

## The Effectiveness of Physical Education Health and Recreation Learning in the Limited Face-to-Face Period

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### Abstract

*The aim of this research is to find out the effectiveness of PJOK learning in limited face-to-face sessions at SMAN 8 Mandau. This type of research is ex-post facto research, ex-post facto research is a systematic empirical investigation in which the researcher does not control the independent variables directly because the existence of these variables has occurred or because the variables are basically not manipulated. The research was conducted at SMAN 8 Mandau on all students of class XI Mipa. SMAN 8 Mandau is located right in the town of Duri so it's easy to reach the location. The time used to carry out this research is starting from July 2022 to August 2022. The sampling is carried out by Total Sampling, where the population is used as the overall sample which amounts to class XI MIPA SMAN 8 Mandau, totaling 178 people. The instrument that will be used in this study is a questionnaire or questionnaire in conducting a survey on the effectiveness of PJOK learning in a limited face-to-face period using the Guttman Scale. Based on the calculation of the average score of the overall learning effectiveness of 66%. The scoring criteria of 63% are in the range of values between 48%-79% with Good Category. This means that the effectiveness of PJOK learning in the limited face-to-face period at SMAN 8 Mandau is very effective even though there are some or a small number of students who do not like sports lessons.*

**Keywords:** Learning, Health Physical Education, Limited face-to-face

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## INTRODUCTION

PJOK learning is one of the subjects in school and is a driving medium to train the development of motor skills, physical abilities, knowledge, sportsmanship attitudes, habituation of healthy lifestyles and the formation of mental, emotional, spiritual, and social characters in order to achieve national education goals. . The function of education is to develop abilities, shape personality traits so that students can become better individuals. However, at this time there are many obstacles in learning due to the new virus, namely Covid-19. PJOK education is a process through physical activity designed to improve physical fitness, develop motor skills, knowledge and behavior of healthy and active living, sportsmanship, and emotional intelligence (Wicaksono, 2019). In addition, PJOK learning in schools does not direct students to master certain sports, but prioritizes the process of student motor development. Where students are given many opportunities to carry out meaningful learning activities and allow students to develop their concept of movement and can increase their ability and confidence in displaying various kinds of motility (Trimantara, 2020). PJOK education is a learning activity to improve physical fitness and apply a healthy lifestyle, sportsmanship, emotional intelligence, and is given many opportunities to carry out learning activities that are more meaningful and increase the ability and confidence of students..

Education is not only focused on the development of science, but education has pedagogical facilities that must be equipped with physical development, sports and health. Because motion is a basic activity for humans to get to know the world of science and

themselves naturally following the times (Syamsu, 2021). With PJOK subjects, children can do physical activities, gain knowledge, develop physical potential, and can optimize basic movements and also develop characters such as respect for others, never give up, honest, helpful and empathetic towards others (Apriliawati & Hartono, 2016). So it can be said that PJOK learning is a physical activity that is carried out in the learning process and gains understanding and knowledge and is even able to develop physical potential, basic abilities and good character formation for students, but with the Covid-19 pandemic, the PJOK learning process has a bit of an obstacle. because the learning process only through face-to-face is limited and practical activities are not allowed in the learning process.

Learning PJOK through offline is more effective than online learning because it is easier for teachers to interact with students both in theory and in practice. In addition, the teacher also continues to carry out online learning by asking students to watch learning videos such as basketball about basic shooting techniques from YouTube (Tumaloto, 2022). In the implementation of PJOK learning, there are three main teacher competencies, namely planning, implementation, and evaluation. PJOK learning is still experiencing many obstacles, but with the Covid-19 pandemic, many people finally understand and take advantage of existing learning applications, both for students and educators (Rochman et al., 2020). It can be said that by using learning applications, students and teachers can get a lot of information about the understandings about the learning they want to learn and are able to add insight from those who don't know to know. However, the offline learning process is more effective than online because it is easier for teachers to interact with their students both in theory and practice.

According to (Husdarta, 2009) explaining the purpose of physical education in simple terms, physical education provides opportunities for students to: (1) Develop knowledge and skills related to physical activity, aesthetic development, and social development, (2) Develop trust and the ability to master basic movement skills that will encourage participation in various physical activities, (3) Obtain and maintain an optimal degree of physical fitness to carry out daily tasks efficiently and in a controlled manner, (4) Develop personal values through participation in physical activity either as a group or individually, (5) Participate in physical activities that can develop social skills that enable students to function effectively in interpersonal relationships, (6) Enjoy fun and excitement through physical activity, including sports games.

Covid-19 is a collection of viruses that can infect the respiratory system. In most cases, this virus causes only mild respiratory infections, such as the flu. However, this virus can also cause severe respiratory infections, such as lung infections. This virus is transmitted through phlegm (droplets) from the respiratory tract, for example when in a crowded closed room with poor air circulation or direct contact with droplets. The virus can attack anyone. As a result of the COVID-19 pandemic, various policies have been implemented to break the chain of transmission of the COVID-19 virus in Indonesia. One of the efforts made by the government in Indonesia is to apply an appeal to the public to practice physical distancing, namely an appeal to maintain distance between people, stay away from activities in all forms of crowds, associations, and avoid gatherings that involve many people (Siahaan, 2020). So with the COVID-19 pandemic, there are various changes that must be followed in order to break the chain of the spread of COVID-19. The Indonesian government carries out various policies, including by giving an appeal to the public to keep their distance, wash their hands, not to crowd and always wear masks, this also applies in the world of learning, this makes the process of teaching and learning activities to be carried out at home and by using technology. or applications that have been determined by the teacher (online).

Online learning also has advantages, while some of the advantages of online learning are that it can be done anytime and anywhere where the learning is, for example, learning can be done in the room, living room and so on as well as adjusted times such as morning, afternoon, evening or night. In addition, online learning can also be reached even at long distances (Putri et al., 2021). Although there are many advantages, online learning also has a negative impact because students do not chat with each other and this online learning makes children bored because there is no time for learning in the same place or meeting friends.

The implementation of online learning is not without problems. In some countries, it is reported that among those who adopt online learning, the average actual benefits are much smaller than expected. Network problems, lack of training, and lack of awareness are stated as the main challenges faced by educators (Wahyono et al., 2020). So it can be said that with the implementation of online learning there are various kinds of obstacles or problems because online learning is only carried out through technology and the learning process only through home.

In addition, many students think that school is a very fun activity, but now the activity called school has suddenly stopped because of the Covid-19 disruption. So the world of Indonesian education needs to follow the path that can help school conditions in an emergency (Aji, 2020). The online learning model demands the creativity and skills of teachers to use technology. Students are also expected to be able to access a network of applications used in learning such as Zoom and several other applications (Mansyur, 2020). So with the Covid-19 period, everyone is required to be creative and understand how to use technology because activities are carried out online and must use a predetermined application.

The pandemic period resulted in all educational activities in Indonesia experiencing changes in the form of the learning process. The learning process then turned into an online learning system. There are several obstacles faced, namely the lack of ability of teachers, parents and students to apply technology facilities and the use of internet quotas that are not small (Karnawati & Mardiharto, 2020). So with the Covid-19 pandemic, the learning process has undergone changes and there are various obstacles faced from the learning process. However, now teaching and learning activities have begun to be carried out in schools as long as they fulfill and comply with the policies that have been made by the government.

In a learning situation like this, teachers are required to be more active in understanding how to communicate with students. The use of learning media and online learning methods must be used by teachers to the maximum. This is to support the implementation of learning that must run well. During the pandemic, in an undetermined period of time when the application of this kind of learning will end to be effective.

Based on direct observations and observations that I have seen and researched, I see that the effectiveness of PJOK learning is still not going well or has not reached its effectiveness, because there are still some students who do not understand the implementation of learning during this pandemic, because the face-to-face learning process is very limited. different from the normal learning process as usual, because the learning process in this limited face-to-face period, the teacher is only given space to convey the learning process through theory or learning videos and the limited time in the learning process also makes students and teachers constrained in teaching and learning activities. Basically, PJOK lessons are learning that is identical to learning carried out through direct practice in the field on the basis of theoretical explanations and accompanied by practical movements. Based on the description of the background of the problem above, the researcher is interested in conducting research that aims to see the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau..

## RESEARCH METHODS

This research is an ex-post facto research, ex-post facto research is a systematic empirical investigation in which the researcher does not control the independent variables directly because the existence of these variables has occurred or because the variables are basically not manipulated (A. Wicaksono, 2015). Expost facto research is research in which we already know the results of a study that we want to examine in the field through observation or direct observations that we have done on something or an object that we want to examine. The research was conducted at SMAN 8 Mandau on all students of class XI Mipa. SMAN 8 Mandau is located right in the town of Duri so it's easy to reach the location. The time used to carry out this research is starting from July 2022 to August 2022.

Experts argue about the population itself, among which Sugiyono gives an understanding that the population is a generalization area consisting of objects or subjects that become certain quantities and characteristics determined by researchers to be studied and then drawn conclusions in (Fakhruddin & Saepudin, 2018). The population in this study were all class XI MIPA SMAN 8 Mandau, totaling 168 people. The sample is part of the number and characteristics possessed by the population (Sugiyono, 2016). The sampling was carried out by Total Sampling, where the population was used as the overall sample which amounted to class XI MIPA SMAN 8 Mandau, amounting to 168 people.

Research instruments are tools that are needed or used to collect data. The instrument that will be used in this study is a questionnaire or questionnaire in conducting a survey on the effectiveness of PJOK learning in a limited face-to-face period using the Guttman Scale. Instruments are tools that are selected and used by researchers so that these activities become systematic. The indicators that have been formulated in the form of the grid are then used as items for the statement or question of the questionnaire. Meanwhile, the assessment uses the Guttman scale for a survey questionnaire understanding the effectiveness of PJOK learning in the face-to-face period is limited. The Uttman scale is an instrument used to get a "positive or negative" answer. The Guttman scale or commonly called the scalogram scale is a very good scale for convincing research results regarding the unity of the dimensions and attitudes or traits under study. (Hafid, 2021).

After conducting the trial, the authors carried out data collection and then carried out data processing in various ways. Categorization using Mean and Standard deviation. To determine the score criteria using the Norm Reference Assessment (PAN) (KONI, 2003). Here's the formula below:

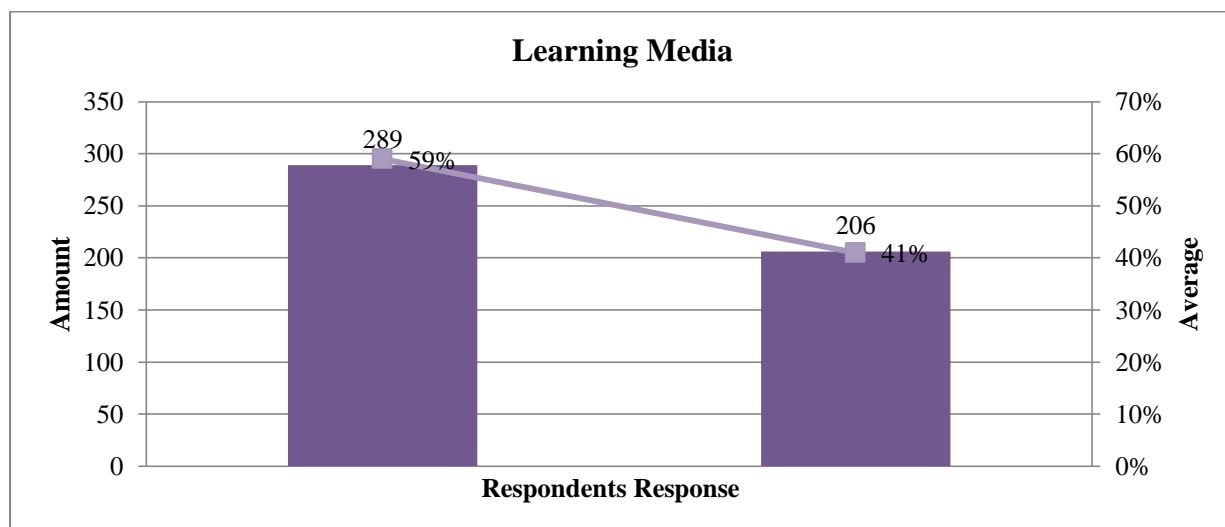
$$P = F N \times 100\%$$

## RESULTS AND DISCUSSION

### **a. The Effectiveness Of PJOK Learning In The Limited Face-To-Face Period At SMAN 8 Mandau Is Reviewed From The Indicators Of Learning Media**

Aspects of learning media is one indicator of the effectiveness of learning. Researchers include 3 statement items to determine the effectiveness of learning in terms of learning media. Of the 168 respondents, 59% gave the answer Yes. 41% of respondents gave the answer No. The following is a detailed description of respondents' answers about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau. The data listed in

the table above, regarding the indicators of learning media, can be described in the graph below.

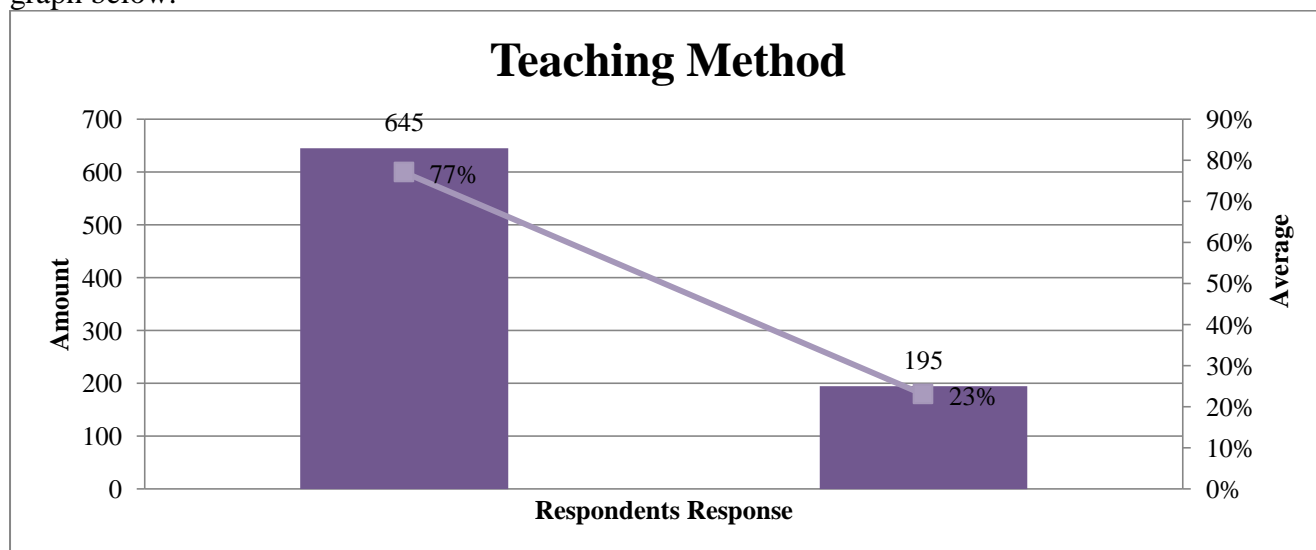


**Figure 1. Histogram of Overall Data Indicators of Learning Media in the Effectiveness of PJOK Learning in Limited Face-to-face Periods at SMAN 8 Mandau.**

Based on the results of the calculations that have been carried out, it is known that the average respondent's answers about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau in terms of learning media indicators of 53% the percentage lies in the interval between 48%-79% with good categories

**b. The Effectiveness of PJOK Learning in the Limited Face-to-face Period at SMAN 8 Mandau in Review of Teaching Method Indicators**

Aspect of the teaching method is one indicator of the effectiveness of learning. Researchers include 5 statement items to determine the effectiveness of learning in terms of teaching methods. Of the 168 respondents, 77% gave the answer Yes. 23% of respondents gave the answer No. The following is a detailed description of respondents' answers about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau. The data listed in the table above, regarding the teaching method indicators, can be illustrated in the graph below.



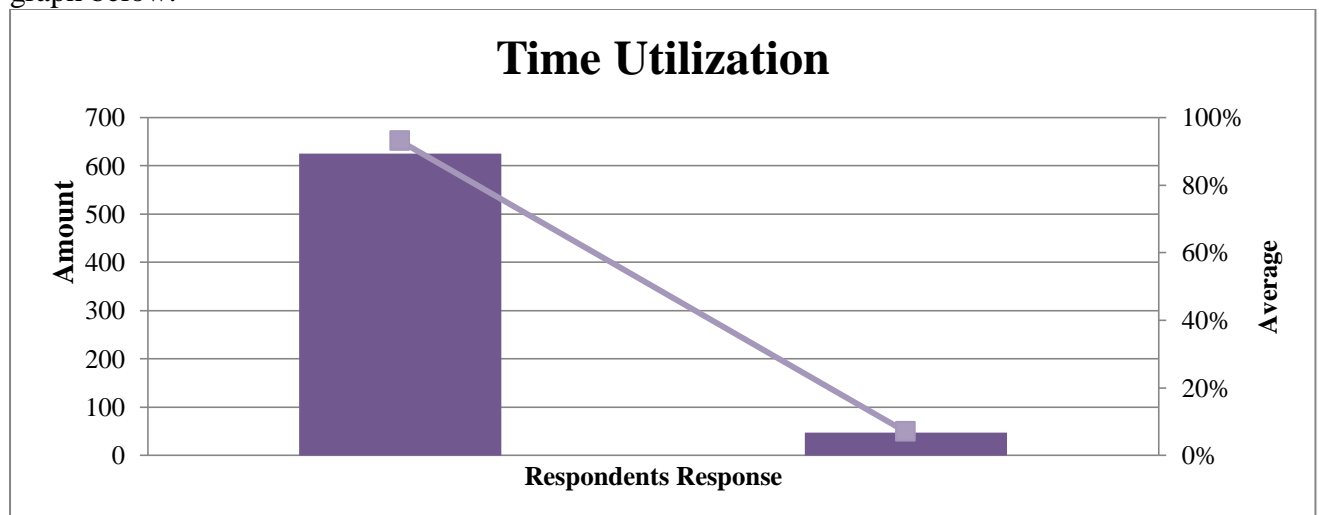


## Graphics 2. Histogram Of Overall Data Indicators Of Teaching Methods In The Effectiveness Of PJOK Learning In Limited Face-To-Face Periods At SMAN 8 Mandau.

Based on the results of the calculations that have been carried out, it is known that the average respondent's answers about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau in terms of the Teaching Method indicator of 65% the percentage lies in the interval between 48%-79% with good categories.

### c. The Effectiveness of PJOK Learning in the Limited Face-to-Face Period at SMAN 8 Mandau in Review From Time Utilization Indicators

Aspect of the teaching method is one indicator of the effectiveness of learning. Researchers include 4 statement items to determine the effectiveness of learning in terms of Time Utilization. Of the 168 respondents, 93% answered Yes. 7% of respondents gave the answer No. The following is a detailed description of respondents' answers about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau. The data listed in the table above, regarding the Time Utilization indicator, can be illustrated in the graph below.

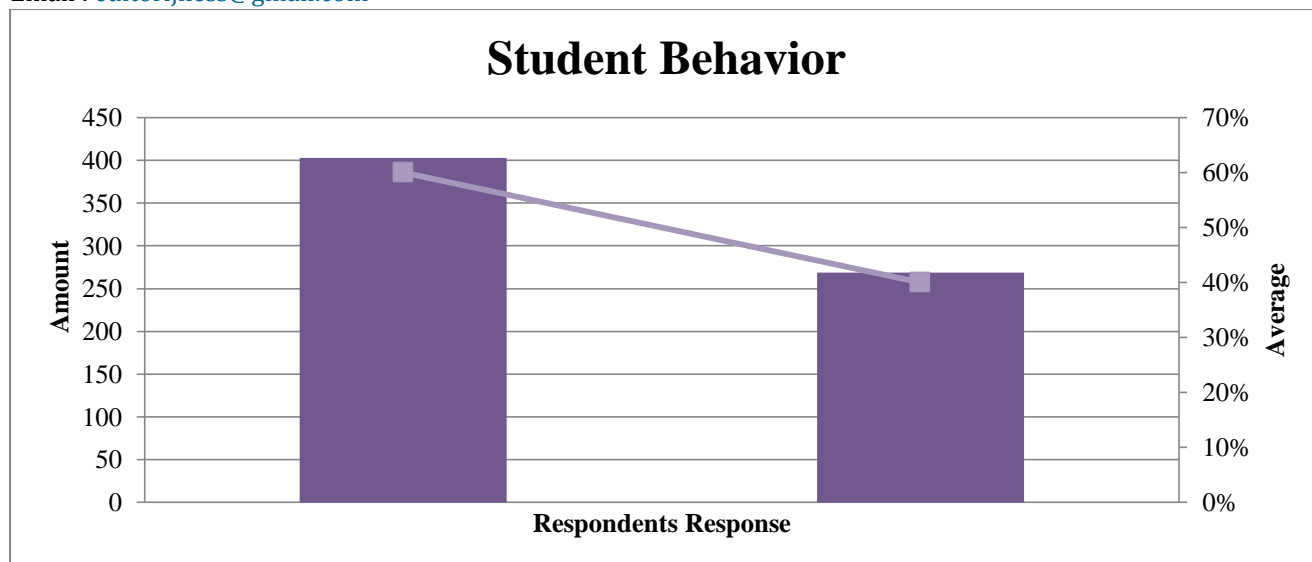


### Graphics 3. Histogram Of The Overall Data Indicators Of Time Utilization In The Effectiveness Of PJOK Learning In The Limited Face-To-Face Period At SMAN 8 Mandau.

Based on the results of the calculations that have been carried out, it is known that the average respondent's answer about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau in terms of the Time Utilization indicator is 65%, the percentage lies in the interval between 48%-79% in the good category.

### d. The Effectiveness of PJOK Learning in the Limited face-to-face Period at SMAN 8 Mandau is Reviewed From Student Behavior Indicators

Aspects of Student Behavior is one indicator of the effectiveness of learning. Researchers include 4 statement items to determine the effectiveness of learning in terms of student behavior. Of the 168 respondents there were 60% who gave the answer Yes. 40% of respondents gave the answer No. The following is a detailed description of respondents' answers about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau. The data listed in the table above, regarding the indicators of Student Behavior, can be described in the graph below.

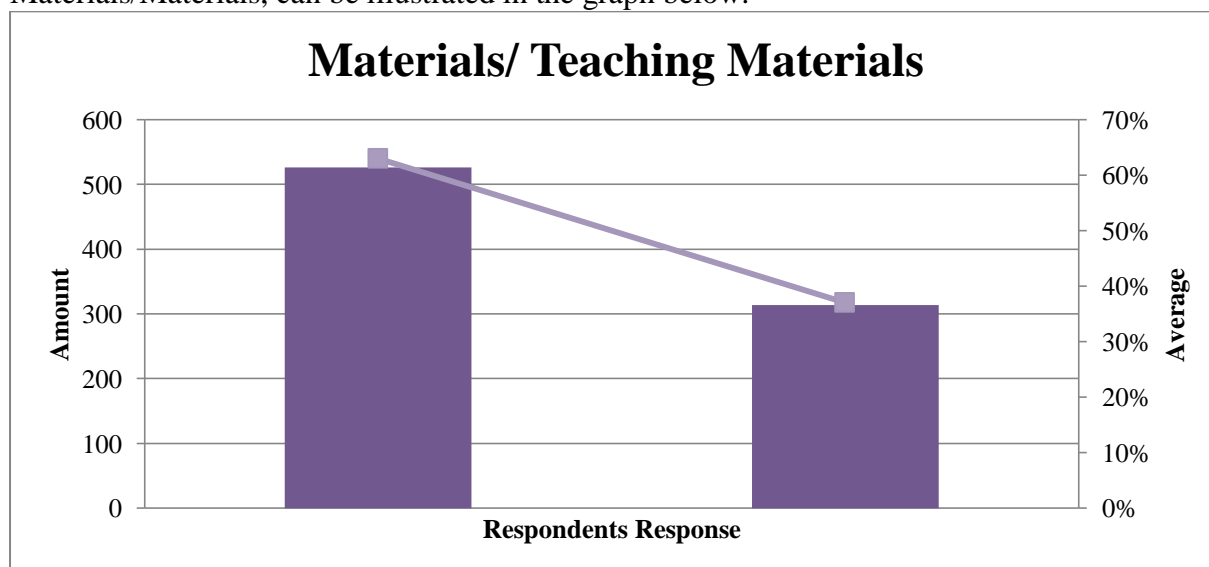


**Graphics 4. Histogram of Overall Data Indicators of Student Behavior in the Effectiveness of PJOK Learning in the Limited Face-to-Face Period at SMAN 8 Mandau.**

Based on the results of calculations that have been carried out, it is known that the average respondent's answer about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau in terms of student behavior indicators is 60%, the percentage lies in the interval between 48%-79% with good category.

**e. The Effectiveness Of PJOK Learning In The Limited Face-To-Face Period At SMAN 8 Mandau Is Reviewed From The Indicators Of Teaching Materials/Materials**

Aspects of Teaching Material Materials is one indicator of the effectiveness of learning. Researchers include 5 statement items to determine the effectiveness of learning in terms of Materials / Teaching Materials. Of the 168 respondents, 63% answered Yes. 37% of respondents gave the answer No. The following is a detailed description of respondents' answers about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau. The data listed in the table above, regarding the indicators of Teaching Materials/Materials, can be illustrated in the graph below.

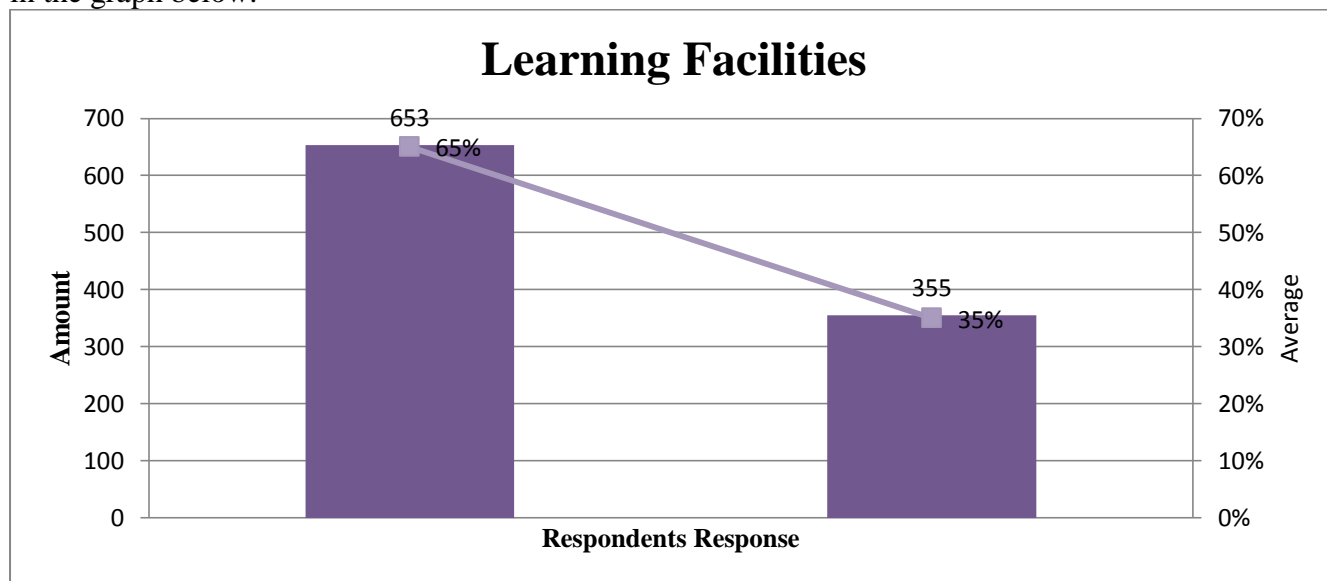


**Graphics 5. Histogram of overall data indicators of student behavior in the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau.**

Based on the results of calculations that have been carried out, it is known that the average respondent's answer about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau in terms of the indicators of teaching materials/materials is 77%, the percentage lies in the interval between 48%-79% with the category good

**f. The Effectiveness of PJOK Learning in the Limited face-to-face period at SMAN 8 Mandau is Reviewed from the Indicators of Learning Facilities**

Aspect of Learning Facilities is one indicator of the effectiveness of learning. Researchers include 6 statement items to determine the effectiveness of learning in terms of Learning Facilities. Of the 168 respondents, 65% gave the answer Yes. 35% of respondents gave the answer No. The following is a detailed description of respondents' answers about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau. The data listed in the table above, regarding the indicators of Learning Facilities, can be illustrated in the graph below.



**Graphics 6. Histogram of Overall Data Indicators of Learning Facilities in the Effectiveness of PJOK Learning during the Limited Face-to-face Period at SMAN 8 Mandau..**

Based on the results of calculations that have been carried out, it is known that the average respondent's answer about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau in terms of the indicators of teaching materials/materials is 65%, the percentage lies in the interval between 48%-79% with the category good.

**g. Recapitulation of Respondents' Answers About the Effectiveness of PJOK Learning in the Limited Face-to-Face Period at SMAN 8 Mandau in Review of All Indicators.**

After describing in detail each indicator of the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau, the next research conducted a recapitulation of respondents' answers to each indicator. In the Learning Media indicator which consists of 3 statement items, there are 298 answers stating Yes or 59% there are 206 answers stating No or 41%.

In the teaching method indicator which consists of 5 statement items, there are 645 answers stating Yes or 77% there are 195 answers stating No or 23%. In the Time Utilization indicator which consists of 4 statement items, there are 625 answers stating Yes or 93% there are 47 answers stating No or 7%.



On the student behavior indicator which consists of 4 statement items, there are 403 answers stating Yes or 60%, there are 269 answers stating No or 40%. In the Materials/Teaching Materials indicator which consists of 5 statement items, there are 526 answers stating Yes or 63% there are 314 answers stating agree or 37%. On the Learning Facilities indicator which consists of 6 statement items, there are 653 answers stating Yes or 65% there are 1355 answers stating No or 35%. The following is a detailed description of respondents' answers about the effectiveness of PJOK learning during the limited face-to-face period at SMAN 8 Mandau from all indicators as set out in the following table.

**Table 1. Recapitulation of Respondents' Answers About the Effectiveness of PJOK Learning during the Limited Face-to-Face Period at SMAN 8 Mandau in Review of All Indicators.**

No	Indicator	Yes		No		Total Score	
		F	%	F	%	F	%
1	Learning Media	298	59%	206	41%	504	100%
2	Teaching method	675	77%	195	23%	870	100%
3	Time Utilization	625	93%	47	7%	672	100%
4	Student Behavior	403	60%	269	40%	672	100%
5	Materials/ Teaching Materials	526	63%	314	37%	840	100%
6	Learning Facilities	653	65%	355	35%	1008	100%

After describing the research data per indicator, the next step is to find the overall average score in order to determine the level of effectiveness of PJOK learning in the limited face-to-face period at SMAN 8 Mandau. Later the score will be compared with the percentage criteria that have been described in the previous Chapter III. For more details, the average score for each indicator of the PJOK Learning Effectiveness variable in the Limited Face-to-face Period at SMAN 8 Mandau.

**Table 2. Recapitulation of Average Respondents' Answer Scores on Student Motivation towards Physical Education Learning For Class XI Science at SMA Negeri 1 Sungai Apit in a Review of All Indicators.**

No	Indikator	Jumlah
1	Learning Media	53%
2	Teaching method	65%
3	Time Utilization	78%
4	Student Behavior	60%
5	Materials/ Teaching Materials	77%
6	Learning Facilities	65%
	Average	66%

After calculating the average score of the overall learning effectiveness of 66%. Based on the assessment criteria, the score of 63% is in the range of values between 48%-79% in the good category. This means that the effectiveness of PJOK learning in the limited face-to-face period at SMAN 8 Mandau is very effective even though there are some or a small number of students who do not like sports lessons.

The results obtained indicate that the motivation of students to take part in physical learning is in the "powerful" category. This situation is influenced by several indicators such as 1) Duration of learning activities, 2) Frequency of learning activities, three) Presentation of learning activities, 4) Patience, tenacity, and ability to face activities and difficulties to achieve learning objectives. five) dedication and sacrifice to achieve learning objectives. 6) the level of aspiration to be achieved. 7) the level of qualification of learning achievement. 8) The direction of his attitude towards the target of learning activities. This result shows how much motivation of students to take part in physical education learning and what factors influence it.

The motivation of students in participating in physical learning is very influential on the success of the learning that is packaged by the teacher. This is because students become actors of learning as the most important part of learning success. so that learning must be packaged in such a way and try to foster student motivation to learn students so that learning can run optimally. The struggle that often occurs in physical education learning must be minimized by the teacher so that students can be interested in actively participating in physical education learning. Various problems from students as well as the packaging of learning will affect the motivation of students in participating in learning.

The motivation for similarity in the individual is to be interested in the subject or to like an object. This shows that how much students are motivated to take part in physical education learning is a reflection of how much students are interested in learning physical education. High student motivation will be reflected by using a high level of student participation in physical education learning. Conversely, if the motivation of students is low, it can be reflected in the participation of students in low learning.

The results showed that indicators 1) Duration of learning activities, three) Presentation of learning activities, 4) Patience, tenacity, and ability to face activities and difficulties to achieve learning goals, five) dedication and sacrifice to achieve learning goals, 6) Strata of aspirations that to be achieved, 7) the level of learning achievement qualifications on physical education subjects is categorized as strong. This indicates that students have feelings of pleasure and liking for physical education subjects. Other indicators are similar 3) Presentation of learning activities, 8) The direction of his attitude towards the target of learning activities. Be in the strong category. This means that most students are quite happy with physical education subjects, but there are some students who do not want to be involved exclusively in the learning process.

The teacher's role in learning is very central to package learning and control class conditions. This illustrates that a teacher must be able to create a learning atmosphere using facilities and psychologically control students so that students have high learning motivation. High learning motivation will help students to be active in learning and have the opportunity to master the skills taught and achieve good learning achievements.

The results of this study are supported by several relevant studies that have been studied previously, namely research on behalf of (Raftania & Dinata, 2022) with the research title Face-to-face Learning Effectiveness 50% in PJOK Subjects at SMK Negeri 5 Surabaya from the result component (results) scored 2.78 (5) very good, from the volleyball component (willingness) a score of 2.82 (4) good, from the method (method) got a score of 2.54 (3) moderate, then it can be seen from the cooperation (cooperation) got a score of 2.81 (4) good. From the results of all components, it shows that the average (average) score is 2.74 with a value of (4) categorized as good.

Further research from (Khoir et al., 2022) with the title Limited Face-to-Face Educational Learning Effectiveness of the New Normal Era. The results of research that have been carried out regarding the effectiveness of limited face-to-face PJOK learning in the new

normal era at SMK Negeri 4 Palembang in the 2021/2022 school year. In general, face-to-face learning PJOK is limited to the new normal era at SMK Negeri 4 Palembang with the value of the final exam report card for the odd semester 2021/2022 above the KKM, and interviews with principals and PJOK teachers are in the effective category. Only one indicator is said to be less effective in student questionnaires, this is because students are not used to face-to-face learning limited to the new normal era, and students lack concentration when studying in the new normal era.

## CONCLUSION

Based on the calculation of the average score of the overall learning effectiveness of 66%. The scoring criteria of 63% are in the range of values between 48%-79% with Good Category. This means that the effectiveness of PJOK learning in the limited face-to-face period at SMAN 8 Mandau is very effective even though there are some or a small number of students who do not like sports lessons.

## REFERENCES

- Aji, R. H. S. (2020). Dampak Covid-19 pada Pendidikan di Indonesia: Sekolah, Keterampilan, dan Proses Pembelajaran. *SALAM: Jurnal Sosial Dan Budaya Syar-I*, 7(5), 395–402.
- Apriliawati, A. T., & Hartono, S. (2016). Penerapan Permainan Tradisional Dalam Pembelajaran Pendidikan Jasmani, Olahraga dan Kesehatan Terhadap Kemampuan Motorik Siswa. *Jurnal Pendidikan Olahraga Dan Kesehatan*, 4(2), 522–528.
- Eunike, P., Kezia, M., Pangemanan, S. S., Rumokoy, F. S., & Program, M. (2018). Analysing the Influence of Creativity and Innovation Employee on Development of Maqna Hotel Gorontalo. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 6(4), 3593–3602. <https://doi.org/10.35794/emba.v6i4.21665>
- Husdarta. (2009). *Manajemen Pendidikan Jasmani*.
- Kamolson, S. (2007). Fundamentals Of Quantitative Research. *Language Institute Chulalongkorn University*, 1, 2-3. [http://www.culi.chula.ac.th/e-Journal/bod/SuphatSukamolson.pdf%5Cnhttp://isites.harvard.edu/fs/docs/icb.topic1463827.files/2007\\_Sukamolson\\_Fundamentals of Quantitative Research.pdf](http://www.culi.chula.ac.th/e-Journal/bod/SuphatSukamolson.pdf%5Cnhttp://isites.harvard.edu/fs/docs/icb.topic1463827.files/2007_Sukamolson_Fundamentals of Quantitative Research.pdf)
- Karnawati, & Mardiharto. (2020). Sekolah Minggu Masa Pandemi Covid 19: Kendala, Solusi, Proyeksi. *Didache: Journal of Christian Education*, 1(1), 13–24. <https://doi.org/10.46445/djce.v1i1.291>
- Mansyur, A. R. (2020). Dampak COVID-19 Terhadap Dinamika Pembelajaran Di Indonesia. *Education and Learning Journal*, 1(2), 113–123.
- Patrick, J., Dyck, M., & Bramston, P. (2010). Depression Anxiety Stress Scale: Is it valid for children and adolescents? *Journal of Clinical Psychology*, 66(9), 996–1007. <https://doi.org/10.1002/jclp.20696>
- Putri, A. P., Rahhayu, R. S., Suswandari, M., & Ningsih, P. A. R. (2021). Strategi Pembelajaran Melalui Daring Dan Luring Selama Pandemi Covid-19 Di SD Negeri Sugihan 03 Bendosari. *Prima Magistra: Jurnal Ilmiah Kependidikan*, 2(1), 1–8.
- Rochman, B., Indahwati, N., & Priambodo, A. (2020). Identifikasi Keterlaksanaan Pembelajaran PJOK Tingkat SMP di Masa Pandemi Covid 19 Se-Kabupaten Sidoarjo Baitur. *Jurnal Ilmiah Mandala Education*, 6(1), 257–265.
- Siahaan, M. (2020). Dampak Pandemi Covid-19 Terhadap Dunia Pendidikan. *Jurnal Kajian*

- Syamsu. (2021). Analisis Deskriptif Hasil Belajar Pendidikan Jasmani, Olahraga, dan Kesehatan Berdasarkan Gaya Belajar SMP. *Jurnal Edukasi Nonformal*, 2(2), 17-21.
- Trimantara, I. K. B. (2020). Implementasi Model Pembelajaran TAI Untuk Meningkatkan Hasil Belajar PJOK pada Siswa Kelas V Sekolah Dasar. *Jurnal Ilmu Keolahragaan Undiksha*, 8(1), 16-23.
- Tumaloto, E. H. (2022). Pembelajaran Pendidikan Jasmani, Olahraga dan Kesehatan Selama Pandemi Covid 19. *Jambura Health and Sport Journal*, 4(1), 60-68.
- Wahyono, P., Husamah, H., & Budi, A. S. (2020). Guru Profesional Di Masa Pandemi COVID-19: Review Implementasi, Tantangan, Dan Solusi Pembelajaran Daring. *Jurnal Pendidikan Profesi Guru*, 1(1), 51-65.
- Wicaksono, G. H. (2019). Kreativitas Guru Penjas Terhadap Proses Pembelajaran Penjas Di Sekolah Menengah Pertama Negeri Sekecamatan Kebumen Kabupaten Kebumen 2018. *Jurnal Pendidikan Kesehatan Reaksi*, 5(2), 95-100.  
<https://doi.org/10.5281/zenodo.3342990>