



Students' views on Indonesian higher education amid the COVID-19 pandemic

Ardo Okilanda ^{a1}, Universitas Negeri Padang, Jl. Prof. Dr. Hamka, Air Tawar Bar., Kec. Padang Utara, Kota Padang, Sumatera Barat 25171, Indonesia, ardo.oku@fik.unp.ac.id

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Abstract

The transition to home-based learning during the COVID-19 pandemic presented a significant shift in the educational landscape, prompting an urgent need to evaluate its effectiveness. This study aimed to investigate how secondary education was implemented during the pandemic and how students responded to online learning. A survey design was employed, targeting senior high school students from various regions, with a total sample of 2156 respondents across 18 provinces. The findings revealed that the majority of students participated in online learning, with the majority accessing lessons via mobile phones. However, only a few students reported a clear understanding of the material presented. Furthermore, the majority of respondents indicated a preference for traditional face-to-face learning over online instruction. These results suggest that while the infrastructure and technological accessibility for online learning were adequate, comprehension and engagement remained limited. The study highlights the need for improving instructional strategies and learner support in virtual environments to enhance educational outcomes during emergency remote learning.

Keywords: Distance education; learning preferences; mobile learning; online instruction; pandemic education

* ADDRESS FOR CORRESPONDENCE: Ardo Okilanda, Universitas Negeri Padang, Jl. Prof. Dr. Hamka, Air Tawar Bar., Kec. Padang Utara, Kota Padang, Sumatera Barat 25171, Indonesia. E-mail address: ardo.oku@fik.unp.ac.id

1. INTRODUCTION

The global community is currently experiencing the effects of a novel and widespread virus that has reached nearly every region of the world (Birdiqli, 2022; Gollakota and Shu, 2023; Wilson, 2022). The COVID-19 virus, originating in Asia, has spread extensively to regions including the United States, resulting in more than one million confirmed infections (Daria and Islam, 2022). A major outbreak of coronavirus disease 2019 (COVID-19), with an untraceable origin, has been rapidly expanding across Europe, North America, Asia, and the Middle East. Initial confirmed cases have also emerged in African and Latin American countries (Acter et al., 2020). In response to this development, the World Health Organization officially declared COVID-19 a global pandemic, as announced by the Director-General (Liu et al., 2022). According to a virtual press briefing held on December 17, 2021, the number of COVID-19 cases outside of China had increased significantly, with an expanding list of countries and regions reporting infections to the World Health Organization (Covid-19 timeline in the Western Pacific - World, n.d.). The Director-General characterized the global spread of COVID-19 as a pandemic (W. H. O, n.d.).

In the context of Indonesia, the country experienced the highest number of COVID-19 infections in February 2021, according to Indonesia Worldometer (n.d.), supported by findings from Kusuma et al. (2022) and Prawira et al. (2022). The Indonesian government announced success in 'flattening the curve' in early May 2020. However, the trajectory of confirmed cases continued to rise monthly (Nanda et al., 2022; Sinaga et al., 2022; Sutrisno, 2022). In response, the first implementation of Large-Scale Social Restrictions began on April 10, 2020, pursuant to Government Regulation Number 21 of 2020 regarding Large-Scale Social Restrictions for the acceleration of COVID-19 containment (Aziz et al., 2022; Gozali and Yusril, n.d.; Tampubolon, 2022). These restrictions affected multiple sectors in Indonesia, particularly the education sector.

The enforcement of Large-Scale Social Restrictions necessitated a shift to home-based learning. Circular Number 15 of 2020 provided guidelines for implementing distance education to ensure the continuation of students' right to educational access during the COVID-19 emergency (Soraya et al., 2022; Sudarma et al., 2022; Verawardina et al., 2020). This transition led to numerous challenges in school-based learning (Shrestha et al., 2022; Syaputri, 2014, 2019; Hong et al., 2021). Traditional face-to-face classroom instruction was replaced by home-based distance learning using internet-enabled technology (Sukmawati et al., 2022; Syam and Achmad, 2022). This transition was necessitated by the high transmission rate of the virus. Students represented a vulnerable demographic due to the ease of person-to-person transmission. Additionally, COVID-19 posed severe health risks even to healthy individuals, further justifying the shift to remote learning to interrupt the chain of transmission (Tizazu et al., 2022; Zhang et al., 2023).

Digital technology emerged as the primary mechanism for supporting the remote teaching and learning process, reflecting broader technological and societal shifts (Goldin et al., 2022; Moldavan et al., 2022). This approach relied on internet-based platforms to facilitate online education (Gyekye, 2025; Shrestha et al., 2022; Ulum, 2022). Online learning posed a considerable challenge despite the availability of digital resources (Koh, 2024; Collantes et al., 2022; Evans et al., 2020; Padayachee and Campbell, 2022). Effective implementation required teachers to optimize online instruction to ensure equitable learning experiences and uphold the educational rights of all students (Kim, 2020; Muthuprasad et al., 2021). Various online platforms were adopted in Indonesia during the COVID-19 pandemic, including Google Classroom, Telegram, YouTube, Instagram Live, Zoom Meetings, and WhatsApp groups. Additionally, Edmodo served as an instructional medium that contributed to improved student performance (Andriani and Kasriyati, 2020). Teachers were required to adapt instructional strategies to the technological access and resources available to students, ensuring the feasibility and effectiveness of online learning delivery.

1.1. Purpose of study

Online learning is predominantly implemented by educators in response to circumstances that prevent the continuation of in-person instruction, particularly during the COVID-19 pandemic. The utilization of technology as

an instructional medium necessitates the incorporation of motivational strategies to engage learners (Mathew et al., 2024; Kasriyati, 2019; Verawardina et al., 2020; Rasmitadila et al., 2020). Motivational support plays a crucial role in fostering learner enthusiasm, even in the absence of direct, face-to-face interaction (MR and Seftika, 2019). A critical aspect of the instructional process involves understanding learner perceptions and attitudes toward online education. Student responses may range from positive to negative, reflecting the effectiveness and reception of the online learning experience. These responses serve as a valuable evaluative tool for instructors in assessing and refining online instructional practices (Li et al., 2024). In this context, the present research seeks to explore learner responses to online instruction conducted by educators.

2. METHODS AND MATERIALS

2.1. Data collection tool

The research method employed in this study is a descriptive qualitative approach. Descriptive qualitative research seeks to present a comprehensive depiction of the phenomenon under investigation (Moser and Korstjens, 2018; Vaismoradi et al., 2013). In this context, the approach is utilized to examine student responses to online learning activities implemented by educators within school settings. The data collection instrument consisted of a questionnaire distributed electronically through the Google Forms platform, enabling participants to provide responses regarding instructional experiences during the COVID-19 pandemic.

2.2. Participants

The subjects of this study were 2156 Senior High School level students spread throughout Indonesia. Students who filled in were students who carried out online learning during the COVID-19 pandemic.

3. RESULTS

The result of this study presents an overview of the survey findings. The survey was distributed to Junior High School students in Indonesia using the Google Form platform and consisted of six items related to the online learning process. The questionnaire contained six items designed to capture various aspects of students' experiences with online learning. These items are presented in Table 1.

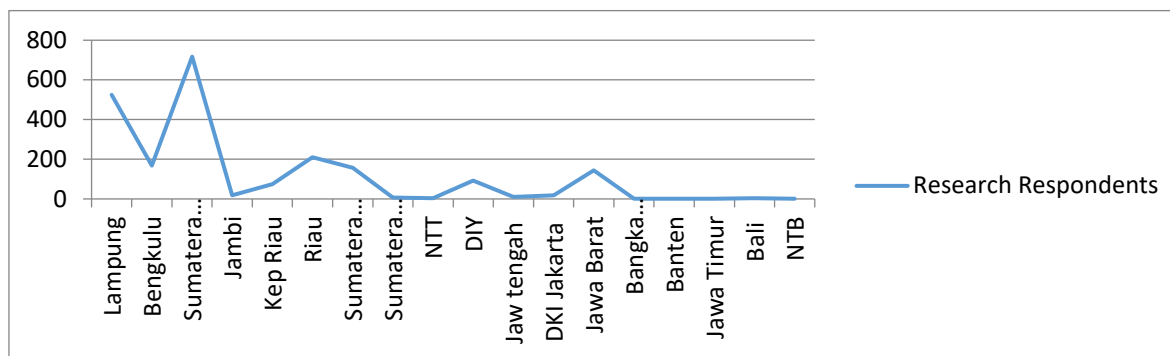
Table 1
Questionnaire items

No	Questions
1	Select your provincial school.
2	Did your school implement lessons from home during the COVID-19 period?
3	Select the devices/tools used in the following online lessons.
4	Please mention the online learning application used
5	How well do you understand the online learning material?
6	Which do you think is better learning between online learning or classroom / direct learning?

The questionnaire was distributed directly to school principals, classroom teachers, and students, resulting in a total of 2,156 responses collected over a one-month period. A detailed breakdown of responses by province is presented below.

Figure 1

Research respondents



Based on the research findings, responses were obtained from 18 provinces in Indonesia. The distribution of responses was as follows: Lampung (525), Bengkulu (169), South Sumatra (717), Jambi (19), Riau Islands (75), Riau (211), West Sumatra (157), North Sumatra (7), East Nusa Tenggara (3), Yogyakarta Special Region (92), Central Java (10), Jakarta Capital Region (19), West Java (144), Bangka Belitung Islands (1), Banten (1), East Java (1), Bali (4), and West Nusa Tenggara (1). The first item in the survey addressed the implementation of the learning process during the COVID-19 pandemic, specifically examining whether online learning was being adopted in schools.

Figure 2

The percentage of online learning implementation

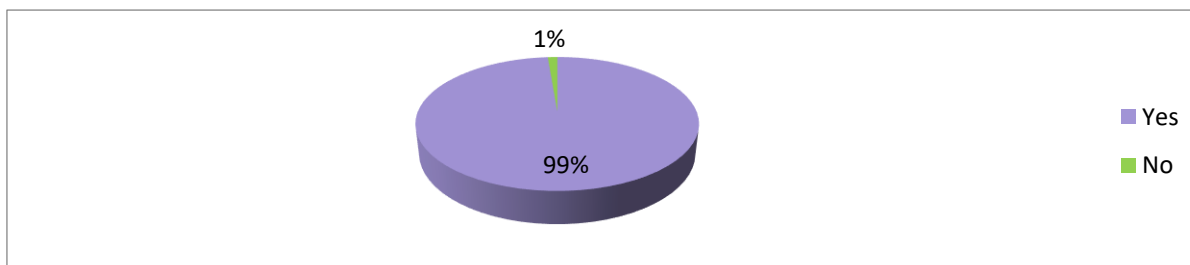


Figure 2 indicates that 2,128 students are engaging in online learning during the COVID-19 pandemic. However, the data also reveals that 28 students reported not participating in online learning. When comparing these two sets of data, it can be concluded that the majority of the learning process is indeed conducted through online platforms, with 99% of the respondents confirming their involvement in online learning. The third survey question inquired about the tools used by students during online learning at home.

Figure 3

The devices used during online learning

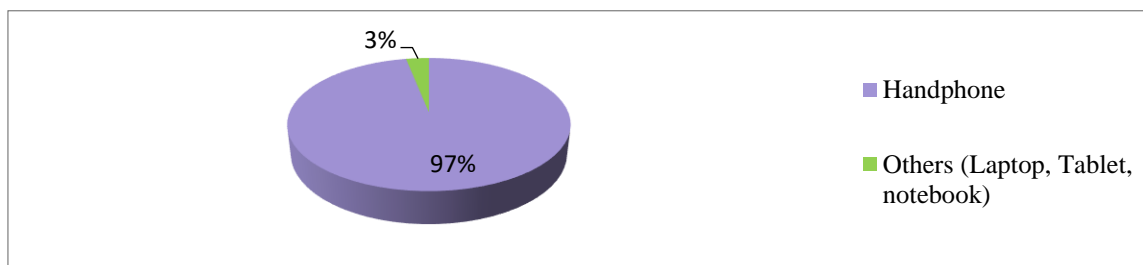
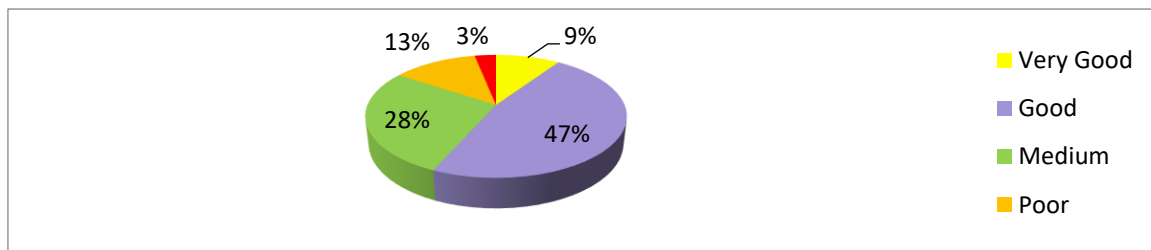


Figure 3 shows that the majority of students (97%) use smartphones for online learning at home, while 3% of students reported using other devices such as laptops, tablets, or notebooks. This indicates that smartphones

remain the preferred device for online learning, and these devices are accessible to nearly all students. The subsequent question focused on students' ability to comprehend the material presented during online learning. The data regarding this aspect is presented in Figure 4.

Figure 4

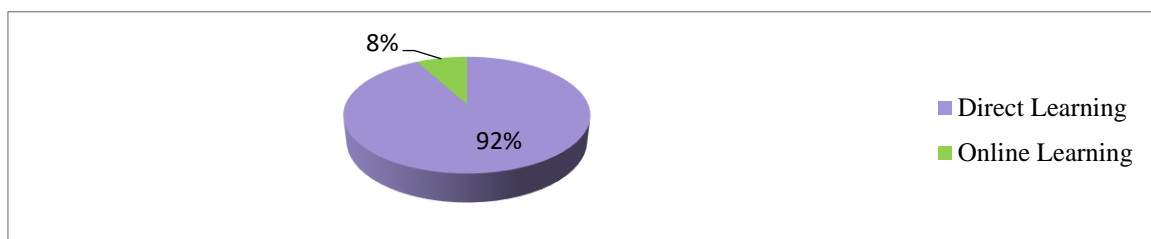
Students' understanding of the material



Students were asked to assess their understanding of the online learning material based on five response categories: very good, good, medium, poor, and very poor. The largest group of respondents (47%) rated their understanding as "good," equating to 1,017 students. The next most common response was "very good," with 204 students, followed by "medium," which was chosen by 597 students. A total of 279 students rated their understanding as "poor," while 68 students expressed a "very poor" understanding. These varying responses are influenced by several challenges faced by students during online learning, such as difficulties with internet connectivity and access to appropriate devices. Many students, particularly those in rural areas, reported issues with obtaining a stable internet connection, which resulted in some students being late for online classes. In light of these challenges, the final survey question asked students to compare their experiences with online learning and face-to-face learning. The responses to this question are presented in Figure 5.

Figure 5

Students' views about online and direct learning



4. DISCUSSION

The final question addresses students' opinions on which mode of learning they perceive as more effective. A total of 1984 students agree that face-to-face learning is superior to online learning. Face-to-face learning allows for the application of teaching and learning techniques without the constraints imposed by screens (Episiasi & Syahputra, 2015). One of the primary reasons students have cited for preferring in-person learning is the manner in which the material is presented, which they find more comprehensive and engaging compared to online formats.

Many students report feeling a sense of boredom when studying through online platforms. Their interactions with both instructors and peers are considerably limited. These interactions are confined to virtual spaces, lacking the direct, personal exchanges that are a hallmark of traditional learning environments. Although both teachers and students exhibit preparedness in terms of material readiness, syllabus alignment, learning plans, and access

to textbooks to support the educational process, these factors are not always sufficient to overcome the lack of meaningful engagement and interaction in online learning settings.

5. CONCLUSION

Based Based on the results and discussion, it was found that 99% of students participated in the online learning implementation. Among these, 97% used mobile phones as their primary device for accessing the learning materials. In terms of understanding the material, only 47% of students felt that they had a strong grasp of the content. Additionally, when asked about their preference between online and in-person learning, 92% of students expressed a preference for face-to-face learning over online alternatives.

From these findings, it can be concluded that while online learning is effective in terms of preparation, device accessibility, and material understanding, students generally favor direct, in-person learning. The key factors contributing to this preference include the limitations on interaction in online classes and the sense of boredom many students experience during online sessions.

The respondents of this study were predominantly from senior high schools and universities. It would be beneficial for future research to include a broader range of educational levels to gain a more comprehensive understanding. Additionally, further exploration of the instruments used in this study could provide deeper insights into the factors affecting students' learning experiences.

Conflict of Interest: The authors declare no conflict of interest.

Ethical Approval: The study adheres to the ethical guidelines for conducting research.

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REFERENCES

- Acter, T., Uddin, N., Das, J., Akhter, A., Choudhury, T. R., & Kim, S. (2020). Evolution of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) as coronavirus disease 2019 (COVID-19) pandemic: A global health emergency. *Science of the Total Environment*, 730, 138996. <https://www.sciencedirect.com/science/article/pii/S0048969720325134>
- Andriani, R., & Kasriyati, D. (2020). Android apps in EFL classroom environment: improving students' learning outcomes in translation. In *IOP Conference Series: Earth and Environmental Science*, 469(1), 012060. <https://iopscience.iop.org/article/10.1088/1755-1315/469/1/012060/meta>
- Aziz, M. R., Mukhtar, R. S., Andrian, S. R., & Permana, S. A. (2022). A Legal Vacuum on the Limitation of the Right to Protest during the COVID-19 Pandemic in Indonesia. *Asian J. Legal Stud.*, 70. https://heinonline.org/hol/cgi-bin/get_pdf.cgi?handle=hein.journals/alsacdmj8§ion=12
- Birdişli, F. (2022). The Effect of COVID-19 on the Security Issues at the Economic, Political, and Ontological Level. In *Geo-economic Perspectives in the Global Environment* (pp. 25-38). Routledge India. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003354703-3/effect-covid-19-security-issues-economic-political-ontological-level-fikret-birdi%C5%9Fli>
- Collantes, L. M., Torres, J. M., Astrero, E. T., Gaboy, R. G., Castillo, M. E. G. C., & Mukminin, A. (2022). Perspectives, challenges, and opportunities: The pandemic teaching experiences in science courses. *Journal of Higher Education Theory and Practice*, 22(4), 75-90. https://www.researchgate.net/profile/Joel-Torres-8/publication/360724951_Perspectives_Challenges_and_Opportunities_The_Pandemic_Teaching_Experiences_in_Science_Courses/links/628713ed39fa2170315ec9d6/Perspectives-Challenges-and-Opportunities-The-Pandemic-Teaching-Experiences-in-Science-Courses.pdf

- Okilanda, A. (2025). Students' views on Indonesian higher education amid the COVID-19 pandemic. *Contemporary Educational Research Journal*, 15(2), 99-107. <https://doi.org/10.18844/cej.v15i2.9700>
- COVID-19 timeline in the Western Pacific - World. (n. d.). ReliefWeb. (2020, May 26). <https://reliefweb.int/report/world/covid-19-timeline-western-pacific>
- Daria, S., & Islam, M. R. (2022). The SARS-CoV-2 omicron wave is indicating the end of the pandemic phase but COVID-19 will continue. *Journal of medical virology*, 94(6), 2343. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9015536/>
- Episiasi, E., & Syahputra, A. (2015). Teaching Reading Comprehension Through Summarizing Training Camp Technique to the Tenth Grade Students of SMA Negeri 5 Lubuklinggau in the Academic Year of 2015/2016. *Jurnal Perspektif Pendidikan*, 9(2), 7-18. <https://mail.ojs.stkippgri-lubuklinggau.ac.id/index.php/JPP/article/view/411>
- Evans, D. J., Bay, B. H., Wilson, T. D., Smith, C., Lachman, N., & Pawlina, W. (2020). Going virtual to support anatomy education: a STOPGAP in the midst of the COVID-19 pandemic. https://sussex.figshare.com/articles/journal_contribution/Going_virtual_to_support_anatomy_education_in_a_STOPGAP_in_the_midst_of_the_covid-19_pandemic/23307440/1/files/41092961.pdf
- Goldin, T., Rauch, E., Pacher, C., & Woschank, M. (2022). Reference architecture for an integrated and synergetic use of digital tools in education 4.0. *Procedia Computer Science*, 200, 407-417. <https://www.sciencedirect.com/science/article/pii/S1877050922002484>
- Gollakota, A. R., & Shu, C. M. (2023). COVID-19 and energy sector: Unique opportunity for switching to clean energy. *Gondwana Research*, 114, 93-116. <https://www.sciencedirect.com/science/article/pii/S1342937X22000314>
- Gozali, D., & Yusril, M. Y. (n. d.). ANALYZING THE HANDLING OF THE COVID-19 PANDEMIC IN DKI JAKARTA: WAS IT SUCCESSFUL OR FAILED?. *GEMA PUBLICA*, 7(2), 284-301. <https://ejournal.undip.ac.id/index.php/gp/article/view/50935>
- Gyekye, E. K. (2025). Perceived effective online learning pedagogies and middle schoolers online learning: A qualitative study. *Education and Information Technologies*, 1-20. <https://link.springer.com/article/10.1007/s10639-025-13356-4>
- Hong, J. C., Liu, Y., Liu, Y., & Zhao, L. (2021). High school students' online learning ineffectiveness in experimental courses during the COVID-19 pandemic. *Frontiers in Psychology*, 12, 738695. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.738695/full>
- Indonesia Worldometer. (n.d.). <https://www.worldometers.info/coronavirus/country/indonesia/>
- Kasriyati, D. (2019). Using Video To Teach Listening at English Department in Fkip Unilak Pekanbaru. *J-SHMIC: Journal of English for Academic*, 6(1), 1-7. <https://journal.uir.ac.id/index.php/jshmic/article/view/2513>
- Kim, J. (2020). Learning and teaching online during Covid-19: Experiences of student teachers in an early childhood education practicum. *International journal of early childhood*, 52(2), 145-158. <https://link.springer.com/article/10.1007/s13158-020-00272-6?fbclid=IwAR3x-u9vdpJctNnoVQ>
- Koh, J. H. L., Daniel, B. K., Ma, R., Hu, A., & Mazzocco, P. (2024). Validating an Online Learning Dexterity Survey of University Students' Online Learning Competence. *The Asia-Pacific Education Researcher*, 1-9. <https://link.springer.com/article/10.1007/s40299-024-00925-3>
- Kusuma, A. A. N. J., Aryana, M. B. D., Mahendra, I. N. B., & Susanto, D. H. (2022). Description of Neutrophil-to-lymphocyte Ratio, C-reactive Protein, and Procalcitonin Levels in Pregnancy with COVID-19 at Sanglah General Hospital Period of April 2020–April 2021. *Journal of South Asian Federation of Obstetrics and Gynaecology*, 14(4), 445-452. https://www.researchgate.net/profile/I-Nyoman-Bayu-Mahendra/publication/362849359_Description_of_Neutrophil-to-lymphocyte_Ratio_C-reactive_Protein_and_Procalcitonin_Levels_in_Pregnancy_with_COVID-19_at_Sanglah_General_Hospital_Period_of_April_2020-April_2021/links/6315825bacd814437f0512f1/Description-of-Neutrophil-to-lymphocyte-Ratio-C-reactive-Protein-and-Procalcitonin-Levels-in-Pregnancy-with-COVID-19-at-Sanglah-General-Hospital-Period-of-April-2020-April-2021.pdf?sg%5B0%5D=started_experiment_milestone&origin=journalDetail

- Okilanda, A. (2025). Students' views on Indonesian higher education amid the COVID-19 pandemic. *Contemporary Educational Research Journal*, 15(2), 99-107. <https://doi.org/10.18844/cerj.v15i2.9700>
- Li, D., Sun, Q., & Feng, Y. (2024). Exploring an online learning burnout assessment model based on learning behavior data. *Current Psychology*, 43(36), 29108-29121. <https://link.springer.com/article/10.1007/s12144-024-06542-z>
- Liu, J., Mukhopadhyay, A., & Yeung, C. W. M. (2022). Psychological and behavioral responses to the declaration of COVID-19 as a pandemic: A comparative study of Hong Kong, Singapore, and the US. *Plos one*, 17(10), e0275854. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0275854>
- Mathew, P. V., Pappachan, J., & Kushwaha, S. (2024). The interplay of online attributes and learning modes in shaping satisfaction and effectiveness in online learning. *Discover Education*, 3(1), 1-15. <https://link.springer.com/article/10.1007/s44217-024-00344-y>
- Moldavan, A. M., Capraro, R. M., & Capraro, M. M. (2022). Navigating (and disrupting) the digital divide: Urban teachers' perspectives on secondary mathematics instruction during COVID-19. *The Urban Review*, 54(2), 277-302. <https://link.springer.com/article/10.1007/s11256-021-00611-4>
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European journal of general practice*, 24(1), 9-18. <https://www.tandfonline.com/doi/abs/10.1080/13814788.2017.1375091%4010.1080/tfocoll.2021.0.issue-e-practical-guidance-to-qualitative-research>
- MR, E. R., & Seftika, S. (2019). How is Instagram Implemented in Teaching Speaking?. In *Eleventh conference on applied linguistics (CONAPLIN 2018)* (pp. 386-388). Atlantis Press. <https://www.atlantis-press.com/proceedings/conaplin-18/125911491>
- Muthuprasad, T., Aiswarya, S., Aditya, K. S., & Jha, G. K. (2021). Students' perception and preference for online education in India during COVID-19 pandemic. *Social sciences & humanities open*, 3(1), 100101. <https://www.sciencedirect.com/science/article/pii/S2590291120300905>
- Nanda, M. A., Faricha, A., Ulyah, S. M., Tamimah, N. M., Indasyah, E., Salaz, M. F. M., ... & Abqari, U. (2022). The susceptible-infected-recovered-dead model for long-term identification of key epidemiological parameters of COVID-19 in Indonesia. *International Journal of Electrical and Computer Engineering*, 12(3), 2900-2910. <https://pure.eur.nl/en/publications/the-susceptible-infected-recovered-dead-model-for-long-term-ident>
- Padayachee, P., & Campbell, A. L. (2022). Supporting a mathematics community of inquiry through online discussion forums: towards design principles. *International Journal of Mathematical Education in Science and Technology*, 53(1), 35-63. <https://www.tandfonline.com/doi/abs/10.1080/0020739X.2021.1985177>
- Prawira, B., Pratama, A. J., Bella, A., & Nuraini, S. (2022). The role of behavioural immune system and belief in COVID-19 misinformation on COVID-19 protective behaviours in Indonesia. *Journal of Health Psychology*, 27(12), 2729-2743. <https://journals.sagepub.com/doi/abs/10.1177/13591053211037730>
- Rasmitadila, R., Aliyyah, R. R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A. R. S. (2020). The perceptions of primary school teachers of online learning during the COVID-19 pandemic period. *Journal of Ethnic and Cultural Studies*, 7(2), 90-109. <https://www.jstor.org/stable/48710085>
- Shrestha, S., Haque, S., Dawadi, S., & Giri, R. A. (2022). Preparations for and practices of online education during the Covid-19 pandemic: A study of Bangladesh and Nepal. *Education and information technologies*, 27(1), 243-265. <https://link.springer.com/article/10.1007/s10639-021-10659-0>
- Sinaga, J., Wu, T., & Chen, Y. W. (2022). Impact of government interventions on the stock market during COVID-19: a case study in Indonesia. *SN Business & Economics*, 2(9), 136. <https://link.springer.com/article/10.1007/s43546-022-00312-4>
- Soraya, R., Mardiana, N., Mardiani, N., Kartika, R., & Siregar, W. (2022). Learning management strategy new normal era. In *E3S Web of Conferences* (Vol. 339, p. 06002). EDP Sciences. https://www.e3s-conferences.org/articles/e3sconf/abs/2022/06/e3sconf_10icmr-2insaef2022_06002/e3sconf_10icmr-2insaef2022_06002.html

- Okilanda, A. (2025). Students' views on Indonesian higher education amid the COVID-19 pandemic. *Contemporary Educational Research Journal*, 15(2), 99-107. <https://doi.org/10.18844/cerj.v15i2.9700>
- Sudarma, P., Karta, I. W., & Fahrudin, F. (2022). Implementation of Teacher-Parent Collaboration Learning During the COVID-19 Pandemic. *International Journal of Multicultural and Multireligious Understanding*, 9(8), 483-487.
- Sukmawati, S., Sujarwo, S., Soepriadi, D. N., & Amaliah, N. (2022). Online English Language Teaching amid COVID-19 Pandemic: Non EFL Students' Feedback and Response. *Al-Ta lim Journal*, 29(1), 62-69. <http://journal.tarbiyahainib.ac.id/index.php/attalim/article/view/732>
- Sutrisno, A. (2022). Language of Lockdowns: New Words and COVID-19 Measures in Indonesia and the Philippines. *Sukrasana: Journal Social and Political Review*, 1(1), 49-62. <https://mengeja.id/journal/index.php/sukrasana/article/view/67>
- Syam, R. A., & Achmad, W. J. J. M. (2022). Online learning in higher education: analysis during the COVID-19 pandemic. *Jurnal Mantik*, 5(4), 2256-2261.
- Syaputri, W. (2014). Pronunciation errors made by senior high school students in reading English texts aloud. *English Education Journal*, 4(1). <https://journal.unnes.ac.id/sju/eej/article/view/6641>
- Syaputri, W. (2019). First language morphological interference of English language learners (EFL). In *Seventh International Conference on Languages and Arts (ICLA 2018)* (pp. 617-619). Atlantis Press. <https://www.atlantis-press.com/proceedings/icla-18/55914562>
- Tampubolon, M. (2022). Impoverishment of the poor and derogation of human rights during the COVID-19 pandemic in Indonesia: Testing the emergency measure and Siracusa principles in large-scale social restriction. *Journal of human rights and social work*, 7(1), 91-103. <https://link.springer.com/article/10.1007/s41134-021-00174-0>
- Tizazu, A. M., Mengist, H. M., & Demeke, G. (2022). Aging, inflammaging and immunosenescence as risk factors of severe COVID-19. *Immunity & Ageing*, 19(1), 53. <https://link.springer.com/article/10.1186/s12979-022-00309-5>
- Ulum, H. (2022). The effects of online education on academic success: A meta-analysis study. *Education and information technologies*, 27(1), 429-450. <https://link.springer.com/article/10.1007/s10639-021-10740-8>
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & health sciences*, 15(3), 398-405. <https://onlinelibrary.wiley.com/doi/abs/10.1111/nhs.12048>
- Verawardina, U., Asnur, L., Lubis, A. L., Hendriyani, Y., Ramadhani, D., Dewi, I. P., ... & Sriwahyuni, T. (2020). Reviewing online learning facing the COVID-19 outbreak. *Talent Development & Excellence*, 12.
- Wilson, V. G. (2022). New and Emerging Viruses. In *Viruses: Intimate Invaders* (pp. 255-277). Cham: Springer International Publishing. https://link.springer.com/chapter/10.1007/978-3-030-85487-4_11
- Zhang, J. J., Dong, X., Liu, G. H., & Gao, Y. D. (2023). Risk and protective factors for COVID-19 morbidity, severity, and mortality. *Clinical reviews in allergy & immunology*, 64(1), 90-107. <https://link.springer.com/article/10.1007/s12016-022-08921-5>