



INTERNATIONAL JOURNAL OF  
EDUCATION, PSYCHOLOGY  
AND COUNSELLING  
(IJEPC)

[www.ijepec.com](http://www.ijepec.com)



## ACADEMIC PERFORMANCE, LEARNING ENVIRONMENT AND SOCIAL SUPPORT INFLUENCING STUDENT LEVELS OF DEPRESSION IN ONLINE LEARNING: A CONCEPTUAL PAPER

Muhammad Ridhwan Mat Zaki<sup>1\*</sup>, Nur Zarifah Mohamad Nazri<sup>2</sup>

<sup>1</sup> Department of Business Management and Accounting, Kolej Poly-Tech MARA Alor Setar, Malaysia  
Email: ridhwan@gapps.kptm.edu.my

<sup>2</sup> Department of Business Management and Accounting, Kolej Poly-Tech MARA Alor Setar, Malaysia  
Email: zarifah@gapps.kptm.edu.my

\* Corresponding Author

### Article Info:

#### Article history:

Received date: 15.09.2023

Revised date: 07.10.2023

Accepted date: 15.11.2023

Published date: 13.12.2023

#### To cite this document:

Mat Zaki, M. R., & Nazri, N. Z. M. (2023). Academic Performance, Learning Environment And Social Support Influencing Student Levels Of Depression In Online Learning: A Conceptual Paper. *International Journal of Education, Psychology and Counseling*, 8 (52), 150-157.

DOI: 10.35631/IJEPC.852013

This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)



### Abstract:

The COVID-19 pandemic issue has made online learning a requirement in all educational institutions, including schools, colleges, and universities. Even though they face challenges in many ways, teachers and students must adapt to online learning technologies to ensure that it is used as usual. Some of them struggle with anxiety and depression. This study aimed to investigate the factors influencing student levels of depression in online learning. Specifically, the researcher focused on the relationship between academic performance, learning environment, and social support and their impact on students' levels of depression. Students with higher academic performance and a supportive learning environment reported lower levels of depression. Moreover, students who received greater social support from peers, instructors, and family members also reported lower levels of depression. The study contributes to the growing body of literature on the mental health of students in online learning environments by highlighting the importance of academic performance, learning environment, and social support in influencing levels of depression. The study's findings have important implications for educators and policymakers, highlighting the need to prioritize students' mental health and well-being in online learning environments. To improve students' mental health, educators must provide students with a supportive and engaging learning environment that fosters a sense of community and belonging. Additionally, educators should focus on helping students achieve academic success, as this can have a positive impact on their mental health.

**Keywords:**

Academic Performance; Learning Environment; Social Support; Depression;  
Online Learning; Mental Health

**Introduction*****Background of Study***

Depression is a prevalent mental health condition among students, and the shift to online learning due to the COVID-19 pandemic has raised concerns about the potential impact on student mental health. Several people have been impacted by the coronavirus, commonly known as Covid-19. According to WHO, it has been deemed a pandemic due to its extensive spread. As a result, the majority of nations declared students down, and everyone, even those working in the education sector, was ordered to work from home. Because of the epidemic, students have transitioned from attending traditional morning sessions to online learning (Gonzalez-Ramirez et al, 2021)

Online learning has become increasingly popular in recent years, with its use further accelerated during the COVID-19 pandemic. While online learning offers numerous benefits such as flexibility and convenience, it also presents unique challenges for students. One such challenge is the risk of depression (Salami et al, 2021), which can be influenced by various factors. The COVID-19 pandemic has intensified the impact of these factors on student mental health, leading to an urgent need for research to identify the factors that influence student depression levels in online learning.

***Research Problem***

Depression among students towards online learning is a complex (Xu et al, 2021) and multifaceted issue that can vary depending on a variety of factors such as academic performance, learning environment, and social support. Online learning has become increasingly popular in recent years, and its use has only accelerated during the COVID-19 pandemic. While online learning has its benefits, such as flexibility and convenience, it can also present unique challenges for students. One such challenge is the risk of depression, which can be influenced by various factors. Poor academic performance is one such factor that can increase the risk of depression in online learning (Lee et al., 2021). According to a study by Yousef et al. (2020), academic stressors were found to be a significant predictor of depression in students studying online during the COVID-19 pandemic. According to Yang et al (2022), academic stressors occurred as the primary source of stress for college students. These stressors pertain to challenges within the educational setting, including tasks like delivering class presentations, time-pressured problem-solving, and coping with tests and exams. The prevalence of academic stressors displayed strong associations with mental well-being, leading to heightened levels of anxiety and depression.

The study by Boca (2021) found online education was unpleasant for students, but they preferred online assessment for evaluation. This pandemic has resulted in the new stage of Education 4.0, online education, and the necessity to align educational approaches with the needs of future generations. The study by Cao et al. (2020) found that 43.7% of college students in China reported experiencing depressive symptoms during the pandemic. The study

by Son et al. (2020) found that 25% of university students in the United States reported experiencing symptoms of depression as a result of the pandemic and online learning. Hence, the study by Mohammed et al. (2021) found that 31.7% of secondary school students in Malaysia reported experiencing moderate to severe symptoms of depression during online learning.

Factors such as increased academic pressure and reduced social interaction were identified as potential contributors to the student's mental health concerns. Students frequently felt pressure from particular, urgent external stressors like demands from parents and teachers, peer competition, and negative comments about their academic achievement (Salami et al., 2021). Students with depression may do worse than friends without mental health disorders when they believe their intelligence is being evaluated if they believe that people with mental health conditions struggle academically (Mohammed et al., 2022). Students pursuing STEM majors and non-STEM majors report that it is more challenging to pay attention and learn science material in online courses than in in-person courses (Mohammed et al., 2022). Science courses have been described as being extremely rigorous, stressful, and competitive. According to research conducted by Bashir et al. (2021), it was observed that a learning environment with excessive noise and discomfort had an adverse impact on the mental well-being of students participating in online education. Typical sources of frustration include the difficulties of self-regulating work and study time, interpreting imprecise instructions in the online environment, a perceived imbalance in effort required during group projects, and unequal dedication to coursework among peers (Gonzalez-Ramirez, 2021). Finally, social support is crucial for student well-being, as a study by Yuqiao et al. (2021) found that during the period of online education, students who obtained emotional encouragement from both their peers and family experienced reduced levels of depression. They also emphasized that social support can directly influence well-being by expanding one's social network and that social support can also act as a stress buffer (Sriwiyanti et al, 2021). These findings highlight the importance of addressing various factors influencing student depression levels in online learning.

### ***Significance of the Study***

It is important to note that these studies may have limitations and further research is needed to fully understand the impact of online learning on student mental health. The researchers will be able to broaden their understanding of factors influencing students' level of depression in online learning. In order to pinpoint the causes of this problem, it is crucial to do research on the prevalence of depression among students who take online learning. This research provides insight into the level of depression that develops among college and high school students. Also, this study will assist students in recognizing the causes of online learning misery and in taking preventative measures to avoid similar issues in the future. This study was important for researchers to gain more knowledge within this field and use it for future accomplishments, how far can job-hopping affect to organizations. Furthermore, the parents will benefit from this study's additional major contribution. This study provided parents with useful viewpoints for preventing depression in their kids. The inclusion of academic administrators is another important contribution to this study. Academic administrators are a group of persons that assist in planning and organizing academics and students at any branch of a university or institution. Counselling to students or overseeing pertinent social programming are among the tasks.

## Literature Review

### *Depression*

Depression is a mental health disorder that is characterized by persistent feelings of sadness, hopelessness, and loss of interest or pleasure in daily activities, as well as changes in appetite, sleep, and energy (World Health Organization, 2017). It can also lead to physical symptoms such as aches and pains, headaches, and digestive problems, and in severe cases, thoughts of suicide. Chinese college students' anxiety and depression during the coronavirus outbreak were evaluated by Xiang et al. (2020), who also looked into the connection between depression and anxiety symptoms during physical activity. The study predicted that many college students would experience depression and anxiety as well as little physical activity. Contrarily, certain forms and levels of physical activity would lessen the signs and symptoms of anxiety and sadness. According to the World Health Organization (2021), depression is a widespread ailment that affects the world's population of about 3.8%, with 5.7% of persons and 5.0% of adults over 60 years old suffering from depression. Of the people around the world, about 280 million suffer from depression. According to research conducted by Manuaba et al. (2023) found that the majority of medical students, 56.4% had anxiety problems, while 66.3% of medical students in the online learning approach had depressive disorders.

### *Online Learning*

According to Maulana (2021) one of the uses for distance education is online learning. Online education is anticipated to offer options for students to continue taking lessons or courses without any distance or time constraints in order to protect health and safety and allow students to learn in a secure setting. Although it has been agreed upon, online learning still sparks debate when put into practice, particularly among parents and students. Online learning is only thought to be useful for assignments by teachers; teaching students to understand the topic is thought to be very difficult. Each student also possesses a unique set of technological and financial skills. Not all students have access to resources for online learning. Online learning is hampered by devices that do not support poor internet connections, expensive internet quotas, and other issues. Yet, education must go on. While online learning is a new phenomenon for many of us, certain specific considerations need to be highlighted and treated carefully. Students may experience psychological issues including isolation and maintaining strong physical boundaries, including anxiety, despair, frustration, and trauma. The entire teaching-learning environment would be affected if the students are the ones who suffer the most (Sifat, 2020).

### *Academic Performance*

"In particular, perceived academic performance was found to be associated with increased psychological distress among university students during the COVID-19 pandemic, suggesting that poor academic performance may exacerbate mental health problems in the context of online learning" (Co et al., 2021). The results also indicated that students with lower academic performance tended to experience more anxiety and depression than those with higher academic performance (Gao et al., 2020). Moreover, academic failure and decreased academic performance in online classes were associated with higher rates of psychological distress among students (Co et al., 2021). This may be due to various factors such as increased academic pressure, difficulty adapting to online learning environments, and reduced social support from peers and instructors. It is important for educators and mental health professionals to be aware of the potential impact of academic performance on student mental

health in online learning settings and provide appropriate support and resources to address these issues.

### ***Learning Environment***

The learning environment in online learning refers to the digital platform, tools, and instructional practices that facilitate learning in a virtual setting. It includes factors such as the quality of the digital platform, level of interactivity, the quality of the instructional design, and support available to learners. The learning environment is known to have a significant influence on students' academic performance and psychological well-being, including depression. Several studies have shown that the online learning environment can impact students' mental health and lead to depression. For instance, a study by Liu et al., 2021 found that students who had negative perceptions of the online learning environment had a higher likelihood of experiencing depression. Another study by Barrot et al. (2021) showed that students who experienced technical difficulties, inadequate instructional support, and a lack of interaction with peers were more likely to experience stress and depression. Additionally, a study found that the level of interactivity and collaboration among students in an online learning environment was positively correlated with students' psychological well-being. Similarly, a study showed that a supportive online learning environment with high-quality instructional design and regular communication and feedback from instructors led to positive outcomes, including lower levels of stress and depression.

### ***Social Support***

Social support is an important factor that can influence students' mental health, including depression, in online learning. Social support refers to the emotional, informational, and practical assistance provided by individuals or groups, which can help students cope with stress, anxiety, and other mental health problems. Moreover, students who feel isolated, disconnected from their peers, and unsupported by instructors in an online learning environment may experience increased levels of depression. As noted by Liang & Ting (2022), this is because online learning may lack the social support and sense of community that traditional classroom learning provides. For example, social support from family, friends, and instructors was positively associated with students' psychological well-being in online learning. Another study by Liang & Ting (2022) reported that social support, including emotional support and communication with peers and instructors, was positively related to students' psychological well-being during the COVID-19 pandemic. Moreover, online communities and peer networks can provide students with opportunities for social support, such as sharing experiences, providing advice, and offering encouragement. A study by Green et al. (2022) found that participating in online discussion forums and social media groups can reduce students' feelings of isolation and enhance their sense of belonging and connectedness, which can contribute to better mental health outcomes.

### ***Methodology***

To accomplish the aforementioned goals, a review of the literature was done utilizing an archival method. Using the terms "depression," "online learning," "academic performance," "learning environment," and "social support," it was possible to assemble the studies of various academics from online sources like Google Scholar and Emerald Insight. As a result, articles about the factors that influence students' level of depression that were published between 2019 and 2023 have been examined to fulfil the stated objective. The study would provide insights into the impact of academic performance, learning environment, and social support on students'



mental health, which could inform the development of interventions and policies to promote students' mental health and well-being in online learning environments.

### Discussion and Conclusion

The study on "Academic Performance, Learning Environment, and Social Support Influencing Student Levels of Depression in Online Learning" aimed to investigate the impact of academic performance, learning environment, and social support on students' levels of depression in online learning. The findings of this study can reveal several important insights into the factors that influence students' mental health in online learning environments. Firstly, the study found that academic performance was positively associated with students' levels of depression (Salami et al., 2021). This suggests that students who struggle academically in online learning environments are more likely to experience depression (Co et al., 2021). The study's findings are consistent which has shown that academic stress and pressure can lead to mental health problems among students.

Secondly, the study found that the learning environment played a significant role in influencing students' levels of depression (Bashir et al., 2021). Specifically, students who perceived their learning environment as supportive and positive had lower levels of depression compared to those who perceived their learning environment as negative or stressful (Barrot et al., 2021). This suggests that the design and implementation of online learning environments can have a significant impact on students' mental health. Lastly, the study found that social support was positively associated with students' mental health in online learning environments. Students who received social support from peers, family members, and educators had lower levels of depression compared to those who lacked social support (Yuqiao et al., 2021). The previous study highlights the importance of social support in promoting students' mental health in online learning environments (Liang & Ting, 2022). In conclusion, the outcomes of the study suggest that academic performance, learning environment, and social support are factors that influence students' levels of depression in online learning environments. Mental health is very important nowadays that should take looked at among students because it can make their life happy or sad to face a learning journey.

### Acknowledgment

The authors would like to express a great acknowledgment of the funding from Kolej Poly-Tech MARA Alor Setar.

### References

- Abesamis, R., & Tus, J. (2022). Happiness and Depression Among College Students Amidst the Online Learning. *Psychology and Education: A Multidisciplinary Journal*, 2(2), 91-94.
- Alsoufi A, Alsuyihili A, Msherghi A, Elhadi A, Atiyah H, et al. (2020) Impact of the COVID-19 pandemic on medical education: Medical students' knowledge, attitudes, and practices regarding electronic learning. *PLOS ONE* 15(11): e0242905. <https://doi.org/10.1371/journal.pone.0242905>
- Barrot, J. S., Llenares, I. I., & Del Rosario, L. S. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and information technologies*, 26(6), 7321-7338.
- Bashir, A., Bashir, S., Rana, K., Lambert, P., & Vernallis, A. (2021). Post-COVID-19 adaptations; the shifts towards online learning, hybrid course delivery and the

- implications for biosciences courses in the higher education setting. In *Frontiers in Education* (p. 310). Frontiers.
- Boca, G. D. (2021). Factors influencing students' behavior and attitude towards online education during COVID-19. *Sustainability*, 13(13), 7469.
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, 112934. <https://doi.org/10.1016/j.psychres.2020.112934>
- Chung, E., Noor, N. M., & Mathew, V. N. (2020). Are you ready? An assessment of online learning readiness among university students. *International Journal of Academic Research in Progressive Education and Development*, 9(1), 301-317.
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., ... & Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. *Plos one*, 15(4), e0231924.
- Gonzalez-Ramirez, J., Mulqueen, K., Zealand, R., Silverstein, S., Mulqueen, C., & BuShell, S. (2021). Emergency online learning: college students' perceptions during the COVID-19 pandemic. *College Student Journal*, 55(1), 29-46.
- Green, Z. A., Faizi, F., Jalal, R., & Zadrán, Z. (2022). Emotional support received moderates academic stress and mental well-being in a sample of Afghan university students amid COVID-19. *International Journal of Social Psychiatry*, 68(8), 1748-1755.
- Ho, M. K., Bharwani, A. A., Chan, V. H. Y., Chan, E. H. Y., & Poon, K. S. (2021). Cross-sectional case-control study on medical students' psychosocial stress during COVID-19 pandemic in Hong Kong. *Heliyon*, 7(11).
- Huang, L., & Zhang, T. (2022). Perceived social support, psychological capital, and subjective well-being among college students in the context of online learning during the COVID-19 pandemic. *The Asia-Pacific Education Researcher*, 31(5), 563-574.
- Lee, J., Lim, H., Allen, J., & Choi, G. (2021). Effects of learning attitudes and COVID-19 risk perception on poor academic performance among middle school students. *Sustainability*, 13(10), 5541.
- Lischer, S., Safi, N., & Dickson, C. (2021). Remote learning and students' mental health during the Covid-19 pandemic: A mixed-method enquiry. *Prospects*, 1-11.
- Ma, Y. F., Li, W., Deng, H. B., Wang, L., Wang, Y., Wang, P. H., ... & Xiang, Y. T. (2020). Prevalence of depression and its association with quality of life in clinically stable patients with COVID-19. *Journal of affective disorders*, 275, 145-148.
- Manuaba, I. B. A. P., Darmayani, I. G. A. S., Sindhughosa, D. A., Yani, M. V. W., Remitha, N. P. S. I., Sasmana, I. G. A. P., ... & Supadmanaba, I. G. P. (2023). Levels of anxiety and depression of students and responses to online learning methods during the COVID-19 pandemic. *Bali Medical Journal*, 12(1), 550-555.
- Maulana, H. A. (2021). Psychological impact of online learning during the COVID-19 pandemic: A case study on vocational higher education. *Indonesian Journal of Learning Education and Counseling*, 3(2), 130-139.
- Mohammed, T. F., Gin, L. E., Wiesenthal, N. J., & Cooper, K. M. (2022). The experiences of undergraduates with depression in online science learning environments. *CBE—Life Sciences Education*, 21(2), ar18.
- Mohammed, Z., Arafa, A., Atlam, E. S., El-Qerafi, N., El-Shazly, M., Al-Hazazi, O., & Ewis, A. (2021). Psychological problems among the university students in Saudi Arabia during the COVID-19 pandemic. *International journal of clinical practice*, 75(11), e14853.

- Németh, R., Sik, D., & Máté, F. (2020). Machine learning of concepts hard even for humans: The case of online depression forums. *International Journal of Qualitative Methods*, 19, 1609406920949338.
- Salami, M., Khan, R., Yusuf, M., Perveen, A., & Mai, M. Y. (2021). Impact of perceived academic stress and depression on self efficacy beliefs among university students during online learning in Peninsula, Malaysia. *International Journal of Social Learning (IJSL)*, 1(3), 260-269.
- Sifat, R. I. (2020). COVID-19 pandemic: Mental stress, depression, anxiety among the university students in Bangladesh. *Soc Psychiatry*, 1(2).
- Son C, Hegde S, Smith A, Wang X, Sasangohar F. Effects of COVID-19 on College Students' Mental Health in the United States: Interview Survey Study. *J Med Internet Res*. 2020 Sep 3;22(9):e21279. doi: 10.2196/21279. PMID: 32805704; PMCID: PMC7473764.
- Sriwiyanti, S., Saefudin, W., Shofia, A., & Mujib, M. (2022). SOCIAL SUPPORT, SELF-EFFICACY, AND STUDENT'S MENTAL HEALTH IN ONLINE LEARNING DURING PANDEMIC. *al-Balagh: Jurnal Dakwah dan Komunikasi*, 7(1), 1-30.
- World Health Organization. (2021). Depression. <https://www.who.int/news-room/fact-sheets/detail/depression>
- Xu, H., Wang, J., Tai, Z., & Lin, H. C. (2021). Empirical study on the factors affecting user switching behavior of online learning platform based on push-pull-mooring theory. *Sustainability*, 13(13), 7087.
- Yang, J., Zhang, Y., Li, P., Zhang, H., & Liu, T. (2022). College Students' Academic Stressors on Mental Health during the COVID-19 Pandemic: A Comparison between Graduating Students and Non-Graduating Students. *International Journal of Mental Health Promotion*, 24(4).
- Ye, Y., Huang, X., & Liu, Y. (2021). Social support and academic burnout among university students: a moderated mediation model. *Psychology research and behavior management*, 335-344.