

Motivation Level and Mobile Technology Role Toward Yosim Pancar Dance Training in Pandemic Covid-19 Era

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Abstract. This study to get the impact of mobile technology and motivation level toward 96 students' Yosim Pancar (YP) dance abilities. It was experimental with a factorial by level 2x2. Data analysis used were two-way anova and Tukey test ($\alpha < 0.05$). Data collection used observation, interviews and tests. The results of this study indicate the physical fitness with mobile phone application treatment ($r = 15.97$; $SD = 5.15$) and video ($r = 14.60$; $SD = 4.18$). The physical fitness with mobile phone application on students who have high motivation has ($r = 17.54$; $SD = 5.03$) and low motivation ($r = 14.7$; $SD = 4.06$). While the physical fitness with video on students who have high motivation has ($r = 14.70$; $SD = 4.06$) and low motivation ($r = 14.51$; $SD = 4.29$). There is an interaction between the two models of mobile technology with a level of motivation.

Keywords: Yosim Pancar dance, physical fitness, motivation, mobile technology.

1 Introduction

Yosim Pancar dance is a form of movement that is used as a gymnastic motion. It is an old dance move that is similar to the *poloneis* of the Western dance originating from the Sarmi district of Papua. The movement is increasingly developing and spreading through the Western and Eastern regions of Papua. The name of the dance movement is taken from the name of the type of jet-engined fighter aircraft. This aircraft is called *Straal Jager* which is the same as the Dutch Pancar Gas when landing the wheels or flying off the runway emitted a gas in the form of smoke. It did aerobic movements at the Frans Kaisepo Airport in Biaks around the 1960s when a conflict occurred between the Dutch Kingdom and the Indonesian government. These movements were imitated by the Papuan artists, cultural observers of origin, so that the name of the motion called *Pancar* emerged [1]. This dance movement is not the same as other dance movements. It has a beautiful expression of the human soul which is displayed in the form of body movements that are smoothed through aesthetics.

Therefore, the *Yosim Pancar* dance movement is used as a form of gymnastics because every movement provides aesthetic value of gymnastics and a level of physical fitness in the form of physical sports activities. It is one of the learning materials in physical education lessons and dance sports have become part of the physical education curriculum in several countries. In Indonesia, specifically in Papua, the *Yosim Pancar* dance is a material taught in physical education learning for junior high school students. Dance has its own benefits that allow students or students to develop communication skills, provide experiences in the body,

and experience in physical activities. In addition, physical fitness exercise and *Yosim Pancar* dance are also major contributors to the development of fundamental basic movements that are important for physical activity in other sports. Thus, the concept of *Yosim Pancar* learning must be right on target and the needs of junior high school students, such as the *Yosim Pancar* dance training facility that can provide a level of success.

Moreover, training activities have only been carried out conventionally and have not taken advantage of technological advances. In fact, teachers and students currently have technology facilities that can be used for training or education process [2]. This means that the success of *Yosim Pancar* training is also influenced by the students themselves, because students' internal factors are also one of the indicators in supporting *Yosim Pancar* dance training activities. Each student has a different background and interest in carrying out physical activities. Especially during the Covid-19 pandemic, *Yosim Pancar's* training activities required a level of motivation and learning facilities that made use of technology.

Motivation is a way that must be owned by students to achieve goals [3] [4]. The trainer can influence the level of student motivation in doing physical exercise [5] [6]. Students who have good self-control will show high motivation [7]. This condition is related to self-fulfillment related to psychology and physical activity [8] [9]. Basically, motivation is a psychological condition that encourages someone to do something. In learning activities, motivation can be said to be the overall driving force within students that raises, ensures continuity and provides direction for learning activities, so that it is hoped that goals can be achieved [10]. Also, the teacher's role is important to support the students' motivation [11]. Tangkudung stated that a good physical condition influences the psychiatric aspects to increase motivation work, spirit, and confidence [12].

Yosim Pancar learning is as physical activity learning refers to holistic change of individual quality [13] [14]. Therefore, to achieve the objectives of the *Yosim Pancar* training activity requires the appropriate multimedia. In connection with current technological advances, various media such as videos can be used for *Yosim Pancar's* physical training process. Moreover, technology has also been widely used in the field of sports [15]. In schools, internet networks have also been used for sports activities [16]. Even sports competition activities have used technology, [17] such as virtual technology device [18].

From previous research, it is known that the physical exercise process requires motivation as a form of desire for achievement for individuals and also sports facilities that have used a lot of technology. Therefore, this study focuses on the process of testing mobile technology and the level of motivation of students to physically practice the *Yosim Pancar* dance in the Covid-19 pandemic era. This was because *Yosim Pancar's* training had to be done at home. It requires the right media so that students feel comfortable. The assumption that if students do not have motivation, the *Yosim* transmitting training activities cannot be carried out optimally. Therefore, this study aims to obtain information on the influence of mobile technology with motivation on *Yosim Pancar* training activities for junior high school students in Yapem Timur Serui Papua.

2 Method

This research was conducted on students of Junior High School Dawai, at Yapem Timur Serui District, Papua. The research approach was experimental with a factorial treatment by level 2 x 2. It can be seen from the below table.

Table 1. Matrix of research

Motivation (B)	Mobile Technology	
	Mobile Phone Application (A1)	Video (A2)
High (B1)	A1B1	A2B1
Low (B2)	A1B2	A2B2

The population of study was 628 students Junior High School Dawai. The research sample was 96 students in 2016/2017 academic years. Technique of taking sample was simple random sampling. The samples used were divided into two groups, namely those with high and low motivation. The determination of the level of motivation is measured according to the theoretical concept of Verducci, namely 27% of students who have the highest score enter the high motivation group and 27% of students who have the lowest score enter the low motivation group. So, the high and low motivation groups each consisted of 48 students. The experimental sample grouping is as follows.

Table 2. Group of experiment

Motivation (B)	Mobile Technology	
	Mobile Phone Application (A1)	Video (A2)
High (B1)	24	24
Low (B2)	24	24

The treatment was given according to the schedule of Yosim Pancar training activities that had been determined by the school. Thus, this study has 2 validation treatments, namely controlling internal and external validation. Data collection techniques using observation, interviews and tests. The research instrument was a physical fitness test through the Yosim Pancar dance.

The data analysis technique was a two-way analysis of variance (ANOVA) and then continued with the Tukey test at a significance level of $\alpha = 0.05$. The homogeneity test used the Lilifors test. While the homogeneity test uses the Barlet or Levene Statistic test. research instrument was a physical fitness test through the Yosim Pancar dance.

3 Discussion

The result of data analysis show that motivation and mobile technology has influenced on training activity of Yosim Pancar for Junior High School students. The following is the statistic descriptive;

Table 3. Statistic descriptive

Motivation	Mobile Phone Application (A1)	Video (A2)
High (B1)	$\sum X = 421$ $\sum X^2 = 12989$ $\bar{X} = 17,54$ $SD = 5,03$ $N = 24$	$\sum X = 353$ $\sum X^2 = 9115$ $\bar{X} = 14,7$ $SD = 4,06$ $N = 24$

Low (B2)	$\sum X = 346$ $\sum X^2 = 8848$ $\bar{X} = 14.41$ SD = 3.90 N = 24	$\sum X = 348$ $\sum X^2 = 8890$ $\bar{X} = 14.51$ SD = 4.29 N = 24
Total	$\sum X = 767$ $\sum X^2 = 21753$ $\bar{X} = 15.97$ SD = 5.15 N = 48	$\sum X = 701$ $\sum X^2 = 18005$ $\bar{X} = 14.60$ SD = 4.18 N = 48

By testing the normality and homogeneity of the research data, the requirements for analysis of variance have been fulfilled. The summary can be seen in the table below.

Table 4. Analysis of variance

Variance Source	Dk	Jk	KT	Fo	Ft
Between rows (b)	1	114,286	114,286	5,968*	4,01
Between column (k)	1	77,786	77,786	4,062*	4,01
Interaction (bxk)	1	87,500	87,500	4,569*	4,01
Within	52	995,857	19,151		4,01
Total corection	55	1275,429			

Based on the summary of the results of the ANAVA calculation analysis at the level significant $\alpha = 0.05$ obtained $F_o = 5.968$ and $F_t = 4.01$ thus $F_o > F_t$ so H_o was rejected. So, it can be concluded that there are differences overall significant influence. The results of this study indicate the overall mean results of the physical fitness of the Yospim Pancar dance on the mobile phone application treatment ($r = 15.97$; $SD = 5.15$) and video ($r = 14.60$; $SD = 4.18$). against the results physical fitness. In other words that the results of physical fitness use YP dance training ($X = 31.95$ and $SD = 5.15$) was better than the fitness results jasamani using the SKJ exercise ($X = 14.60$ and $SD = 4.18$).

While Interaction count $F_o = 4.569$ and $F_t = 4.01$, it appears that $F_o > F_t$, so that H_0 is rejected and H_1 is accepted. Therefore, it is concluded that there is an interaction between motivation and mobile technology that can be seen below;

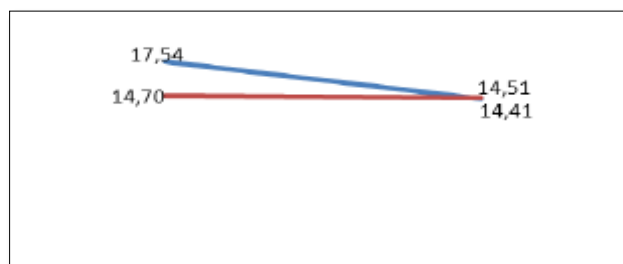


Fig. 1. Interaction between motivation and mobile technology

The physical fitness value of the Yospim Pancar dance with the use of the mobile phone application on students who have high motivation has a mean ($r = 17.54$; $SD = 5.03$) and low motivation ($r = 14.7$; $SD = 4.06$). While the physical fitness of the Yospim Pancar dance with

the use of video on students who have high motivation has a mean ($r = 14.70$; $SD = 4.06$) and low motivation ($r = 14.51$; $SD = 4.29$).

These findings indicate that motivation needs to be considered in the development of physical fitness training in the form of the Yosim Pancar dance in the covid-19 pandemic conditions. This motivation is a support the physical fitness of students.[19] In other words, to improve physical fitness, it is necessary to involve a motivational factor. In addition, the use of technology makes it easy for students to carry out exercises that are carried out offline or for students to do their own training activities through video and applications from mobile phones. Many virtual simulation is as the tools of sport training nowadays [20]. For students, the digital technology help them to increase the learning and teaching [21].

For students who have high motivation, the data obtained shows that the mobile phone application has a better effect than video on the physical fitness results of the Yosim Pancar dance. Thus, it can be recommended that the use of a mobile phone application be more suitable for students who have high motivation in increasing the mastery of the Yosim Pancar dance. Technology is evident in sports in a variety of contexts including play experience, consumption and spectators. Because of the inherent need for technology in sport, it becomes even more important to understand how to develop a comprehensive strategy for innovation management [22].

4 Conclusion

Based on the results of data analysis, several conclusions can be explained, namely

1. Overall, there is a difference between the use of video and mobile phone applications with the level of student motivation in physical fitness training for the Yosim Pancar dance.
2. There is an interaction between mobile technology and motivation in physical fitness training for the Yosim Pancar dance
3. For students who have high motivation, the use of mobile phone applications has a better effect than the use of videos in physical fitness training for the Yosim Pancar dance.
4. For students who have low motivation, the use of video is better than the mobile phone application in physical fitness training for the Yosim Pancar dance.

It can be concluded that besides there is an interaction between the two models of mobile devices with a level of motivation. In the era of the Covid-19 pandemic, it provides challenges for students who have low motivation because students find it difficult to learn to use technological devices. Unlike students who are highly motivated, students do not face learning difficulties. This research has an impact on teacher classroom management in providing learning in online classes in the Covid-19 pandemic era.

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