



Comparison of Fitness Levels and Participation in Physical Education Learning Between PPLP Athletes Rowing West Java Students and Non-Athletes

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Received: June 12, 2022; *Reviewed:* June 20, 2022; *Received:* June 25, 2022;

Published: June 28, 2022

ABSTRACT

The purpose of this study was to measure the level of fitness and participation of students in physical education learning between athletes and non-athletes (regular) at SMA Negeri 2 Padalarang. This research uses quantitative research methods, with ex post facto research. The samples in this study were 10 PPLP rowing students and 10 non-athlete students (regular) with sampling techniques using Census Sampling (Saturated Sampling) and Purposive Sampling. The research instrument used TKJI and questionnaires in the data and analyzed using the t-test. The result is that Paddle PPLP students have a more significant impact on their fitness levels and participation in physical education learning. Based on these results, it can be concluded that education can be used as an alternative to increasing the level of fitness and participation of students.

Keywords: PPLP; Rowing Athletes; non-athletes; fitness level; participation.

INTRODUCTION

Physical education is a subject that must exist at every level of education (Bangun & Yunis, 2016). Physical education is given because it has the role and function of stimulating the growth and physical development of students (Faozi, 2016). Physical education is not the same as sports, because in Physical education there are exercises aimed at strengthening muscles, heightening coordination, and maintaining a healthy body, besides that it also aims to shape the disposition of the students (Rokhayati et al., 2016). The main review of Physical education in motion, and from that motion will have a positive effect on a person's physique and mentality (Firmansyah, 2016). In addition, activities in physical investigations must be arranged in such a way as to be following the development of students (Taufan et al., 2018). Physical education is essentially an integral part of the education system as a whole (Jayul & Irwanto, 2020). Therefore, the implementation of physical education should be directed towards the achievement of

such goals. Mahendra (2009) explained: "Physical education is a process of education through physical activity, games or sports selected to achieve educational goals". From the above quote, it is clear that physical education has a very important role in intensifying the implementation of education as a process of human development that lasts a lifetime. As a form of education through motion, physical education must be carried out (Bismar & Sahabuddin, 2019) out following the understanding it contains (Jayul & Irwanto, 2020). Thus physical education is a tool for getting to the goal of education in general which is carried out through physical movement (Taqwim et al., 2020).

Physical education provides opportunities for students to be directly involved in various learning experiences through physical activity, play, and exercise which are carried out systematically, purposefully, and planned (Lengkana & Sofa, 2017). The provision of learning experiences is directed at fostering, as well as forming a healthy and active lifestyle throughout life (Fitriyanto et al., 2018). The scope of physical education The Education Unit Level Curriculum (MoNE 2008) includes "aspects of games and sports, development activities, self-testing / gymnastics, rhythmic activities, water activities, and out-of-class education according to the characteristics of students". The scope of physical education subjects in the curriculum for the high school / MA level is very helpful for physical education teachers in preparing, implementing, and evaluating student activities. Therefore, an assessment teacher must understand starting from the concept, purpose, and scope of physical education.

Physical Fitness is the ability of a person's body to perform daily work tasks without causing significant fatigue so that the body still has the energy reserves to cope with Nurhasan's additional workload (2005). Physical fitness is the main capital that should be owned by a person, be it an adult or a child (Taufan et al., 2018). Physical fitness can be obtained by doing physical activity regularly and measurably both in terms of quality and quantity (Nazirun et al., 2020). Good physical fitness will guarantee that a person will be able to carry out daily activities, with good physical fitness a person will show an optimal appearance, be confident, and always be excited and passionate in his life (Saleh & Malinta, 2020).

In addition to good physical fitness, a student should also have an ideal body mass index, because with an ideal body mass index a person may achieve a good degree of health (Saputra, 2015). Body mass index is used as one of the indicators to present

nutritional status and is an index that is responsive and sensitive to changes in nutritional status and work productivity.

Physical fitness coaching can be done with various kinds of physical exercises or sports, and all kinds of exercises and exercises can be used to improve physical fitness (Yasin & Asmara, 2018). Sudargo (2007) having good physical fitness can create and be useful for an image of body appearance that is pleasing to the eye, evoking the impression of being able to carry out daily tasks without feeling tired, and tired, and believing in one's abilities (Prasetyo et al., 2019). Moreover, for school-age children, of course, physical fitness is very important so that children are always healthy, active, and cheerful they are always enthusiastic about learning both outside the classroom and in the classroom (Hermawan, 2016), so it is hoped that with this condition children will have good concentration when receiving lessons at school (Gede Yogi Saputra, 2021). The teaching and learning process is a series of activities ranging from planning, organizing, and implementing to the assessment and organizing of what is further in teaching and learning activities (Syamsudin, 2018). Therefore, in the presentation of sports and health physical education (PJOK) learning, one unit is inseparable. This is so that students have knowledge and skills in managing the learning process Sudjana (1989). Participation comes from the English word "*participation*" which is the taking of a part or participation. According to Keith Davis, participation is a person's mental and emotional involvement in achieving goals and taking responsibility for them. Factors that influence the growth and development of participation can be approached with a variety of approaches to scientific disciplines (Izzuddin & Gemael, 2020). As stated by Turindra (2009) "according to the concept of the Educational process, participation is a form of response or response to the stimuli given; in this regard, the response is a function of *the benefits (rewards)* that can be expected."

Each school has students or students where in a school some students have a background as sports athletes, as well as at SMAN 2 Padalarang. The presence of athlete students gives color to the learning process, especially in the learning process of the examiner. Regarding student-athletes according to the broadly accepted understanding of *student-athletes* in (Wikipedia, 2012): A *student-athlete* or student-athlete (sometimes written student-athlete) is a term used to describe a participant in an organized competitive sport sponsored by the educational institution in which he is enrolled, a term

commonly used in the United States, it is used to describes the direct balance of students studying in formal education and sports as athletes entirely.

Based on the above understanding, athlete students have their characteristics, athlete students have more learning load, that is, they have a training load that must always be carried out. The heavy training load as well as the burden of following regular lessons in class is a challenge for student-athletes. It requires physical and mental readiness and excellent stamina, besides that it requires Intellectual Question (IQ) abilities and adequate *skill* abilities. With a heavy training load, athlete students are required to balance physical exercise and learning. In addition to them participating in-class learning as well as non-athlete students every day, athlete students are also required to take part in sports practices every day which will be draining of energy and time. In the school where researchers are located, there are several student-athletes such as rowing athletes, martial arts, chess, and wrestling. Meanwhile, non-athlete students or students are students in general who attend formal education at school. This is following the understanding of students according to Government Regulation Number 28 and 29 of 1990 Chapter I article I that: Student / Student a term for students at the primary and secondary education levels. The student is an input component in the educational system, which is further processed in the educational process, thereby becoming a qualified human being following the goals of national education. As a component of education, students can be viewed from various approaches, including the social approach, psychological approach, and educational/ pedagogical approach.

Based on this, non-athlete students are students in general who only take formal lessons at school and are not athletes who have a training load in their daily lives outside of school hours.

In connection with this, currently, the development of achievement sports from an early age continues to be carried out by the government to improve sports achievements by preparing prospective quality athletes in the future. One of the forms of such efforts in schools, for the time being, is that extracurricular development, especially concerning sports, is enhanced because it seeks to produce outstanding athletes. In addition, currently in every school, of course, there is always a student who is an athlete so it gives color to learning, especially in physical education learning. Likewise, at SMAN 2 Padalarang which is the place of research, in school, many students are also athletes, be they rowing athletes or others. The presence of students who are also athletes provides its color and characteristics in each learning process, especially in this study which is related

to assessment learning. There are differences between athlete and non-athlete students when participating in learning process activities caused by several factors including the improper application of learning methods, lack of teacher creativity, and teacher attention to their students.

Based on this background, problems arise that need to be raised in a study related to the differences between PPLP students and non-athlete students. The author will research PPLP students with non-athletes in fitness and participation in physical education learning at SMAN 2 Padalarang as a research sample because the school is a PPLP paddle Jabar entrustment school. Therefore, the author tries to find facts in the field to conclude how many differences in fitness levels and participation between West Java Rowing PPLP students and regular students at SMA Negeri 2 Padalarang.

The observations that have been made by the author show that the physical fitness shown by students during the learning process is still felt to be lacking, and the lack of student participation in the learning process. Departing from the problems that have been described above, the author wants to know the level of fitness and participation between West Java Rowing PPLP students and non-athlete in physical education learning.

METHOD

Research is a scientific activity that must be carried out with certain methods or techniques by scientific principles. The approach used in this study is quantitative, a type of research *ex post facto*. *Ex post facto* research examines what has happened to the subjects. The basic design of comparative causal research is very simple, and although free variables are not manipulated, there are control procedures that can be applied. Comparative causal studies also involve a wide variety of statistical techniques (Gay in Emzir, 2007).

Table 1.
 Basic Design of Comparative Causal Research

Case	Group	Free Variables (Fitness Level)	Bound Variables (Participation)
A	E (PPLP) K (Reg)	(X ₁) (X ₂)	Or Or

The population used in this study was all students at SMAN 2 Padalarang, West Bandung Regency. The number of students is 2,149 students, which also includes 10 students of PPLP Rowing West Java. According to Arikunto (2012, p. 104) if the total

population is less than 100 people, then the number of samples is taken as a whole, but if the population is greater than 100 people, then it can be taken 10-15% or 20-25% of the total population. Based on this study because the total population is not greater than 100 respondents, the author took 100% of the total population of PPLP Rowing students, which is as many as 10 people. Thus the use of the entire population without having to withdraw the research sample as an observation unit is referred to as the Saturated Sample (Census Sample). Meanwhile, the sampling technique used to determine the sample of non-athlete students (regular) uses purposive sampling techniques. According to Sugiyono (2016), "Purposive sampling is a technique for determining samples with certain considerations." So in this case the researcher will consider which sample matches the study this time. For example, the researcher will examine the level of fitness and student learning participation, and the researcher will ask for advice from the assessment teacher who has known the characteristics of each class, which presumably the level of fitness and learning participation of the students is less visible, that is what will be sampled in this study. And 10 students from Class X IPA2 were selected who were samples for non-athlete (regular) students in this study. The sampling criteria in this study were 20 students consisting of: (1) 10 students who are members of the West Java Rowing PPLP, and (2) 10 students of Class X IPA2 students of SMA Negeri 2 Padalarang.

The questionnaire in this study is a closed questionnaire designed using the Likert scale with five alternative answers, so respondents were asked to choose alternative answers that were already available. The measurement scale used in this study is the Likert scale. The scoring pattern is as follows:

Table 2.
Likert Scale Table

No.	Statement	Statement/Score	
		Positives	Negative
1	Strongly Agree/ Always/Very positive	5	1
2	Agree/ Often/Positive	4	2
3	Doubtful/ Sometimes/Neutral	3	3
4	Disagree/ Almost never/ Negative	2	4
5	Strongly disagree/ Never/ Very Negative	1	5

The results of each test item that have been achieved by the students can be called rough results. This is because the units of measure used for each test item are different, which include units of time, motion tests, and height measures. To get the final result, it needs to be replaced in the same unit, namely VALUE. After the rough results of each

test are converted into units of values, it is continued by summing the values of the five TKJI tests. The result of the summation is used as the basis for determining the classification of physical freshness.

Table 3.
 TKJI Value Table (For sons aged 16-19 years)

Value	Run 60 meters	Hang Lift the body	Sit	Jump Upright	Run 1200 meters	Value
5	s.d-7.2"	19- up	41-up	73 above	s.d- 3'14"	5
4	7,3"-8,3"	14-18	30-40	60-72	3'15-4'25"	4
3	8,4"-9,6"	9-13	21-29	50-59	4'26"-5'12"	3
2	9,7"-11,0"	5-8	10-20	39-49	5'13"-6'33"	2
1	11.1"-etc	0-4	0-9	38-etc	6'34"-etc	1

Table 4.
 TKJI Value Table (For girls aged 16-19 years)

Value	Run 60 meters	Hang Lift the body	Sit	Jump Upright	Run 1000 meters	Value
5	s.d-8.4"	41"- up	28-up	The 50s	s.d- 3'52"	5
4	8,5"-9,8"	22"-40"	20-28	39-49	3'53-4',56"	4
3	9,9"-11,4"	10"-21"	10-19	31-38	4'57"-5'58"	3
2	11,5"-13,4"	3"-9"	3-9	23-30	5'59"-7'23"	2
1	13.5"-etc	0"-2"	0-2	22-etc	7'24"-etc	1

Table 5.
 Indonesian Physical Fitness Test Norms

No.	Sum of Values	Clarification of Physical Freshness
1	22 – 25	Very Good
2	18 – 21	Good
3	14 – 17	Medium
4	10 – 13	Less
5	5 – 9	Less Once

Descriptive analysis according to Natawiria (2010) is an analysis that describes data that will be made both alone and in groups. Descriptive analysis was carried out to obtain an overview of physical fitness, participation, and physical education learning outcomes of students at SMAN 2 Padalarang.

RESULTS AND DISCUSSION

The data obtained are data on the level of physical fitness and participation (questionnaire test) yang obtained as follows:

Table 6.
 The Result of Calculating the Average Value and Standard Deviation

Group	Average		Standard Deviation	
	TKJI	Participation	TKJI	Participation

PPLP	22	167.6	2.748737	4.060651
Regular	16.2	158.3	4.467164	13.32541

Based on table 6, it can be seen in the group of PPLP rowing students the average score on the TKJI 22 test with a standard deviation of 2.74 while the group of regular rowing students in the TKJI ts 16.2 with a standard deviation of 4.46 and on the PPLP rowing student questionnaire participation test an average score of 167.6 with a standard deviation of 4.06 and in the regular student group with an average of 158.3 with a standard deviation of 13.32.

Normality Test

The normality test is used to find out whether the data obtained is normally distributed or not. Normality tests were conducted on rowing PPLP student data and regular student data. The normality test used is *Liliefors*. The sample data is normally distributed if L_o is smaller than L_t . A summary of the results of the normality test is shown in the table below:

Table 7.
 Normality Test with Liliefors Participation (questionnaire test)

Kath. Date	Liliefors		Ket.
	<i>Already</i>	<i>Lt</i>	
PPLP Students	-0.012341	0,258	Usual
Regular Students	0.237847	0,258	Usual

Table 7. it can be stated that the data of rowing PPLP students and regular students are normally distributed with L_o both smaller than L_t . It is described in the normality test table in the appendix.

Table 8.
 Normality Test with Liliefors Fitness level

Kath. Date	Liliefors		Ket.
	<i>Already</i>	<i>Lt</i>	
PPLP Students	0.166677	0,258	Usual
Regular Students	0.20551	0,258	Usual

Table 8. it can be stated that the data of rowing PPLP students and regular students are normally distributed with L_o both smaller than L_t . It is described in the normality test table in the appendix.

Homogeneity Test Results

Homogeneity testing aims to find out whether the two variables in the study (PPLP Rowing students and Regular Students) have variants that are homogenous or heterogeneous. Here are the results of the homogeneity test of the two groups:

Table 9.
 Participation Homogeneity Test Results

Group	Variance	f count	Table f	Conclusion
PPLP Rowing	16,49	0,09	3,18	Homogeneous
Regular (non-athlete)	177,57			

Based on the results obtained from the homogeneity test table 9 the calculation of the homogeneity test of the two groups (PPLP and Regular) has the same or homogeneous variant. The data obtained are said to be homogeneous when the indigo f count is smaller than f the table. The above data shows that the calculated f value is 0.09 and the F-table is 3.18. Because being accepted means that the two groups have no significant difference in variance which means that both groups have the same or homogeneous variance. H_0

Table 10.
 Fitness Level Homogeneity Test Results

Group	Variance	f count	Table f	Conclusion
PPLP Rowing	7,56	19,96	3,18	Homogeneous
Regular (non-athlete)	19,96			

Based on the results obtained from the homogeneity test table 10 the calculation of the homogeneity test of the two groups (PPLP and Regular) has the same or homogeneous variant. The data obtained are said to be homogeneous when the indigo f count is smaller than the F-table. The above data shows that the value of the calculated f is 0.38 and the F-table is 3.18. Because being accepted means that the two groups have no significant difference in variance which means that both groups have the same or homogeneous variance. H_0

Hypothesis Test

The test results can be seen in table 11.

Table 11.
 Results of one-party testing of Fitness and Participation Levels (Questionnaire Test)

Group	Variance	t Calculate	t Table	Conclusion
PPLP Rowing	16,49	1,94	1,374	There are differences in fitness and participation
Non Athletes	177,57			

(regular)				levels between PPLP athletes and non-athletes.
PPLP Rowing	7.56			
Non Athletes	19.96	2,77	1,374	
(regular)				

Significance testing/hypothesis test uses two one-party averages if $t\text{-count} > t\text{-table}$ then accepted H_1 and rejected, otherwise if $t\text{-counts} < t\text{-table}$ and rejected. H_0 received H_1

Based on the results presented in tables 10 and 11, it is known that the calculated t and t values of the table with an α of 0.05. It means that the $t\text{-count}$ is greater than the $t\text{-table}$ than accepted. It can be concluded that there is a significant influence on the level of fitness and participation of PPLP Rowing students and non-athletes (regular). H_1

Discussion of Findings

From this research, it can be concluded that "Fitness and Participation Levels have a significant effect on West Java Rowing PPLP students and non-athletes (regular)" both groups were given treatment to determine the level of physical fitness and participation of PPLP Rowing students and non-athlete students (regular).

Based on the results of data analysis that the author has done, PPLP Rowing students have a more significant influence on the level of physical fitness and student participation in physical education learning. Because physical education encourages students to actively move and feel good (Syamsudin, 2018).

Physical fitness is one of the important goals in learning physical education. Coaching programs that utilize physical activity for educational purposes are directed at improving the degree of physical fitness. Physical fitness is influenced by several factors, namely: (1) regularity of training, with a fairly strenuous activity intensity, (2) genetic factors, and (3) nutritional adequacy (Rusli Lutan, 2001). Between participation and physical fitness, of course, there is a connection. A person who has good physical fitness, of course, also has good participation in participating in learning.

The components mentioned above must be present in the coaching program or exercises for example such as PPLP coaching to improve students' physical fitness (Ihsan et al., 2022). Physical education in schools must meet the concepts mentioned above, and have certain objectives that lead to educational goals, namely improving the physical fitness and endurance of students, with the fitness of the student body condition will affect the level of student participation in participating in learning (W & Nurkholis,

2013). All activities or physical activities carried out by students affect the level of physical fitness they have. With a person's fitness, his mindset can develop well and can stimulate the brain well too, because his motor nerves function optimally (Bahari & Nurkholis, 2020).

According to B. Suryosubroto (2001). Three things must be considered in participating in an activity, including participation in planning, participation in implementation, and participation in evaluation. Participation in planning can be interpreted as the degree to which students are involved in the planning of learning activities. Participation in the implementation is the extent to which students are involved in the implementation of learning which can be seen from how the students behave when participating in the learning, whether they pay attention to the material presented and carry out all the instructions taught by the teacher (Akbar & Junaidi, 2018). The high participation also reflects the interest and appreciation of students in sports activities. Participation is believed to be a prerequisite for the strong foundation of building the pillars of sports, both educational sports, community sports, and achievement sports (Widowati, 2015). One of the obligations of students in participating in learning is to participate in every learning process that takes place. A student's ability to participate in each learning process will affect the success of the learning that takes place and create a more lively learning atmosphere and a sense of meaning both in the classroom and in the field (outside the classroom). Participation in every learning activity must be evenly distributed and must be carried out by all students, both PPLP and regular students. Student participation is very important in every learning activity both in the classroom and in the field, especially in physical education learning where the subject matter requires students to always participate.

From the statement above, it can be concluded that participatory activities require students to play an active role in the ongoing teaching and learning process. The ability to participate must be applied by the student in every subject he learns, especially in physical education learning (Sahabuddin & Hakim, 2019). As it is known that learning physical education requires students to do physical activity outside the classroom, if students do not participate in learning, it will affect the success of learning continuity.

Physical education learning can be said to be successful if it can arouse the learning atmosphere of students as well as shape students' social behavior, one of which is to increase student participation in the educational process (Rahanyaan & Nurkholis, 2013). Physical fitness is one of the supporting factors for the process in every learning process

of the examiner and other learning (Abduh et al., 2020). Sports have various goals, some aimed at just filling free time, recreation, health, prestige, or achievement of achievements (Sahabuddin, 2017). Sugiarto, (2012) The purpose of exercise that wants the level of physical fitness of the body to be maintained requires the setting of training strategies that are right on target and following the condition of the body. Self-confidence, willingness to exercise, and continuous effort and hard work are aspects that must be done in sports and ultimately contribute to the development of the nation. In other words, sports can be used as an instrument for nation-building through individual coaching from the moment of learning. Laksmi (2011) Rowing is a sport that requires energy and a high level of focus, besides that the sport of rowing itself can also be equated to the same level of energy needed as heavy workers. Rowing sports require very high physical fitness, this is because rowing is a type of exercise that is very fast and lasts a long time, this will certainly drain a lot of energy and stamina of the body.

CONCLUSIONS AND SUGGESTIONS

The results of data processing and analysis in the previous discussion were: (1) There are differences in fitness levels in physical education learning between PPLP rowing athlete students and non-athlete students (regular), and (2) There are differences in participation in physical education learning between PPLP athlete students and non-athlete students (regular)

Based on the results of data processing and analysis in the previous discussion, the author concludes that physical education can be used as an alternative to increasing the level of fitness and student participation.

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