The Effect of Mindfulness Practices on Learning Anxiety: A Case Study on High School Students

Deswi Metasari[1*], Ayu Andriyaningsih[2], Burmansah[3], Eko Pramono[4], Juni Suryanadi[5], Rini Kasrah[6], Wistina Seneru[7]

Jinarakkhita Buddhist College of Lampung, Jl. Raya Suban, Pidada, Kec. Panjang, Kota Bandar Lampung, Lampung, Indonesia, 35241

deswi.metasari@sekha.kemenag.go.id

Abstract: The purpose of this study was to examine the effect of mindfulness practice on students' learning anxiety. Students often face problems such as a lack of understanding of the material presented during lessons and difficulty completing assignments. This study uses a quantitative approach, using a survey method. The population consists of 118 students, with a sample of 81 respondents selected through Proportional Random Sampling. The study was conducted on high school students in the 2024/2025 academic year. The study showed a significant favorable influence between mindfulness practices and learning anxiety, with a t-value of 7.303 and a significance level of 0.000 (<0.05). Simple regression analysis produced an R-squared value of 0.375, indicating that mindfulness practices explain 37.5% of the variation in learning anxiety, while other factors influence the remaining 62.5%.

Keyword: Mindfulness Practice; Anxiety; Learning; Mindful Learning

1. Introduction

Learning anxiety is a feeling that arises when students face problems, situations, or tasks related to learning or education. Learning anxiety is usually caused by factors such as high academic demands, pressure from the social environment, fear of failure, or the inability to manage time and learning tasks effectively. Learning anxiety can affect motivation and academic performance and can be a barrier to students' personal and academic development [1]. In Buddhism, anxiety is known as dukkha. Buddha defined dukkha as suffering, pain, misery, suffering, unhappiness, dissatisfaction, sadness, anxiety, and restlessness. Problems that cause anxiety will cause suffering. The emergence of suffering is from desire [2]. From lust arises sadness, and from lust arises fear; for those who are free from lust, there is no more sadness or fear. Anxiety in students is due to various factors, such as a lack of understanding of the material presented in the learning process and difficulty in completing the tasks given. This raises anxiety for students, decreasing grades and making them feel unprepared to face the next level of learning [3]. To overcome the anxiety experienced, students try to study independently so that they can understand the material well. The tasks given are also immediately completed according to their abilities so they do not pile up. In addition, students also have discussions with teachers and friends to do assignments or study complex materials [4]. Someone, for example, often experiences anxiety, usually feels worried about what

is being done, feels nervous when speaking in public or with new people, and has difficulty concentrating, and sleep is often disturbed. When students carry out the learning process with a feeling of anxiety, it will be difficult for students to receive the material that has been delivered by the teacher, so that learning becomes ineffective. Anxiety often occurs when students are going to take an exam because of the success of students in achieving the criteria set by the school.

Mindfulness is a practice of mindfulness training involving observing the in-breath and out-breath [5], [6]. By practicing this, it is expected that someone will be able to focus on their attention so that they remain calm and awake in any condition. The most important part of mindfulness practice is getting used to what is felt, becoming more aware, and becoming better at focusing to maintain full attention. Mindfulness is related to the ability to be fully present in the moment and aware of the environment and activities without overreacting or feeling overwhelmed [6], [7]. This is often associated with meditation, which aims to develop mental awareness. If someone has faith (sraddha), the next stage referred to in Buddhism is the emergence of awareness or mindfulness [8] The awareness referred to here refers to the ability to be aware of what is being done and what has been done after it has been done. With awareness, a person can choose what to do and what not to do. A person will feel and bring happiness with a good understanding. Mindfulness practice is beneficial for increasing full awareness and reducing anxiety by understanding that suffering or unpleasant experiences are part of the human condition and natural. This condition makes people more aware of their previous experiences and can save them from evil thoughts [9]. Mindfulness will bring extraordinary benefits if practiced in everyday life. Mindfulness can be applied to someone who wants to focus on all conditions to stay calm with full awareness [10]. Mindfulness also aims to reduce anxiety and help openness to new experiences. Mindfulness is also beneficial for mental and emotional health. The benefits that can be obtained are reducing anxiety, reducing pain, relieving stress and evil thoughts, and changing bad habits [11].

2. Method

In this study, the researcher used a survey method with a quantitative descriptive approach and data processing techniques in the form of a questionnaire with a total of 74 questions using a Likert scale in the answers. In this study, the population studied was 89 junior high school students, and all students were sampled using a total sampling technique. According to [12], Total sampling is a sampling technique in which all population members are also sampled. According to [13] if the population is less than 100, the entire population is used as a sample. The research design conducted in this study is related to making observations, editing the background of the problem, identifying problems, formulating problems using theoretical foundations, or looking for theories related to retreat activities and student discipline, including exploring theories, creating research methods, and making decisions and continued by determining variables, creating instrument grids, collecting data with questionnaires, data analysis, making conclusions and suggestions. Data analysis used in this study uses simple linear regression analysis

techniques. To obtain higher and more reliable analysis results, this study uses data analysis using the SPSS data processing program.

3. Results

Based on the test instrument for mindfulness practice on high school students' learning anxiety, 80 items comprised 40 items of mindfulness practice variables and 40 items of learning anxiety variables. The results of the mindfulness practice variable contained 36 valid items and four invalid items. Some of these items were declared invalid by comparing rtable in 40 respondents with a significance level of 0.05, namely 0.312. If rcount ≥ rtable, then the item is declared invalid. The researcher deleted invalid statement items because other item numbers could already represent each statement indicator, so 80 items still contained 73 statements used in the study. Based on the research reliability instrument test, the reliability coefficient was obtained on 73 valid items; the reliability analysis scale (alpha) with SPSS for Windows version 16 results produced a Cronbach's alpha value of 0.837.

Table 1. Instrument Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.837	73

Source: 2024 research data processing using SPPS 16.00)

The normality test was conducted using the One-Sample Kolmogorov-Smirnov test. The requirement for sample data comes from a normally distributed population with a significance level of 0.05 or 5%. Based on the normality test results obtained from 91 respondents, the significant value (2-tailed) is 0.228, which means 0.228> 0.05, so it can be concluded that the data is usually distributed. The results of the normality calculation using the One-Sample Kolmogorov-Smirnov test are presented in the following table.

Table 2. Normality Test Results

One-Sample Kolmogorov-Smirnov Test Unstandardized Residual	
N	91
Normal parametersª	Mean .0000000
	Std. Deviation 11.94882408
Most Extreme Differences	Absolute .109
	Positive .075
	Negative -.109
Kolmogorov-Smirnov Z	.1.042
Asymp. Sig. (2-tailed) Test distribution is Normal	.228

Source: 2024 research data processing using SPPS 16.00)

A homogeneity test is conducted as a requirement in independent sample test analysis by Compare Means One Way ANOVA. The underlying assumption in the analysis (ANOVA) of the population variance is the same. If the test criteria are more than 0.05 or 5%, then the variance of the two data groups can be said to be the same. The results of the homogeneity test are seen from the output of the test of homogeneity variance; the significance value of mindfulness practice and learning anxiety is 0.473, which means 0.473> 0.05, so it can be said that the two data are homogeneous. For more details, see the following table of tests of homogeneity of variances.

Table 3. Homogeneity Test Results

Test of Homogeneity of Variances			
The Influence of X on Y			
Levene Statistics	Dfl	Df2	Sig.
.518	1	180	.473

(Source: 2024 research data processing using SPPS 16.00)

Table 4. Regression Equation Output

Coefficients"					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	73,488	12,964		5,669	.000
Mindfulness	.398	.104	.377	3.835	.000
a. Dependent Variable: Anxiety					

Source: (results of 2024 data processing using SPSS 16.0)

Based on the output results by reading the coefficient, a constant value of 73.488 is obtained, meaning that if mindfulness practice has a value of 0, then the consistency value of the learning anxiety variable is 73.488. The regression coefficient on the mindfulness practice variable (X) is .398, meaning that if mindfulness practice increases or develops, the learning anxiety variable (Y) will decrease by 398. Based on the data analysis, the t-value is 3.835, and the t-table value with df = n-2 is df = 89 of 0.361 and a significance of 0.000 because the absolute value of t-value 3.835> 1.983 and a significance of 0.000 <0.05, then Ho is rejected and Ha is accepted. A positive coefficient means that mindfulness practice positively affects the learning anxiety of Ekayana Dharma Budhi Bhakti High School students. Seeing these results implies that Ha is accepted and Ho is rejected, so it can be concluded that mindfulness practice has a positive and significant effect on the learning anxiety of Ekayana Dharma Budhi Bhakti High School students. The hypothesis testing criteria use alpha 5% (0.05), namely, reject Ho if the significance is ≤ 0.05 by reading the following ANOVA table.

Table 5. Anova Analysis Output

Model		Sum of squares	Df	Mean Square	F	Sig.
1	Regression	2123.184	1	2123.184	14,706	.000a
	Residual	12849.717	89	144,379		
	Total	14972.901	90			
a. predictors: (Constant), mindfulness practice						
b. Dependent variable: learning anxiety						

(Source: 2024 research data processing using SPPS 16.00)

From the results of the ANOVA analysis output, the f count value was obtained at 14,706 with a significance of 0.000, so there was no need to match the F table because SPSS already provided the significance value. The importance of 0.000 <0.05 indicates that Ho is rejected and Ha is accepted. This shows that mindfulness practices affect students' learning anxiety.

Table 6. Value of determination coefficient R square

		Model Summary		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
One a.	.612	.375	.368	21,455
a. Predictors: (Constant), mindfulness				

(Source: 2024 research data processing using SPPS 16.00)

The coefficient of determination in Table 4.22 above is R Square, which has a value of .375, which means that 37.5% of mindfulness practices affect students' learning anxiety while other variables influence the remaining 62.5%. The results of the quantitative analysis normality test obtained a residual significance value of 0.228 because the significance for the residual is more significant than 0.05; it can be concluded that the data population is normally distributed. From the homogeneity test results, the significance was 0.473; because of the importance≥ 0.05, it can be concluded that the data on mindfulness practices on students' learning anxiety have the same variance.

4. Discussion

Based on the results of data analysis and hypothesis testing, it is known that there is a positive and significant influence between mindfulness practices and learning anxiety. It can be interpreted that SMA Ekayana Dharma Budhi Bhakti students must implement mindfulness practices because they can reduce learning anxiety caused by internal and external factors often occurring when learning begins. One example of a factor often occurring during the learning process is a lack of confidence in their abilities. This is in line with research [14] that learning anxiety is a feeling that arises when students face problems, situations, or tasks related to learning or education. Learning anxiety is usually caused by factors such as high academic demands, pressure from the social environment,

fear of failure, or the inability to manage time and learning tasks effectively. Learning anxiety can affect motivation and academic performance and can be a barrier to student's personal and academic development [15]. Based on the results of data analysis and hypothesis testing, it is known that practical activities of mindfulness have a positive and significant influence on learning anxiety. It can be interpreted that mindfulness practice is essential for SMA Ekayana Dharma Budhi Bhakti students because it can reduce learning anxiety caused by internal and external factors often occurring when learning begins. One example of a factor that often occurs during the learning process is a lack of self-confidence in their abilities. High mindfulness will reduce the anxiety that arises in the learning process, such as increasing self-confidence in students and motivation. Mindfulness practice has a significant influence on success in reducing learning anxiety.

Through mindfulness practice, students can reduce learning anxiety experienced during the learning process. This can be seen from regression test results with a coefficient value of 0.398. Mindfulness practice is related to learning anxiety; this can be seen from the determination coefficient value of 0.398, and R square with value 0.375 means that 37.5% of mindfulness practices affect students' learning anxiety, while the remaining 62.5% are influenced by other variables, such as using smartphones for too long [16], lack of understanding of the material that has been presented [17], and Self-Regulated Learning [18], In Buddhism, anxiety is known as dukkha. Buddha defined dukkha as suffering, pain, misery, suffering, unhappiness, dissatisfaction, sadness, anxiety, and restlessness. Problems that cause anxiety will cause suffering [19], The emergence of suffering is from desire [3]. From lust arises sadness, and from lust arises fear; for those free from lust, there is no more sadness or fear. The results of this study indicate that the learning anxiety variable describes that students of SMA Ekayana Dharma Budhi Bhakti experience anxiety in the moderate category on the indicators of fear, worry, disappointment, and delay in tasks. This can be interpreted as SMA Ekayana Dharma Budhi Bhakti students not fully experiencing anxiety in learning.

Based on the explanation above, it can be concluded that mindfulness practice has a positive and significant influence in reducing learning anxiety in SMA Ekayana Dharma Budhi Bhakti students. Internal and external factors, such as lack of self-confidence, social pressure, and fear of failure, generally trigger this learning anxiety [20]. Mindfulness helps students increase their self-confidence and learning motivation to be better prepared to face academic demands and learning situations [21]. The analysis results show that mindfulness contributes 37.5% to reducing learning anxiety, while the rest is influenced by other factors such as excessive smartphone use, lack of understanding of the material, and Self-Regulated Learning abilities. In addition, from a Buddhist perspective, learning anxiety is related to the concept of dukkha, or suffering, which arises from lust and desire. Therefore, mindfulness not only plays a role in the academic context but also supports students' personal and spiritual development [22]. Thus, the application of mindfulness in the school environment is significant as one solution to reduce learning anxiety and improve the overall psychological well-being of students [23].

5. Conclusion

Based on the study's results on the influence of mindfulness practices on students' learning anxiety (high school case study), it can be concluded that mindfulness practices have a significant favorable influence on high school students' learning anxiety. The magnitude of the impact of mindfulness practices on high school students' learning anxiety can be seen from the R Square, which is 37.5% of mindfulness practices affect learning anxiety, while the remaining 62.5% are influenced by other factors that were not studied, such as prolonged use of smartphones, lack of understanding of the material that has been delivered and Self-Regulated Learning. The research gives a big picture for schools to develop their mindfulness program to support students in cultivating their awareness during school activities to build the capacity to be in the present moment. The program can be combined with classroom learning and teaching activities or a special session during the mindfulness practice time. The research has limited time to explore the case of student anxiety by doing profound observations, and the next researcher can bring a qualitative approach with a case study method to examine it profoundly.

References

[1]   M. T. Costado Dios and J. C. Piñero Charlo, "Mathematical Anxiety among Primary Education Degree Students in the Post-Pandemic Era: A Case Study," *Educ Sci (Basel)*, vol. 14, no. 2, p. 171, Feb. 2024, doi: 10.3390/educsci14020171.

[2]   I. Warsah, E. Carles, R. Morganna, S. Anggraini, S. Silvana, and S. Maisaroh, "Usaha Guru Mengurangi Kecemasan Belajar Siswa Dalam Pembelajaran Pai," *At-Ta'Dib: Jurnal Ilmiah Prodi Pendidikan Agama Islam*, vol. 15, no. 1, pp. 31–48, 2023, doi: 10.47498/tadib.v15i1.1763.

[3]   Melsasail, "Pandangan Agama dalam Menghadapi Anxiety Disorder yang Dialami oleh Masyarakat," *IJM: Indonesian Journal of Multidisciplinary*, vol. 1, pp. 10–21, 2023.

[4]   D. H. Oktawirawan, "Faktor Pemicu Kecemasan Siswa dalam Melakukan Pembelajaran Daring di Masa Pandemi Covid-19," *Jurnal Ilmiah Universitas Batanghari Jambi*, vol. 20, no. 2, p. 541, 2020, doi: 10.33087/jiubj.v20i2.932.

[5]   D. Henriksen, C. Richardson, and K. Shack, "Mindfulness and creativity: Implications for thinking and learning," *Think Skills Creat*, vol. 37, no. June, pp. 1–10, 2020, doi: 10.1016/j.tsc.2020.100689.

[6]   B. Burmansah, R. Rugaiyah, and M. Mukhtar, "A case study of mindful leadership in an ability to develop focus, clarity, and creativity of the buddhist higher education institute leader," *International Journal of Higher Education*, vol. 8, no. 6, pp. 57–69, 2019, doi: 10.5430/ijhe.v8n6p57.

[7]   B. Burmansah, R. Rugaiyah, M. Mukhtar, S. Nabilah, A. J. H. Ripki, and A. Fatayan, "Mindful leadership: The ability of the leader to develop compassion and attention without judgment - A case study of the leader of buddhist Higher education Institute," *European Journal of Educational Research*, vol. 9, no. 1, pp. 51–65, Jan. 2020, doi: 10.12973/eu-jer.9.1.51.

[8] C. Kusuma, V. A. M. Saputri, R. Kasrah, I. Yudhawati, and S. A. Gautama, "The Practice of Mindful Communication Brings the Strong Effect on Spiritual Intelligence of School Students," *Journal of Communication, Religious, and Social Sciences*, vol. 1, no. 1, pp. 35–46, 2023, [Online]. Available: https://ejournal.stiab-jinarakkhita.ac.id/index.php/jocrss

[9] A. Andriyaningsih, T. Ismoyo, susanto, and J. Suryanadi, "Mindfulness Sitting: Enhancing Students' Listening Skill at Jinarakkhita Buddhist College Lampung," *Journal of Education, Religious, and Instructions (JoERI)*, vol. 1, no. 2, pp. 59–63, Dec. 2023, doi: 10.12816/0040336.

[10] A. Sugata, S. A. Gautama, E. Pramono, B. Burmansah, and R. Rapiadi, "Pengaruh Mindfulness terhadap Minat Belajar Mahasiswa Sekolah Tinggi Ilmu Agama Buddha Jinarakkhita Bandar Lampung Tahun 2021," *Jurnal Agama Buddha dan Ilmu Pengetahuan*, vol. 8, no. 2, pp. 87–95, 2022, doi: 10.53565/abip.v8i2.649.

[11] S. H. Sutanto and G. Immanuela, "Mengenal mindfulness bagi siswa Sma (understanding mindfulness for high school students)," *Jurnal Pengabdian Psikologi Devotion*, vol. 1, no. 1, pp. 12–20, 2022.

[12] Sugiyono, *Metode Penelitian Kualitatif Dan Kuantitatif*. Bandung: Alfabeta CV, 2021.

[13] S. Arikunto, "Proses Penelitian Suatu Pendekatan Praktek," p. 146, 2019.

[14] A. Kumar, A. Singh, and M. Jahan, "Application of mindfulness on stress, anxiety, and well-being in an adolescent student: A case study," *Ind Psychiatry J*, vol. 29, no. 1, p. 165, 2020, doi: 10.4103/ipj.ipj_75_17.

[15] T. T. L. Tran, "An Investigation into the Causes of Students' Anxiety in Learning English Speaking Skills," *International Journal of TESOL & Education*, vol. 2, no. 3, pp. 183–196, Jun. 2022, doi: 10.54855/ijte.222312.

[16] E. A. Fransiska, "Faktor yang memengaruhi tingkat kecemasan akademik pada mahasiswa," *Jurnal Keperawatan*, vol. 16, no. 2549–8118, pp. 87–94, 2023.

[17] S. Siska Dwi Astiati and I. Ilham, "Analisis Faktor Penyebab Kecemasan Belajar Matematika Pada Siswa Sekolah Menengah Atas (SMA)," *Jurnal Ilmiah Mandala Education*, vol. 9, no. 2, pp. 1294–1302, 2023, doi: 10.58258/jime.v9i2.5070.

[18] I. Herawati, U. Makhmudah, and C. T. Suryawati, "Hubungan Antara Self-Regulated Learning dengan Kecemasan Akademik Pada Peserta Didik," *Jurnal Psikoedukasi dan Konseling*, vol. 7, no. 1, p. 40, 2023, doi: 10.20961/jpk.v7i1.72479.

[19] S. Mineka and K. Oehlberg, "The relevance of recent developments in classical conditioning to understanding the etiology and maintenance of anxiety disorders," *Acta Psychol (Amst)*, vol. 127, no. 3, pp. 567–580, Mar. 2008, doi: 10.1016/j.actpsy.2007.11.007.

[20] P. Fattahi Marnani and S. Cuocci, "Foreign Language Anxiety: A Review on Theories, Causes, Consequences and Implications for Educators," 2022.

[21] L. Cheng, "Delving into the role of mindfulness on the relationship among creativity, anxiety, and boredom of young EFL learners," Feb. 01, 2023, *Elsevier Ltd*. doi: 10.1016/j.heliyon.2023.e13733.

[22] I. Wagner, T. Noichl, M. Cramer, G. E. Dlugosch, and I. Hosenfeld, "Moderating personal factors for the effectiveness of a self-care- and mindfulness-based intervention for teachers," *Teach Teach Educ*, vol. 144, Jul. 2024, doi: 10.1016/j.tate.2024.104576.

[23] J. McConville, R. McAleer, and A. Hahne, "Mindfulness Training for Health Profession Students—The Effect of Mindfulness Training on Psychological Well-Being, Learning and Clinical Performance of Health Professional Students: A Systematic Review of Randomized and Non-randomized Controlled Trials," *EXPLORE*, vol. 13, no. 1, pp. 26–45, Jan. 2017, doi: 10.1016/j.explore.2016.10.002.