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Survey Study on the Increase of Arabic Learning Due to Smartphones

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ABSTRACT

Background. The Covid-19 pandemic is growing and spreading in various countries, changing various fields of people's lives, especially in Indonesia for some time.

Purpose. The purpose of this observation is to find out the use of smartphones for students of public madarasah tsanawiyah (mtsn) 11 tanah datar when studying online. this observation is through a quantitative approach through a survey study method and selecting a sample by randomly determining 10 sources who live in the dormitory, 7th grade mtsn 11 tanah datar students have given questionnaire answers using Google from.

Method. The research tool was adapted from several writings, the tool made 5 questions.

Results. The results of the observation found that there were 7 people who had their own smartphones and 3 students used their parents' smartphones, relatives and other people in online learning, the time used to study via smartphones was between 5 to 6 hours. mtsn 11 flatland students using smartphones are classified as good categories in learning, doing and collecting assignments. So that students are able to discuss with their friends and all feel satisfied in using smartphones in online learning activities.

Conclusion. suggestions for further researchers to use attitude variables, behavior and the impact of using smartphones for mtsn 11 flatland students who have their own smartphones.

KEYWORDS

Arabic, Increase, Smartphones

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INTRODUCTION

Due to the corona virus covid 19 (Ogen, 2020) The shift from offline or face-to-face learning to online or networked learning (Nida dkk., 2023). With online learning, teachers use learning facilities, teachers use e learning with the skills that teachers have in using e learning such as using e learning. (Rodrigues et al., 2019) Using google classroom, the use of e learning online has become its own movement in online learning at this time in madrasah stanawiyah negeri 11 tanah datar. Not only in MTSN 11 Tanah Datar but all over Indonesia feel the impact of e learning. (Fryer & Bovee, 2018) this by taking into account and considering online management matters (Zuo et al., 2019) to help the implementation of online

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learning in Indonesia online learning has obstacles compared to students who learn face-to-face, online learning with e learning (Singh & Thurman, 2019) 92% of students choose and prefer faceto-face or offline learning in the classroom. 80% of teachers were found to be dissatisfied with online learning. The change in the form of offline learning is now online so that it becomes an obstacle for teachers, as a result, there are several typical teacher teachers in preparing for online implementation and learning, then several factors appear that dominate the implementation of online learning in covid 19. Online learning is carried out online by teachers (Xiong et al., 2018) of all levels of education from primary to tertiary level, Learning is a communication process between teachers and learners. (Alawamleh et al., 2022) and learning resources in a learning environment. Learning is assistance channeled by the teacher (Lee & Tan, 2020) so that the process of transferring knowledge can take place (Sauermann et al., 2020), mastery of understanding skills and habits, and the formation of attitudes and beliefs in students. In other terms, learning is the process of helping students to learn well. (Letina, 2020). Terdapat beberapa pengertian menurut para ahli yang mengemukakan bahwa: pendapat Gagne tahun 1977 pembelajaran adalah serangkaian kegiatan atau peristiwa yang terjadi diluar yang disusun untuk mensupport beberapa proses belajar yang bersifat internal. Selanjutnya gagne mengatakan bahwa teorinya lebih lengkap dengan menyebutkan bahwa pembelajaran ditujukan untuk mennghasilkan belajar, keadaan eksternal harus disusun sedemikian rupa untuk menglaksanakan, mendudkung, dan menetapkan proses internal yang ada pada setiap kejadian dan situasi belajar siswa. Sedangkan belajar adalah suatu perubahan yang bersifat pasti (Amorim et al., 2019), remains in the action or ability of the lesson or exercise supported.

The development of science (Merrie et al., 2018), technology and art as well as various activities in the field of rapid education, demanding educational institutions to improve the quality of educational services. Improving the quality of this service aims to fulfill the needs of participants (De Guimarães et al., 2020) students in developing their potential optimally, through various activities provided by the school management, the high demands of these service needs, making schools have to race to grab the attention of the community. (Farinde-Wu et al., 2017), so that the community entrusts their children to attend educational institutions at MTSN 11 Tanah Datar the quality of education management is a determining factor in gaining public trust, it clearly looks difficult to think about but during the pandemic that hit the world, of course the school inevitably took the decision of the government Kemendikbud published guidelines for organizing learning from home in 2020 yesterday which reads: The Ministry of Education, Culture, Sports, Science and Technology (Kemendikbud) issued Circular Letter Number 15 of 2020 concerning Guidelines for Organizing Learning at Home in the Covid19 Spread Emergency. Chatalina Muliana Girsang, Expert Staff to the Minister of Education and Culture for Regulatory Affairs, said that Circular Letter No. 15 is to strengthen the 2020 Circular Letter of the Minister of Education, Culture and Culture No. 4 on the Implementation of Education in an Emergency of coronavirus disease (Covid).19). Today, learning services continue to follow Permendikbud Number 4 of 2020 and are refined by Secretary General Number 15 of 2020 with guidelines for the implementation of Covid-19 emergency BDR. chatarina at the afternoon talk. online in Jakarta on Thursday (05/28/2020). chatarina reminded again that, BDR activities are carried out to deliver meaningful learning experiences for students, without being burdened by the demands of completing all curriculum outcomes and focusing on life skills education, including the covid pandemic 19 learning materials are inclusive synchronous using age and level of education, cultural context, character and type of student specificity he said.

Chatarina added that BDR activities and assignments can vary between regions, education units and students according to their respective interests and conditions, including considering gaps in access to BDR facilities, the learning outcomes of students during BDR are given qualitative and useful feedback from teachers without being required to give quantitative scores/grades, and prioritize positive patterns of interaction and communication between teachers and parents, the methods and media for implementing BDR are carried out by distance learning which is divided into two approaches, namely online and offline distance learning (luring). Education in Indonesia has undergone enormous changes due to covid-19, therefore the planning of the learning process has also changed, which used to be offline now has changed to online, learning and teaching activities, of course, at MTSN 11 Subang children in Tanag flat district, for the pandemic, for the pandemic inevitably learn online from all levels of education from home.

Smartphone use among children (Hadad et al., 2020) who have just graduated from elementary school (grade 1 mtsn), of course the way of thinking and using smartphones with parental guidance, children will get a good way of learning according to what the teacher directs during the pandemic, of course by working with parents at home. (Dong et al., 2020) no wonder many children's grades have dropped, at the time of submitting assignments and how to answer the exam it is all due to controlling children playing cell phones at home. for parents who care about children's education (Yahirun et al., 2017) surely the way to control learning and playing cell phones should also be applied but parents who do not care about children's education (Ma, 2019) Surely the way of learning will be chaotic, the task is not completed, the exam is whatever it is, it will all have an impact on the child's score, if the direction from the teacher, of course the teacher will direct the implementation of his home whether it is carried out or not, everything will have results that will be obtained, so we don't need to be surprised anymore that many MTSN 11 Tanah Datar children lack direction and guidance at home. (Hong et al., 2022) There are many pros and cons to this online learning, some feel the method is quite effective, others argue that not everyone can follow online learning. then what online learning is effective? (Boling et al., 2012) One of the advantages of online learning is that we don't need to leave the house or go to school to learn, where and anytime as long as there is a smartphone and adequate internet network, learning can be done according to the time you have. (Yu et al., 2019) Besides the flexibility of time and place, online learning is also more affordable and able to provide broad insights. (Rapanta et al., 2020). How could it not be, without the need to pay for the building and maintenance of the place of study, you can get each class at a reasonable cost.

Teachers' methods to improve learning activities with smartphones (Anshari et al., 2017) elearning method is considered closer to the current generation of students who are known to be very integrated with technology products. Benefits of online learning (Assyfa Putri & Irwansyah, 2021).1. practical and flexible. With online learning, the interaction between teachers and students (Perera & John, 2020) It will be more practical because there is no need to travel to meet. besides that there is no classroom as a formal learning place. 2. environmentally friendly. indirectly you have reduced the pollution caused by motorized vehicles. 3. fun learning. teachers no longer use whiteboards markers but teachers can already use photos, videos and audio. everything will give you a more enjoyable learning experience. 4. save time and costs. in conventional learning. (Voutilainen et al., 2017) for two hours, for example, it takes 3 hours until the class starts because of moving rooms. both teachers and students must take the same travel time to reach the class used for learning. in addition there are additional costs for photocopying materials and so on. 5. easy to document. Students do not need to take notes because they can record and save the material that has been given by the teacher.

The disadvantages of online learning are. 1. limited internet access. if you are in an area that does not have stable internet access, then it will be difficult for you to access this e learning. 2. lack of interaction with the teacher, some e learning methods are only one-way, this causes the interaction between teachers and students to be reduced so that it will be difficult for you to get further explanation of materials that are difficult to understand. 3. . understanding of the material. The material taught in e learning is responded to based on different levels of understanding, depending on the ability of the user, some people may be able to grasp the material more quickly just by reading, but there are also those who need a long time, even there are also students who need a new explanation from their friends. The lack of supervision in learning. The lack of supervision for users of the e learning method makes users sometimes feel less focused, with the ease of access, some users tend to delay learning time, need awareness and supervision in learning this e learning method.

In this digital era, it has brought a huge impact on students' lives. (Matzavela & Alepis, 2021). seakan akan siswa dipaksa untuk beradaptasi lebih cepat dengan cara cara manual ke media digital dalam menjalani kehidupan mereka.terutama dalam dunia pendidikan ditengah merabaknya covid 19 (Nurkolis & Muhdi, 2020) lately the world of education must continue to run but using long distance. the tool used in MTSN 11 Tanah Datar is a smartphone, of course in using this smartphone, the school has explained how to use it and the time used to play this smartphone, not to forget that parents also take part in the success of what this e learning method is really beneficial for MTSN 11 Tanah Datar students. It should be realized that the unpreparedness of teachers and students for online learning is also a problem. transferring conventional learning systems to online systems (Ba, 2001) very sudden, without careful preparation. but all of this must still be implemented so that the learning process can run smoothly and students are actively participating even in the covid 19 pandemic.

Hypothesis of increased Arabic language learning due to smartphones (Albursan et al., 2019) it requires hard work between the school and the guidance of parents (Olivia Kim et al., 2019) Because without controlling students in using or using smartphones, it will not increase Arabic language learning because there are many things in smartphones that are good and bad. not all children are able to control how to play smartphones properly. (Abbasi et al., 2021). That is the importance of the teacher's role in explaining the material taught online, and the role of parents in controlling how children use smartphones and teachers and parents work together so that they can achieve this goal, namely increasing Arabic language learning due to smartphones.

RESEARCH METHODOLOGY

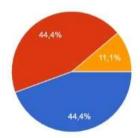
In a research, the method is something that can support the running and movement of the research. Why is this so, because in terms of identification the method is a surefire trick that a person does in order to obtain research results in the form of data. In this research, the types of methods used are, quantitative methods (Sarker et al., 2019). Quantitative method

RESULT AND DISCUSSION

This observation uses a quantitative approach (Xu et al., 2020), Because based on the concept of quantitative research, researching is concluding accurate data. This observation was held at Madrasah Tsanawiyah Negeri 11 Subang anak Batipuh District, Tanah Datar Regency, research time on June 20, 2022. The population in this observation was 10 mirid grade 7 mtsn 11 tanah datar. the researchers chose mtsn 11 tanah flat are; 1). mtsn 11 tanah flat school conducts research face to face.2). at school at mtsn 11 tanah flat when making observations while studying using smartphones

with group wa.3). researchers are very interested in the title given by the lecturer. The implementation of online learning activities through the role of teachers and parents is needed at mtsn 11 flatlands so that online activities are carried out accurately and accurately so that the results desired are in line with the material provided, talking about love certainly cannot be separated from the name hard work done by mtsn 11 flatlands students accompanied by teachers and parents. Because during this pandemic many students are unable to manage their time to play smartphones so of course this is a pr for teachers who teach, how teachers are able to direct and guide students towards a better direction.

Learning outcomes are (Cheboxarov et al., 2019) "It is a pattern of patterns of action, understanding, attitudes and values of aspirations and skills. (Amaechi, 2021)". Learning outcomes are the result of the learning process using measurement tools. the learning outcomes of some students of mtsn 11 flat land determine that interest and interest in learning Arabic decreases due to the use of smartphones, in this millennial era not only adults are familiar with smartphones, even children are already dependent on this small and mugil object so it is no wonder that parents give children smartphone facilities at an age that can be said to be underage, this has a good impact and a bad impact too. Most children think that smartphones are part of their lives. (Gough & Gough, 2019), In fact, children cannot last one day without a smartphone, the report card received by parents in addition to the form of children's achievement in one semester or one year is also a material for evaluation and reflection on the extent to which the role of parents guides children at home, especially in this pandemic condition, of course, children's supervision is more exrta than learning at school, because children's learning activities are mostly done at home and schools are closed to conduct face-to-face learning schools, several studies have concluded that learning from home or BDR for too long results in a decrease in the quality of children's learning. so suggestions for the future from researchers should be increased supervision of smartphone use. (Can et al., 2019) better in the future.



Learning with smartphones is favored by students

This is a questionnaire form with the question do you like learning with smartphones (Sarker, 2019)? 44.4% agreed with liking learning using smartphones. The desire of students to use smartphones is very large, it's just that the teacher is good at using what applications are used and managing the use of playing smartphones. 44.4% strongly agree answered the same as the agreed questionnaire above, it is true and there is no doubt that the student's desire to use a smartphone is very large. 11.1% answered that they did not agree to study with smartphones 11.1% of these students think that learning with smartphones makes students unfocused and difficult to focus. some researchers found the reason students agreed to study with smartphones was 44.4% and strongly agreed 44.4% this proves the reason students like smartphones is considered easier and more practical when studying, making assignments and collecting assignments individually or in groups, and very few.

students do not like learning with smartphones 11.1% on the pretext that they prefer face-to-face learning because students are able to pay attention clearly and have extraordinary chemistry when meeting with teachers in the local, of course this chemistry will not be obtained if they do not do face-to-face learning directly, the favorite of mtsn 11 flat land students using smartphones to study is very good but many of these students are not accompanied by their parents when playing smartphones.

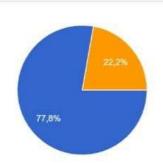


Figure 2. Student smartphone use accompanied by parents

The results of the questionnaire whose question is whether you learn to use a smartphone accompanied by parents (Chou & Chou, 2019)? 77.8% agreed that they were accompanied by parents and 22.2% disagreed. Parents are the core family closest to the child, parents must play an active role in efforts to protect the child, parents used to protect children from things that were thought to harm children, but nowadays parents have increased their duties due to the rapid development of technology. In today's era of technological development, there are children who use smartphones for positive things and there are also children who use smartphones for negative things. This is where the role of parents is to supervise their children in using technology in this day and age, we take for example technology that almost everyone uses it, from children to adults and even to adults, parents, namely android, this is where parents have to be smart to supervise their children in the use of android, for that to overcome the problem there are some tips from researchers that can be applied to help the problem of using android, 1. Accompany the child when using android. 2. Limit playing time when children can play and when children stop playing . 3. Perental control and limit what sites can be opened and which cannot be opened. parents have a very important role in advancing and maintaining generations, therefore parents must be more active in seeking supervision of the child.

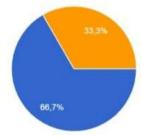


Figure 3. Understanding of teaching materials

The results of the questionnaire whose question did you understand the learning material using a smartphone? 66.7% agreed with the answer and 33.3% answered disagree. The understanding of students in accepting the material taught by the teacher to their students is certainly inseparable from the way the teacher conveys the material, in the results of the questionnaire of MTSN 11 flat land students agree or understand the learning material using smartphones, that the use of smartphones in educational programs makes the device a guideline for

the use of alternatives in media development, The material presented during online learning is certainly the same as face-to-face learning because the teachers who teach it are all the same, but smartphones are used in the world of education as mobile learning technology stated by Gonzalez, so that it can provide good cooperation to students to access learning materials or as a means of delivering learning materials, by utilizing smartphones as an intermediary for learning to provide more. In-depth in-depth opportunities for students because by utilizing smartphones students or learners can develop their knowledge through searching for information from social media, as well as practicing skills that will be honed, students' understanding of using smartphones to understand learning material if they make good use of it will be much better than dissolving in using smartphones regardless of time and place, students who do not understand the material taught by the teacher should be honest and the teacher will certainly look for effective ways for the smooth understanding of learning especially what is discussed is Arabic language lessons, requiring extra understanding so that students understand and the material is easily accepted.

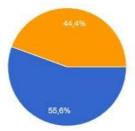


Figure 4. Student focus in learning

The questionnaire results with the question is whether you are learning using a smartphone you focus on learning? 55.6% answered agree and 44.4% answered disagree. The results of the questionnaire from the question of the level of focus of MTSN 11 Tanah Datar students said that the focus was 55.6% and those who did not focus on learning were around 44.4%. The reason why there are children who focus on learning there are children who do not focus on learning depends on many factors, the first is the level of intelligence of the child, the intelligence ability of students is important in influencing the form of fast or slow reception of information by answering or not, children will find it difficult to accept the lessons described or explained by the teacher if the level of focus and the level of intelligence of the student is weak. The second is the readiness and maturity of students who are ready to learn and mature in terms of thinking, of course they will focus on learning, the third is the willingness to learn the willingness to learn and accompanied by a great sense of responsibility, of course, has a good effect on the cause of the learning they want, the fourth is the model of delivering learning material, the success of students in the level of learning focus certainly depends on the teacher who delivers the material described by the teacher, students will focus if the above has been carried out and applied to learning when using a smartphone (Jahnke & Liebscher, 2020),

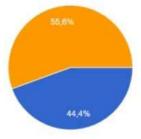


Figure 5: The effect of smartphones on students' intelligence

The questionnaire results whose question is whether smartphones affect the level of intelligence of students? 44.4% said yes it had an effect but 55.6% said it sometimes had an effect, for mtsn 11 tanah datar students who think that cellphones have no effect on the level of intelligence because they are not good at managing time and those who say they have an effect are due to the student's ability to manage time and what sites are viewed (Shenouda et al., 2018).

The results of observations knowing about the state of the respondents can be seen in the following table.

Gender
Male 6 people
Female 4 people
Smartphone ownership
Owned by 7 people
Owned by parents 3 people
Class

Table 1. Data results related to smartphone ownership

From the data above, there are 7 students who have their own smartphones (Twenge & Campbell, 2018), smartphone ownership at the age of 7th grade mtsn is still relatively small, because online learning forces them to have their own smartphones. besides that there are students who use smartphones owned by parents. Most of the men who use android in mtsn 11 tanah datar are caused because they ask to buy it from their parents on the pretext of studying online and looking for assignments. for android ownership itself a lot because it was bought by the parents earlier (Reid, 2018).

whatsapp is chosen during online learning during this pandemic because it is cost-effective and the way to use it is quite easy. Even the children of mtsn 11 tanah datar generally already have this whatsapp application on their smartphones, of course it will be easier to use, just the direction of the teacher who teaches it, the mechanism for using the whatsapp application when learning Arabic in grade 7 in using a smartphone, the way the learning mechanism uses whatsapp groups during a pandemic by entering learning as usual at 7.30 WIB. The teacher starts online learning into whatsapp by saying greetings and telling children before learning to read the Koran first at least one sheet of the Koran and continued by filling in the attendance in the wa group in order and then the teacher provides material by photographing today's material and sending it to the whatsapp group then the teacher explains what lessons are discussed today after explaining the material the teacher asks who does not understand the material given by the teacher, If the students have understood, then the questions are given and answered by the students, of course, they are given a specified time limit of 45 minutes, after the teacher gives the time limit, the teacher ends the meeting by reading alhamdulillah. so on until the subject runs out at 10 o'clock the children are rested for duha prayer for 15 minutes, and enter again until the lesson ends at 12.15 WIB.

When participating in this online learning, students are very enthusiastic in participating in Arabic language learning, although there are students who do not participate in participating in this Arabic language learning in local 7.4. it is all not separated from the responsibility of teachers and parents, even teachers and parents have advised and directed the children to become responsible individuals, especially for the education they carry. Learning during the pandemic at mtsn 11 tanah

datar certainly cannot be separated from the name smartphone. before children learn online or use smartphones, the principal and wakasis (deputy student affairs) gather children lined up in the field and explain how to use smartphones, of course this has been discussed with homeroom teachers and teachers who teach at mtsn 11 tanah datar. And including parental guidance is expected by the school When children learn to use smartphones, when studying Arabic subjects, students are always guided and directed by teachers and homeroom teachers while studying, the application used by teachers to succeed Arabic language learners at MTSN 11 Tanah Flat is the WhatsApp application.

Using smartphones for students at MTSN 11 Tanah Datar can work on assignments given by teachers to students can be done easily thanks to smartphones, because in essence the tasks given by the teacher are part of the learning process. Where the tasks given by the teacher to students are in accordance with the subject matter of the material provided, in online conditions doing student assignments is a learning activity directed at achieving student learning goals, starting from the design to student learning activities, students can do assignments from teachers even though online learning, can do assignments casually and easily. Because teachers use social media as online learning, this makes it easier for students to collect assignments because students are familiar with this social media application. it is the right tool if the teacher uses social media and it is also important for teachers to know student interest in this online learning.

Because this is very influential. one of the effects is that students do not like social media and hate online learning, to make policies it needs to be used as a study material for various parties, but it is still recognized positively that students are able to use samrtphone to get digital and electronic learning resources, such as browsing on operamini to find out teaching materials on youtube, tik tok, facebook, ig and video snacks because all the applications mentioned earlier can be used for learning.

Learning resources at this time are quite extensive, the teacher is not only the only learning resource figure, the virtual world is available and extensive learning resources.

CONCLUSION

The use of smartphones among children who have just graduated from elementary school (grade 1 mtsn) of course the way of thinking and using smartphones with parental guidance is much better. A child will get a good way of learning according to what the teacher directs during a pandemic, of course, by working with parents at home, no wonder many children's grades have dropped. At the time of collecting assignments and how to answer the exam, it was all caused by controlling children playing cellphones at home. for parents who care about children's education, of course, controlling learning and playing cellphones should be applied, but parents who don't care about children's education will definitely study chaotically, the task is not completed, the exam is whatever it is, it will all have an impact on the child's grades. If the direction from the teacher is of course the teacher will direct the implementation of the whether run or not everything will have results that will be obtained. So we don't need to be surprised anymore that many MTSN 11 Tanah Datar children lack direction and guidance at home, that's why many of the children's grades were unsatisfactory, all of that happened because of the above. Based on this research, we can also assess how the role of a teacher in learning, he is not only an educator, he also acts as an administrator, evaluator and supervisor for his students. Well, in this study it is not only the role of the teacher that influences the role of the parents is also very, very influential on the child's learning process.

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AUTHORS' CONTRIBUTION

- Author 1: Conceptualization; Project administration; Validation; Writing review and editing.
- Author 2: Conceptualization; Data curation; In-vestigation.
- Author 3: Data curation; Investigation.

REFERENCES

- Abbasi, A. Z., Shamim, A., Ting, D. H., Hlavacs, H., & Rehman, U. (2021). Playful-consumption experiences and subjective well-being: Children's smartphone usage. *Entertainment Computing*, *36*, 100390. https://doi.org/10.1016/j.entcom.2020.100390
- Alawamleh, M., Al-Twait, L. M., & Al-Saht, G. R. (2022). The effect of online learning on communication between instructors and students during Covid-19 pandemic. *Asian Education and Development Studies*, 11(2), 380–400. https://doi.org/10.1108/AEDS-06-2020-0131
- Albursan, I. S., Al Qudah, M. F., Dutton, E., Hassan, E. M. A. H., Bakhiet, S. F. A., Alfnan, A. A., Aljomaa, S. S., & Hammad, H. I. (2019). National, Sex and Academic Discipline Difference in Smartphone Addiction: A Study of Students in Jordan, Saudi Arabia, Yemen and Sudan. *Community Mental Health Journal*, 55(5), 825–830. https://doi.org/10.1007/s10597-019-00368-x
- Amaechi, E. (2021). Understanding Culture and Success in Global Business: Developing Cultural and Innovative Intrapreneurs in Small Businesses. In B. S. Thakkar (Ed.), *Culture in Global Businesses* (pp. 205–224). Springer International Publishing. https://doi.org/10.1007/978-3-030-60296-3_9
- Amorim, E., van der Stoel, M., Nagaraj, S. B., Ghassemi, M. M., Jing, J., O'Reilly, U.-M., Scirica, B. M., Lee, J. W., Cash, S. S., & Westover, M. B. (2019). Quantitative EEG reactivity and machine learning for prognostication in hypoxic-ischemic brain injury. *Clinical Neurophysiology*, *130*(10), 1908–1916. https://doi.org/10.1016/j.clinph.2019.07.014
- Anshari, M., Almunawar, M. N., Shahrill, M., Wicaksono, D. K., & Huda, M. (2017). Smartphones usage in the classrooms: Learning aid or interference? *Education and Information Technologies*, 22(6), 3063–3079. https://doi.org/10.1007/s10639-017-9572-7
- Assyfa Putri, A. N., & Irwansyah, I. (2021). EFEKTIVITAS KOMUNIKASI DALAM PEMBELAJARAAN ONLINE. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, *3*(1), 54–63. https://doi.org/10.47233/jteksis.v3i1.184
- Ba, S. (2001). Establishing online trust through a community responsibility system. *Decision Support Systems*, 31(3), 323–336. https://doi.org/10.1016/S0167-9236(00)00144-5
- Boling, E. C., Hough, M., Krinsky, H., Saleem, H., & Stevens, M. (2012). Cutting the distance in distance education: Perspectives on what promotes positive, online learning experiences. *The Internet and Higher Education*, 15(2), 118–126. https://doi.org/10.1016/j.iheduc.2011.11.006
- Can, Y. S., Arnrich, B., & Ersoy, C. (2019). Stress detection in daily life scenarios using smart phones and wearable sensors: A survey. *Journal of Biomedical Informatics*, 92, 103139. https://doi.org/10.1016/j.jbi.2019.103139
- Cheboxarov, V. V., Yakimovich, B. A., Lyamina, N. V., Abd Ali, L. M., & Zhiganov, I. G. (2019). Some Results of a Study of Wave Energy Converters at Sevastopol State University. *Applied Solar Energy*, 55(4), 256–259. https://doi.org/10.3103/S0003701X19040029
- Chou, H.-L., & Chou, C. (2019). A quantitative analysis of factors related to Taiwan teenagers' smartphone addiction tendency using a random sample of parent-child dyads. *Computers in Human Behavior*, 99, 335–344. https://doi.org/10.1016/j.chb.2019.05.032
- De Guimarães, J. C. F., Severo, E. A., Felix Júnior, L. A., Da Costa, W. P. L. B., & Salmoria, F. T. (2020). Governance and quality of life in smart cities: Towards sustainable development

- goals. *Journal of Cleaner Production*, 253, 119926. https://doi.org/10.1016/j.jclepro.2019.119926
- Dong, C., Cao, S., & Li, H. (2020). Young children's online learning during COVID-19 pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services Review*, 118, 105440. https://doi.org/10.1016/j.childyouth.2020.105440
- Farinde-Wu, A., Glover, C. P., & Williams, N. N. (2017). It's Not Hard Work; It's Heart Work: Strategies of Effective, Award-Winning Culturally Responsive Teachers. *The Urban Review*, 49(2), 279–299. https://doi.org/10.1007/s11256-017-0401-5
- Fryer, L. K., & Bovee, H. N. (2018). Staying motivated to e-learn: Person- and variable-centred perspectives on the longitudinal risks and support. *Computers & Education*, 120, 227–240. https://doi.org/10.1016/j.compedu.2018.01.006
- Gough, H. A., & Gough, K. V. (2019). Disrupted becomings: The role of smartphones in Syrian refugees' physical and existential journeys. *Geoforum*, 105, 89–98. https://doi.org/10.1016/j.geoforum.2019.05.012
- Hadad, S., Meishar-Tal, H., & Blau, I. (2020). The parents' tale: Why parents resist the educational use of smartphones at schools? *Computers & Education*, 157, 103984. https://doi.org/10.1016/j.compedu.2020.103984
- Hong, Y., Xie, H., Bhumbra, G., & Brilakis, I. (2022). Improving the accuracy of schedule information communication between humans and data. *Advanced Engineering Informatics*, 53, 101645. https://doi.org/10.1016/j.aei.2022.101645
- Jahnke, I., & Liebscher, J. (2020). Three types of integrated course designs for using mobile technologies to support creativity in higher education. *Computers & Education*, *146*, 103782. https://doi.org/10.1016/j.compedu.2019.103782
- Lee, L. H. J., & Tan, S. C. (2020). Teacher learning in Lesson Study: Affordances, disturbances, contradictions, and implications. *Teaching and Teacher Education*, 89, 102986. https://doi.org/10.1016/j.tate.2019.102986
- Letina, A. (2020). Development of Students' Learning to Learn Competence in Primary Science. *Education Sciences*, 10(11), 325. https://doi.org/10.3390/educsci10110325
- Ma, M. (2019). Does children's education matter for parents' health and cognition? Evidence from China. *Journal of Health Economics*, 66, 222–240. https://doi.org/10.1016/j.jhealeco.2019.06.004
- Matzavela, V., & Alepis, E. (2021). M-learning in the COVID-19 era: Physical vs digital class. *Education and Information Technologies*, 26(6), 7183–7203. https://doi.org/10.1007/s10639-021-10572-6
- Merrie, A., Keys, P., Metian, M., & Österblom, H. (2018). Radical ocean futures-scenario development using science fiction prototyping. *Futures*, 95, 22–32. https://doi.org/10.1016/j.futures.2017.09.005
- Nurkolis, N., & Muhdi, M. (2020). Keefektivan Kebijakan E-Learning berbasis Sosial Media pada PAUD di Masa Pandemi Covid-19. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(1), 212. https://doi.org/10.31004/obsesi.v5i1.535
- Ogen, Y. (2020). Assessing nitrogen dioxide (NO2) levels as a contributing factor to coronavirus (COVID-19) fatality. *Science of The Total Environment*, 726, 138605. https://doi.org/10.1016/j.scitotenv.2020.138605
- Olivia Kim, U., Barnekow, K., Ahamed, S. I., Dreier, S., Jones, C., Taylor, M., Hasan, Md. K., & Basir, M. A. (2019). Smartphone-based prenatal education for parents with preterm birth risk factors. *Patient Education and Counseling*, 102(4), 701–708. https://doi.org/10.1016/j.pec.2018.10.024
- Perera, H. N., & John, J. E. (2020). Teachers' self-efficacy beliefs for teaching math: Relations with teacher and student outcomes. *Contemporary Educational Psychology*, *61*, 101842. https://doi.org/10.1016/j.cedpsych.2020.101842
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning

- Activity. *Postdigital Science and Education*, 2(3), 923–945. https://doi.org/10.1007/s42438-020-00155-y
- Reid, A. J. (2018). *The Smartphone Paradox: Our Ruinous Dependency in the Device Age*. Springer International Publishing. https://doi.org/10.1007/978-3-319-94319-0
- Rodrigues, H., Almeida, F., Figueiredo, V., & Lopes, S. L. (2019). Tracking e-learning through published papers: A systematic review. *Computers & Education*, *136*, 87–98. https://doi.org/10.1016/j.compedu.2019.03.007
- Sarker, I. H. (2019). Context-aware rule learning from smartphone data: Survey, challenges and future directions. *Journal of Big Data*, 6(1), 95. https://doi.org/10.1186/s40537-019-0258-4
- Sarker, I. H., Kayes, A. S. M., & Watters, P. (2019). Effectiveness analysis of machine learning classification models for predicting personalized context-aware smartphone usage. *Journal of Big Data*, 6(1), 57. https://doi.org/10.1186/s40537-019-0219-y
- Sauermann, H., Vohland, K., Antoniou, V., Balázs, B., Göbel, C., Karatzas, K., Mooney, P., Perelló, J., Ponti, M., Samson, R., & Winter, S. (2020). Citizen science and sustainability transitions. *Research Policy*, 49(5), 103978. https://doi.org/10.1016/j.respol.2020.103978
- Shenouda, J. E. A., Davies, B. S., & Haq, I. (2018). The role of the smartphone in the transition from medical student to foundation trainee: A qualitative interview and focus group study. *BMC Medical Education*, 18(1), 175. https://doi.org/10.1186/s12909-018-1279-y
- Singh, V., & Thurman, A. (2019). How Many Ways Can We Define Online Learning? A Systematic Literature Review of Definitions of Online Learning (1988-2018). *American Journal of Distance Education*, 33(4), 289–306. https://doi.org/10.1080/08923647.2019.1663082
- Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventive Medicine Reports*, 12, 271–283. https://doi.org/10.1016/j.pmedr.2018.10.003
- Voutilainen, A., Saaranen, T., & Sormunen, M. (2017). Conventional vs. e-learning in nursing education: A systematic review and meta-analysis. *Nurse Education Today*, 50, 97–103. https://doi.org/10.1016/j.nedt.2016.12.020
- Xiong, G., Zhang, J., Shi, D., & He, Y. (2018). Parameter identification of solid oxide fuel cells with ranking teaching-learning based algorithm. *Energy Conversion and Management*, 174, 126–137. https://doi.org/10.1016/j.enconman.2018.08.039
- Xu, P., Li, J., Meda, A., Osei-Yeboah, F., Peterson, M. L., Repka, M., & Zhan, X. (2020). Development of a quantitative method to evaluate the printability of filaments for fused deposition modeling 3D printing. *International Journal of Pharmaceutics*, 588, 119760. https://doi.org/10.1016/j.ijpharm.2020.119760
- Yahirun, J. J., Sheehan, C. M., & Hayward, M. D. (2017). Adult children's education and changes to parents' physical health in Mexico. *Social Science & Medicine*, 181, 93–101. https://doi.org/10.1016/j.socscimed.2017.03.034
- Yu, T., Man, Q., Wang, Y., Shen, G. Q., Hong, J., Zhang, J., & Zhong, J. (2019). Evaluating different stakeholder impacts on the occurrence of quality defects in offsite construction projects: A Bayesian-network-based model. *Journal of Cleaner Production*, 241, 118390. https://doi.org/10.1016/j.jclepro.2019.118390
- Zuo, W., Zhu, W., Chen, S., & He, X. (2019). Service quality management of online car-hailing based on PCN in the sharing economy. *Electronic Commerce Research and Applications*, *34*, 100827. https://doi.org/10.1016/j.elerap.2019.100827

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