always measures the level of a specific task, the scope of the task being done, and the level of stability/strength of the individual to his beliefs.

Students become confident in their abilities in certain fields or tasks if they can get achievements in those fields (Zainuddin & Halili, 2016). Self-efficacy can be influenced by students' confidence in their ability to complete tasks. Each type of experience will create a different self-efficacy (Schunk & Usher, 2011). The experience of failure will provide limited self-efficacy, whereas success in a particular field will provide broader self-efficacy. Students with a high level of self-efficacy are very confident in their abilities, less easily frustrated in facing problems, and better able to overcome various problems and obstacles. But on the contrary, a student with a low level of self-efficacy will feel that he has weak abilities and will easily falter if he faces obstacles when completing tasks. Deep Schunk also found that when making efficacy assessments, people must take into account some factors, including perceived ability, difficulty of the task, amount of effort required, amount of assistance received, and past successes and failures.

Self-efficacy is influenced by various sources, including mastery experiences, social modeling, social persuasion, and physical and emotional states (Hendricks, 2016). Mastery experiences, such as past achievements and successes, have a significant impact on self-efficacy, while failure and lack of experience can undermine it (Moniz-Lewis et al., 2022). Through observing the achievements of others, social modeling can enhance self-efficacy, especially among peers, while reviewing others' failures may decrease it. Social persuasion, involving criticism or encouragement from trusted sources, can also affect self-efficacy, but its impact is limited. Finally, the emotional and physiological state of an individual, characterized by strong emotions, fear, stress, and anxiety, can influence self-efficacy expectations (Lippke, 2020). Overall, these factors contribute to the development of self-confidence and belief in one's abilities.

According to (Zysberg & Schwabsky, 2021), academic self-efficacy can be measured through three aspects: technical skills, cognitive operations, and social situations. Technical skills refer to the

individual's knowledge and expertise in solving problems and completing tasks, often associated with specific fields such as mechanics and information technology (Waddington, 2023). Cognitive operations involve the cognitive aspects of learning, including processing, counting, reading, remembering, and applying learned theories. It encompasses how well students analyze problems, understand learning materials, and perform tasks. Social situations involve the interrelationship between individuals, where they connect with others, share common goals, participate in discussions, and engage in activities and organizations. These three aspects provide insights into different dimensions of academic self-efficacy and how individuals perceive their abilities in various contexts.

The results of a preliminary study with an open questionnaire that researchers have conducted on 300 students of SMP Negeri 61 Surabaya show that some subjects that are very disliked by students are Indonesian, Mathematics, Cultural Arts, and Javanese Language. In the first order, based on the results of respondents' answers, as many as 99 students mentioned that the most disliked subjects were Indonesian (Santoso et al., 2016). The reason for learners is that Indonesian is uninteresting, rigid, and difficult to understand. The factors that cause Indonesian to be difficult subjects come from students themselves, such as: (1) Indonesian lessons emphasize more on aspects of reading and writing, (2) identical to long questions, so that students feel lazy to read them and causing difficulties in answering the questions given, (3) it is considered difficult because there is no interest in reading from within students. Indonesian lessons that are dominated by long readings are the reason for students not to be interested in this lesson, causing learning motivation to decrease.

The second is Mathematics. A total of 77 students said that mathematics is difficult to understand, and complicated and confusing formulas are the most reasons why students do not like Mathematics lessons. In addition, students also think that Mathematics lessons drain the mind a lot which causes them to find it difficult to memorize and calculate correctly. Other lessons that were not liked by students were the Javanese Language, as many as 63 students, and Cultural Arts, as many as 61 students. Most students complain that Javanese lessons feel foreign to their ears. With background of learners who are accustomed to using Indonesian or Javanese Ngoko, they have a lot of difficulties understanding vocabulary, Javanese script, and regurgitation. These reasons make students not like Javanese language lessons. As for Cultural Arts lessons, students have difficulties drawing material because, in general, they cannot draw. This makes them choose Arts and Culture

subjects as part of the subject that they do not like.

In addition to the above, exposure to the characteristics of students with low efficacy can be seen from class observation, students who have indications of low academic self-efficacy tend to be passive in learning, pessimistic about their abilities, doubt their learning abilities, cheat, and ask friends when doing assignments and exams, afraid to ask the teacher in class, loss of motivation in doing the tasks given by the teacher so that they are late and do not do the tasks that given, prefer to rely on friends' work because they are less confident in their abilities, anxious when exams by glancing at friends beside them and confused when doing assignments, give up before trying on project assignment activities delivered by the facilitator teacher and prefer to postpone or even avoid the tasks given. Based on the results of the pre-test results of the academic self-efficacy scale at the VII grade level, which was attended by 204 students, it was known that 26 students entered the low efficacy category with a score range of 136-155, as many as 138 students entered the medium category with a score range of 156-189, and as many as 41 students entered the high category with a score range of 196-234. Academic self-efficacy determines the amount of effort made and the strength of students who can survive in the face of difficult experiences and obstacles. The stronger the perception of students' self-efficacy, the more active and diligent the students' efforts when facing difficulties. Students who have doubts about their abilities will reduce their efforts. Even worse, they will simply give up. Based on the results of preliminary studies, many students have problems with laziness and delays in carrying out the tasks given by the school. Students consider the homework and daily tasks given too much to excess. Not to mention that there are lessons that are not liked, increasingly making students feel they have less self-ability. Another reason that factors into lazy students doing homework is playing on mobile phones. Students who have low self-efficacy will more easily give up when completing tasks and prefer to divert them to other activities, namely playing mobile phones.

The importance of education is undeniable, but some students still show indifference, which can have an impact on their academic achievement. Some junior high school students believe that they still depend on their parents, while others consider themselves mature enough and no longer need guidance like elementary school students.

The study by Paramitha & Ajisuksmo (2021) empirically proved the relationship between mathematical self-efficacy and attitudes toward mathematics. These two affective aspects can be further associated with mathematical achievement to examine the contribution of mathematical self-

efficacy and attitudes toward mathematics to mathematical achievement.

In a study by Umbara & Sudihartinih (2020), it was explained that the level of self-efficacy among students was at a moderate level. Based on the results of simple linear regression and Pearson correlation tests, the variable of student self-efficacy had an influence but was not significant on the variable of students' mathematics learning outcomes. This is because self-efficacy is a psychological variable that may not apply universally to every individual, and there are other factors that can influence this variable.

In conclusion, some subjects that junior high school students dislike are Bahasa Indonesia (Indonesian language) and Mathematics. The pre-test on the academic self-efficacy scale shows that some students have low levels of academic self-efficacy. Students with low self-efficacy tend to make less effort and easily give up when faced with difficulties. In addition to low self-efficacy, other factors that contribute to students' reluctance to do their homework are excessive workload and the influence of excessive smartphone usage. Students with low academic self-efficacy also exhibit indifference toward school assignments, feel threatened by school tasks, attempt to avoid them, lack commitment to learning, and constantly feel a sense of failure (Lianto, 2019).

Therefore, further research is needed on the self-efficacy of junior high school students, guidance and support for students with low self-efficacy, and attention to the workload assigned to students. Unlike previous studies, this research utilizes the IMI instrument, which is an adaptation of the academic self-efficacy instrument called CASES (College Academic Self-Efficacy Scale), to measure the self-efficacy of junior high school students.

Based on observations in the field, it is evident that academic self-efficacy can influence an individual's choices in joining organizations and engaging in specific activities. Students tend to focus on tasks they perceive as easy to master and avoid tasks they feel uncertain about.

METHOD

The method used in this study uses a quantitative approach and aims to determine the effectiveness of self-efficacy instruments. The population obtained amounted to 564 eighth-grade students from several provinces in Indonesia. The sampling technique used was convenience sampling, and a sample size of 300 students was determined.

Measurement of Academic Self-Efficacy was carried out using an instrument adapted from the College Academic Self-Efficacy Scale (CASES). This instrument initially consisted of 33 positive

statement items, which were then modified by the researcher to 50 items, consisting of 25 positive statement items and 25 negative statement items adapted to the characteristics of junior high school students.

Primary data in this study were obtained from the results of student instrument answers with the method of filling in and circling the most appropriate answer. At the same time, secondary data is obtained from searching journals related to research.

The Academic Self-Efficacy Scale, which comes from an adapted instrument, includes three variables: Social Situations, Cognitive Operations, and Technical Skills. The scale includes item numbers and the corresponding number of positive and negative statements for each variable. The instrument is administered using a fill-in method that asks respondents to circle the most appropriate answer from several alternative choices based on their personal circumstances. The available answer options range from "Very Little" (1) to "Very Much" (5).

Scoring was done by assigning weights between 1 and 5 to the answers chosen by the participants. The criteria for evaluating the Academic Self-Efficacy instrument were based on the table provided, which categorized the responses into three groups: High, Medium, and Low. These categories were determined using the mean and standard deviation of the responses.

The data collection technique was a fill-in sheet given to 300 grade 8 students in several provinces in Indonesia. Then, the data analysis used was quantitative data analysis conducted by descriptive analysis and verification analysis (hypothesis testing with t-test). Furthermore, based on the data obtained from junior high school students, the instrument was tested for validity and reliability using SPSS version 25. The hypotheses used in this study are:

H1: the instrument is effective in measuring the academic self-efficacy scale for junior high school students in Indonesia.

H0: the instrument is not effective in measuring the academic self-efficacy scale for junior high school students in Indonesia.

FINDINGS AND DISCUSSION

Findings

Stages in Making an Instrument of Academic Self-Efficacy of Junior High School Students in Indonesia

The stages of preparing and developing the self-efficacy instrument are as follows:

1. Formulating constructs based on the theory that will be given to junior high school children, namely technical skills, cognitive operations, and social situations.
2. Based on these constructs, the dimensions and indicators of the variables that will be included in the instrument are developed.
3. Make an instrument grid in the form of a specification table that contains dimensions, indicators, item numbers, and the number of items for each dimension and indicator.
4. Determine the amount of assessment, namely the criteria for the Academic Self-Efficacy instrument, based on the table provided, which categorizes responses into three groups: High, Medium, and Low.
5. Writing instrument items that can be in the form of statements or questions. The instrument items made consist of two groups, namely positive item groups and negative item groups.
6. The items that have been written are draft instruments that have gone through the validation process.
7. The first validation stage taken is theoretical validation, namely through expert examination or through a panel which basically examines how far the dimensions are the right description of the construct, how far the indicators are the right description of the dimensions, and how far the instrument items made can precisely measure the indicators.
8. Revision or improvement based on suggestions from experts or based on panel results.
9. After the instrument concept is considered theoretically or conceptually valid, limited copies of the instrument are made for testing purposes.
10. Testing the instrument in the field is part of the empirical validation process. Through the test, the instrument is given to a number of respondents as a test sample who have the same or equivalent characteristics as the characteristics of the research population. The answers or responses from the test sample are empirical data that will be analyzed to test the empirical validity or criterion validity of the instrument developed.
11. Validity testing was carried out using the SPSS application.

12. Based on the results of the item analysis, invalid items are removed or corrected for retesting, while valid items are reassembled into an instrument set to review their content validity based on the grid. If the content of the valid items is considered valid or qualified, then this last set of instruments becomes the final instrument that will be used to measure our research variables.
13. Next, the reliability coefficient is calculated using the SPSS application as well. The reliability coefficient with a range of values (0-1) is a quantity that shows the quality or consistency of the instrument's measurement results. The higher the reliability coefficient, the higher the quality of the instrument.
14. Assembling valid instrument items to make the final instrument

Validity Test

For the research carried out, the instrument used is the College Academic Self-Efficacy Scale (CASES) as a measure of academic self-efficacy. Before using this instrument, researchers first carry out validity tests.

The purpose of this validity test is to know the accuracy of the instrument for measuring the variables that the researcher wants to research. Validity refers to aspects of accuracy (accuracy) and precision (accuracy) of measurement results and is understood how far an instrument can measure the properties measured. Content validity means a validity test that determines the extent to which the elements of an instrument are relevant and represents the concept of variables taken into account. Expert judgment is also used in this validity test, which is an instrument assessment carried out by an expert.

Based on the results of the academic self-efficacy instrument validity test, the results of the adaptation of the College Academic Self-Efficacy Scale (CASES) as a measure of academic self-efficacy. The instrument adapted from (Owen & Froman, 1988) has been distributed to 300 junior high school students with a total of 50 items of statement items, and there is one invalid item. The result is based if $r_{counts} > r$ table, then the statement item is declared valid, where r_{table} uses a significant level of 1% which is 0.15. Therefore, researchers present the validity table as follows:

Table 1. Validation Results Using SPSS 25

No.	r calculate	r table	Information
1.	0.516	0,15	VALID
2.	0.538	0,15	VALID
3.	0.282	0,15	VALID
4.	0.347	0,15	VALID
5.	0.317	0,15	VALID
6.	0.260	0,15	VALID
7.	0.321	0,15	VALID
8.	0.473	0,15	VALID
9.	0.170	0,15	VALID
10.	0.228	0,15	VALID
11.	0.327	0,15	VALID
12.	0.371	0,15	VALID
13.	0.336	0,15	VALID
14.	0.394	0,15	VALID
15.	0.460	0,15	VALID
16.	0.246	0,15	VALID
17.	0.419	0,15	VALID
18.	0.198	0,15	VALID
19.	0.339	0,15	VALID
20.	0.461	0,15	VALID
21.	0.322	0,15	VALID
22.	0.416	0,15	VALID
23.	0.469	0,15	VALID
24.	0.550	0,15	VALID
25.	0.353	0,15	VALID
26.	0.232	0,15	VALID
27.	0.327	0,15	VALID
28.	0.512	0,15	VALID
29.	0.378	0,15	VALID
30.	0.483	0,15	VALID
31.	0.552	0,15	VALID
32.	0.632	0,15	VALID
33.	0.556	0,15	VALID
34.	0.486	0,15	VALID
35.	0.566	0,15	VALID
36.	0.303	0,15	VALID
37.	0.265	0,15	VALID
38.	0.244	0,15	VALID
39.	0.335	0,15	VALID
40.	0.215	0,15	VALID
41.	0.472	0,15	VALID
42.	0.529	0,15	VALID
43.	0.534	0,15	VALID
44.	0.286	0,15	VALID
45.	0.478	0,15	VALID
46.	0.474	0,15	VALID
47.	0.392	0,15	VALID
48.	0.368	0,15	VALID

49.	0.141	0,15	INVALID
50.	0.300	0,15	VALID

From the results of the table above, it can be seen that the number of items before the validity test amounted to 50 statement items consisting of 25 positive items and 25 negative items. After this instrument was tested on 300 junior high school students, there was 1 item of invalid (void) statement. So that the number of items after the validity test is 49 items consisting of 25 positive items and 24 negative items. The following researchers present the instrument grid table after the validity test:

Table 2. Academic Self-efficacy Scale Grid (After validity test)

Variable	Sub Variable	Item		Sum
		+	-	
Academic Self-Efficacy	Social Situations	1,2,3,4,5,11,12 13,14,15	46,47,48, ,50,36,37, 38,39,40	19
	Cognitive Operations	21,22,23,24, 25,31,32,33, 34,35,41	16,17,18,19, 20,1,26,27, 28,29,30	22
	Technical Skills	42,43,44,45	2,3,4,5	8
Total				49

After conducting a validity test, the Academic Self-Efficacy Scale grid consists of three sub-variables: Social Situations, Cognitive Operations, and Technical Skills. The Social Situations sub-variable includes items 1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 46, 47, 48, 49, 50, 36, 37, 38, 39, and 40, with a total of 19 items. The Cognitive Operations sub-variable includes items 21, 22, 23, 24, 25, 31, 32, 33, 34, 35, 41, 16, 17, 18, 19, 20, 1, 26, 27, 28, 29, and 30, with a total of 22 items. Lastly, the Technical Skills sub-variable includes items 42, 43, 44, and 45, with a total of 8 items. The overall total of items on the scale is 49.

Reliability Test

For this study, instrument reliability testing was assisted by the application of R static on SPSS version 25. The reliability coefficient varies from 0 to 1 where the value is close to 1, and the more reliable the instrument is. Table 3 describes reliability criteria using Alpha Cronbach from Guilford.

Table 3. Reliability Results with SPSS

Reliability Statistics	
Cronbach's Alpha	N of items
0,861	49

Furthermore, to see the effectiveness of the instrument made, the t-test was carried out as follows:

T Test

Table 4. T-Test Result

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	t	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	-3.185	1.258		-2.531	.013
	X1	.372	.229	.135	1.628	.016
	X2	.747	.256	.337	2.917	.004
	X3	1.038	.190	.465	5.450	.000

a. Dependent Variable: Y

The test was conducted using a significance level of 0.05 (a = 5%). Acceptance or rejection of the hypothesis is done with the following criteria:

a. If the significant value of t < 0.05, then H0 is rejected, meaning that the instrument is effective in measuring the academic self-efficacy scale for junior high school students in Indonesia.
b. If the significant value of t> 0.05, then H1 is accepted, meaning that the instrument made is not effective in measuring the academic self-efficacy scale for junior high school students in Indonesia.

Based on Table 4. the results of the t-test conducted with a significance level of 5% = 0.05 show that the instrument made is effective in measuring the academic self-efficacy scale for junior high school students in Indonesia.

Discussion

Based on the results of the study, it was found that several stages were carried out in making the instrument. Then, a validation test was conducted and obtained 49 out of 50 valid items were divided into three sub-variables, namely Social Situation, Cognitive Operations, and Vocational Technical Skills. Furthermore, reliability testing was carried out using Cronbach's Alpha coefficient, and the results showed a reliability value of 0.861. Finally, a t-test was conducted to determine the

effectiveness of the instrument in measuring the self-efficacy of junior high school students in Indonesia. The results of the t-test conducted with a significance level of 5% = 0.05 showed that the instrument made was effective for measuring the academic self-efficacy scale for junior high school students in Indonesia.

By implementing these guidelines, it is expected that students' academic self-efficacy can be improved, which in turn will contribute to improving their motivation, performance, and academic achievement. Previous research conducted by (Ifdil et al. l, 2019), who tested the College Academic Self-Efficacy Scale (CASES), an Indonesian validation to measure the self-efficacy of students, proved that CASES is valid and reliable in measuring student self-efficacy, and the Indonesian version of the CASES construct can be applied in measuring student self-efficacy and is ready to be used in further research. In addition, another study was conducted by (Mubarak et al., 2022), who conducted research with the title Development of math efficacy scale for junior high school students in Indonesia. The results of his research showed that the psychometric aspects of this scale followed the standard. Compared to the Mathematics Self-Efficacy Scale-Revised (MSES-R), which is used as a reference.

The Academic Self-Efficacy Scale for Junior High School Students in Indonesia is a measurement tool used to assess the level of academic self-efficacy of students at the junior high school level in Indonesia. Academic self-efficacy refers to an individual's belief in their ability to complete academic tasks and achieve learning goals. This scale was developed with the aim of gaining a deeper understanding of the level of academic self-efficacy of junior high school students in Indonesia. This can help researchers, educators, and policymakers in analyzing the factors that influence students' academic self-efficacy and designing appropriate strategies to improve it.

The development of the Academic Self-Efficacy Scale was conducted through a research phase that involved identifying dimensions and indicators relevant to the context of junior high school students in Indonesia. After that, a validation process was conducted to ensure that this scale was reliable and valid in measuring students' academic self-efficacy. This scale can be used in research and evaluation in the field of education to objectively measure the level of academic self-efficacy of students. Through the use of this scale, it is possible to assess the level of students' confidence in their ability to face academic challenges and achieve desired learning outcomes.

In the context of education in Indonesia, improving students' academic self-efficacy is critical to improving learning motivation, academic achievement, and overall well-being. The Academic Efficacy Scale for Junior High School Students in Indonesia can provide a more comprehensive understanding of students' academic self-efficacy levels so that it can be used as a reference for the development of support programs and effective learning strategies. By understanding students' academic self-efficacy levels, educators and policymakers can design appropriate measures to motivate students, increase self-confidence, and develop appropriate learning strategies. This can help students achieve better academic performance and optimize their potential in the educational environment.

Students' level of academic self-efficacy refers to students' beliefs or perceptions of their ability to succeed in an academic context. This includes students' belief in their ability to complete academic tasks, face learning challenges, manage time, and achieve set academic goals. Here are some guidelines for teachers and policymakers to improve students' academic self-efficacy:

1. Providing Emotional Support: Teachers can provide emotional support to students by attending to their emotional needs, giving constructive praise, and providing positive feedback to strengthen students' belief in their abilities.
2. Challenge-Based Learning: Teachers can design learning that is challenging and allows students to develop new skills progressively. Providing adequate challenges will help students feel confident and improve their academic self-efficacy.
3. Collaborative Learning: Encouraging cooperation and collaboration between students can strengthen their academic self-efficacy. Through working together in learning groups, students can support each other and build confidence in each other.
4. Providing Ongoing Support: Teachers can provide ongoing support by providing guidance and motivation to students. This can be done through coaching, mentoring, or academic guidance that helps students overcome obstacles and strengthen their beliefs.
5. Creating a Positive Learning Environment: Creating an inclusive, supportive, and safe learning environment is essential for improving students' academic self-efficacy. Teachers and policymakers can create a positive atmosphere in the classroom, value diversity, and encourage active student participation.
6. Involving Parents: Involving parents in supporting the development of students' academic self-efficacy is also very important. Open communication between teachers and parents, as

well as providing guidance to parents on how they can support their children's academic self-efficacy development, can have a positive impact.

7. Guidance and Counseling Program Development: Schools can provide guidance and counseling programs that target increasing students' academic self-efficacy. This program can provide individualized support to students in coping with uncertainty, managing stress, and building confidence in their academic abilities.

Improving students' academic self-efficacy has important implications in an educational context. When students have high levels of academic self-efficacy, they tend to be more motivated, have a strong passion for learning, and cope better with learning obstacles. This is also associated with improved academic performance and better achievement of learning goals.

CONCLUSION

Based on the research conducted, it can be concluded that the analysis results show that 49 out of 50 statement items are valid, with one statement item considered invalid. This shows that the instrument has good validity in measuring academic self-efficacy. In addition, this instrument has been divided into three sub-variables, namely Social Situation, Cognitive Operation, and Vocational Technical Skills, with a total of 49 items. Furthermore, reliability testing was conducted using Cronbach's Alpha coefficient, and the results showed a reliability value of 0.861. The value shows a strong/high level of reliability, indicating that this instrument is consistent and reliable in measuring the academic self-efficacy of junior high school students. Then, a t-test was conducted using the Social Situation, Cognitive Operation, and Technical Skills variables, and it was found that the Academic Self-Efficacy Scale developed was effective in measuring self-efficacy.

This scale has gone through a development process that involves identifying dimensions and indicators that are relevant to the context of junior high school students in Indonesia. After that, a validation process was carried out to ensure that this scale was reliable and valid in measuring students' academic self-efficacy. This scale can be used in research and evaluation in the field of education to objectively measure students' academic self-efficacy levels. By using this scale, the level of students' confidence in facing academic challenges and achieving desired learning outcomes can be assessed. Thus it can be concluded that the instrument made is effective in measuring the academic self-efficacy scale for junior high school students in Indonesia.

REFERENCES

Abdullah, S. M. (2019). Similiarity Artikel: Social Cognitive Theory: A Bandura Thought Review published in 1982-2012. *Journal Psikodimensia*, *18*(1), 85–100.

Bandura, A. (2019). Applying Theory for Human Betterment. *Sage Journals Home*, *14*(1).

Deng, K., Tsuda, A., Horiuchi, S., & Aoki, S. (2022). Processes of change, pros, cons, and self-efficacy as variables associated with stage transitions for effective stress management over a month: a longitudinal study. *BMC Psychology*, *10*(122).

Hayat, A. A., Shateri, K., Amini, M., & Shokrpour, N. (2020). Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: a structural equation model. *BMC Medical Education*, *20*(1), 1–11.

Hendricks, K. S. (2016). The sources of self-efficacy: Educational research and implications for music. *Update: Applications of Research in Music Education*, *35*(1), 32–38.

Ifdil, I., Bariyyah, K., Dewi, A. K., & Rangka, I. B. (2019). The College Academic Self-Efficacy Scale (CASES); is an Indonesian validation to measure the self-efficacy of students. *Jurnal Kajian Bimbingan dan Konseling*, *4*(4), 115-121.

Lianto. (2019). Self-Efficacy: A brief literature review. *Jurnal Manajemen Motivasi*, *15*, 55–61.

Lippke, S. (2020). Self-Efficacy Theory. *Encyclopedia of Personality and Individual Differences*, 4722–4727.

Moniz-Lewis, D. I. K., Stein, E. R., Stein, E. R., & Witkiewitz, K. (2022). Self-Efficacy as a Potential Mechanism of Behavior Change in Mindfulness-Based Relapse Prevention. *Mindfulness*, *12*, 2175–2185.

Mubarrak, K. R., Ihsan, H., & Wyandini, D. Z. (2022). Development of math efficacy scale for junior high school students in Indonesia. *Jurnal Elemen*, *8*(1), 276-289.

Naqiyah, N., Ilhamuddin, M. F., Sumarlik, Taufikurohmah, T., & Sudihutomo, A. (2020). *Self-Efficacy with Educational Purpose on Consuming Nanogold and Nanosilver as Medication for Cancer*. *387*(Icei), 315–317. https://doi.org/10.2991/icei-19.2019.74

Naqiyah, N., Wiyono, B., & Kholidya, C. (2018). *The Development of Cognitive Behavior Therapy Guidebook to Improve Self-efficacy of People with HIV/AIDS*. *173*(Icei 2017), 117–120. https://doi.org/10.2991/icei-17.2018.31

Nurhikmah, H. (2019). Analysis of Students' Computer Self-Efficacy Instrument. *5th International*

Conference on Education and Technology (ICET 2019), 650–654.

Owen, S. V, & Froman, R. D. (1988). Development of a College Academic Self-Efficacy. *National Council on Measurement in Education*, 8.

Paradewari, D. S. (2017). Investigating students' self-efficacy of public speaking. *International Journal of Education and Research*, *5*(10), 97–108.

Paramitha, J., & Ajisuksmo, C. R. P. (2021). Efikasi Diri Matematika Dan Sikap Terhadap Matematika Pada Siswa Sekolah Menengah Pertama. *Jurnal Psikologi*, *14*(2), 207–216.

Perin, D., Lauterbach, M., Raufman, J., & Kalamkarian, H. S. (2017). Text-based writing of low-skilled postsecondary students: relation to comprehension, self-efficacy, and teacher judgments. *Reading and Writing*, *30*, 887–915.

Riyanto, O. R., & Mariani, S. (2019). Mathematics critical thinking reviewed from self-efficacy and motivation of learning in arias learning. *Journal of Primary Education*, *8*(5), 243–250.

Santoso, H. B., Schrepp, M., Isal, R., Utomo, A. Y., & Priyogi, B. (2016). Measuring user experience of the student-centered e-learning environment. *Journal of Educators Online*, *13*(1), 58–79.

Schunk, D. H., & DiBenedetto, M. K. (2016). Self-efficacy theory in education. In *Handbook of motivation at school* (pp. 34–54). Routledge.

Schunk, D. H., & DiBenedetto, M. K. (2021). Advances in Motivation Science. *Advances in Motivation Science*.

Schunk, D. H., & Usher, E. L. (2011). Assessing self-efficacy for self-regulated learning. *Handbook of Self-Regulation of Learning and Performance*, 282–297.

Shin, M.-H. (2018). Effects of Project-Based Learning on Students' Motivation and Self-Efficacy. *English Teaching*, *73*(1), 95–114.

Sintya, N. M. (2019). Pengaruh Motivasi, Efikasi Diri, Ekspektasi Pendapatan, Lingkungan Keluarga, Dan Pendidikan Kewirausahaan Terhadap Minat Berwirausaha Mahasiswa Jurusan Akuntansi Di Universitas Mahasaraswati Denpasar. *JSAM (Jurnal Sains, Akuntansi Dan Manajemen)*, *1*(1), 337–380.

Stephen N. Elliott, Thomas R. Kratochwill, Joan Littlefield Cook, J. F. T. (2000). *Educational Psychology: Effective teaching, effective learning* (Third Edit). McGraw-Hill.

Sugiyono. (2005). *Memahami Penelitian Kualitatif* (Alfabeta).

Tambunan, S. (2022). Tujuan Belajar dan Efikasi Diri Terhadap Hasil Belajar Mahasiswa Program Studi Bimbingan Konseling Islam UIN Syekh Ali Hasan Ahmad Addary Padangsidimpuan.

Jurnal Al-Irsyad: Jurnal Bimbingan Konseling Islam, *4*(2), 285–300.

Umbara, F. D. A. D., & Sudihartinih, E. (2020). Hasil Belajar Dan Efikasi Diri Siswa Sekolah Menengah Pertama Pada Mata Pelajaran Matematika. *SIGMA*, *6*(1), 8–16.

Utami, C. T. (2017). Self-Efficacy dan Resiliensi: Sebuah Tinjauan Meta-Analisis. *Buletin Psikologi*, *25*(1).

Waddington, J. (2023). Self-efficacy. *ELT Journal*, *77*(2), 237–240.

Walker, C. W. (2023). *A Collective Case Study of Novice Elementary Teachers' Perceptions of Preparedness to Teach Early Literacy Skills to Beginning Readers*.

Warner, L. M., & French, D. P. (2020). *Self-Efficacy Interventions*. Cambridge University Press.

Zainuddin, Z., & Halili, S. H. (2016). Flipped classroom research and trends from different fields of study. *International Review of Research in Open and Distributed Learning*, *17*(3), 313–340.

Zysberg, L., & Schwabsky, N. (2021). School climate, academic self-efficacy, and student achievement. *Educational Psychology*, *41*(4), 467–482.