



## The Influence of Higher Education Learning Experience During Covid 19 on the Academic Behavior of Today's Students

Alimni<sup>1\*</sup>, Saepudin<sup>1</sup>, Alfauzan Amin<sup>1</sup>

<sup>1</sup>Department of Education Pascasarjana, UIN Fatmawati Sukarno Bengkulu, Bengkulu, Indonesia

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### ABSTRACT

**Purpose of the Study:** This study aims to analyze the correlation between students' experiences of learning during the COVID-19 health protocol period and their academic behavior at Islamic Religious Colleges. The research seeks to identify contributing and inhibiting factors shaping students' academic attitudes under pandemic-induced learning conditions.

**Methodology:** The study employs a mixed-method sequential exploratory design. Quantitative data were collected using questionnaires and analyzed with Pearson's product-moment correlation, while qualitative data were gathered through interviews, observations, and documentation, followed by thematic analysis to identify key influencing factors. The integration of both approaches provides a comprehensive understanding of the research problem.

**Main Findings:** The study reveals a significant correlation between students' learning experiences during COVID-19 and their academic behavior. Key contributing factors include personal motivation (intrinsic and extrinsic), social support (from peers, family, and educators), an optimized study environment (free from distractions), and tailored learning methods that align with individual preferences. Conversely, inhibiting factors such as environmental disturbances (noise or instability at home) and lack of motivation negatively impacted learning outcomes. A unique finding is that the stressful and uncertain conditions during the pandemic fostered a resilient mindset among students, positively influencing their academic attitudes.

**Novelty/Originality of the Study:** This study uniquely highlights how the challenging learning environment created by the pandemic cultivated adaptive academic behaviors in students. By combining quantitative and qualitative insights, the study offers a detailed understanding of how crisis-driven experiences shape student behavior, providing valuable implications for post-pandemic educational strategies.

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### Corresponding Author:

Alimni,  
Department of Education Pascasarjana, UIN Fatmawati Sukarno Bengkulu,  
Pagar Dewa, Selebar, Bengkulu City, Bengkulu 38211, Indonesia  
Email: [alimni@mail.uinfasbengkulu.ac.id](mailto:alimni@mail.uinfasbengkulu.ac.id)

## 1. INTRODUCTION

Humans must adjust to the success of science and technology in the digital field and the internet [1]. Included in the main learning in higher education to welcome the era of the industrial revolution 4.0. An era where everything digital has become a trend and lifestyle for humans [2]. Indonesia entered the era of the industrial revolution 4.0 and began with the launch of the "Making Indonesia 4.0" roadmap [3] which was officially conveyed by the Ministry of Industry in line with the development of national digital infrastructure, one of the cross-sectoral initiatives. Indonesian industries must also be ready to face moments that are closely

related to the digital era [4]. One of the main things that every industry must continue to improve is the ability to manage data that is secure and relevant in accordance with applicable regulations [5]. Included in this case is the need for industrial technology in the field of education [6]. Moreover, education in higher education as an agent of change [7].

The mastery of technology quickly and skillfully must be learned by the campus community of Islamic universities [6]. The immediacy of mastery of technology for the world of higher education is predicted by experts in the field of education that in the next 10-20 years, human activities will be closely related to the digital era [7]. However, the facts show that the condition of the covid 19 pandemic seems to remind that human activities with digitalization activities do not need to wait long [8]. This means that it must be immediately welcomed faster and implemented in life. Human life behavior since the instruction of the work-from-home activity policy has changed all activities [9]. Included [10] changing the behavior of students' learning styles during the pandemic. Change in learning style behavior that was previously normal (face-to-face) to online learning habits [10]. Precisely since March 2020, students from Kindergarten and Elementary School to Higher Education (PT) have implemented the learning and teaching process in different places between teachers and students online, a form of enforcing the recommendations of the authorities to prevent the spread of virus outbreaks that endanger life safety. The change in the learning process occurred suddenly from classroom meetings to virtual learning. Virtual learning experience from March 2020 until the implementation of face-to-face learning again in the odd semester of 2021/2022 [11], now it is about 19 months or 1 year and 7 months. Of course, that long period is enough to make students, including students, form new attitudes and behaviors in learning with the familiarity of using digital technology, various virtual learning applications.

A person's theory of experience is formed from impressive conditions [12] Like the Covid 19 tragedy with all the impact of rules as policies that regulate life that can affect certain behaviors of a person. Reference sources from Journals; The experience, challenges, and acceptance of e-learning as a tool for teaching during the COVID-19 pandemic among university medical staff [13]. Meanwhile, academic behavior is a person's behavioral attitude about activities that are nuanced in the learning process set by teachers and students [14]. The reference for this theory is an e-book entitled "E-book data mining: real information behavior of university academics" [15]. Students' positive academic behavior is displayed every time during the lecture process [16]. Students show a proactive attitude towards lecturers [17]. Student literacy culture is built [18]. The intensity of student visits to library websites and web libraries has increased [19]. During the exam, students looked high sportsmanship. Students are committed not to cheating, believe in their own abilities, the power of prayer and tawakal.

Academic behavior is also displayed with student awareness in managing time as best as possible in carrying out learning activities and outside of learning [20]. Feeling grateful for the education he has achieved. Education is a need to improve the quality of living a meaningful life. So, academic behavior is all activities or activities of students or students, both activities at the psychological and physical levels. Behavior change as an indication of academic activities can be conditioned by changes in the environment where students carry out the change process [21]. Academic behavior is also a person's learning activity to prepare new knowledge behaviors, new attitudes and new skills. Academic behavior correlates with learning experience activities obtained by a person or learning participant [22].

Since the implementation of virtual learning during the covid 19 pandemic, it is hoped that students will be more motivated to open up to take advantage of digital technology advances as one of the characteristics of the millennial generation's progress [23]. An educational process with the characteristics of progress in the era of the industrial revolution 4.0 will color the attitudes and behaviors of Islamic university students' learning styles that are expected to be realized. The profile of an ideal Islamic student who is not only good at religious competence but is able to integrate religious teachings [24] and at the same time good at adapting to the development of science and technology [25]. Likewise, public university students who both gained learning experience during the covid 19 era. There is indeed a difference in the character of students with public and religious university affiliations in the formation of behavioral attitudes.

Unfortunately, what is expected where students have good academic behavior has not been obtained scientifically valid data that is explored systematically and methodologically. Testing the influence of life experience with health protocols on students'. academic behavior has also not been focused on it. So this is a symptom of the problem faced to find a solution immediately. To obtain the answer to this problem, it is necessary to conduct research with the theme "learning experiences of religious and public university students during covid 19 and its influence on academic behavior".

## 2. RESEARCH METHOD

This study uses a mix method sequential exploratory design. The location of the research was carried out in Islamic religious universities (PTKI) in the province of Bengkulu as well as selected PTKI universities outside the province of Bengkulu. In this case, religious universities in Bengkulu, Curup and Palembang. The

population is 6th semester students of the 2021-2022 school year. A total of 1500 people. Consisting of students of the Tarbiyah faculty of the PAI study program UIN Fatmawati Sukarno Bengkulu, IAIN Curup, and UIN Raden Fatah Palembang. The sample used in this study was 150 students divided into 50 students at each university. Quantitative data was obtained by questionnaire techniques and qualitative data was obtained through interviews, observations, and documentation. Meanwhile, the quantitative data that has been collected is analyzed using Pearson's moment product formula.

### 3. RESULTS AND DISCUSSION

#### *Learning Experience*

The data of the learning experience questionnaire can be described with the help of the SPSS 26 program. The results of the variable descriptive measurement are presented in Table 1 below which summarizes the overview of student learning experience data that has been classified based on the categories of Strongly Agree, Agree, Disagree, and Strongly Disagree, statistical descriptions with minimum, maximum, and standard deviation score sizes, as well as the distribution of data to see their normality.

Table 1. Descriptive Statistics

	N	Std. Deviation	Minimum	Maximum
Learning Experience	150	.99663865	-2.24289	2.70959

Table 1 shows that the learning experience variable with the number of data (N) of 150 has a maximum score of 270959 while the minimum score is -2.24289 with a standard deviation of .99663865.

#### *Academic Behavior*

Academic behavior questionnaire data can be described with the help of the SPSS 26 program. The results of the variable descriptive measurement are presented in Table 2 below which summarizes the overview of the academic behavior data of female students that have been classified based on the categories of Strongly Agree, Agree, Disagree, and Strongly Disagree, statistical descriptions with minimum, maximum, and standard deviation score measures, as well as the distribution of data to see their normality.

Table 2. Descriptive Statistics

	N	Std. Deviation	Minimum	Maximum
Comportement scolaire	150	3.12988146	-8.87430	7.77679

#### *Analysis of the Normality Test*

The normality test is used to find out whether the data population is normally distributed or not. The normality test used in this study is the One Sample Kolmogorov-Smirnov Test. In this study, if the significance of  $p < 0.05$  or 5%, the data are not normally distributed, and vice versa, if the significance of  $p > 0.05$  or 5%, the data are normally distributed.

The results of the normality test of the data measuring each variable of the learning experience can be seen in the following table 3.

Table 3. Description of the Normality Test Learning Experience Data

		Learning Experiment	
N		150	
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	.99663865	
	Absolute	.100	
Most Extreme Differences	Positive	.100	
	Negative	-.062	
	Test Statistic	.100	
Asymp. Sig. (2-tailed)		.001 <sup>c</sup>	
Monte Carlo Sig. (2-tailed)	Sig.	.092 <sup>d</sup>	
	99% Confidence Interval	Lower Bound	.085
		Upper Bound	.100

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Based on 10000 sampled tables with starting seed 2000000.

The table describes the results of statistical tests on the dissemination of academic experience data with the One sample Kolmogorov-Smirnov Test technique. In this case, the researcher used Monte Carlo Sig. (2-tailed) to obtain a normally distributed value. So it can be seen in table 4.5 that the value with Monte Carlo Sig. (2-tailed) for learning experience = 0.0924 is greater than > 0.05 then it can be concluded that the value of the normal distributed experience variable.

An overview of the normality of the distribution of learning experience data can be seen in the graph in figure 1.

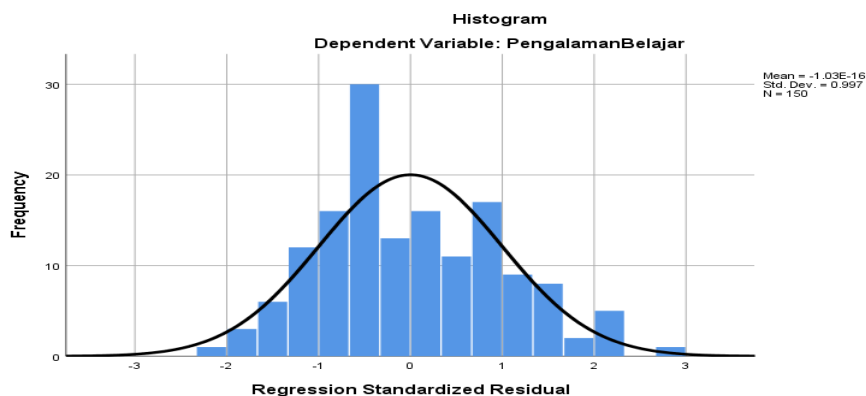


Figure 1. Distribution of learning experience

The results of the normality test of the data measuring each academic behavior variable can be seen in the following table 4.

Table 4. Description of the Normality Test of Academic Behavior Data

		Academic Behavior	
N		150	
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	3.12988146	
Most Extreme Differences	Absolute	.082	
	Positive	.082	
	Negative	-.032	
Test Statistic		.082	
Asymp. Sig. (2-tailed)		.014 <sup>c</sup>	
Monte Carlo Sig. (2-tailed)	Sig.	.244 <sup>d</sup>	
	99% Confidence Interval	Lower Bound	.233
		Upper Bound	.255

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Based on 10000 sampled tables with starting seed 1502173562.

The table describes the results of statistical tests on the dissemination of academic behavior data using the One sample Kolmogorov-Smirnov Test technique. In this case, the researcher used Monte Carlo Sig. (2-tailed) to obtain a normally distributed value. So it can be seen in table 4.6 that the value with Monte Carlo Sig. (2-tailed) for academic behavior = 0.244 is greater than > 0.05 then it can be concluded that the value of the normal distributed academic behavior variable.

An overview of the normality of the distribution of academic behavior data can be seen in the graph in figure 2.

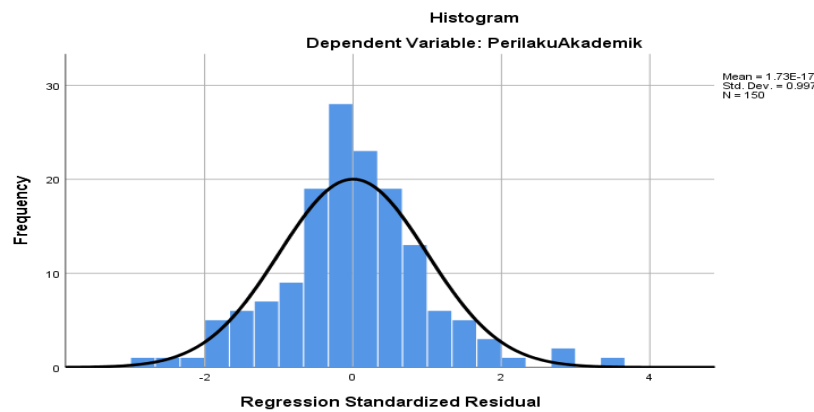


Figure 2. Distribution of academic behavior

**Research Variable Correlation Analysis**

UIN Fatmawati Sukarno Bengkulu

Table 5. Correlation in UIN Fatmawati Sukarno Bengkulu

		Learning Experience	Academic Behavior
Learning Experience	Pearson Correlation	1	.742**
	Sig. (2-tailed)		.000
	N	50	50
Academic Behavior	Pearson Correlation	.742**	1
	Sig. (2-tailed)	.000	
	N	50	50

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Based on the above results, it can be concluded that the correlation coefficient is 0.742 with a significance of 0.000.  $H_a$  was accepted because of its significance  $>0.05$ . So there is a significant relationship between the experience of virtual learning activities during the covid 19 health protocol on the academic behavior of students of Islamic and General religious universities.

IAIN Curup

Table 6. Correlations IAIN Curup

		Learning Experience	Academic Behavior
Learning Experience	Pearson Correlation	1	.757**
	Sig. (2-tailed)		.000
	N	50	50
Academic Behavior	Pearson Correlation	.757**	1
	Sig. (2-tailed)	.000	
	N	50	50

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Based on the above results, it can be concluded that the correlation coefficient is 0.757 with a significance of 0.000.  $H_a$  was accepted because of its significance  $>0.05$ . So there is a significant relationship between the experience of virtual learning activities during the covid 19 health protocol on the academic behavior of students of Islamic and General religious universities.

Tabel 7. Correlations UIN Raden Fatah

		Learning Experience	Academic Behavior
Learning Experience	Pearson Correlation	1	.800**
	Sig. (2-tailed)		.000
	N	50	50
Academic Behavior	Pearson Correlation	.800**	1
	Sig. (2-tailed)	.000	
	N	50	50

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Based on the above results, it can be concluded that the correlation coefficient is 0.800 with a significance of 0.000. Ha was accepted because of its significance >0.05. So there is a significant relationship between the experience of virtual learning activities during the covid 19 health protocol on the academic behavior of students of Islamic and General religious universities.

### Results of Qualitative Data Research

This qualitative data is intended to confirm and support from the quantitative root to obtain data accuracy in order to obtain a more comprehensive picture of research findings.

#### *The formation of student lecture experience during Covid 19*

Based on the results of data collection at three universities, namely UIN Fatmawati Bengkulu, UIN Raden Fatah Palembang and IAIN Curup, an overview of the data was obtained as follows. The data on campus policies regarding online lectures can be said to have been implemented. Moreover, this online learning is nationally monitored by the directorate of higher education. To convey the regulations, all parties socialize the use of virtual learning. Data on student motivation in learning appears to vary. Student motivation to learn is between high, medium and low motivation. This motivation condition depends on the campus where the student comes from and is domiciled.

Solutions to learning obstacles during covid are sustainable until now. Learning with the characteristics of the covid period is such as the zoom system, webinars, learning videos, digital learning resource references, online learning and so on. Even the University facilitates to provide hybrid learning tools. The lecturer's confession "Still using zoom, google classroom, and quizzes". Although there is also one lecturer on a certain campus revealed that "Direct introduction has not been made, but some of the learning processes use the application application referred to above". Students are often invited to look for sources of learning information. Even students must also provide information to each other with their fellow college friends.

#### *Lecture experience during covid 19 affects academic culture*

The data obtained shows the impact of the lecture experience during Covid 19 on the formation of academic culture. Support for learning has led to hybrid learning. It is quite influential because students are expected to be able to use video meetings to make videos, and use online quizzes. Because students still want to carry out lectures using IT. Several digital lecture methods such as zoom and e-learning can help lectures be carried out even during covid.

It is said to be "Very impactful", during covid forcing students and lecturers to be technologically literate so that there is no reason for students and lecturers not to continue learning. Another opinion Some of them have an impact, but not completely, because students only reach the user level, only know how to join the application, but cannot operate the application. There is an impact, because now it can apply offline, online, or blended learning. Impactful, less effective. Some even argued that It is very impactful because the habit of using various media during the pandemic from Zoom, Google Classroom Room to Youtube, Instagram and Facebook has made the use of various media in the learning process commonplace. This requires teachers and students to be digitally literate. Students are more familiar with learning through android cellphones.

Switching to online learning can reduce the risk of spreading the virus, so many universities are forced to adopt online or hybrid learning models [26]. This model requires students to attend classes online [27], [28]. Access and technology are a challenge [29] because many people do not have the same internet access and technology. It is very common for students to switch completely or partially to online learning. They no longer attend classes in person on campus, but must learn through online platforms. To avoid paper-based exams, higher education institutions have adopted online-based evaluation methods. Online exams that require biometric proctoring or identification may be difficult for students[30] but are an experience in itself. During online

learning, students may face academic problems such as difficulty managing time or working together with classmates. Campuses may conduct temperature checks and COVID-19 tests periodically to monitor health. Students who test positive may have to be quarantined or isolated, which has an impact on their learning process. So campuses have been looking for new ways to give students flexibility in learning and use new technologies [31] to enhance their learning experience.

To understand how changes in the learning context during the pandemic have affected students [32], it is necessary to understand how the learning experience during the pandemic has affected academic behavior [33]. Based on research data that during online learning, it shows that a good level of interaction has occurred between students and educators. Effective conversations occur. Students feel more engaged in learning. Technology and accessibility challenges have been successfully faced by students [34]-[35]. This change has affected students' ability to participate in learning. Students have learned to be more independent in their studies during the pandemic[36], such as planning their time, managing assignments, and monitoring their academic progress.

Considerations in Support of Academic Behavior, Personal Motivation: There are intrinsic and extrinsic motivations that can drive a person to excel in school [37]. Social Support: Students can feel supported in their academic endeavors with support from friends, family, and educators. The Right Study Space: Study better in a comfortable and undistracted place. Appropriate Learning Methods: Learning tailored to individual learning styles [38] can help students understand and understand the material better. Factors Inhibiting Academic Behavior, Environmental Disturbances: Things like noise, distractions, or instability in the home environment can cause difficulties in learning. Lack of Motivation: If you don't have any interest or desire to learn in a particular subject [39], it can become difficult to study. Lack of Social Support [40], A sense of isolation or lack of support from those around you can interfere with your desire to excel in school.

#### 4. CONCLUSION

The tragedy of the covid 19 outbreak caused students to become more academically independent in managing their time and resources for studying. This skill is necessary in distance learning, which requires the ability to plan on your own and be disciplined. This pandemic has increased awareness of the importance of maintaining mental and physical health. To stay healthy, many students are starting to prioritize a healthy diet, exercise, and self-care. Students of the future, can easily access knowledge and educational resources thanks to their skills with various technologies and online learning tools. Students face difficult situations that require adaptation and resilience during the pandemic, and these experiences can help them overcome future challenges. These results show that, although the COVID-19 pandemic has presented many difficulties, the learning experience can be beneficial. Students have found new ways to grow, contribute to society, and acquire skills that will be useful in the future.

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#### REFERENCES

- [1] D. Ambarwati, U. B. Wibowo, H. Arsyiadanti, and S. Susanti, "Studi literatur: Peran inovasi pendidikan pada pembelajaran berbasis teknologi digital [Literature study: The role of educational innovation in digital technology-based learning]," *J. Inov. Teknol. Pendidik.*, vol. 8, no. 2, pp. 173–184, 2022.
- [2] H. Azzahra, T. Marditama, M. Fithriani, and V. Febriyani, "Tren inovasi digital pasca pandemi covid-19 pada keberlanjutan [Digital innovation trends post covid-19 pandemic on sustainability]," *J. Sci. Innov. Technol.*, vol. 2, no. 1, pp. 6–14, 2021.
- [3] M. P. R. I. Fourth, "Making Indonesia," 2019. doi: 10.7591/9781501719370.
- [4] F. Nastiti and A. Abdu, "Kajian: Kesiapan pendidikan indonesia menghadapi era society 5.0 [Study: Readiness of Indonesian education to face the era of society 5.0]," *Edcomtech J. Kaji. Teknol. Pendidik.*, vol. 5, no. 1, pp. 61–66, 2020, doi: 10.17977/um039v5i12020p061.
- [5] F. Johana, "Pentingnya teknologi dalam pengelolaan data di era revolusi industri 4.0 [the importance of technology in data management in the era of the industrial revolution 4.0]," *Www.Dqlab.Com*. 2021.
- [6] M. Javaid, A. Haleem, R. Vaishya, S. Bahl, R. Suman, and A. Vaish, "Industry 4.0 technologies and their applications in fighting COVID-19 pandemic," *Diabetes Metab. Syndr. Clin. Res. Rev.*, vol. 14, no. 4, pp. 419–422, 2020, doi: 10.1016/j.dsx.2020.04.032.
- [7] I. Idrizon, "Prediksi teknologi informasi masa depan [Future information technology predictions]," *Perpustakaan Universitas Negeri Padang*
- [8] Kominfo, *Pandemi Covidpacu adaptasi*.

- [9] O. Mungkasa, "Bekerja dari rumah (Working From Home/WFH): Menuju tatanan baru era pandemi COVID 19 [Working From Home (WFH): Towards a new order in the COVID-19 pandemic]," *J. Perenc. Pembang. Indones. J. Dev. Plan.*, vol. 4, no. 2, pp. 126–150, 2020, doi: 10.36574/jpp.v4i2.119.
- [10] S. Palinggi and L. R. Allolinggi, "Analisa deskriptif industri fintech di Indonesia: Regulasi dan keamanan jaringan dalam perspektif teknologi digital [Descriptive analysis of the fintech industry in Indonesia: Regulation and network security from a digital technology perspective]," *Ekon. dan Bisnis*, vol. 6, no. 2, pp. 177–192, 2020, doi: 10.35590/jeb.v6i2.1327.
- [11] Kemendikbud, *Penyelenggaraan Pembelajaran Tatap Muka Tahun Akademik 2021/2022*. 2021, pp. 3–5.
- [12] H. Hadawiah, "Fenomena (Gegar Budaya) pada mahasiswa perantauan di universitas muslim Indonesia," *Al-MUNZIR*, vol. 12, no. 1, p. 149, 2019, doi: 10.31332/am.v12i1.1310.
- [13] A. J. Mustopa and D. Hidayat, "Pengalaman mahasiswa saat kelas online menggunakan aplikasi zoom cloud meeting selama Covid-19," *Digit. Media Relatsh.*, vol. 2, no. 2, pp. 75–84, 2020, doi: <https://doi.org/10.51977/jdigital.v2i2.372>.
- [14] S. Santana K and Suriani, "Budaya Akademik Internasional Mahasiswa Indonesia di Australia dan Kanada," *Mimbar*, vol. 25, no. 2, pp. 119–142, 2009.
- [15] A. Rafique, K. Ameen, and A. Arshad, "E-book data mining: real information behavior of university academic community," *Libr. Hi Tech*, vol. ahead-of-p, no. ahead-of-print, 2021, doi: 10.1108/LHT-07-2020-0176.
- [16] A. Hidayat, "Persepsi dan perilaku mahasiswa dalam pendidikan karakter [Student perceptions and behavior in character education]," vol. I, no. 2, pp. 1–12, 2013.
- [17] M. D. Mahardika and A. Kistyanto, "Pengaruh kepribadian proaktif terhadap kesuksesan karier melalui adaptabilitas karier [The influence of proactive personality on career success through career adaptability]," *FORUM Ekon. J. Ekon. Manaj. dan Akunt.*, vol. 22, no. 2, pp. 185–195, 2020.
- [18] I. F. Muslim and F. Salsabila, "Gerakan literasi di kalangan mahasiswa sebagai pengaruh pembelajaran daring (Online) [Literacy movement among students as an influence of online learning]," *Res. Dev. J. Educ.*, vol. 7, no. 2, p. 424, 2021, doi: 10.30998/rdje.v7i2.10224.
- [19] F. Fajriyati, "Peningkatan Kualitas Perpustakaan melalui Media Sosial dalam Menghadapi Pandemi Covid-19," vol. 10, no. 3, pp. 28–37, 2021.
- [20] R. Hafizha, "Pentingnya Integritas Akademik," *JECO J. Educ. Couns. J. Educ. Couns.*, vol. 1, no. 2, pp. 115–124, 2021.
- [21] S. Rahman, "Pentingnya Motivasi Belajar Dalam Meningkatkan Hasil Belajar," in *Merdeka Belajar dalam Menyambut Era Masyarakat 5.0*, pp. 289–302, 2021.
- [22] T. Kristiyani and F. Faturochman, "Eksplorasi perilaku belajar akademik: Studi pada mahasiswa di Yogyakarta," *J. Psikol. Ulayat*, vol. 9, pp. 254–280, 2021, doi: 10.24854/jpu426.
- [23] A. Amin, A. Alimni, D. A. Kurniawan, E. Triani, S. E. Septi, "Interpersonal communication skills on student discipline: Analysis of the effects of islamic religious learning," vol. 26, no. 1, p. 135, 2023, doi: 10.24252/lp.2023v26n1i10.
- [24] A. Amin, A. Alimni, D. A. Kurniawan, R. Perdana, W. A. Pratama, and E. Triani, "Analysis of the relationship of religious character, perseverance and learning motivation of junior high school students," *J. Innov. Educ. Cult. Res.*, vol. 3, no. 4, pp. 536–547, 2022, doi: 10.46843/jiecr.v3i4.233.
- [25] H. Mudaris, "Integrasi nilai-nilai karakter dalam pendidikan lingkungan hidup di era revolusi industri 4.0 studi kasus model pendidikan lingkungan hidup di sekolah di DIY [Integration of character values in environmental education in the era of the industrial revolution 4.0, case study of environmental education models in schools in DIY]," Arif Rahman, Ed. Komojoyo Press, 2019.
- [26] C. Farmati, M. Yeou, and B. Benzehaf, "Blended learning in English for specific purposes instruction: A systematic review," *Digit. Educ. Rev.*, no. 44, pp. 114–124, 2023, doi: 10.1344/der.2023.44.114-124.
- [27] J. C. Espinoza *et al.*, "Development of a social and environmental determinants of health informatics maturity model," *J. Clin. Transl. Sci.*, vol. 7, no. 1, 2024, doi: 10.1017/cts.2023.691.
- [28] S. Russo, F. Fiani, and C. Napoli, "Remote Eye Movement Desensitization and Reprocessing Treatment of Long-COVID- and Post-COVID-Related Traumatic Disorders: An Innovative Approach," *Brain Sci.*, vol. 14, no. 12, pp. 1–18, 2024, doi: 10.3390/brainsci14121212.
- [29] A. L. M. Yin, Y. K. Jeok, and L. C. Yan, "Mobile learning readiness among Malaysian students at higher education in learning mathematics," *J. Adv. Res. Appl. Sci. Eng. Technol.*, vol. 53, no. 2, pp. 122–129, 2025, doi: 10.37934/araset.53.2.122129.
- [30] Y. Shang *et al.*, "Comparative effectiveness of various teaching modes, including PBL, CBL, and CTTM in paediatric medical education with combined online and offline approaches," *BMC Med. Educ.*, vol. 25, no. 1, 2025, doi: 10.1186/s12909-024-06267-4.
- [31] P. Li and L. Zhang, "Application of big data technology in enterprise information security management," *Sci. Rep.*, vol. 15, no. 1, pp. 1–15, 2025, doi: 10.1038/s41598-025-85403-6.
- [32] M. Davydova, L. M. Divinagracia, K. E. Ng, and N. Bradley, "Student perspectives on peer education using a virtual



- platform to enhance advanced pharmacy practice experiences (APPE),” *Pharm. Educ.*, vol. 24, no. 1, pp. 48–53, 2024, doi: 10.46542/pe.2024.241.4853.
- [33] M. Marques *et al.*, “Improving access to mental health care through a stepped care approach: preliminary results from a university students’ sample,” *Portuguese Journal of Public Health*, vol. 42, no. 3, pp. 221–230, 2024.
- [34] C. C. Gonçalves *et al.*, “Barriers and facilitators to mental health treatment access and engagement for LGBTQA+ people with psychosis: a scoping review protocol,” *Syst. Rev.*, vol. 13, no. 1, pp. 1–7, 2024, doi: 10.1186/s13643-024-02566-5.
- [35] J. I. Rotgans, I. Sterpu, L. Herling, J. Nordquist, and G. Acharya, “Exploring the dynamics of situational interest in team-based learning in undergraduate medical education,” *BMC Med. Educ.*, vol. 24, no. 1, pp. 1–7, 2024, doi: 10.1186/s12909-024-05769-5.
- [36] S. Lake *et al.*, “Online vs in-person musculoskeletal ultrasound course: a cohort comparison study,” *Ultrasound J.*, vol. 16, no. 1, 2024, doi: 10.1186/s13089-024-00375-4.
- [37] A. Ramadhanti, K. Kholilah, R. Fitriani, E. F. S. Rini, and M. R. Pratiwi, “Hubungan Motivasi Terhadap Hasil Belajar Fisika Kelas X MIPA di SMAN 1 Kota Jambi,” *J. Eval. Educ.*, vol. 3, no. 2, pp. 60–65, 2022, doi: 10.37251/jee.v3i2.246.
- [38] P. Cabrera-Solano, C. Ochoa-Cueva, and L. Castillo-Cuesta, “Enhancing EFL higher education through Fliki videos: An artificial intelligence implementation approach,” *World J. English Lang.*, vol. 15, no. 1, p. 424, 2024, doi: 10.5430/wjel.v15n1p424.
- [39] A. Amin, A. Alimni, D. A. Kurniawan, M. Z. Azzahra, and S. E. Septi, “Parental communication increases student learning motivation in elementary schools,” *Int. J. Elem. Educ.*, vol. 5, no. 4, p. 622, 2021, doi: 10.23887/ijee.v5i4.39910.
- [40] J. P. Bartkowski, K. Klee, X. Xu, J. B. Roach, and S. Jones, “It takes a village: How community-based peer support for breastfeeding bolsters lactation prevalence among black Mississippians on the Gulf Coast,” *Pediatr. Rep.*, vol. 16, no. 4, pp. 1064–1076, 2024, doi: 10.3390/pediatric16040091.