LEOTECH: Journal of Learning Education and Technology
Vol. 1, No. 2, Desember 2024, pp. 08~16
ISSN: 3062-9543

The Impact of Learning Environment and Learning Anxiety on School Disaffection

Nela Nayla[1], Putriasani Nurrahmah[2], Tita Andrayani[3]
[1,2,3] Institut Prima Bangsa, Cirebon, Indonesia

Article Info

Article history:

Received 05, 31, 2025
Revised 06, 24, 2025
Accepted 06, 24, 2025

Keywords:

School disaffection
Learning environment
Learning anxiety

ABSTRACT

This study aims to find out how the learning environment and learning anxiety affect the dissatisfaction of elementary school students, as well as to look at the role of mediating and moderation factors in these relationships. We analyzed several elementary schools in the Cirebon area, West Java. The learning environment encompasses the physical, social, and emotional conditions in the school that students feel on a daily basis. When this environment is unsupportive or uncomfortable, students tend to feel unhappy at school. On the other hand, learning anxiety such as fear of failure, anxiety about exams, or academic stress can also exacerbate negative feelings towards school. This study used a mediated analysis approach to see if learning anxiety is a relationship between a poor learning environment and school dissatisfaction. In addition, moderation analysis is also used to find out whether certain factors strengthen or weaken the relationship. This study uses a quantitative research design with a survey method to collect data from students through standardized questionnaires. To analyze the data, researchers used two software, namely SmartPLS with the SEM-PLS method and SPSS with the regression method using PROCESS Macro. The number of samples used was 240 students consisting of 120 male students and 120 female students with an age range between 9-12 years according to their grade level. The results show that learning anxiety does play a mediator, while several other factors can affect how strongly the learning environment affects students' feelings. These findings are important for teachers and schools in creating a more supportive environment for students to feel more comfortable, safe, and satisfied during the learning process at school.

Corresponding Author:

Nela Nayla
Institut Prima Bangsa, Cirebon, Indonesia
Jl. Brigjend Dharsono Bypass No.20, Kertawinangun, Kec. Kedawung, Kabupaten Cirebon, Jawa Barat 45153
Email: nelanayla6@gmail.com

1. INTRODUCTION

According to Ki Hajar Dewantara in the journal (Tia Basana Hutagalung & Liesna Andriany, 2024), education is an effort to guide all the natural or basic potentials possessed by children, both as individuals and as part of society. In essence, education directs all the forces that exist in nature so that students as human beings and members of society can achieve the highest sense of security and happiness in life Basic education aims to foster students school disaffection and motivation. School dissatisfaction reflects students' negative evaluations of their school experience, which may include dislike of teachers, curriculum, peers, or the school environment in general. (Suasapha, 2020) explained that disaffection arises from unsupportive interpersonal interactions or negative attitudes towards oneself, and appears in the form of withdrawn behavior and negative emotions such as frustration and boredom However, school disaffection in attending school is a serious problem because it can decrease student achievement and participation. A conducive learning environment including a comfortable classroom atmosphere, teacher support, and positive social interaction is known to play an important role in increasing students interest in learning. The learning environment refers to all conditions that influence the

behavior of individuals involved in the learning process, particularly teachers and students as the key figures in the educational process at school. For example, (Dewi, 2024) found that aspects of the learning environment (family, school, community) together have a significant influence on students' school disaffection. On the other hand, learning anxiety often hinders the learning process. Learning anxiety according to Chaplin (2009:32) in journals (Apriani et al., 2021) Anxiety in psychology is defined as a mixed feeling of fear in learning and concern about the future, without a specific cause for the fear, and is individual in nature. Excessive anxiety can make students feel afraid of failure, lack confidence, and ultimately lower their school disaffection. Research by (Rahman et al., 2022) also shows that there is a significant influence between learning anxiety and students' interest in learning and confirms that anxious students tend to be less interested in learning.

According to Fredricks in the Journal (Pratama & Guspa, 2022) Dissatisfaction is reported to have a significant and ongoing negative impact on students. Dissatisfied students experience low academic achievement due to frequent truancy and loss of educational opportunities (Skinner et al., 2008). Therefore, it is very important to understand how students rate their school and know what factors are related to their level of satisfaction with the school (Solari, 2014). School dissatisfaction, as a docial phenomenon, has taken on a worrying dimension. Educators and the research community have become concerned about the ever-increasing rate of student disengagement (Ann & Findlay, 2013). In addition, school dissatisfaction fully mimics the relationship between victimization and achievement (Galand & Hospel, 2013). One way to overcome dissatisfaction at school and create a positive learning environment is to increase a sense of community and belonging within the school. This can be achieved through a variety of ways, such as implementing anti-bullying programs, organizing extracurricular activities that cater to a variety of interests, and providing support services for students who may be struggling with anxiety or other mental health issues. When students enter the education system, they learn how to manage and express their emotions and behaviors appropriately in the classroom through interaction with social partners (Schutz et al., 2006). By actively addressing these issues and creating a safe and inclusive environment, schools can help students feel more engaged and motivated to learn. This holistic approach to addressing student well-being not only benefits students individually, but also contributes to an overall positive school culture. When students feel supported and valued, they are more likely to participate in class discussions, collaborate with their peers, and take risks in their learning. This can improve academic success, improve social connections, and a greater sense of belonging within the school community. Additionally, by promoting a culture of empathy and understanding, schools can help reduce incidents of bullying and create a more inclusive environment for all students. Overall, prioritizing student well-being is essential to creating a positive and supportive learning environment that fosters growth and development for all individuals. The learning environment, both physical and non-physical, has an important role in shaping students' interest in learning. Adequate facilities, conducive classroom atmosphere, and positive interaction between teachers and students effectively support increased interest in learning. However, student interest may decline due to factors that are less supportive of the learning environment, such as an uncomfortable classroom atmosphere or a less interactive teaching approach.

Anxiety is a form of individual emotion related to the feeling of being threatened by something, usually with a less obvious object of threat. Anxiety of a reasonable intensity can be considered to have positive value as motivation. If the intensity is very strong and negative, it will actually cause losses and can interfere with the physical and psychological state of the individual concerned. According to Sudrajat (2008:3) in the journal (Mukholil, 2018) said that many factors trigger anxiety in students. Too high curriculum targets, unconducive learning climate, dense assignments, and strict and unfair assessment systems can be factors that cause anxiety stemming from curriculum factors. In addition, learning anxiety that is often triggered by an unconducive learning environment or negative perception of self-ability can reduce students' motivation and interest in learning. Excessive anxiety can make students feel lazy to study and have an impact on low learning achievement. Anxiety is defined as feelings of fear, tension or panic, or the expectation that something unpleasant will happen . High levels of anxiety can result in more difficult and painful procedures. Previous research has reported mixed results with anxiety reduction techniques in other procedural settings, such as educational, cognitive-behavioral, handling and relaxation, combination techniques, and music According to Martha et al., 2006; Wynne et al., 2004; Renée et al., 2010; Heng-Hsin, 2009 in the journal (Su, 2017).

A conducive and interactive learning environment can increase students' interest in learning, while an uncomfortable environment and high learning anxiety can decrease students' motivation and interest in school. A supportive learning environment is expected to suppress students' anxiety (e.g. through social support and engaging materials), thereby increasing their interest. Conversely, a less conducive environment can increase anxiety which in turn lowers interest. Several previous studies have also applied mediation analysis to test similar mechanisms. For example, (Abbas and Rizki, 2023) found that self-regulation mediates the influence of the learning environment on students' mathematics learning outcomes. This shows the relevance of using the mediation model in the context of education. However, there have not been many studies in Indonesia that

specifically test whether learning anxiety mediates the relationship between the learning environment and the school disaffection of elementary school students. Thus, the purpose of this study is to examine the influence of the learning environment on the school disaffection of elementary school students, test the influence of learning anxiety on school disaffection, and test whether learning anxiety plays a mediator in the influence of the learning environment on school disaffection.

From the analysis of previous crisis studies, According (Skinner et al., 2008) discussed how disaffection (withdrawal, disengagement) is closely related to anxiety, frustration, and lack of teacher support. The findings suggest that efforts to increase behavioral engagement without building autonomy and positive emotions can worsen disaffection and anxiety over time. Studies by (Rifai et al., 2024) show that classroom environments that attack psychological needs (e.g., lack of teacher support, negative relationships) directly trigger disengagement, including withdrawal and mental absenteeism. (Damaianti et al., 2019) Damaianti Examines the relationship between classroom environment perception and academic emotions. It was found that a competitive environment increases negative emotions, while a satisfying environment decreases negative emotions. In the journal The impact of learning environments on student engagement (Oliveras-ortiz, 2017) a quasi-experimental study of school architectural design shows that new physical environments increase student engagement. (Hao, 2024) compared the anxiety and depression levels of IB, AP, and ALevel students, finding the highest anxiety in IB students, but without statistically significant differences.

2. METHOD

This research is a quantitative research with a mediation and moderation analysis approach. The main objective of this study was to test the indirect influence of the Learning Environment (X) variable on School Disaffection (Y) through Learning Anxiety (M) as a mediating variable. To analyze the relationship and mediation effect between variables, path analysis techniques were used with the help of Model 4 of PROCESS Macro by Hayes and Structural Equation Modeling (SEM) based on Partial Least Squares (PLS) through SmartPLS 4 software to strengthen the analysis results. The population in this study is students in grades IV and V of elementary schools in several schools in Cirebon City, Indonesia. Before carrying out data collection, the researcher first submitted and obtained official permission from the principal and the relevant class teacher, to ensure that the research activities were carried out in accordance with the provisions of ethics and administrative procedures applicable in the school. The sampling technique used is purposive sampling, which is a sample selection technique based on certain considerations set by the researcher, such as the availability of respondents and the ability to read instruments independently. The number of samples used was 240 students consisting of 120 male students and 120 female students with an age range between 9-12 years according to their grade level. The instrument in this study is in the form of a closed questionnaire in the form of a checklist which is compiled using a 4-point Likert scale. In the journal (Budiaji et al., 2019) According to Hofmans et al. (2007), a 7-point Likert scale is recommended because this number of response options is generally preferred by respondents. However, Garland (1991) argues that when determining the number of response points, an even number of response options (such as a 4-point scale) is more advisable than an odd number (such as a 5-point scale), as it can help reduce social desirability bias. This bias refers to the respondent's tendency to please the interviewer or to appear helpful simply by agreeing to participate as a respondent with the following range of choices:

1 = Disagree
2 = Disagree
3 = Agree
4 = Strongly Agree

The instrument consists of statement items that measure the three main variables Learning Environment (X), Learning Anxiety (M), and School Disaffection (Y). Each indicator is developed based on relevant theory and previous studies. The questionnaire is given directly to students and explained in advance so that it can be understood according to their level of development. Data analysis is carried out through the following stages:

Validity Test

The validity of the convergence is tested through the outer loading value, which is ideally > 0.50. The validity of the discriminant was tested through the Fornell-Larcker Criterion and the HTMT Ratio (Heterotrait-Monotrait Ratio).

Reliability Test

Using Composite Reliability (CR) and Cronbach's Alpha, with an ideal value above 0.70. Average Variance Extracted (AVE) is also tested to ensure internal consistency.

Statistics Descriptive
It is used to describe the data characteristics of each variable, in the form of mean, standard deviation (SD), minimum and maximum values. This data was analyzed using SPSS.

Correlation Test
It was carried out with Pearson Product Moment to determine the direction and strength of the relationship between variables before the mediation test was carried out. The coefficient value (r) indicates the direction of the relationship, while the significance of the test indicates the strength of the association between variables.

Mediation Analysis
The Mediation Analysis was conducted using PROCESS Macro Model 4 by Hayes. This model was used to test the indirect influence from X to Y through M. Bootstrapping was carried out as many as 1000 resamples (resampling) with a confidence level of 95%. Bootstrapping is a computer-based statistical method for estimating the distribution of indirect effects without assuming the normality of distribution.
The results of the analysis include:
Direct effect (X → Y)
Indirect effect (X → M → Y)
Total effect (a combination of direct and indirect effects)
The mediation effect is considered significant if the Confidence Interval (CI) does not include a value of zero (0).

3. RESULT AND DISCUSSION

Based on data collected from 240 respondents, the results of the presentation were obtained with a description of the characteristics of the respondents to provide an overview of the profile of the research participants. Furthermore, the results of data analysis on research variables are presented systematically, ranging from descriptive analysis to statistical tests used to answer problem formulations and test hypotheses. The discussion was carried out by relating these findings with relevant theories and the results of previous research, so that a deeper understanding of the relationship between the variables being studied was obtained.

Respondents consisted of 120 male students (50%) and 120 female students (50%). This shows that the sample in this study has a balanced gender distribution, thus allowing for a fair and unbiased analysis based on sex. Most respondents were 10 years old (107 students or 45%) and 11 years old (97 students or 40%). Meanwhile, 17 students (7%) are 9 years old and 19 students (8%) are 12 years old. This shows that the majority of respondents are in the middle age range of primary school, which is in line with the focus of this study. The distribution of respondents by grade level was also balanced, with 119 students (50%) from grade IV and 121 students (50%) from grade V. This provides a representative picture of middle-class students in primary school, which was targeted in this study.

Table 1. Variable Descriptive Statistics Table

		Gender	Age	Class
N	Valid	240	240	240
	Missing	0	0	0
Mean		1.5000	1.4833	1.5042
Minimum		1.00	1.00	1.00
Maximum		2.00	2.00	2.00

Descriptive data for the variables Gender, Age, and Class showed that the number of valid respondents was 240 people, with no missing data (missing = 0). The mean value for Gender is 1.500, Age is 1.4833, Class is 1.5042 Each variable has a minimum value of 1.00 and a maximum of 2.00, which indicates that these variables are categorically coded with 2 categories (probably: 1 = male and 2 = female, or vice versa, depending on the code you use).

A mean value distribution close to 1.5 across all variables suggests that the sample is relatively balanced in terms of gender, age, and class. For example, in the sex variable with a mean of 1.5000, this shows that the number of males and females in this study is almost the same. Similarly, for the age and class variables, the mean value that is close to the middle of the two categories indicates the absence of dominance of a particular group.

3.2. Validity Test Table

The validity test aims to find out the extent to which the statement items on the instrument are able to measure the variables in question. The technique used in this study is Pearson Product Moment correlation, by comparing the correlation value of each item with the r-table value at a certain level of significance (e.g. 5%). An item is declared valid if the correlation value is greater than the r-table value. The results of the instrument validity test are presented as follows:

School Disaffection
There are 12 statements, and 11 statements are declared valid because the correlation value is above the r-table. However, statement number 4 has a correlation value of 0.473, which does not meet the validity criteria based on the r-table used, so the statement is declared invalid.

Learning Environment
There are 12 statements, and all statements are declared valid because they have a correlation value above the r-table. Thus, all instrument items on this variable can be used for further analysis.

Learning Anxiety
Of the 12 statements, 11 are valid, while statement number 3 has a correlation value of -0.078, which is far below the r-table value and also has a negative value, so the item is declared invalid and must be eliminated from the analysis.

The results of the validity test show that in general, most of the items in this research instrument have met the validity requirements. There are only two invalid statements, namely the 4th statement on the school disaffection variable and the 3rd statement on the learning anxiety variable. These invalid items need to be considered for removal or revision, so as not to affect the accuracy of the research results. The instruments for the learning environment variables show the best quality because all of the items are valid. This indicates that the construct of the learning environment has been appropriately measured through the instruments used.

Table 2. Reliability Test Table

Variabel	Cronbach's Alpha	Information
Learning Environment	0.778	Reliabel
Learning Anxiety	0.735	Reliabel
School Disaffection	0.716	Reliabel

A reliability test is carried out to find out the extent to which the research instrument produces consistent data if repeated measurements are carried out. In this study, the reliability of the instrument was tested using Cronbach's Alpha technique, where an instrument is said to be reliable if it has an alpha value of ≥ 0.70.

Based on the Table, it can be seen that all research variable instruments have a Cronbach's Alpha value above 0.70. The Learning Environment variable obtained a score of 0.778, the Learning Anxiety variable of 0.735, and the School Disaffection variable of 0.716. Thus, all instruments in this study are declared reliable and suitable for use for further analysis processes.

3.4. Mediation Analysis

This study aims to test whether the LA variable mediates the influence between elementary schools on LEN. The analysis was carried out using a mediation model (Model 4) on SPSS through macro PROCESS version 4.2.

Table 3. Effects Test of SD on LA (Pathway X → M)

Variabel	**Coeficin**	**SE**	**t**	**p**	**LLCI**	**ULCI**
Konstanta	6,4838	2,1261	3,0496	0,0026	2,2954	10,6721
SD	0,7248	0,0597	12,1365	0,0000	0,6072	0,8425

Based on the results of the analysis, the values of R = 0.6183 and R^2 = 0.3823 were obtained, which showed that SD explained 38.23% of the variation in the LA variable. An F value of 147.2942 with a p < 0.001 indicates that the relationship between elementary school and LA is statistically significant. The regression coefficient showed that elementary school had a significant positive effect on LA. The higher the elementary school, the higher the LA.

Table 4. SD and LA Effect Test Table on LEN (X&M → Y Strip)

Variabel	Coeficin	SE	t	p	LLCI	ULCI
Konstanta	3,6286	2,0695	1,7534	0,0808	-0,4483	7,7056
SD	0,4979	0,0726	6,8613	0,0000	0,3549	0,6408
LA	0,4459	0,0619	7,2040	0,0000	0,3240	0,5679

The regression model shows values R = 0.7227 and R^2 = 0.5224. This means that elementary and LA together explain 52.24% of the variation in LEN. The value of F = 129.5917 and p < 0.001 indicate a significant model. These results show that both elementary and LA have a positive and significant effect on LEN, respectively.

Table 5. Total Effects and Direct Effects of SD on LENs (Lines X → Y)

Variabel	Coeficin	SE	t	p	LLCI	ULCI
SD	0,8211	0,0628	13,0677	0,0000	0,6973	0,9448

The total effect showed that SD had a significant effect on LEN before the inclusion of the LA mediator.

Table 6. Mediation Effects (Indirect Effects) SD → LA → LEN

Types of Effects	Efek	SE	LLCI	ULCI
Total	0,8211	0,0628	0,6973	0,9448
Immediately	0,4979	0,0726	0,3549	0,6408
Indirect	0,3232	0,0543	0,2243	0,4347

The indirect effect was significant because the confidence interval (LLCI to ULCI) did not include zero. So, the results of the analysis show that the LA variable mediates the relationship between SD and LEN. Elementary schools have a positive and significant influence on LA, and both elementary and LA have a positive influence on LEN. The effects of indirect mediation (SD → LA → LEN) were also significant. This means that some of the influence of SD on LEN occurs indirectly through the increase in LA. In other words, elementary school will increase LEN more optimally if LA also increases.

These findings support the theoretical model that mediating variables such as LA play an important role in bridging the influence of School Disaffection (SD) on Learning Environment (LEN). Therefore, efforts to increase student Learning Environment (LEN) are not only through the development of School Disaffection (SD), but also by building an environment or supporting variables such as LA. Thus, the mediation model in this study proved to be significant and can explain the indirect relationship between SD and LEN through the role of LA.

3.5. Moderation Analysis Results

This study aims to examine whether the learning anxiety (LA) variable moderates the relationship between school disaffection (SD) and learning engagement (LEN). The analysis was conducted using a moderation model (Model 1) in SPSS, utilizing PROCESS Macro version 4.2 developed by Andrew F. Hayes (2022), which is specifically designed to test interaction effects between an independent variable and a moderator (Igartua & Hayes, 2021)

3.5.1. Regression Model Summary

Based on the analysis output, values R = 0.7338 and R^2 = 0.5385 were obtained, which shows that the model explains a 53.85% variation in the LEN variable. An F-value of 91.7891 with a p-value < 0.001 indicates that this regression model is statistically significant.

Table 7. Regression Coefficient Table

Variabel	Coeficin	SE	t	p	LLCI	ULCI
Konstanta	31,1835	9,8061	3,1800	0,0017	11,8649	50,5021
SD	-0,2821	0,2808	-1,0048	0,3160	-0,8352	0,2710
LA	-0,4367	0,3132	-1,3942	0,1646	-1,0538	0,1804
SD x LA	0,0246	0,0086	2,8727	0,0044	0,0077	0,0415

Results showed that the interaction between SD and LA (SD x LA) was significant with p = 0.0044. However, SD and LA individually had no significant effect on LEN because the p> value was 0.05.

Table 8. Interaction Test Table (Moderation)

Interaction	ΔR^2	F	df1	df2	p
SD x LA	0,0161	8,2526	1	236	0,0044

The presence of a ΔR^2 value of 0.0161 and $p < 0.05$ suggests that LA significantly moderates the relationship between SD and LEN. The effect of SD on LEN becomes stronger and more significant as the value of LA increases.

Table 9. Conditional Effects of SD at Different LA Levels

LA	Efek SD	SE	t	p	LLCI	ULCI
26,1867	0,3619	0,0857	4,2221	0,0000	0,1930	0,5308
32,0333	0,5057	0,0715	7,0701	0,0000	0,3648	0,6466
37,8800	0,6495	0,0889	7,3098	0,0000	0,4744	0,8245

The results of the analysis showed that the LA variable played a role as a moderator in the relationship between SD and LEN. Although SD and LA do not directly have a significant effect on LEN, the interaction between them has a significant influence. This means that the influence of elementary school on LEN is not fixed, but depends on the level of LA. The higher the LA score (e.g. learning environment or learning support), the stronger and more significant the influence of elementary school on LEN. In contrast, when the LA is low, the influence of elementary school on LEN remains but is not as strong as when the LA is high.

These findings support the assumption that the success of School Disaffection development in increasing student learning environment is highly dependent on a supportive environmental context. Thus, interventions to improve LEN through SD need to consider LA quality as an important context. These results are also in line with the literature that states that contextual variables such as learning environment can strengthen or weaken the effect of individual character on learning outcomes

4. CONCLUSION

Based on the findings of this study, it can be concluded that the learning environment and learning anxiety significantly influence elementary school students school disaffection. A conducive learning environment has been shown to enhance student engagement in school activities, both directly and indirectly through the reduction of learning anxiety as a mediating variable. This emphasizes that the quality of the learning environment affects not only academic outcomes but also the affective aspects of students related to motivation and participation. Furthermore, learning anxiety was found to act as a moderating variable that strengthens the effect of the learning environment on school disaffection. Students with higher levels of learning anxiety exhibited a stronger relationship between their perceptions of the learning environment and school disaffection. These findings contribute significantly to understanding the psychological dynamics at play in the context of primary education.

The practical implications of this study highlight the need for holistic interventions, with a focus on creating a safe, supportive, and engaging learning environment. Schools are advised to pay attention to physical aspects (such as classroom comfort), social aspects (teacher-student and peer relationships), and emotional aspects (psychological support) that shape students' overall learning experience. Support programs such as counseling services, the development of emotional regulation skills, and teacher training to foster a positive classroom climate can serve as applicable intervention strategies. Future research is recommended to test this model at different educational levels and to consider additional variables such as academic self-efficacy, peer social support, and family climate as potential factors in understanding school disaffection. Longitudinal studies are also important to examine the development of relationships between variables over time and to evaluate the effectiveness of interventions based on these findings.

5. ACKNOWLEDGEMENTS

The author would like to thank all parties who have provided support during the research and writing process of this journal. Special thanks were expressed to the teachers and students in elementary schools who were willing to be respondents in this study. Thank you also to the supervisor who has provided direction and input that supports the smooth implementation of the research. Not to forget, the author appreciates and thanks the contribution of fellow researchers and journal editors for valuable input in the improvement of this manuscript. Hopefully the results of this research can provide benefits for the development of science, especially in the fields of education and statistics.

REFERENCES

Abbas, A. B., & Rizki, N. A. (2023). Mediasi regulasi diri atas pengaruh lingkungan belajar terhadap hasil belajar matematika Siswa SMP. *Primatika. J. Pend. Mat*, *12*(1), 51–60. https://doi.org/10.30872/primatika.v12i1.2108

Ann, L., & Findlay, E. (2013). *School of Education A QUALITATIVE INVESTIGATION INTO STUDENT AND TEACHER PERCEPTIONS OF MOTIVATION AND ENGAGEMENT IN THE SECONDARY MATHEMATICS CLASSROOM*. *October*.

Apriani, Aryani Farida, & Abdul, S. (2021). Hubungan Antara Kecemasan Belajar, Motivasi Belajar Dengan Hasil Belajar Siswa Sekolah Menengah Kejuruan Selama Study From Home Di Kabupaten Bantaeng. *Pinisi Jurnal of Education*, *Vol. 1*(2), 2. https://ojs.unm.ac.id/PJE/article/view/27117

Budiaji, W., Fakultas, D., Universitas, P., Tirtayasa, A., Raya, J., Km, J., & Serang Banten, P. (2019). SKALA PENGUKURAN DAN JUMLAH RESPON SKALA LIKERT (The Measurement Scale and The Number of Responses in Likert Scale). *Jurnal Ilmu Pertanian Dan Perikanan Desember*, *2*(2), 125–131. http://umbidharma.org/jipp

Damaianti, L. F., Awaliya, R., & Misbach, I. H. (2019). Relationship between the perception of classroom learning environment and student academic emotions. *Jurnal Konseling Dan Pendidikan*, *7*(3), 104–112. https://doi.org/10.29210/135900

Dewi, I. P. (2024). *Pengaruh Lingkungan Belajar terhadap Minat Belajar Matematika Siswa Kelas VIII SMP Negeri 15 Yogyakarta*. *06*(02), 12935–12945.

Galand, B., & Hospel, V. (2013). Peer victimization and school disaffection: Exploring the moderation effect of social support and the mediation effect of depression. *British Journal of Educational Psychology*, *83*(4), 569–590. https://doi.org/10.1111/j.2044-8279.2012.02077.x

Hao, A. Z. (2024). The Effect of the Learning Environment on Students Anxiety and Depression Levels. *Lecture Notes in Education Psychology and Public Media*, *45*(1), 94–101. https://doi.org/10.54254/2753-7048/45/20230286

Igartua, J. J., & Hayes, A. F. (2021). Mediation, Moderation, and Conditional Process Analysis: Concepts, Computations, and Some Common Confusions. *Spanish Journal of Psychology*, *24*(6), 1–23. https://doi.org/10.1017/SJP.2021.46

Mukholil. (2018). KECEMASAN DALAM PROSES BELAJAR Mukholil *). *Kecemasan Dalam Proses Belajar*, *8*, 1–8.

Oliveras-ortiz, Y. (2017). *LEARNING ENVIRONMENTS ON*. *October*.

Pratama, M., & Guspa, A. (2022). Analisis Properti Psikometrik Skala Student Engagement Versi Bahasa Indonesia Psychometric Properties Analysis of the Indonesian Version of Student Engagement Scale. *Psycho Idea*, *20*, 1–5.

Rahman, A., Munandar, S. A., Fitriani, A., Karlina, Y., & Yumriani. (2022). Pengertian Pendidikan, Ilmu Pendidikan dan Unsur-Unsur Pendidikan. *Al Urwatul Wutsqa: Kajian Pendidikan Islam*, *2*(1), 1–8.

Rifai, I., Islam, U., & Sunan, N. (2024). *Eduscape : Journal of Education Insight*. *1*, 37–47.

Schutz, P. A., Hong, J. Y., Cross, D. I., & Osbon, J. N. (2006). Reflections on investigating emotion in educational activity settings. *Educational Psychology Review*, *18*(4), 343–360. https://doi.org/10.1007/s10648-006-9030-3

Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and Disaffection in the Classroom: Part of a Larger Motivational Dynamic? *Journal of Educational Psychology*, *100*(4), 765–781. https://doi.org/10.1037/a0012840

Solari, E. (2014). Longitudinal prediction of 1st and 2nd grade English oral reading fluency in ELL. *Journal of Adolescence*, *74*(4), 274–283. https://doi.org/10.1002/pits

Su, C. H. (2017). The effects of students' learning anxiety and motivation on the learning achievement in the activity theory based gamified learning environment. *Eurasia Journal of Mathematics, Science and Technology Education*, *13*(5), 1229–1258. https://doi.org/10.12973/eurasia.2017.00669a

Suasapha, A. H. (2020). Skala Likert Untuk Penelitian Pariwisata; Beberapa Catatan Untuk Menyusunnya Dengan Baik. *Jurnal Kepariwisataan*, *19*(1), 26–37. https://doi.org/10.52352/jpar.v19i1.407

Tia Basana Hutagalung, & Liesna Andriany. (2024). Filosofi Pendidikan Yang diusung Oleh Ki Hadjar Dewantara dan Evolusi Pendidikan di Indonesia. *Morfologi: Jurnal Ilmu Pendidikan, Bahasa, Sastra Dan Budaya*, *2*(3), 91–99. https://doi.org/10.61132/morfologi.v2i3.615