Survey Of The Effectiveness Of Online Learning Processes In Sports Massage Courses

Ari Wibowo Kurniawan[1*], Argadianto Widigdya[2]
[1,2]Department of Physical Education, Health and Recreation / Faculty of Sports Science / State University of Malang / East Java / Indonesia
[1,2]Street Semarang No.5, Sumbersari, Lowokwaru District, Malang City, East Java, 65145
[1]ari.wibowo.fik@um.ac.id , [2]widigdyaargadianto@gmail.com

ABSTRACT

The purpose of this study is to determine the effectiveness of the online learning process in the Sports Massage course for students of the Department of Physical Education, Health and Recreation, State University of Malang, class of 2017. This study used a quantitative descriptive research design and survey research techniques. The population used in this study were all 189 students majoring in Physical Education, Health and Recreation, State University of Malang, class of 2017. From this population, a sample of 130 people was obtained. The data in this study were obtained through a questionnaire distributed online using Google Form. There are six sub-variables assessed in this research: student learning interest, online learning excellence, online learning weaknesses, online learning facilities and infrastructure, interaction quality, and online learning prospects. Based on the results of the research and data analysis, the percentage of the overall value is 55.56%, which falls into the quite effective category, so it can be concluded that the process of online learning in the Sports Massage course is quite effective in being applied to students majoring in Physical Education, Health and Recreation, State University of Malang, class of 2017.

Keywords: Online Learning; Sports Massage; Covid-19.

INTRODUCTION

Since the end of 2019, the world has been going through difficult times due to the COVID-19 pandemic. COVID-19 stands for Coronavirus Disease 19, a disease caused by a virus called Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2), this virus attacks the human respiratory system, can cause respiratory problems in infected people (Susilo et al. ., 2020). SARS-CoV-2 is thought to have first spread from animals such as bats and pangolins to humans (Susilo et al., 2020), but this has not been proven true, it is still only a hypothesis. Currently, SARS-CoV-2 is most widely spread from human to human. This virus spreads through droplets, which are splashes of liquid sneezing or coughing from an infected person and then enters the human body through

the nose, mouth, or eyes before finally infecting cells in the respiratory tract.

People infected with SARS-CoV-2 will experience respiratory symptoms such as cough, runny nose, fever, and shortness of breath. In severe cases, this virus can cause pneumonia, acute respiratory syndrome, kidney failure, and even death. So far, there is no vaccine or specific drug for COVID-19 that can be used to treat infected patients. The first case of infection with this virus was reported in Wuhan, Hubei Province, China at the end of December 2019 and then spread very quickly throughout the world. On March 12, 2020, WHO declared the COVID-19 outbreak a global pandemic, i.e. a condition in which all the world's population has the opportunity to be infected. The rapid spread of SARS-CoV-2 and the absence of a drug or vaccine that can overcome this virus pose a major health threat to the entire world population. As of June 26, 2020, COVID-19 has spread to 216 countries. A total of 9,473,214 confirmed cases, 484,249 of them were declared dead (WHO, 2020: online).

To break the chain of the spread of SARS-CoV-2, policymakers around the world make regulations to limit human activities that can increase a person's risk of infection. Activities that involve many people cannot be carried out as usual. As a result, various sectors of life such as business, economy, trade, entertainment, tourism are affected and suffer losses. Another sector affected by the spread of this virus is the education sector.

In Indonesia, the Minister of Education and Culture through the Circular of the Secretary-General of the Ministry of Education and Culture No. 36603/A.A5/OT/2020 on March 15, 2020, instructed all educational institutions to eliminate teaching and learning activities in schools and universities during this pandemic. Instead, the Minister of Education and Culture called for online teaching and learning activities to be carried out from home. Daring is an abbreviation of within the network, a translation of the term online which means connecting to the internet network. In the context of higher education, teaching and learning activities or online lectures mean that lecturers and students do not meet face to face, but use media such as video conferencing using the help of the internet. Waryanto, et. al (2006:10) states that one of the uses of the internet in education is distance learning.

Along with the times, advances in science and technology allow teachers and students to conduct distance learning, one way is using video conferencing. Video conferencing can be done with the help of the internet network, hardware (computer, laptop, or smartphone), and software (applications such as Google Meet and Zoom) that support it. However, not all courses can be done online effectively. In a course that only

473

explains the theory in its delivery, the level of student understanding of the material presented by the lecturer may not experience many obstacles with online media. Unlike the case with courses based on practice such as in the field of sports.

Many practice-based courses are found in the Department of Physical Education, Health and Recreation at the Faculty of Sports Science, State University of Malang. The majority of lectures in this department are carried out by practicing physical activity. One of the courses in the department's curriculum is Sports Massage.

Massage is a way of healing using hand movements of assistive devices on soft body tissues to get pleasure and maintain physical health. In ancient times, massage was used only to heal injuries. Along with the times, massage has several types and certain uses. One type of massage is sports massage. Sports massage is a way of massage using hands massaged on the muscles of the body (Kurniawan et al., 2019). The purpose of massage is to improve circulation, assist absorption or absorption.

METHOD

This study uses a quantitative descriptive research design and survey research techniques. According to Sugiyono (2012:13), descriptive research is research that is used to determine the value of independent variables, either one or more variables without making comparisons or being linked to other variables. Meanwhile, quantitative research methods are research methods used to examine certain populations or samples, data collection using research instruments, quantitative or statistical data analysis to test predetermined hypotheses (Sugiyono, 2012:8). Descriptive quantitative research in this study is intended to get an overview of student responses to the online learning process in the Sports Massage course.

The population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2012:117). The population in this study were students majoring in Physical Education, Health and Recreation, State University of Malang, class of 2017 as many as 189 people. The sample is part of the number and characteristics possessed by the population (Sugiyono, 2014: 118). The sample used in this study was calculated using the Slovin formula as stated in Budiwanto (2017:176) below:

$$n = N/(1+Ne^2)$$

Information:
n: number of samples
N: total population
e: error tolerance (error tolerance limit)

After being calculated using this formula with an error tolerance limit of 5%, the minimum sample size is 128 people from the entire population. The sample in this study amounted to 130 people.

The data in this study were obtained from a data collection tool in the form of a questionnaire distributed through Google Form. Arifin (2011:228) said that the questionnaire is a research instrument that contains a series of statements or questions to collect data or information that the respondent must answer freely according to his opinion. The type of questionnaire in this study is a closed questionnaire, which is a questionnaire in which alternative answers have been provided. The questionnaire in this study used an attitude scale or a Likert scale of 1-4 with choices of answers: strongly agree (4), agree (3), disagree (2), strongly disagree (1) for the types of positive statements, and strongly agree (1), agree (2), disagree (3), strongly disagree (4) for the type of negative statement. The questionnaire in this study contains 25 questions and has been tested for validity by experts. The data that has been collected in this study were analyzed manually using Microsoft Excel 2016. The data was processed using the formula as proposed by Sudjana (2001:128) as follows:

$$P = f/N \times 100\%$$

Information:
P: percentage number
f: the frequency being searched for the percentage
N: number of cases (number of frequencies/number of individuals)
100% : fixed number

To make it easier to conclude the results of the percentage analysis, the results of the analysis are compared with the criteria table from Arikunto & Jabar (2010) which has determined the assessment categories as follows:

Percentage	Description
81 - 100 %	Very Effective
61 - 80 %	Effective
41 - 60 %	Quite Effective
21 - 40 %	Ineffective
<21 %	Very Ineffective

475

Data analysis was carried out on six sub-variables, including student learning interest, advantages of online learning, weaknesses of online learning, online learning facilities and infrastructure, quality of interaction, and online learning prospects.

## RESULTS AND DISCUSSION

Student Learning Interest
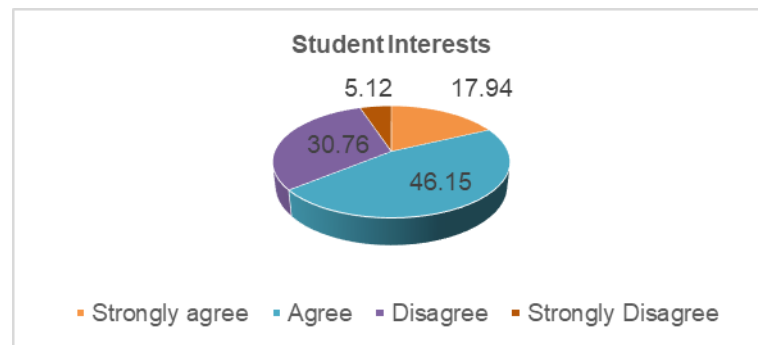
Picture 1.
Graph of student learning interest data results

From a total of 390 answers, 70 (17.94%) answers stated strongly agree, 180 (46.15%) answered agreed, 120 (30.76%) answered disagreed and 20 (5.12%) answered stated strongly disagree. From these results, obtained a Likert scale value of 846. After analysis, obtained a percentage value of 54.23%. This percentage falls into the percentage range of 41-60%, so it can be concluded that students are quite interested in participating in online learning.

### Advantages of Online Learning
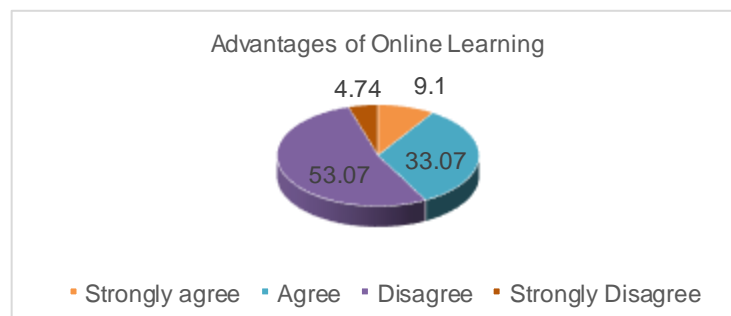
Picture 2.
Data result in a graph of the advantages of online learning

From a total of 780 answers, 71 (9.1%) answers stated strongly agree, 258 (33.07%) answers agreed, 414 (53.07%) answered disagreed and 37 (4.74%) answered stated

476

strongly disagree. From these results, the Likert scale value is 1923. After analysis, the percentage value is 61.63%. This percentage falls into the percentage range of 61-80%, so it can be concluded that online learning is beneficial for students.

Weaknesses of Online Learning
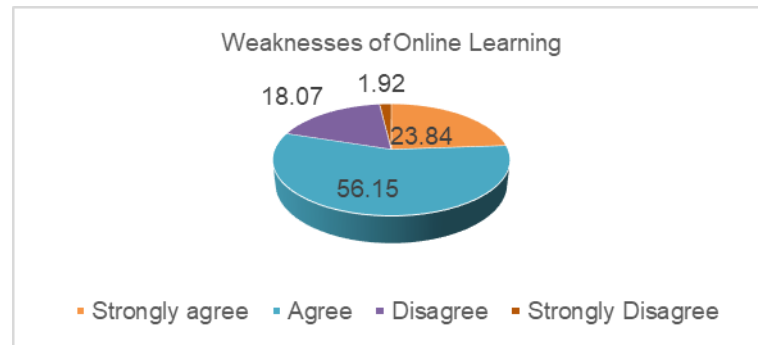
Picture 3.
Graph of online learning weakness data results

From a total of 780 answers, 186 (23.84%) answers stated strongly agree, 438 (56.15%) answered agreed, 141 (18.07) answered disagreed and 15 (1.92%) stated strongly do not agree. From these results, obtained a Likert scale value of 1545. After analysis, obtained a percentage value of 49.51%. This percentage falls into the percentage range of 41-60%, so it can be concluded that students have quite a bit of difficulty when learning online.

**Online Learning Facilities and Infrastructure**
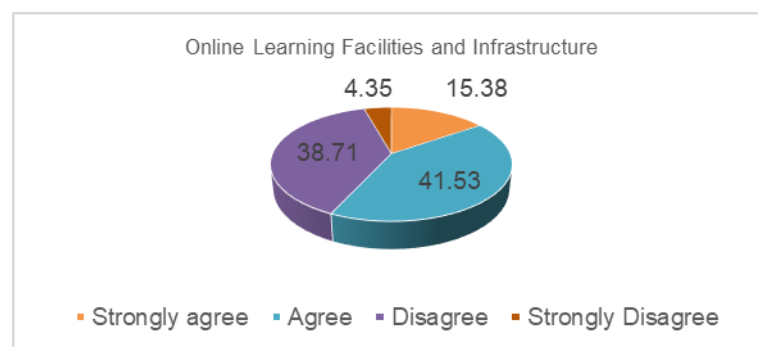
Picture 4.
Graph of data results in online learning facilities and infrastructure

From a total of 390 answers, 60 (15.38%) answers stated strongly agree, 162 (41.53%) answered agreed, 151 (38.71%) answered disagreed and 17 (4.35%) answered stated strongly disagree. From these results, obtained a Likert scale value of 1074. After

analysis, obtained a percentage value of 68.91%. This percentage falls into the percentage range of 61-80%, so it can be concluded that the online learning facilities and infrastructure owned by students are fairly good.

Interaction Quality
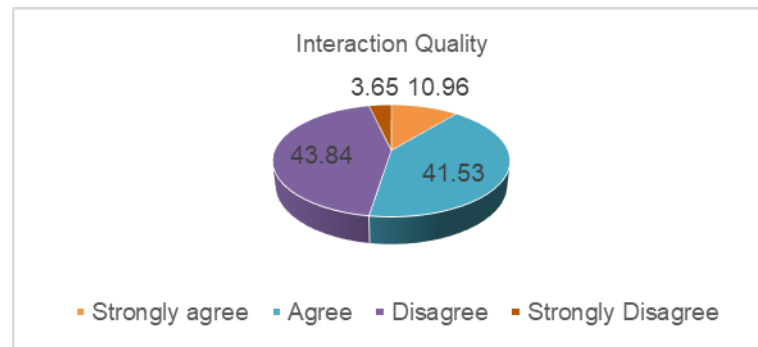
Picture 5.
Graph of interaction quality data results

From a total of 520 answers, obtained 57 (10.96%) answers were strongly agree, 216 (41.53%) answers agree, 228 (43.84) answers disagree and 19 (3.65%) answers strongly do not agree. From these results, obtained a Likert scale value of 1091. After analysis, obtained a percentage value of 52.45%. This percentage falls into the percentage range of 41-60%, so it can be concluded that the quality of interaction in online learning is quite good.

Online Learning Prospects
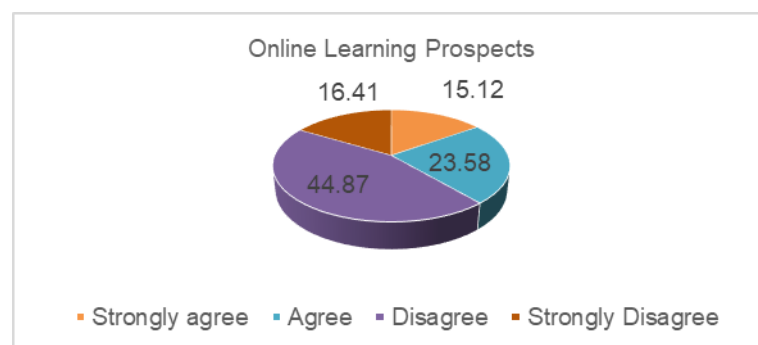
Picture 6.
Graph of online learning prospect data results

From a total of 390 answers, obtained 59 (15.12%) answers were strongly agree, 92 (23.58%) answers agree, 175 (44.87%) answers disagree and 64 (16.41%) answers state

strongly disagree. From these results, the Likert scale value is 744. After analysis, the percentage value is 47.69%. This percentage falls into the percentage range of 41-60%, so it can be concluded that online learning has enough prospects to be implemented in the future.

After knowing the results of each sub-variable, then the results are processed into one to determine the effectiveness of online learning as a whole. The effectiveness of online learning as a whole is calculated by adding up the Likert scale scores of all sub-variables and then comparing them with the maximum total score of all sub-variables as follows:

P= (total score of all sub-variables)/(total maximum score of all sub-variables) ×100%

P= 7224/((4×25×130)) ×100%

P= 7224/13000 ×100%

P= 55.56%

With a percentage of 55.56%, the effectiveness of online learning is in the percentage range of 41-60%, which means that the online learning process is quite effectively applied to sports massage courses.

Discussion

This study examines the effectiveness of the online learning process in the Sports Massage course for students majoring in Physical Education, Health and Recreation, State University of Malang batch 2017. The results of the study on the sub-variable of student interest in learning obtained a percentage value of 54.23% which indicates that students are quite interested in learning. Sports Massage online. This is the same as the results of research conducted by (Meiza et al., 2020) which states that online learning is enough to make students enthusiastic about attending lectures.

In the sub-variable of online learning excellence, a percentage value of 61.63% is obtained which indicates that online learning is beneficial for students and provides various conveniences because learning can be done without having to meet face-to-face, learning can be done by providing material to students in the form of videos and PowerPoint through Google Meet or Google Classroom (Firyal, 2020). In online learning, teachers also often include interactive multimedia in the learning process. According to Sugiarto et al. (2020), learning using interactive multimedia can be said to be more effective because it can minimize the difficulties faced by students in the sports massage learning process.

In addition to providing convenience, in practice online learning also has weaknesses. In the sub-variable of online learning weaknesses, a percentage value of 49.51% is obtained which indicates that students have quite a bit of difficulty when learning online. One of the difficulties experienced by students when learning online is a less supportive internet connection (Pratiwi, 2020). Firyal (2020) also stated that online learning has several weaknesses, such as poor internet connection, sometimes students also don't understand the material, sometimes they feel bored because they can't discuss with friends as usual. The same thing was said by Meiza et al. (2020), in addition to providing convenience, online learning also has a negative side, such as not all lecturers and students have the same level of understanding of operating devices and internet network problems such as when the quota runs out and the internet network often has problems in the area.

Learning facilities and infrastructure are important in supporting the learning process so that the objectives of learning can be achieved properly (Novita, 2017). Based on the results of research on the sub-variable of online learning facilities and infrastructure, obtained a value of 68.91% which indicates that the online learning facilities and infrastructure owned by students can be said to be good. This is the same as what Maulana & Hamidi (2020) said, overall student perceptions of online learning facilities are fairly good. The majority of students have the facilities and infrastructure needed to conduct online learning.

Interaction in learning is one of the important things to achieve learning objectives. In this study, the quality of the interaction obtained a percentage value of 52.45% which indicates that the interaction that occurs in online learning is quite good. Sadikin & Hamidah (2020) said that in online learning, students felt more comfortable expressing their opinions. Because the learning process is carried out from home, students feel more confident because they do not have to meet face to face with many people. The absence of physical barriers makes students feel less awkward and more comfortable in communicating (Sun et al., 2008).

In the online learning prospect sub-variable, a value of 47.69% was obtained which indicates that online learning has enough prospects to be implemented in the future when the COVID-19 pandemic has been declared over. This online learning system can be used as an initial basis for teachers to carry out their learning process in the future (Jamaluddin et al., 2020). To add variety to the learning process, teachers need to create a blended pattern or mix between face-to-face learning and online learning when lectures

return to normal.

Of all the sub-variables that have been researched and the results are processed into one to determine the effectiveness of the online learning process as a whole, a percentage value of 55.56% is obtained which means that the online learning process is quite effective in applying the Sports Massage course to students majoring in Physical Education, Health and Recreation, State University of Malang class 2017. As stated (Kuntarto, 2017), online learning can be run and provide new experiences for students. Nadziroh (2017) said that online learning is quite effective to improve the quality of learning because the learning process is not only included in the learning process

CONCLUSIONS AND SUGGESTIONS

Based on the results of the study, it was concluded that students were quite enthusiastic about participating in online learning of Sports Massage courses. Online learning provides several conveniences for students. Lecturers and students can carry out the learning process anywhere and anytime without the limitations of space and time. However, in addition to providing convenience, in practice, online learning also has weaknesses. One of the things that most students complain about is the internet network which sometimes does not support learning. The quality of the internet network in one place is different from the quality of the network in other places. In areas far from the city, for example, the internet network owned by students is often problematic so that the materials that have been given by the lecturers cannot be digested properly.

In terms of online learning facilities and infrastructure, the majority of students have facilities and infrastructure that support the learning process. Students can operate and make good use of learning facilities. The interaction that takes place during online learning is quite good. Many students feel more comfortable expressing opinions during the learning process because they do not have to meet face to face with other lecturers or students. Students feel more confident and do not feel awkward when communicating.

Online learning has enough prospects to be applied in the future when the COVID-19 pandemic has been declared over. This online learning system can be used by lecturers as an initial basis for carrying out the learning process in the future.

Overall, the online learning process is quite effective in applying the Sports Massage course to students of the Department of Physical Education, Health and Recreation, State University of Malang class 2017.

REFERENCES

Arifin, Z. 2011. *Penelitian Pendidikan*. Bandung: Remaja Rosda.

Arikunto, S. & Jabar, C. S. A. 2010. *Evaluasi Program Pendidikan: Pedoman Teoritis Praktis bagi Mahasiswa dan Praktisi Pendidikan*. Jakarta: Bumi.

Budiwanto, S. 2017. *Metodologi Penelitian dalam Keolahragaan*. Malang: UM Press.

Fadli, A. 2020. *Mengenal Covid-19 dan Cegah Penyebarannya dengan "Peduli Lindungi" Aplikasi Berbasis Andorid*. *April*, 1–6.

Firyal, R. A. 2020. Pembelajaran Daring dan Kebijakan New Normal Pemerintah. *LawArXiv Papers*, 1–7. Dari https://osf.io/preprints/lawarxiv/yt6qs/.

Gikas, J., & Grant, M. M. 2013. Mobile Computing Devices in Higher Education: Student Perspectives on Learning with Cellphones, Smartphones & Social Media. *Internet and Higher Education*, *19*, 18–26. Dari https://doi.org/10.1016/j.iheduc.2013.06.002.

Jamaluddin, D., Ratnasih, T., Gunawan, H., & Paujiah, E. 2020. Pembelajaran Daring Masa Pandemik Covid-19 pada Calon Guru: Hambatan, Solusi dan Proyeksi. *Karya Tulis Ilmiah UIN Sunan Gunung Djjati Bandung*, 1–10. Dari http://digilib.uinsgd.ac.id/30518/.

Kuntarto, E. 2017. Keefektifan Model Pembelajaran Daring dalam Perkuliahan Bahasa Indonesia di Perguruan Tinggi. *Journal Indonesian Language Education and Literature*, *3*(1), 53–65. Dari http://www.syekhnurjati.ac.id/jurnal/index.php/jeill/%0apembelajaran.

Kurniawan, A. W., Wahyudi, U., & Tomi, A. 2019. Pelatihan Terapi Masase untuk Karangtaruna Desa Sumbermanjing Kulon Kecamatan Pagak Kabupaten Malang. *Jurnal Karinov*, *2*(1).

Maulana, H. A., & Hamidi, M. 2020. *Persepsi Mahasiswa terhadap Pembelajaran Daring pada Mata Kuliah Praktik di Pendidikan Vokasi*. *VIII*, 224–231.

Meiza, A., Hanifah, F. S., Natanael, Y., & Nurdin, F. S. 2020. Analisis Regresi Ordinal untuk Melihat Pengaruh Media Pembelajaran Daring terhadap Antusiasme Mahasiswa Era Pandemi Covid. *Digital Library UIN Sunan Gunung Jati*, 8. Dari http://digilib.uinsgd.ac.id/30730/1/artikel KTI final asti dkk.pdf.

Muis, A. R. C. 2020. Transparansi Kebijakan Publik Sebagai Strategi Nasional dalam Menanggulangi Pandemi Covid-19. *Salam: Jurnal Sosial dan Budaya Syar-i*, *7*(5). Dari https://doi.org/10.15408/sjsbs.v7i5.15317.

Mustofa, M. I., Chodzirin, M., Sayekti, L., & Fauzan, R.(2019. Formulasi Model Perkuliahan Daring Sebagai Upaya Menekan Disparitas Kualitas Perguruan Tinggi. *Walisongo Journal of Information Technology*, *1*(2), 151. Dari https://doi.org/10.21580/wjit.2019.1.2.4067.

Nadziroh, F. 2017. Analisa Efektifitas Sistem Pembelajaran. *Jurnal Ilmu Komputer dan Desain Komunikasi Visual (Jikdiskomvis)*, *2*(1), 1–14.

Novita, M. 2017. Sarana dan Prasarana Yang Baik Menjadi Bagian Ujung Tombak Keberhasilan Lembaga Pendidikan Islam. *Nur El-Islam: Jurnal Pendidikan dan Sosial Keagamaan*, *4*(2), 102–103. Dari http://ejournal.staiyasnibungo.ac.id/index.php/nurelislam%0Ahttp://moraref.or.id/record/view/64714.

Pratiwi, E. W. 2020. Dampak Covid-19 terhadap Kegiatan Pembelajaran Online di Sebuah Perguruan Tinggi Kristen di Indonesia. *Perspektif Ilmu Pendidikan*, *34*(1), 1–8. Dari http://journal.unj.ac.id/unj/index.php/pip/article/view/14921.

Sadikin, A., & Hamidah, A. 2020. Pembelajaran Daring di Tengah Wabah Covid-19. *Biodik*, *6*(2), 109–119. Dari https://doi.org/10.22437/bio.v6i2.9759.

Sugiarto, T., Kurniawan, A. W., & Sugiyanto, S. 2020. Efektivitas Pembelajaran Sport Massase Berbasis Multimedia Interaktif untuk Mahasiswa Pendidikan Jasmani, Kesehatan dan Rekreasi. *Gelanggang Pendidikan Jasmani Indonesia*, *4*(1), 36. Dari https://doi.org/10.17977/um040v4i1p35-43.

Sugiyono. 2012. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.

Sugiyono. 2014. *Metode Penelitian Pendidikan*. Bandung: Alfabeta.

Sulistyorini & Basoeki, H. 2013. *Sport Massage: Seni Pijat untuk Atlet/Olahragawan dan Umum*. Malang: Wineka Media.

Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. 2008. What Drives A Successful E-Learning? An Empirical Investigation of the Critical Factors Influencing Learner Satisfaction. *Computers and Education*, *50*(4), 1183–1202. Dari https://doi.org/10.1016/j.compedu.2006.11.007.

Susilo, A., Rumende, C. M., Pitoyo, C. W., Santoso, W. D., Yulianti, M., Herikurniawan, H., Sinto, R., Singh, G., Nainggolan, L., Nelwan, E. J., Chen, L. K., Widhani, A., Wijaya, E., Wicaksana, B., Maksum, M., Annisa, F., Jasirwan, C. O. M., & Yunihastuti, E. 2020. Coronavirus Disease 2019: Tinjauan Literatur Terkini. *Jurnal Penyakit Dalam Indonesia*, *7*(1), 45. Dari https://doi.org/10.7454/jpdi.v7i1.415.

Surendra, M. (2012). *Masase Olahraga*. Malang: Fakultas Ilmu Keolahragaan Universitas Negeri Malang.

Tholabi, A. T., & Nurhayati, F. 2017. *Persepsi Mahasiswa Jurusan Pendidikan Olahraga terhadap Implementasi Mata Kuliah Masase Olahraga*. 11–16.

Waryanto, et al. (2006). Online Learning Sebagai Salah Satu Invasi Pembelajaran. *Phythagoras Jurnal Matematika Pendidikan Matematika*, Vol 2 No.1.

WHO. 2020. *Coronavirus Desease (COVID-19) Dashboard*, (Online) , (https://covid19.who.int), diakses 26 Juni 2020.

484