Blended learning or full online: Increase student mood and motivation during the new normal era

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Abstract

The purpose of this study is to improve students' mood state and motivation to learn through blended learning versus full online. This type of research is quantitative with the use of experimental methods. Participants in this study were students from the PGSD study program at University of Muhammadiyah Malang (n=42). The forty-two participants were allocated to the blended learning group (n=21) and full online group (n=21). The instruments in this study used the mood states and motivation questionnaire. The intervention program was carried out for four weeks with three weekly meetings. The raw data in this study will be analyzed using the IBM SPSS application to find the mean and standard deviation, normality test, and homogeneity test. Independent sample t-test was used to test the difference in pre-test and post-test mood state scores and student motivation. The level of significance used in this study is 0.05. The study results found that there was a significant difference in effect between blended learning and full online and the data proved that blended learning had a better effect than full online. Thus, it can be emphasized that blended learning is learning that can positively change the mood state and low motivation to become high in the new normal era. This research contributes to developing a learning system that can be used in the new normal era so that lecturers can create optimal lectures.

Keywords: Blended learning, Full Online, Mood state, Motivation

INTRODUCTION

The World Health Organization (WHO) announced that COVID-19 has spread to various continents, and the global death toll has exceeded hundreds of thousands of people (Cahapay, 2020). In addition, the impact of COVID-19 has caused all sectors, from tourism, sporting events, and education (Kalloo et al., 2020), especially physical education from elementary school to university levels, to be closed and temporarily suspended (Moorhouse, 2020; Leacock & Warrican, 2020). However, at this time, the whole world is preparing to enter the "new normal" era, and to face the new normal era in the field of physical education, it must begin to re-evaluate the effective curriculum model to be applied in the learning process for students, so that COVID-19 does not spread massively (Murphy, 2020), and most importantly, the implementation of a curriculum model has an impact on their mood state and their motivation to learn again increases. Data from a previous study showed that the impact of the

COVID-19 pandemic had caused a person to become more lazy, anxious, depressed (Qiu et al., 2020; Dawel et al., 2020), stress (Torales, O'Higgins, Castaldelli-Maia, & Ventriglio, 2020; Li, Cao, Leung, & Mak, 2020), lack the mood (Browning et al., 2021) and low motivation to study (Tan, 2020).

Mood state is one of the psychological aspects of a person experiencing a rapid decline caused by COVID-19 in the current new normal era (Browning et al., 2021). A mood state can be interpreted as the emotional state of a person who is unstable due to environmental conditions (Keikha et al., 2015). Mood state is an important factor for students in undergoing the physical education learning process because a positive mood state will have an impact on higher attendance rates (Vazquez et al., 2009), while a low mood state causes depression, stress, boredom, fatigue, so that it has an impact on lower attendance levels when participating in the physical education learning process (Badenes, Prado-Gascó, & Barrón, 2016; Chacón-Borrego, Castañeda-Vázquez, & Corral-Pernía, 2018). Many previous studies have discussed the mood state of athletes when exercising and its impact on athlete performance (Turgut et al., 2020). Then the results of previous studies also reported that the mood state would affect performance when exercising, for example, a positive mood state will cause athletes to be more confident and enthusiastic when facing a match, while a negative mood state causes feelings such as anger, depression (Green et al., 2021), confusion, anxiety, boredom, depression (Chang et al., 2020). Most previous researchers have focused on investigating mood states in sports, physical activity, and physical education before the new normal era (Noce et al., 2016; Portela-Pino, Gutierrez-Sánchez, Alonso-Fernández, & De Vicuña, 2017). Although the mood state is an important aspect, there is a lack of literature investigating the mood state of students when participating in the physical education learning process during the new normal era.

The next aspect affected by COVID-19 is motivation to learn. Learning motivation is basically a psychological aspect that plays an

important role as a driver for someone to want to follow or participate in an activity (Rahm et al., 2021). In the context of physical education, high learning motivation will cause students to be more focused and have enthusiasm and willingness to learn even though the current condition is experiencing a deadly pandemic. Similar to the opinion of (Al Majali, 2020) that motivation is closely related to learning activities, the higher the learning motivation possessed by a person, the higher the learning outcomes. Conversely, if students have low motivation, it will cause feelings of laziness to learn and not be responsible for the tasks given by the lecturer (Holzer et al., 2021). The results of the latest study reported that during the COVID-19 pandemic, learning activities carried out at homemade students bored because their activities were monotonous, namely only doing the tasks given by the lecturer, so it cannot be denied that their level of learning motivation decreased slowly (Al-Kumaim et al., 2021).

Given the importance of mood state and motivation for students, these aspects must be considered and optimally improved through physical education during the new normal era. Many experts suggest implementing a full online-based learning curriculum (Usak, Masalimova, Cherdymova, & Shaidullina, 2020; Basilaia & Kvavadze, 2020) which is currently claimed to have become an effective alternative learning to be used in the new normal era (Naciri et al., 2020). However, previous studies found many challenges and problems related to full online-based learning involving lecturers and students. For example, students will not focus on subject matter that has difficult movements, so they cannot learn it optimally. Then the internet network is bad, and not all students have internet quota (Ramakrisnan et al., 2012), and many houses do not have internet connectivity, another problem is that if lecturers and students are not skilled enough to operate online learning platforms (e.g., zoom meeting, google classroom or Webex), then student achievement in learning will not be optimal (Leacock & Warrican, 2020). The study results by (Brom et al., 2020) report that distance education based on full online is

very burdensome for families, schools, and students at all levels because they have to prepare quotas and smartphones (Quezada et al., 2020).Then the research of Rochman, Indahwati, & Priambodo, (2020) reported that online learning could cause a student to lack communication, and many students feel bored when participating in online learning. With the gap in previous studies, a solution is needed to overcome this gap by implementing a learning system that is not fully online or blended learning.

Blended learning combines modern technology online with conventional learning (face to face) (Dziuban et al., 2018; Waha & Davis, 2014). Combining online and offline learning can produce more innovative and easier learning for students in the current new normal era (Rafiola et al., 2020). Blended learning integrates the latest technology and still maintains a face-to-face system. Examples of technologies used in blended learning are smartphones, laptops, podcasts, lecture capture, online chat, discussion boards, google classroom, zoom meetings, google meet, or Webex. These tools are platforms used in learning management in education today. Blended learning has been used in various academic practices worldwide, such as education (Banyen et al., 2016), medical education, nursing, business, and technique. The majority of education experts claim that blended learning is one of the best learning systems to date (Dziuban et al., 2018). Blended learning is claimed to have been an effective instructional approach during the COVID-19 era for lecturers to use in the learning process (Moorhouse, 2020). For example, in China, which was the epicenter of the first outbreak of COVID-19, more than 180 million children were instructed to stay at home, and schools were temporarily closed, but the education process must continue through blended learning (Cahapay, 2020).

Research on blended learning has been widely researched internationally (Dziuban et al., 2018; Rafiola et al., 2020; Saboowala & Manghirmalani Mishra, 2021). However, the literature shows that no previous studies have reported on the effects of blended learning on aspects of mood state and student motivation during physical education

lectures at the university level. Therefore, this research is important because it can be empirical evidence that blended has more advantages than full online. This research is expected to be a solution to overcome the problems contained in the physical education learning process during the new normal era. Thus, this study aims to improve the mood state and motivation of students to learn through blended learning versus full online.

METHOD

Participation

This research is quantitative with an experimental method. In this study, two groups were used, namely experimental class (blended learning) and control (full online). Forty-two participants representatives from level II-A male and female from the "Program Pendidikan Guru Sekolah Dasar (PGSD)" from the University of Muhammadiyah Malang were willing to participate. The forty-two participants were allocated to an experimental group (blended learning, N=21) and control (full online, N=21). How to divide the research sample into experimental and control groups using ordinal pairing. This ordinal pairing technique divides students into experimental and control groups fairly based on pretest scores. All participants must fill out a consent form to participate in the intervention program. The criteria for choosing participation are students with a low attendance rate in physical education courses. The characteristics of the participants are presented in Table I.

Table 1. Characteristics of Participation

Profil	Blended (n=21)	Full Online (n=21)
Age (years)	20.67±1.34	20.73±1.03
High (cm)	1.61±2.17	1.59±1.52
Wight (kg)	57.67±4.45	55.40±3.29

Instrument data

Mood states.

To measure the level of mood state in students can use "The Mood States Questionnaire (MSQ)" developed by Arruza et al (Chacón-Borrego et al., 2018). This instrument has 4 question items, all participants were asked questions about the presence of positive feelings (activity) and negative feelings (low mood) (Table 2).

Table 2. Instrumen Mood Satate

Variable	Indicator	Question number
Mood State	High mood following physical education lessons.	1,2,3,4,5
	Not in the mood to take physical education lessons.	6,7,8,9,10
	Not in the mood to do work.	11,12,13,14,15
	Complete the task as best as possible.	16,17,18,19,20

Each item is rated on a Likert scale from 1 to 5 points, with a score of 1 = "strongly disagree" to 5 = "strongly agree" if the statement is positive. Meanwhile, for negative statements, a value of 1 "strongly agrees" to a value of 5 "strongly disagrees." The validity coefficient of the questionnaire is 0.64 (Chacón-Borrego et al., 2018) and the reliability is 0.71.

Motivation

To measure students' learning motivation, you can use a questionnaire (Sitepu, Cahyadi & Tarigan, 2020). This instrument was tested first, so it has a validity level of 0.67 and a reliability of 0.74 (Table 3).

Table 3. Instrumens Motivation

Variable	Indicator	Question number
	Diligent in Learning.	1,2,3,4,5
	Tenacious in the face of adversity.	6,7,8,9,10

Motivation	Focus on studying.	11,12,13,14,15
	Achievement in learning.	16,17,18,19,20

Each item is rated on a Likert scale from 1 to 5 points, with a score of 1 = "strongly disagree" to 5 = "strongly agree" if the statement is positive. This instrument has been tested beforehand so that it has a validity value of 0.87 and a reliability value of 0.83.

Research procedure

This research was carried out in April of the 2021 academic year. All participants involved in this study were divided into an experimental group, a blended learning intervention program, and a control group, namely full online. The intervention program was carried out for four weeks with details of 3 meetings a week. Day 1 carried out a pre-test, namely filling out the mood state questionnaire and learning motivation, this was done so that researchers could get an idea related to the level of mood state and learning motivation of the students. Then on day 2 to day 11 carry out treatment, namely blended learning, which is integrated into physical education lectures. Then on the last day or at the 12th meeting, all participants carried out a post-test, namely filling out the mood state questionnaire and learning motivation.

Statistic analysis

Data analysis used IBM SPSS version 25. Normality test used Shapiro-Wilk test and homogeneity test used Levene test. Independent sample t-test was used to examine differences in mood states and learning motivation results before and after the intervention program was given. The level of significance used is 0.05.

RESULTS

After carrying out the research for four weeks, it was found that the normality test was declared to be normally distributed (P-value=0.123>0.05). The results of the homogeneity test also showed the same results, namely data with homogeneous variance (P-value=0.221>0.05), and for testing descriptive data shows that the mean

value of mood state and motivation in the blended learning group is greater than the full online group (Table 4). Meanwhile, for testing the research hypothesis using the Independent sample t-test analysis, the results showed that there was a difference in the effect between blended learning and full online on improving students' mood state (Fig. 1) and learning motivation (Fig. 2).

Table 4. Descriptive Value

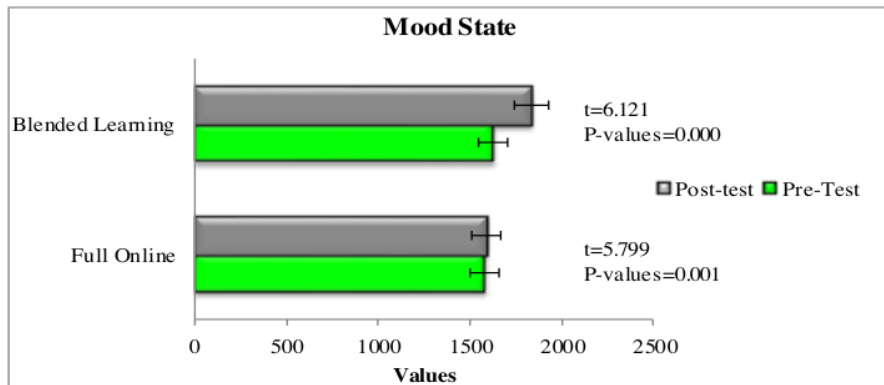| Variable		Blended Learning		Full Online	
		Mean	SD	Mean	SD
Mood State	Pre-test	3.87	1.01	3.76	1.06
	Post-test	4.37	0.71	3.78	1.01
Motivation	Pre-test	3.95	1.01	3.80	1.04
	Post-test	4.40	0.72	3.81	1.01

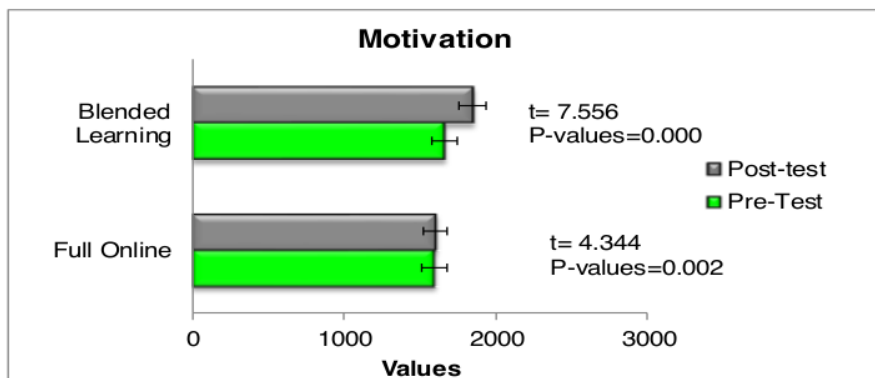**Figure 1**. Differences in Pre-Post Values in Motivation between Blended and Full Online

Figure 2. Differences in Pre-Post Values in Motivation between Blended and Full Online

DISCUSSION

The purpose of this study is to improve students' mood state and motivation to learn through blended learning versus full online. The first finding in this study is that blended learning actually creates effective learning because when students do not understand the subject matter delivered online, at the offline stage, the material is taught again by the lecturer so that students can learn it optimally. In addition, this study found that the obstacles that often occur during online learning, such as a bad internet network (Rozi et al., 2021), causing students not to catch what the lecturers say, can be overcome by offline learning. Previous studies also support the results of this study which explains that the strength of blended lies in the learning process carried out from two directions, if students are less than optimal in digesting material during online lectures, they can learn again during offline meetings (Ramakrisnan et al., 2012; Saboowala & Manghirmalani Mishra, 2021). When students feel their mood state and learning motivation are low during online lectures, the presence of offline learning can be a medicine for them. This means that when online lectures cause many obstacles and problems for students, offline lectures are the solution to all these obstacles and problems. Recent studies report that students feel happy, satisfied, comfortable, and feel their mood state becomes enthusiastic when carrying out offline lectures (Fishman et al., 2013; Elshami et al., 2021) and they state that they can understand more clearly what is being conveyed. By the lecturer. Thus, the use of lectures from two directions, namely online and offline (blended), this is the main strength of blended learning to cause an increase in aspects of the mood state, for example, their attendance is high during lectures, and they want to take blended lectures (online+offline), while the increase in students' learning motivation is shown by the behavior of wanting to discuss during online and offline lectures, they are willing to study relatively difficult lecture material. The results of this study are in line with a study conducted by Dhawan, (2020)

which explains that combining online+offline (blended) has the potential to improve student learning outcomes.

The second finding in this study is that full online also shows it can cause an increase in aspects of the mood state and learning motivation, but the increase is not as big as in the blended learning group. Improvements can occur because online can facilitate students to learn easily, and they can gain knowledge instantly anytime and anywhere (Al-Kumaim et al., 2021) by using a smartphone or laptop. Hamidi, (2020) also stated that full online learning uses an internet network in physical education learning activities so that students have the breadth of learning time whenever they can interact with lecturers. Basically, full online learning will be effective if the existing obstacles can be minimized and even overcome. The results of previous studies also reported that in carrying out full online learning, there were many obstacles, such as poor internet network, unskilled students, and lecturers using certain platforms, such as Webex, Google Meet, and Zoom Meeting (Ramakrisnan et al., 2012). Then the price is high, and the main thing is the feeling of boredom in students when participating in full online learning because the lecturer only gives them assignments (Jumareng et al., 2021). However, in this study, researchers were able to overcome several obstacles that often arise, for example, lecturers have eliminated the bad habit of often giving lots of assignments to students, then replacing them with discussions, quizzes or questions and answers between lecturers and students. The second obstacle that can be overcome is when students do not understand a lecture material, they can ask questions via WhatsApp to the lecturer after the lecture ends. By implementing such a strategy, the results of this study prove that full online learning can improve students' mood state and learning motivation slowly, although not as much as the blended group.

CONCLUSION

Based on the findings and discussions that have been described previously, this study explicitly confirms that blended learning has a much

greater influence than full online on increasing psychological aspects between mood state and motivation to learn physical education during the new normal era. This research can contribute to the development of learning in the new normal period and can be literature or reference for lecturers in carrying out a better physical education learning so that later it can maximize the acquisition of learning outcomes that have been carried out. Further research needs to be done, for example, trying to improve other psychological aspects such as self-confidence or responsibility of students when carrying out learning in the new normal.

ACKNOWLEDGEMENTS

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