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The Role of Perceived Social Support on Self-Regulated Learning of High School Students at Islamic Boarding Schools

Agistni Sarah Sakinah [1], Tamanna Quraishi *[2], Tang Eng Loong [3]

[1] Psychology Study Program, Faculty of Social and Political Sciences, Brawijaya University, **Indonesia**
[2] Computer Science Faculty, University of the People, **United State of America**
[3] Sunway College, Petaling Jaya, Selangor, **Malaysia**

Abstract

Education plays a fundamental role in improving the quality of life. It enables individuals to develop themselves intellectually, socially, and morally. In the context of Islamic boarding schools, education not only focuses on the acquisition of knowledge and skills, but also emphasizes the cultivation of values, ethics, and religious commitment. The goal is to shape Muslim individuals who are faithful, pious, possess good character, contribute positively to society, and uphold the values of Islam. One key factor that influences students' learning behavior is perceived social support. This study aims to examine the role of perceived social support in fostering self-regulated learning among high school students in Islamic boarding schools. This research adopts a quantitative approach using correlational methods to assess the relationship between variables. Data were collected through the distribution of a transadapted perceived social support scale among high school students enrolled in Islamic boarding schools. The results revealed a statistically significant relationship, with a p-value of 0.000 ($p < 0.05$), a correlation coefficient (R) of 0.430, and a coefficient of determination (R^2) of 0.185. This indicates that perceived social support contributes 18.5% to students' self-regulated learning. Further analysis of sub-scales showed the following contributions: teachers (11.1%), friends (9.5%), people at school (9.2%), classmates (8.9%), and parents (6.1%). In conclusion, perceived social support plays a significant role in enhancing students' self-regulated learning in Islamic boarding schools. These findings underscore the importance of fostering supportive environments, especially from educators and peers, to improve students' independent learning capabilities.

Keywords: Education, Independent Learning, Islamic Boarding Schools, Social Support, Quantitative Approach.

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INTRODUCTION

The main component in improving the quality of life is education. Through education, an individual is able to develop themselves and know many things. Education is not only related to knowledge and skills, but also concerns morals, values, and ethics. This is in line with the purpose of education in Islamic boarding schools, namely to create and develop Muslim personalities who are faithful and pious, have morals, are useful for society, spread Islam and the glory of Muslims in society [1].

The dynamics of the development of Islamic boarding schools which were originally Islamic religious education began in the 13th century, then along with the development of the times experienced renewal. There are four main targets that are renewed. First, the subject matter, the subject matter taught before the birth of the ideas of renewal was focused on religious studies, namely classical books. After the era of renewal, the subject matter did not only focus on religious knowledge and classical books but also general knowledge. Second, the renewal of the method is not only focused on the teaching and learning method specifically for yellow books, but is balanced with lecture methods, questions and answers, and discussions. Third, the classical system, students have been divided into classes based on the order of year of entry and length of study. Fourth, educational management, the application of basic principles of educational management [2].

Zainul Hasan Islamic boarding school located in Pajarakan, Probolinggo Regency, is one example of an Islamic boarding school that implements a formal education system, providing religious knowledge and general knowledge, and preaching. The learning method in this Islamic boarding school has been balanced with a modern learning system such as questions and answers, lectures, and discussions. In addition, the curriculum used in the Islamic boarding school has used the national education curriculum. Students and

* **Correspondence Address**
E-mail: agistnisarahsakinah@gmail.com

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students of the Islamic boarding school are required to be able to divide their time between learning activities at school and Islamic boarding school activities. School activities include two activities, namely teaching and learning activities as in general and extracurricular activities. Islamic boarding school activities include studying books, diniyah, studying the Qur'an, and so on, this information was obtained from one of the students (Interview, January 1, 2019).

Based on the results of interviews with administrators and teachers of the Islamic boarding school, it was stated that "the activities of the students here start from 03.00 am to 10.00 pm" so it can be concluded that the students start their activities from 03.00-22.00.

> *"At 03.00-06.00 students are required to wake up to perform congregational tahajud prayers, congregational dawn prayers and study books, at 06.00-14.30 students carry out teaching and learning activities at school, then at 15.00-22.00 students carry out activities at the pondok, at 22.00-03.00 the pondok activities are finished, students carry out their own activities such as doing assignments given by the school, studying with their friends. The activity schedule has been prepared by the school and the pondok, of course it is made for the benefit of students in order to maximize the learning process. This process cannot be separated from various factors that can affect its sustainability "(W1, AA, AS, B12).*

So self-regulated learning is needed as a support to achieve maximum academic results, this is supported by research with the results that self-regulated learning has a significant influence on academic achievement in students [3]. According to Memon et al. [4] self-regulated learning (SRL) is defined as the active participation of students in their own learning process. Hailikari et al. [5] also said that students who are motivated to learn a topic tend to involve themselves in various activities that have been believed, this will help students to learn, such as paying close attention to the teacher's explanation, mentally understanding and memorizing the material to be learned, taking notes to facilitate the next learning activity, checking their level of understanding, and asking for help when they do not understand the material. However, based on the results of interviews conducted at the Zainul Hasan Islamic Boarding School, it was found that students showed learning behavior that was not in accordance with Zimmerman's statement. Students were sleepy when the teacher was explaining the material, were lazy, did not meet the targets in learning, did not pay attention to the teacher, and were less disciplined in learning, and students felt bored with learning activities causing them to look for various reasons to avoid school and Islamic boarding school activities.

The problem is related to the dimensions that have been put forward by Juodis et al. [6] students must plan or plan how to understand the task first before taking steps so that students are not lazy in doing their activities, then students and students must also monitor themselves to always monitor themselves to improve their performance, students and students must also evaluate to find out what has been done whether it is in accordance with the planning that has been made previously, students or students react to apply self-knowledge into action and increase the number of strategies that can be used, then students or students must make efforts to improve and maintain performance so that it remains optimal, then students or students must carry out self-efficacy for self-confidence in the ability to do something. Students or students are expected to have high self-regulated learning, because self-regulated learning has great benefits for students or students, namely being able to regulate themselves and utilize an environment that supports their learning activities [7]. However, if students or students have low self-regulated learning, it will result in difficulties in learning activities so that their learning outcomes are not optimal. In addition, this can also have a negative impact on students or students not graduating because it is difficult to achieve the graduation standards from the government [8]. Mgaiwa [9] states that the graduation standards from the government include attitudes, knowledge, and skills.

According to Bandura [10] in social cognitive theory there are three things that influence a person to do self-regulated learning, namely individual, behavior and environment. Environmental factors can be physical environment or social environment, both family environment, school environment, and so on. One possibility that can influence self-regulated learning in environmental factors is social support [11]. Social support is included in environmental factors that can have a major influence on self-regulated learning [12]. This has an impact on self-regulated learning so that students are able to manage their learning effectively and are able to achieve optimal learning outcomes. However, on the contrary, if social support is less supportive, it will cause students' self-regulated learning abilities to be low. This is also reinforced by previous research conducted by Karakose et al. [13], stating that there is a positive relationship between perceived social support and self-regulated learning in students. The stronger the social support received by students, the better the self-regulated learning they have.

Sumitro et al. [14], stated that there are three categories of social support, namely, social embeddedness, perceived social support, and enacted social support. In this study, the focus of the study is on the perspective of the recipient, whether he feels support from his surroundings or what is called perceived social support. As a supporter, a study conducted by Li et al. [15] stated that there is a relationship between perceived social support and self-regulated learning, where the study was conducted on adolescents aged 15 to 18 years. In this study, there are parties that influence self-regulated learning in students, namely parents, friends, and teachers and these three things are factors that influence perceived social support. Sumitro et al. [16] defines perceived social support as a person's belief that there is some social support available when they need perceived social support. Another definition put forward by Wang et al. [17] that social support is an individual's perception of receiving support, both specific support from people around them such as parents, friends, teachers, and people in the school environment. As well as general support that can encourage individuals to be better or help prevent individuals from doing things that are detrimental to themselves.

In this study, researchers chose high school students who attended Zainul Hasan Islamic boarding school. High school students in this study were individuals who were in their teens based on Erikson's development theory, teenagers are individuals aged between 10-20 [18]. Adolescence is a transition period from childhood to adulthood, most teenagers experience instability from that period [19]. Adolescence is often marked by the emergence of characteristics called "identity crisis" this usually causes individuals to experience confusion, dissatisfaction, instability, and avoid Marcia's problems [20]. To overcome these problems, adolescents need social support that is felt by the adolescents themselves (perceived social support). That perceived social support during adolescence is very important because it is an age marked by rapid change and intermittent emotional turmoil. In the school environment, perceived social support is also needed as an effort to achieve self-regulated learning, which can be shown by the support from sources of perceived social support, namely parents, teachers, friends, and people around them. In relation to this, the researcher wants to know how perceived social support is for students or high school students at Islamic Boarding Schools and what impact it has on self-regulated learning.

METHOD

Research Design

This study is an individual study with the theme of self-regulated learning, using a quantitative research approach, a quantitative approach according to Foong et al. [21] is a design that requires the recording of research data in real form in the form of numbers, so as to facilitate the analysis and interpretation process using statistical calculations. And using the correlation method. Correlational is used by researchers to obtain information about the level of relationship that occurs [22]. The study was conducted by distributing the transadaptation result scale to high school students at Islamic boarding schools.

Population and Sample

Population is a generalization area consisting of subjects with certain characteristics determined by researchers who will later be studied and conclusions drawn in a study [23]. The population used in this study were high school students in Islamic boarding schools aged 15-17 years. This study uses a sampling technique used in research to determine the sample. This study uses an accidental sampling technique, namely samples are selected from people who are met and have appropriate criteria. Researchers use the G * Power application to determine the number of samples from the population with an effect size = 0.3 and $\alpha = 0.05$ and a power of 0.95 so that the minimum number of subjects is 134 and rounded up to 150.

Research Instruments

1. Self Regulation of learning self report scale (SRL-SRS)

The SRL-SRS scale created by Toering (2012) is specifically for ages 11-17 years and was first transadapted by the researcher. This scale consists of 50 items, and is a Likert scale with a score range of 1 (Never), 2 (Almost Never), 3 (Sometimes), 4 (Often). Administration of the SRL-SRS scale is by checking the column that best suits him/her based on the statement/item. The scale has been tested for reliability and produces a Cronbach alpha of 0.69-0.84 [24]. The following is the SRL-SRS scale blueprint (see Table 1).

2. Perceived Social Support Scalet

The scale is adapted from The Child and Adolescent Social Support Scale (CASSS) [25]. Consisting of 5 sources of support, each consisting of 12 items, so that the total of all items is 60 items [26]. On this scale, students are asked to read statements and assess two parameters, namely, how often they feel the support and

secondly how important the support is to them. For frequency, it is assessed from 1 (never), 2 (almost never), 3 (sometimes), 4 (often), 5 (very often), and 6 (always). While for importance or not, it is assessed from 1 (not important), 2 (important), 3 (very important).

Table 1. Blueprint Self Regulation of learning self report scale

Dimensions	Item	Total item
Planning	1-9	9
Self monitoring	10-17	8
Evaluation	19-25	8
Reflection	26-30	5
Effort	31-40	10
Self efficacy	41-50	10
Total		50

Administration of the CASSS scale is by circling the most appropriate one of the parameters of how important (1-6) and how often (1-3) each item is where the place to choose both parameters is side by side. The CASSS scale has a total reliability of 0.772 [1]. The following is the CASSS blueprint table.

Table 2. CASSS scale blueprint

Aspects/Sources Social Support	Parent	Teacher	Classmate	Friend	People Around School	Total
Emotional	1,2,3	13,14,15	25,26,27	37,38,39	49,50,51	15
Informational	4,5,6	16,17,18	28,29,30	40,41,42,	52,53,54	15
Appraisal	7,8,9	19,20,21	31,32,33	43,44,45	55,56,57	15
Instrumental	10,11,12	22,23,24	34,35,36	46,47,48	58,59,60	15
Total	**12**	**12**	**12**	**12**	**12**	**60**

Data analysis stage

After the participants collected the scales and questionnaires, the researcher checked whether the collected scales had been filled in correctly. Data input was carried out in accordance with the CASSS and SRL-SRS procedures. After all the data was complete, an analysis was carried out to test the hypothesis using the SPSS 25.0 for Windows program. After conducting the data processing and analysis process, the researcher then makes a research report to make it easier for others to read the research that has been done. The contents of the research report will be adjusted to the research results that are adjusted to the problems and objectives of the research. Including interpretation with the theoretical studies used and making conclusions from the research results. The data obtained by dialysis were first tested with an assumption test to determine normality and linearity, then a hypothesis test was carried out using multiple regression statistical techniques using the SPSS 25.0 for Windows data processing application.

RESULT AND DISCUSSION

Participant Overview

Participants were students of Zainul Hasan High School aged 15-17 years, the total participants in this study were 150 people consisting of 59 males and 91 female participants. In this study, participants aged 15 years consisted of 12 students, those aged 16 years consisted of 94 students and those aged 17 years consisted of 44 students.

Descriptive Data Analysis

The data obtained were analyzed by comparing empirical scores and hypothetical scores. The score comparison can be seen in the following table.

Table 5. Comparison of Empirical and Hypothetical Scores

Variabel		Empirical Score				Hypothetical Score			
		Min	Max	M	Sd	Min	Max	M	SD
Perceived social support	Often	104	252	178	24.6	43	258	150.5	25.66
	important	45	129	87	29	43	129	86	14.33
Self regulated learning		71	116	93.5	7.5	29	145	87	1933

After the comparison, the data is then categorized based on the normal distribution category norms by Wang et al. [17]. Data categorization references can be seen in Table 6.

Table 6. References Category of subject score levels

Category	Decision area	Description
Low	X < (μ-σ)	σ: Hypothetical SD
Medium	(μ-σ) ≤ X <(μ+σ)	μ: Mean hipotetik
High	(μ+σ) ≤ X	X: Subject Score

Based on the decision area table above, the researcher enters the value of the standard deviation and mean of each variable so that the high or low category of the variable is obtained, which is explained in the following table.

Table 7. Category of subject score levels based on hypothetical values

Variable		Category	Decision Area	Total	Percentage
Perceived social support	Often	Low	X<124.84	3	2%
		Medium	124.84≤X<176.16	73	49%
		High	176,17≤ X	74	49%
		Total		150	100%
	Important	Low	X<71.67	2	1%
		Medium	71.67≤ X<100.33	66	44%
		High	100.33≤ X	82	55%
		Total		150	100%
Self regulated learning		Low	X<67.67	0	0%
		Medium	67.67≤ X<106.33	132	88%
		High	106.33≤ X	18	12%
		Total		150	100%

Based on the categorization in the table from the two research parameters of perceived social support, the participants in this study were mostly in the high category. While the Self-regulated learning parameter was in the medium category.

Assumption Test Results

The normality test is used to determine how the distribution of research data is normally distributed or not. The following is the normality test in this study.

Table 8. Normality test of perceived social support and self-regulated learning

Variable		Kolmogorov – Smirnov		Information
		Statistical Values	Significance	
self regulated learning		0.045	0.200	Normal
perceived social support	Important	0.063	0.200	Normal
	Often	0.043	0.200	Normal

*p>0.05

The normality test in this study used Kolmogorov-Smirnov. The Table 8 states that the distribution of data for the variables self-regulated learning and perceived social support is normally distributed. Based on the calculations that have been carried out, the results of the significance value are 0.200 (p>0.05) for the self-regulated learning variable. Then for the significance results of the perceived social support variable with a scale of how important (important) the results are 0.200 (p>0.05), while for the scale of how often (often) the results are 0.200 (p>0.05). Linearity test is used to determine whether there is a linear role between the variables of perceived social support and the variables of self-regulated learning. The linearity test in this study uses the Test for Linearity and it is known that the relationship between the parameters of perceived social support and self-regulated learning is linear. The comparative value of the parameter how often with self-regulated learning is 0.076> 0.05, and the comparative value of the parameter how important it is with self-regulated learning is 0.117> 0.05. The following is the plot for the linearity test.

Hypothesis Test Results

Based on the results obtained, it shows a significance of p = 0.000 (p <0.05) with a coefficient of R = 0.430 and a coefficient of determination R2 = 0.185. So it can be concluded that the hypothesis in this study is that the role of perceived social support has a role in self-regulated learning of high school students in Islamic boarding schools by 18.5%. The results of the hypothesis test can be seen in the following Table 9.

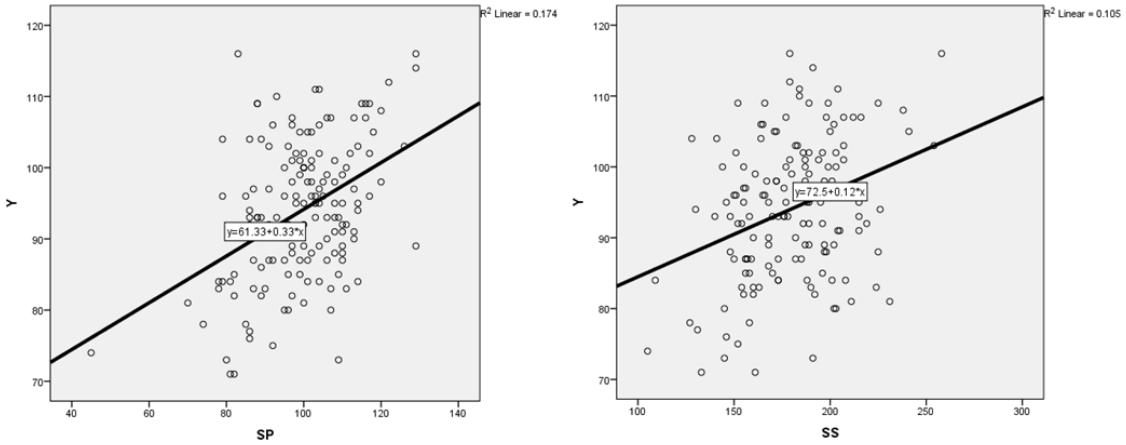

Figure 1. (a) Self Regulated Learning Linearity Test How important is it?; (b) Self Regulated Learning Linearity Test How often

Table 9. Hypothesis Test Perceived Social Support *Self Regulated Learning

Model	R	R Squeare	Change Statistic Sig. F Change
1	0.430	0.185	0.000

[a]Predictors: (constant), OFTEN, IMPORTANT

The results of the significance test on the parameters of how often and how important it is carried out to determine how important and how significant the role of Perceived Social Support is for high school students at Islamic boarding schools. Can be seen in the following Table 10.

Table 10. Significance test of the parameters of how often and how important

Parameter	Beta		Sig
	Unstandarrized Coefficients	Standardized Coefficients	
Constant	58.682	NR	0.000
Important	0.271	0.345	0.000
Often	0.046	0.125	0.172

Based on the regression equation Y = 58.682 + 0.271 (Important) + 0.046 (often), then: (1) based on the meaning of the constant of 58.682, if other factors are controlled/perceived social support has a value of 0, then the value of Y/self-regulated learning is 58.682. (2) Based on the meaning of B = 0.271, if other factors are controlled or constants are considered 0, then every 1 unit increase in the parameter of how important self-regulated learning increases by 0.271. (3) Based on the meaning of B = 0.046, if other factors are controlled or the constant is considered 0, then every 1 unit increase in the parameter of how often self-regulated learning eats increases by 0.046.

Additional Analysis Results

Additional analysis conducted on the study to see which sources of social support play the most role in self-regulated learning in high school students of Islamic boarding schools. Perceived social support has 5 sources of support, namely parents, teachers, friends, classmates, friends, people at school. The following are the regression values for each source of support:

Table 11. Regression values of each source of perceived social support

Support sources	R	R^2	Sig.
Parents	0.247	0.061	0.002
Teachers	0.334	0.111	0.000
Classmates	0.299	0.089	0.000
Friends	0.307	0.095	0.000
People at school	0.303	0.092	0.000

***P* ≤ 0.05**

The Table 11 shows the regression value of perceived social support sources from both parameters of how often and how important simultaneously to self-regulated learning. The regression value can be seen in the respective R tables and its significance is listed (P ≤ 0.05).

Table 12. Regression values of each source of perceived social support parameters

Source	Beta		sig			*R*
	Important	Often	Important	Often	Simultan	
Parents	3.063	0.911	0.001	0.010	0.002	0.247
Teachers	1.122	0.411	0.000	0.001	0.000	0.334
Classmates	0.936	0.266	0.000	0.007	0.000	0.299
Friends	0.692	0.302	0.001	0.001	0.000	0.307
People at school	0.937	0.216	0.000	0.007	0.000	0.303

*$P \leq 0.05$

The Table 12 shows the value of each regression from the source of perceived social support separately, namely between how important and how often it is for self-regulated learning. The regression value can be known by looking at the results of the significance value for each parameter. The results of the multiple regression test show that parents, teachers, classmates, friends, and people at school have a significant role in perceived social support for self-regulated learning.

Discussion

This study shows that the role of perceived social support has a large role, namely 18.5%, on self-regulated learning, it can be interpreted that when students receive the role of perceived social support, it will affect students' self-regulated learning, besides that there are also other factors that influence it, namely 81.5%. A study conducted by Wong et al. [25] said that there is a relationship between perceived social support and self-regulated learning, where the study was conducted on adolescents aged 15 to 18 years. In this study, there are parties that influence self-regulated learning in students, namely friends, and teachers and both of these are factors that influence perceived social support. The results of the study showed that in middle school adolescents, peer and teacher support was significantly related to self-regulated learning but parental support was not. From this, it can be seen that in middle school adolescents (high school students) it can be said that teachers and friends have a role. As stated by Guay [12] that adolescence is a stage that must be passed by every individual before entering adulthood where this period is a turbulent period colored by conflict and mood swings or called the view of "storm and stress", there is a possibility that adolescents in this case high school students commit negative actions including juvenile delinquency (delinquency). Malik [1] also said that adolescence is often colored by the emergence of characteristics called "identity crisis" this usually causes individuals to experience confusion, dissatisfaction, instability, and avoid problems.

The results of additional analysis on each CASSS subscale showed that perceived social support from parents played a role of 6.1%, teachers 11.1%, classmates 8.9%, friends 9.5%, and people at school 9.2% on self-regulated learning. If the results are sorted on each subscale of perceived social support for self-regulated learning, the order is teachers, friends, people at school, classmates, and parents. The results on each CASSS subscale show that the most dominant role in self-regulated learning is the teacher, this is supported by Karlen et al. [27]. The study found that teachers, parents and friends have a big role in perceived social support, while people at school do not have a big role like the three sources, but in this study only teachers and friends have a big role while parents have the lowest role. In this study, parents have the lowest role in perceived social support, this is supported by the old model of parent-adolescent relationships proposed by Sumitro et al. [16] that when they become adults, adolescents separate from their parents and enter a world of independence separate from their parents, in addition, the conflict that occurs between parents and adolescents is very strong and stressful. From this model, it can be assumed that adolescents begin to separate from their parents related to their developmental tasks, namely the search for self-identity, one of the efforts is independence. Research by Lockertsen et al. [19] shows that there is a positive relationship between parent-child attachment and child independence. If associated with this study, the low perceived social support from parents may be because students have started to learn to be independent.

This study also shows that classmates have a low role in perceived social support of the subject, which can be explained by what Blair et al. stated that peers have a number of roles in the process of adolescent social development including as friends, sources of support for spirit, sources of physical support, sources of ego support, social comparison functions and affection functions [28]. When associated with this study, friends or close friends who influence the role of perceived social support of friends are greater than classmates. Other parties who have a role in perceived social support are people at school, there is a possibility that this is

influenced by the time spent at school more considering that this study was conducted on high school students at Islamic boarding schools.

Research limitations

In this study, there are two measuring instruments that must be worked on by each student, where each measuring instrument has quite a lot of items, this affects the condition of the participants when working and the possibility of students answering not seriously which results in answers that do not match the student's condition.

CONCLUSION

The conclusion of this study highlights the significant role of perceived social support in influencing self-regulated learning among high school students in Islamic boarding schools. The hypothesis testing revealed that perceived social support accounts for 18.5% of the variance in students' self-regulated learning, indicating that the more students feel supported socially, the more capable they are of managing and directing their own learning processes. When analyzed based on sub-scales, the highest contribution to self-regulated learning came from support provided by teachers (11.1%), followed by friends (9.5%), people at school (9.2%), classmates (8.9%), and parents (6.1%). Furthermore, of the two parameters assessed within perceived social support—how important the support is and how often it is received—the "how important" parameter was found to have a greater impact on students' self-regulated learning. In terms of methodology, the large number of items in the scale and questionnaire led to participant fatigue. Therefore, future researchers are advised to distribute the questionnaires in separate sessions and provide direct assistance during the completion process. This will help reduce errors and allow participants to seek clarification when needed, thereby improving the accuracy and reliability of the data collected.

REFERENCES

[1] A. Malik, "New variants of ultra-conservative Islamic schools in Indonesia: A study on Islamic school endeavor with Islamic group movement," *Power and Education*, vol. 16, no. 1, hlm. 14–28, Mar 2024, doi: 10.1177/17577438231163042.

[2] T. Karakose, H. Polat, dan S. Papadakis, "Examining Teachers' Perspectives on School Principals' Digital Leadership Roles and Technology Capabilities during the COVID-19 Pandemic," *Sustainability*, vol. 13, no. 23, Art. no. 23, Jan 2021, doi: 10.3390/su132313448.

[3] M. Theobald, "Self-regulated learning training programs enhance university students' academic performance, self-regulated learning strategies, and motivation: A meta-analysis," *Contemporary Educational Psychology*, vol. 66, hlm. 101976, Jul 2021, doi: 10.1016/j.cedpsych.2021.101976.

[4] M. Q. Memon, Y. Lu, A. R. Memon, A. Memon, P. Munshi, dan S. F. A. Shah, "Does the Impact of Technology Sustain Students' Satisfaction, Academic and Functional Performance: An Analysis via Interactive and Self-Regulated Learning?," *Sustainability*, vol. 14, no. 12, Art. no. 12, Jan 2022, doi: 10.3390/su14127226.

[5] T. Hailikari, V. Virtanen, M. Vesalainen, dan L. Postareff, "Student perspectives on how different elements of constructive alignment support active learning," *Active Learning in Higher Education*, vol. 23, no. 3, hlm. 217–231, Nov 2022, doi: 10.1177/1469787421989160.

[6] A. Juodis, Y. Karavias, dan V. Sarafidis, "A homogeneous approach to testing for Granger non-causality in heterogeneous panels," *Empir Econ*, vol. 60, no. 1, hlm. 93–112, Jan 2021, doi: 10.1007/s00181-020-01970-9.

[7] C.-Y. Chang, P. Panjaburee, H.-C. Lin, C.-L. Lai, dan G.-H. Hwang, "Effects of online strategies on students' learning performance, self-efficacy, self-regulation and critical thinking in university online courses," *Education Tech Research Dev*, vol. 70, no. 1, hlm. 185–204, Feb 2022, doi: 10.1007/s11423-021-10071-y.

[8] C. E. Kee, "The impact of COVID-19: Graduate students' emotional and psychological experiences," *Journal of Human Behavior in the Social Environment*, vol. 31, no. 1–4, hlm. 476–488, Mei 2021, doi: 10.1080/10911359.2020.1855285.

[9] S. J. Mgaiwa, "Fostering Graduate Employability: Rethinking Tanzania's University Practices," *Sage Open*, vol. 11, no. 2, hlm. 21582440211006709, Apr 2021, doi: 10.1177/21582440211006709.

[10] A. Bandura, "Social cognitive theory of self-regulation," *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, hlm. 248–287, Des 1991, doi: 10.1016/0749-5978(91)90022-L.

[11] Y. Gambo dan M. Z. Shakir, "Evaluating students' experiences in self-regulated smart learning environment," *Educ Inf Technol*, vol. 28, no. 1, hlm. 547–580, Jan 2023, doi: 10.1007/s10639-022-11126-0.

[12] F. Guay, "Applying Self-Determination Theory to Education: Regulations Types, Psychological Needs, and Autonomy Supporting Behaviors," *Canadian Journal of School Psychology*, vol. 37, no. 1, hlm. 75–92, Mar 2022, doi: 10.1177/08295735211055355.

[13] T. Karakose, H. Polat, dan S. Papadakis, "Examining Teachers' Perspectives on School Principals' Digital Leadership Roles and Technology Capabilities during the COVID-19 Pandemic," *Sustainability*, vol. 13, no. 23, Art. no. 23, Jan 2021, doi: 10.3390/su132313448.

[14] S. Sumitro, A. Firmansyah, R. A. Aryati, dan M. Noviana, "Analysis of Social Networks in Modern Society: Case Study on the Use of Social Media Instagram by Sociology Students," *Journal of Social and Humanities*, vol. 2, no. 2, Art. no. 2, Sep 2024, doi: 10.59535/jsh.v2i2.412.
[15] F. Li *dkk.*, "Effects of sources of social support and resilience on the mental health of different age groups during the COVID-19 pandemic," *BMC Psychiatry*, vol. 21, no. 1, hlm. 16, Jan 2021, doi: 10.1186/s12888-020-03012-1.
[16] S. Sumitro, A. Firmansyah, M. Fiedlschuster, W. Affaghrou, dan J. A. Buhori, "Social Solidarity in the Tradition of Mutual Cooperation: Indonesia Cultural Heritage," *Journal of Social and Humanities*, vol. 2, no. 2, Art. no. 2, Sep 2024, doi: 10.59535/jsh.v2i2.411.
[17] Y. Wang, M. C. Chung, N. Wang, X. Yu, dan J. Kenardy, "Social support and posttraumatic stress disorder: A meta-analysis of longitudinal studies," *Clinical Psychology Review*, vol. 85, hlm. 101998, Apr 2021, doi: 10.1016/j.cpr.2021.101998.
[18] J. H. D. Henkens, M. Kalmijn, dan H. A. G. de Valk, "Life Satisfaction Development in the Transition to Adulthood: Differences by Gender and Immigrant Background," *J Youth Adolescence*, vol. 51, no. 2, hlm. 305–319, Feb 2022, doi: 10.1007/s10964-021-01560-7.
[19] V. Lockertsen, L. A. W. Holm, L. Nilsen, Ø. Rø, L. M. Burger, dan J. I. Røssberg, "The transition process between child and adolescent mental services and adult mental health services for patients with anorexia nervosa: a qualitative study of the parents' experiences," *J Eat Disord*, vol. 9, no. 1, hlm. 45, Apr 2021, doi: 10.1186/s40337-021-00404-w.
[20] F. Ding dan F. Curtis, "'I feel lost and somehow messy': a narrative inquiry into the identity struggle of a first-year university student," *Higher Education Research & Development*, vol. 40, no. 6, hlm. 1146–1160, Sep 2021, doi: 10.1080/07294360.2020.1804333.
[21] C. C. Foong *dkk.*, "A qualitative study on self-regulated learning among high performing medical students," *BMC Med Educ*, vol. 21, no. 1, hlm. 320, Jun 2021, doi: 10.1186/s12909-021-02712-w.
[22] R. L. Jewett, S. M. Mah, N. Howell, dan M. M. Larsen, "Social Cohesion and Community Resilience During COVID-19 and Pandemics: A Rapid Scoping Review to Inform the United Nations Research Roadmap for COVID-19 Recovery," *Int J Health Serv*, vol. 51, no. 3, hlm. 325–336, Jul 2021, doi: 10.1177/0020731421997092.
[23] D. G. Hays dan W. B. McKibben, "Promoting Rigorous Research: Generalizability and Qualitative Research," *Journal of Counseling & Development*, vol. 99, no. 2, hlm. 178–188, 2021, doi: 10.1002/jcad.12365.
[24] H. Sveinall *dkk.*, "The reliability and validity of the Norwegian version of the Victorian Institute of Sports Assessment for gluteal tendinopathy questionnaire (VISA-G-Norwegian) for patients with greater trochanteric pain syndrome," *BMC Musculoskelet Disord*, vol. 24, no. 1, hlm. 769, Sep 2023, doi: 10.1186/s12891-023-06901-0.
[25] M. D. Wong, K. K. Dosanjh, N. J. Jackson, D. Rünger, dan R. N. Dudovitz, "The longitudinal relationship of school climate with adolescent social and emotional health," *BMC Public Health*, vol. 21, no. 1, hlm. 207, Jan 2021, doi: 10.1186/s12889-021-10245-6.
[26] A.-R. Babapour, N. Gahassab-Mozaffari, dan A. Fathnezhad-Kazemi, "Nurses' job stress and its impact on quality of life and caring behaviors: a cross-sectional study," *BMC Nurs*, vol. 21, no. 1, hlm. 75, Mar 2022, doi: 10.1186/s12912-022-00852-y.
[27] Y. Karlen, C. N. Hirt, J. Jud, A. Rosenthal, dan T. D. Eberli, "Teachers as learners and agents of self-regulated learning: The importance of different teachers competence aspects for promoting metacognition," *Teaching and Teacher Education*, vol. 125, hlm. 104055, Apr 2023, doi: 10.1016/j.tate.2023.104055.
[28] K. L. Blair, C. Hudson, dan D. Holmberg, "Walking hand in hand: The role of affection-sharing in understanding the social network effect in same-sex, mixed-sex, and gender-diverse relationships," *Journal of Social and Personal Relationships*, vol. 40, no. 10, hlm. 3171–3194, Okt 2023, doi: 10.1177/02654075231169786.

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