The Effectiveness of Online Learning on Psychology Education Courses of Children With Special Needs in Special Education Students

Hayatun Thaibah[1*], Muhammad Arsyad[2]
[1,2]Universitas Lambung Mangkurat, Banjarmasin, Indonesia

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ABSTRACT

The role of educators is to develop teaching methods in the Psychology of Educational Children with Special Needs lectures so that students gain knowledge, learning experiences, and easy access through online discussion forums during the COVID-19 pandemic. This study aimed to determine the effectiveness of online learning on educational psychology courses for special education students. This research hypothesizes that the online teaching method using WhatsApp is effective for The Educational Psychology of Children with Special Needs course. The research method is a Quasi Experiment. The subjects of this study were students of special education study programs at the University of Lambung Mangkurat, Banjarmasin city. The data collection method used the test method, through pre-test and post-test. The data analysis technique is the t-test technique. The results of the research from pre-test and post-test data using a paired sample-t test showed that the activities of special education students in the educational psychology course for Children with Special Needs using online learning using WhatsApp turned out to be quite effective.

INTRODUCTION

The government's appeal to implement social distancing to prevent the spread of the COVID-19 outbreak has limited direct meetings, including in the world of education. Face-to-face teaching and learning activities in the classroom have shifted to online distance education. The Directorate General of Higher Education of the Ministry of Culture and the Ministry of Education stated that 353 universities implement distance learning. This number will continue to grow along with the rampant COVID-19 outbreak, appeals for social distancing, and Large-Scale Social Restrictions. Law on Higher Education number 12 years 2012 article 31 concerning Distance Education explains that it is a teaching and learning process carried out remotely through various communication media (Saphira, 2020).

Regulation of the Minister of Education and Culture Number 109/2013 Article 2, Distance education aims to provide higher education services to community groups who cannot attend face-to-face education and to expand access and facilitate higher education services in learning. Distance Education is an education system with the characteristics of open, independent learning and complete learning by utilizing Technology, Information, and Communication, and/or using other technologies and/or in the form of university-integrated learning (Saphira, 2020).

Distance education must be connected to online learning as a facilitator medium. Online learning allows students to study anytime, anywhere, and with anyone. Online learning is a form of learning method that is perceived to be student-centered. According to Khoirunnisa (2018), the role of educators can be described as active facilitators, namely providing material to be explored for students and guiding students

to achieve accurate understanding through discussion forums or online chats. The development of online teaching materials for educational psychology for children with special needs is expected to provide a different source of knowledge, a varied learning experience, and better flexibility and ease of access in this course. Online learning media allows students to learn through gadgets in their respective places without attending class learning.

Psychology is an essential contribution to being able to provide concepts by explaining, predicting, controlling, and resolving the problems of children who have obstacles in social, emotional, cognitive, physical, motor, and other aspects. Collaborating with other stakeholders in the child's biopsychosocial system is a real contribution to the field of psychology. The system involves children, families, communities, educators, and the education system, as well as other professionals. Topics in educational psychology include human development related to education, child diversity, learning, effective teaching, creativity in education, motivation in education, students who have privileges, assessment, and others (Maulidiyah & Yoenanto, 2022).

Online learning or e-learning is a learning process delivered or facilitated by electronic technology, especially information and communication technology. The learning process in tertiary institutions in the current era of advances in information technology has experienced a shift, especially in terms of the approach which initially used a face-to-face approach, such as lecturers and students in the classroom, which has now changed to an online approach. The need for online learning facilities in tertiary institutions is significant because several considerations include easy and fast online learning to assist the learning process in class and outside the classroom. Online learning allows students to explore, search, deepen, and broaden subject matter. What he learned through various learning sources, with online learning, also encourages the emergence of self-expression in students to want to learn, explore knowledge and actively possess information through technology (Divayana, 2017).

Physically, students and lecturers are separated, but the communication process continues, interacting with each other or collaborating. The benefit of using online learning is that it can shorten the time, and students can interact with lecturers and other students. In addition, the information received can be shared with other students, and teaching materials can be accessed at any time and repeatedly. Under such conditions, students can maximize their mastery of learning materials. The teacher's role in online learning is as a facilitator (Alimuddin & Nadjib, 2015).

Other research on student readiness to use online learning shows that three out of four indicators of student readiness in implementing online learning show the ready category and 1 indicator is in the unprepared category, namely the indicator, namely the positive attitude of students towards computer and internet technology (Setiaji & Dinata, 2020). The causes for students having difficulty accessing online learning include unstable or inadequate network conditions, gadgets/devices that are not compatible with online learning applications, and limited internet quota (Maulana & Hamidi, 2020).

There are two methods of learning from home: online distance learning and offline learning. Distance learning within the network combines electronic and internet-based technology. In contrast, distance learning outside the network can be carried out

through television broadcasts, radio, self-learning modules, printed materials, and learning media from objects in the surrounding environment (Direktorat Sekolah Dasar, 2020).

Learning is currently very possible given the availability of the internet and the ease of accessing various web and social media that make it possible to carry out online learning activities such as Schoology, Edmundo, Facebook, Line, WhatsApp, and other social media. The purpose of this activity is, of course, to increase the efficiency and effectiveness of students, transparency, and learning accountability (Rizal, 2019). Online learning is carried out from various applications as support in learning, starting from using applications such as zoom, google meet, and other online media platforms such as google classroom, WhatsApp group, and so on. The Google Classroom application was chosen to help students and lecturers as teachers conduct lectures online. Google Classroom is an application in the form of a learning management system provided by Google and can be linked to email, making it easy to access (Suhada et al., 2020).

This research focuses on the use of WhatsApp as an online learning medium. So, WhatsApp is a social media application designed to make it easier for users to communicate through the various features available. Some of the features in the WhatsApp application include group chat, WhatsApp on the web and desktop, WhatsApp voice and video calls, end-to-end encryption, photo and video sending, voice messages, and documents. Through the various features provided, WhatsApp social media can be utilized, including education. WhatsApp in education is included in educational technology, which can function as a communication medium in managing education and educational development. As an education manager, WhatsApp's function includes managing educational organizations and managing people involved in education. Meanwhile, the function of WhatsApp in educational development includes using educational technology in learning activities to increase learning effectiveness (Abdulhak & Darmawan, 2015).

Searching for the meaning of the two words psychology and education can be used as a basis to understand further and define educational psychology. Educational psychology is a science that can be applied in everyday life, especially in the procedures for managing to learn. Educational psychology is a discipline of psychology that investigates psychological problems that occur in the world of education. Tardif (Islamuddin, 2012) also said that Educational psychology is a field of study that deals with applying knowledge about human behavior to business education, including the context of teaching and learning, the process of teaching and learning, and outcomes of teaching and learning (Sailer et al., 2019). Various theories, methods, problems, and techniques characterize educational psychology.

Educational psychology is a relatively young science, which illustrates the importance of psychology for the world of education and subjects to develop material from these subjects quickly. According to Woolfolk (2009), educational psychology is a distinctive discipline that has theories from various theories, methods, problems, and techniques. Educational psychology studies human procedures for learning and regular educational arrangements or interventions for effective learning. Duchesne & McMaugh (2016) state that educational psychology is a branch of psychology that studies students' conditions and their implications for the learning process. This means that educational psychology can play a role in creating several effective ways of teaching.

Theories in educational psychology can be used to help children with special needs in education, such as at school. The main task is to teach children with special needs effectively. There are several general concepts of effective teaching for children with special needs, including emphasizing prevention, teaching learning-learning skills, providing frequent feedback, using various teaching strategies that involve children actively in lessons, using effective classroom management methods, and coordinating additional services with teaching during teaching and learning activities in schools (Maulidiyah & Yoenanto, 2022).

Children with Special Needs are children who educationally require specific services that differ from children in general. According to Yuwono & Utomo (2015), children with special needs have significant interindividual and intraindividual differences. They require special services in various aspects of life, such as learning, communication-interaction with the environment, and others, to develop their potential for education and teach what is necessary. So, educational psychology course for special education students is a course that teaches psychology and education for children with special needs.

Children with needs deviate from the average normal child as seen by their physical, mental, sensory, and neuromuscular characteristics, social and emotional behavior, ability to communicate, or a combination of two or more of the above causes the child to need modification. From school assignments, learning methods, or other related services aimed at developing children's potential to the fullest (Suharsiwi, 2017). There are two categories of children with special needs, namely children with special needs are temporary, namely learning barriers caused by external factors such as trauma experienced in previous events, and children with special needs are permanent, namely learning barriers caused by internal factors such as direct consequences from the disability experienced (Widiastuti, 2019).

Children with special needs who experience difficulties can be identified through criteria that are indicators of learning difficulties so that children with special needs can receive lessons according to their abilities and are given guidance according to the rights they should receive so that they can achieve optimal abilities (Ulva & Amalia, 2020). Several types of children with special needs are as follows: children with autism, children with mental retardation, children with attention deficit disorder, and children with sensory, physical, and mental health problems (Maulidiyah & Yoenanto, 2022).

The educational psychology course for Children with Special Needs requires students to understand the material in depth and use this material to analyze examples of cases that occur in society so that they need learning resources that can make students more active and independent, especially to find out psychological factors for children with special needs. Learning in the Special Education department facilitates the development of students' potential abilities into abilities that can be used to achieve logical, critical, systematic, and innovative thinking (Thaibah & Arsyad, 2020). This research is expected to determine the effectiveness of online learning for educational psychology courses for Children with Special Needs special education students. This study aimed to determine the effectiveness of online learning on educational psychology courses for special education students.

RESEARCH METHOD

General Background

The research method used is experimental research. According to Sugiyono (2015), experimental research is a method used to find the effect of certain treatments on others under controlled conditions.

Participants

The research subjects in this study were students of the Special Education study program, Faculty of Teacher Training and Education, Lambung Mangkurat University, Banjarmasin, in the second semester. The sampling technique used purposive sampling, the total population was 38 students, but researchers only took a sample of 32 students. This research was conducted for three months, from March 2020 to May 2020. The data collection method in this research used the test method, through pre-test and post-test. The effectiveness of online learning is reviewed from two approaches: First, comparing the distribution of data before the action (pre-test) and after the action is given (post-test). The data distribution, in this case, includes the average value of the maximum value and the minimum value using Ms. Program Excel and SPSS version 21. In addition, a comparison of data distribution was also carried out on test results based on the instrument grid in each cycle to see changes in student abilities due to implementing online learning through WhatsApp. The data analysis technique used in this study is the t-test technique. This research data analysis technique also uses the normality test and homogeneity test.

Instrument and Procedures

Test instruments are given to determine the effectiveness of online learning (WhatsApp) in educational psychology courses for children with special needs for students of special education study programs by conducting an initial learning test first. After the grades are obtained, students receive instruction via the whatApps group by sending learning materials and giving assignments and explanations through voice notes. After three months running, students are given a final learning test in the form of the same instrument as the initial learning test.
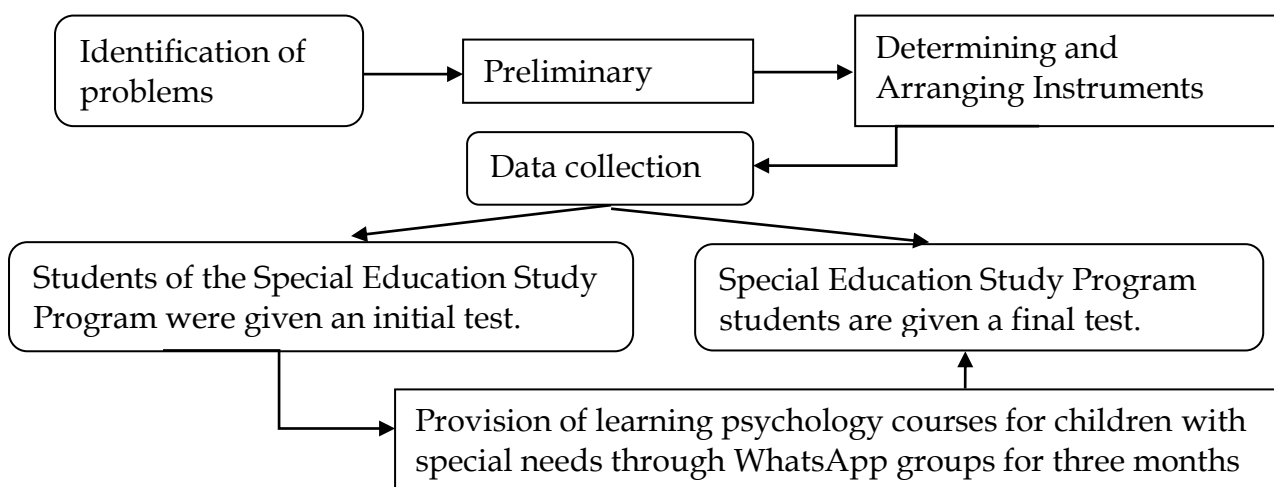

Figure 1. Research procedure.

Data Analysis
The data analysis technique used in this research is the t-test technique. The data analysis technique used in this study is a quantitative descriptive analysis by describing all data and facts collected in the form of narratives and arguments based on field data obtained using statistical data tables (Sugiyono, 2015). The value of student learning outcomes (cognitive and psychomotor domains) are as follows: 80 - 100 = Very Effective; 66 - 79 = Effective; 56 - 65 = Fairly Effective; 40 - 55 = Less Effective; 30 - 39 = Failed.

RESULTS AND DISCUSSION
The learning outcomes of the educational psychology course for children with special needs, which is given to students of special education study programs, are carried out utilizing a questionnaire, namely with two tests, namely the pre-test, which is given before learning, and the post-test which is given after learning. Pre-test and post-test scores for mastery of material related to the courses given to 32 subjects. The results of the research data obtained can be seen in Table 1.

Table 1. Recapitulation of pre-test and post-test results educational psychology of children with special needs course.

	Intial Name	Pre Test	Post Test		Intial Name	Pre Test	Post Test
1.	M.A	60	80	17.	N.K.D	50	70
2.	N.A	65	80	18.	S	45	65
3.	M.HI	60	90	19.	D.B.F	40	85
4.	D.T	60	60	20.	H	45	75
5.	F.K	70	85	21.	N.M	75	80
6.	D.S	60	75	22.	M.F	40	65
7.	A.N	55	85	23.	P.E	55	80
8.	F.D	40	80	24.	W.A	55	80
9.	D.P	70	65	25.	A	40	70
10.	D.A	45	95	26.	N.Q	70	80
11.	I	70	70	27.	S.H	40	65
12.	S.R	45	90	28.	N.R	45	80
13.	M.R	65	85	29.	A.A	50	85
14.	A.K	65	70	30.	W.N	40	60
15.	R.R	55	65	31.	M.A.A	40	85
16.	C.A.M	40	85	32.	N.As	45	50

The results of the study obtained from the pre-test and post-test results showed that two subjects got permanent results, namely DT and I. One subject who experienced a decline was on behalf of DP. However, there is a good improvement in most of the online learning in the child with special needs Educational Psychology courses. This was also carried out by Markamah et al. (2022) through research which resulted in the average post-test score being higher than the average pre-test score. Namely, 27 children who worked on pre-test questions scored less than the standard assessment, and three children received a value that reached the specified value. Then the children were given mathematics learning, so the results obtained by 12 reached standard values when working on post-test questions.

Table 2. Recapitulation of the average category of student learning outcomes.

	Amount (Subject)	Category	Percentage (%)
1.	18	Very Effective	56.25
2.	6	Effective	18.75
3.	7	Fairly Effective	21.88
4.	1	Less Effective	3.12

The research that has been carried out aims to determine the effectiveness of online learning using WhatsApp for educational psychology courses with special needs students in Special Education, showing that there are several categories of very effective, effective, moderately effective, and less effective. Table 2 shows that online learning using WhatsApp can be seen by 56.25% with a very effective category of 18 students; 18.75% with an effective category of 6 students; 21.88% with quite fairly effective category as many as 7 students; 3.12% with less effective category as many as one students. The results of this study are relevant to research conducted by Mustakim (2020), who researched the effectiveness of online learning using online media during the Covid-19 pandemic in mathematics subjects, which stated that describing students assessing mathematics learning using online media was very effective (23.30%), most rated it as effective (46.70%), and rated it as normal (20.00%). The results of other studies showed 17.65% in the very good category, 29.40% in the good category, 29.40%% in the good category, 17.65% in the less category, and 6.9% in the very poor category in research that conducted by Saragih & Ansi (2020) regarding the effectiveness of using WhatsApp groups during the Covid-19 pandemic for educators. The percentage of online learning for special education psychology courses for students at Lambung Mangkurat University Banjarmasin is the most effective. The value increases from the pre-test results.

This is relevant to the results of Salim's research (2018), showing that there is an effect of pre-test and post-test on learning readiness. This can be seen from the difference in the average learning readiness of students whose learning is accompanied by a pre-test and post-test and those whose learning is without a pre-test and post-test. The results of the calculation of statistical analysis of pre-test and post-test data using the paired sample t-test on SPSS version 21 are in Table 3.

Table 3. Result of Paired sample statistics.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	53.13	32	11.41	2.01
	Postest	76.09	32	10.45	1.84

Table 3 shows that the initial test on the educational psychology course for special education students before being given online learning resulted in 11.41 and the last test with 10.45 results. The number of respondents taken as many as 32 subjects with a significant 0.00. The results of the research support this research by Salim (2018), namely that giving pre-tests and post-tests affects student learning outcomes. This can be seen from the difference in the average learning outcomes of students whose learning is accompanied by a pre-test and post-test and the learning outcomes of students without a pre-test and a post-test. Calculating the difference test of the two

average student learning outcomes obtained tcount > tregister (at a significant level of 5% or 1%).

Tabel 4. Result of Paired Samples Test.

	Mean	Std. Deviation	Std. Error Mean	95% Confidence		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 Pretest-Postest	-22.96	14.85	2.62	-28.32	-17.61	-8.74	31	.000

Table. 4 shows that the results of the t test are obtained with a t value of -8.745 and a significance level of 0.000, while the t table alpha value of 0.05 (df 31) is 2.04. The value of tcount > ttable (-8.745 > 2.042) and a significance value of < 0.05 (0.00 < 0.05) thus, H0 is rejected, and H1 is accepted. So, the activities of special education students in the educational psychology course for special education students using online learning are effective. Furthermore, the final test results showed that the average final test score was 53.13 while the initial test average score was 76.09, meaning an increase of 22.96. The results of research conducted by Nida et al. (2020) showed that the use of online learning with WhatsApp shows that the blended learning model is better than the direct learning model for the ability to think creatively mathematically, but judging from the amount of anxiety the direct mathematics learning model is better than the station rotation learning model. The results of another study from Koomson (2018) state that the results of demographic reports are in accordance with traditional adult learners as described in the literature. About 89 percent of students indicated working, while 54 percent were engaged in full-time employment. It can be concluded that using WhatsApp Messenger in the context of blended mobile learning is not a distraction for students but rather a 'help' to help solve contextually disturbing distance learning situations in Ghana.

The learning process basically cannot be separated from the teaching process. In general, there are two teaching concepts: teaching as a process of delivering subject matter and teaching as a process of regulating the environment. In accordance with the characteristics of student-oriented learning, the learning process can occur anywhere. The classroom is one of many places for students to study because they can study anytime. Students can take advantage of various learning places according to the needs and nature of the subject matter (Warso, 2014). The application of online learning has several things, namely, making it easier and increasing time. Learning activities are very flexible. Namely, time can share information between lecturers and students at any time, the quality and performance of lecturers can develop for the better, reduce the gap between lecturers and students, and simplify the process. Storage of study materials. The use of WhatsApp for users is to enliven group chats on WhatsApp during discussions, participate more actively in WhatsApp group chat discussions, and actively participate in discussions of the learning materials provided. Discussion participants will be satisfied with the exchange of information. The use of the WhatsApp application as a learning tool is included in the effective category.

Nevertheless, it can still be improved to be very effective if a re-evaluation is carried out on WhatsApp users themselves (Hamidy, 2021; Jumiatmoko, 2016).

Research conducted by Awada (2016) shows that the use of WhatsApp is more effective than ordinary learning in improving students' abilities and increasing their motivation. The research findings show that using WhatsApp is significant in helping students learn and improve proficiency in using English. This study requires the use of WhatsApp to be encouraged to students and institutions by providing internet facilities as a top priority in current learning (Izyani & Embi, 2016). Several studies relevant to this study are the research of Khusaini et al. (2017). The results show that using WhatsApp in lectures can help students discuss with each other and with lecture lecturers. Khusniyah et al. (2019) results show that blogs positively influence the learning process, so it also impacts increasing the value obtained by students.

Online learning facilitates interaction between students and teaching materials. Likewise, the interaction between students and lecturers and between students. Students can share information on various matters related to lessons and other needs for student self-development. Lecturers can send teaching materials online, which students can then download. Lecturers can also assign assignments to students and submit them via email. In addition, interaction can be carried out directly between students and lecturers or with fellow students through discussion forums (e.g., mailing lists and discussion forums). The online learning activities that have been carried out for about three months are felt by students to be boring and uninteresting, so it is hoped that the lecturers will be more creative and innovative in utilizing the media used to make the learning process more enjoyable (Aswasulasikin, 2020).

CONCLUSION

Based on the research results on the effectiveness of online learning, whatapps online learning is quite effective in educational psychology courses for children with special needs. This can be seen from the results of the pre-test and post-test carried out. The results show that using WhatsApp in lectures can help students discuss with each other and with lecture lecturers. The suggestion put forward by the researcher is that online learning using whatapps has several obstacles, one of which is less innovative learning for the psychomotor and affective domains because educational psychology courses for children with special needs also use practical learning, so it cannot be given to students and also related to the network of students who are far from urban areas.

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*Hayatun Thaibah, M.Psi, Psikolog. (Corresponding Author)
Faculty of Teacher Training and Education, Special Education Study Program,
Universitas Lambung Mangkurat, Banjarmasin city.
Jl. Bridjen Hasan Basri, Banjarmasin city 70123, South Kalimantan, Indonesia
Email: hayatun.thaibah.plb@ulm.ac.id

Muhammad Arsyad, M.Psi, Psikolog.
Faculty of Teacher Training and Education, Counseling Guidance Study Program,
Universitas Lambung Mangkurat, Banjarmasin city.
Jl. Bridjen Hasan Basri, Banjarmasin city 70123, South Kalimantan, Indonesia
Email: arsyad.bk@ulm.ac.id