Physical Fitness: Effects of Active Lifestyle Internalization Through Physical Literacy Awarenes Based Project

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Abstract

Background and Study Aim. Physical fitness is an important indicator of the current and future health status of college students. But in reality, there are still many issues with poor physical fitness. Therefore, this study aims to determine and examine how internalizing an active lifestyle through physical literacy awareness based on project-based learning can improve physical fitness.

Materials and Methods. This research uses the experimental method of times-series type (equivalent times-series design). The population as well as the research sample were all physical education students of Lambung Mangkurat University, even in the 2022–2023 semester of programming physical literacy courses, totaling 140 people. The research sample was divided into three classes: 1) class A-1 numbered 48; 2) class A-2 numbered 45; and 3) class A-3 numbered 47. The three classes received intervention in lectures in the form of internation and active lifestyle through project-based learning and physical literacy awareness. The data selection instrument in this study was the TKPN (Student Fitness Test Nusantara) test in 2022. Data analysis using 14 SPSS version 26 application.

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Results 15 he results showed that there was an increase in physical fitness after treatment. The results can be seen from the mean value of test 3 which is 36 76 greater than the value of test 1 which is 2.936 and in test 2 the mean value is 3.051. Next, the results of further tests using the test show a significance value of 0.000 < 0.05, so there is no significant difference between test 1 and test 2.

Conclusions. The results of the study provide information that internalizing an active lifestyle through project-based learning and physical literacy awareness can improve physical fitness. So that these results can be utilized and applied in physical education, especially to maintain physical fitness.

Keywords: Physical fitness, active lifestyle, physical literacy, project-based learning

Introduction

Physical fitness is defined as a set of attributes or characteristics that individuals have related 32 to their ability to perform physical activities. Where this refers to the body systems that work

34 goether efficiently (Suryadi, Suganda, et al., 2023). Thus, to enable a person to be healthy and 35

- able to carry out daily physical activitie 40 ithout causing excessive fatigue, it requires good
- 36 Anysical fitness (Rubiyatno et al., 2023). So that they are still able to enjoy their free time and
- 37 be able to carry out their activities again (Mahud, 2018). If the physical fitness conditions
- 38 described are owned by someone, that person will be able to carry out daily activities well, be
- 39 productive, and enjoy his life well too.

Sedentary lifestyles and a lack of physical activity in young people are two of the many 40 causes of the obesity epidemic and even a decline in physical fitness. The implementation of 41

- Regular, quality physical activity during childhood can lead to improvements in physiologic 42
- and morphologic variables (Owen et al., 2010). The success of realizing physical fitness 43
- 44 especially in school-age children, has been widely found. Various other benefits of physical
- 45 Activity can provide psychological development for children (M. & I., 2019) (Bäckmand et al.,
- 46 2006), lifestyle development, social development, cognitive development (Donnelly et al.,
- 47 2016), and motor development (Samodra et al., 2023). Most children's physical activity is
- currently allocated to regular physical education classes at school for economic reasons (Bailey, 48
- 49 2016).

- 50 Physical fitness is an important indicator of the current and future health status of
- 51 adolescents (Rubín et al., 2017). There are several factors that cause a decrease in physical 52 fitness, including age, gezer, BMI, waist circumference, hypertension, and diabetes mellitus
- 53 (Juliansyah et al., 2021). Several studies emphasize that low physical fitness is a contributing
- 54 factor factor in the development of non-communicable diseases (Lavie et al., 2019),
- 55 2019). For example, if physical fitness is low, such as cardiovascular disease, then it is at risk
- 56 of causing death (Vancampfort et al., 2019; Zhao et al., 2019). Research data assessing students'
- 57 physical activity levels shows a lack of physical activity in modern youth (Lipošek et al., 2019).
- 58 Some of these reviews reinforce the importance of maintaining physical fitness, which is not
- 59 only for sportsmen but also important for the general public. With some research
- 60 considerations, of course, it can be a reference on how to maintain good physical fitness.
- 61 A study found that 12 weeks of physical, functional-based training effectively improved
- students' physical fitness (Li et al., 2023). It turns out that the application of the interval training 62 63 method can improve physical fitness (Hardiansyah, 2017)(Grygoriy et al., 2020).
- 64 Further research adds that regular and measurable endurance and strength training can improve
- physical fitness (Görner & Reineke, 2020). Physical training for six months can cause 65
- 66
- significant changes and promote improved bone health, especially in women (De Oliveira et
- 67 al., 2021). In addition, six months of physical training can improve cardiorespiratory capacity
- 68 and upper limb muscle fitness in all students. Some of the research results above suggest that
- 69 physical fitness is improved by doing physical activities by applying certain methods, carried
- 70 out over a certain period, and strictly controlled by the teacher or coach. So that physical fitness
- 71 can be improved properly.
- 72 Several studies have revealed various assumptions related to physical fitness. The facts
- 73 presented also illustrates that the reduction in physical activity carried out by some people can
- 74 cause a decrease in the level of physical fitness (Rubiyatno et al., 2023). However, researchers
- 75 still consider it inappropriate if the goal of physical fitness is for the long term (lifelong physical
- 76 fitness). So this requires knowledge, experience with discipline, motivation, confidence, and

awareness to carry out physical activity as a necessity of life. The The results of the study 77 78 emphasize that physical fitness is related to health, which is influenced by several factors, 79

including socioeconomic status (Kljajević et al., 2022), and body weight (Galan-Lopez et al.,

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grevious research has argued for the contribution that exercise makes 🚹 psychological emotional and physical well-being (Hughes et al., 2020). Exercise has benefits in improving body health and can also reduce the risk of disease (Meo et al., 2021). Based on these reviews, it has been explained that exercise plays an important role in keeping the body fit. The truth about this explanation has been proven by several studies: that physical Activities carried 23 It through sports have a positive effect 7 in physical fitness (Suryadi & Rubiyatno, 2022) (Suryadi et al., 2021) (Baek et al., 2020). Therefore, it is very important to maintain physical fitness in order to carry out various activities optimally. Lack of physical activity, such as moving, can cause the body's health to decline (Erliana & Hartoto, 2019). Which is estimated as one of the risk factors for various health problems and stress experienced (Østerås et al., 2017).

The United States Department of Health and Human Services recommends that youth ages 6-17 engage in at least 60 minutes of physical activity daily (USA. DHHS, 2018). Therefore, physical education as an organized and compulsory activity is a key component of physical education (Aziz, Okilanda, Rozi, et al., 2023)(Aziz, Okilanda, Permadi, et al., 2023)(Suryadi, Samodra, et al., 2023). So it can be one of several possible environments. Other Research reveals that incompetent general teachers in physical education have been a major problem for many years (Barroso et al., 2005) (Morgan & Hansen, 2008). Where teachers become one of the success factors of school learning (Hardinata et al., 2023) (Harianto et al., 2023). The union of teachers and pupils must have a mass, just as the union of athletes and their coaches must have a mass. A person's bodily and spiritual connection will last till the end of time. As a result, having training guidelines to enhance physical fitness autonomously with full knowledge, drive, and confidence is essential.

Based on the fact that research is currently developing, namely increasing physical fitness due to controlled and monitored training from teachers, trainers, or physical trainers. We understand together that the togetherness of a teacher and trainer has a time limit, namely as long as they are still students or under contract with their physical trainer. After that, They must separate, and the student or students will live independently and determine all their own life achievements. Independent in the sense that individuals are able to determine exercise patterns, exercise loads, exercise variations, and habits for continuous physical activity during their lifetime. Internalizing an active lifestyle through physical literacy using project-based learning is the right method to equip students with knowledge and experience so that they can be independent and realize the quality of their physical fitness. (Mashud, 2021). The main feature of its internalization is that students carry out physical activity consciously, continuously, and regularly every day, accompanied by knowledge understanding, motivation, and selfconfidence of the physical activities carried out so that an active lifestyle is formed throughout their lives. Structured and patterned routines and continuous rounds of activity will form a fit body or physique (physical fitness).

119 The form of internalization of physical activity with physical literacy using the project-based 120 learning method to form an active lifestyle is a novel concept that researchers carry in this 121 research. Researchers claim that this internalization concept has not been maximally developed

122 and needs deeper study and innovation, both abroad and domestically, especially in South

- 123 Kalimantan. In addition, the urgency of solutions in the short term is to form the awareness of
- 124 prospective teacher students to be cultured in active living throughout the day so that they are
- 125 expected to become a generation that is fit, healthy, and behaves productively. Furthermore, the
- 126 urgency of long-term solutions is the realization of teachers who are aware of the culture of
- 127 active living and physical literacy So that great hope will be formed, teachers who are able to
- 128 innovate in carrying out their duties and functions as physical education teachers.

129 Materials and Methods

- 130 Participants. The study population was all physical education students at Lambung Mangkurat.
- 131 University even in the semester of 2022-2023 who were programming physical literacy courses
- 132 totaling 140 people, but in this study only 133 people were given treatment until completion.
- 133 The sample used in this study is the entire population, also referred to as population research.
- 134 The entire population becomes the research sample (Vaughn, Debbie, & Lomax, 2020).
- 135 The intervention technique or treatment to the research sample by following the class
- 136 division carried out by the physical education study program, which is divided into three
- 137 classes: 1) class A-1 totaling 48; 2) class A-2 totaling 45; and 3) class A-3 totaling 47. The
- 138 research was conducted at Lambung Mangkurat University, Banjarbaru City, South
- 139 Kalimantan. The research was conducted from April to June 2023.
- 140 Research Design. This study used the time-series experimental method, which 29 as chosen by
- 141 researchers because researchers only have access to one group and can study it within a certain
- 142 period of time (Harrison et al., 2020). In addition, the seattion of the time series experimental
- 143 method was based on the research objectives, namely to determine the impact of changes in
- 144 students' physical fitness after attending lectures and internalizing active lifestyles through
- 145 project-based learning and physical literacy awareness for eight weeks or two months. or two
- 146 months (Payadnya, I & Jayantika, I, 2018). It is said that the researcher only has access to one
- 147 group; that is, researcher a wants to test the application of interplizing an active lifestyle
- 148 through project-based learning-based physical literacy awareness on improving the piscal
- 149 fitness of all students, a schematic description of the time-series experimental method is shown
- 150 in Figure 1 below.

151 152

>>>Figure 1. figure attached<<<

- 153 Research Procedure. Based on the research design of the time series experimental method in
- 154 Figure 1, The research procedure can be described as follows: 1) the researcher collects students
- 155 as research participants in accordance with the class group determined by the ULM physical
- 156 education study program; 2) after being divided into class groups, the researcher conducts the
- 157 first stage of measurement or observation (physical fitness) of participants; measurement and
- 158 observation are carried out in the first week of the study; 3) then the learning intervention is
- 159
- carried out in the course by applying internalization of an active lifestyle through physical
- 160 literacy awareness based on project-based learning; 4) In the fourth week, the second stage of
- 161 measurement and observation (physical fitness) is carried out; 5) The learning intervention is 162 carried out in the course by applying the internalization of an active lifestyle through physical
- 163 literacy awareness based on project-based learning, and 6) in the twelfth week, the third and
- 164 final stage of measurement and observation (physical fitness) is carried out.
- 165 In addition, in implementing physical literacy awareness based on project-based learning,
- students reported daily practice journals every week for eight weeks during the intervention 166

- 167 time. This data was also used by the researcher to investigate the stages of the project carried
- 168 out by students each week.
- 169 Research Instruments. Data collection instruments in this study used two kinds of instruments:
- 170 1) instruments measuring phi23 al fitness using the TKPN test (Student Fitness Test of the
- 171 Archipelago) issued by the Ministry of Youth and Sports of the Republic of Indonesia
- 172 (Pedoman Tes Kebugaran Pelajar Nusantara, 2022). 2) A physical literacy portfolio instrument
- 173 in the form of a daily exercise journal.
- 174 The TKPN test in 2022 has five indicators, namely: 1) Body mass index test; 2) Sit and rich test
- 175 to measure body flexibility, 3) A sit-up test to measure abdominal muscle strength and
- 176 endurance, 4) Squatrus-test to measure body power, 5) Pacer test to measure cardio-respiratory
- 177 endurance. While the physical literacy portfolio instrument is in the form of a daily exercise a
- 178 journal is used to measure students' active lifestyles.
- 179 Statistical Analysis. Measurements were taken three times during the intervention period,
- 180 resulting in three consecutive sets of data. For this reason, data analysis was conducted in three
- 181 stages: descriptive statistics, normality, and repeated measurement ANOVA (Leppink, 2019).
- 182 Results
- 183 The results of the physical fitness category with internalization of active lifestyle through
- physical lieracy awarnes based on project-based learning. The results in table 1 and figure 2 184
- 185 show that out of 333 students there are 1.5% in the very low category, 40.6% in the low
- 186 category, 57.1% in the moderate category and 0.8% in the good category. Based on these
- 187 results, it provides evidence that physical fitness in test 1 is dominant enough.
- 188 Further data on test 2 physical fitness provides information that out of 133 students there are
- 189 33.1% in the low category. Next, there are $64.\overline{7}\%$ in the moderate category and 2.3% in terms of the category and 2.3% in the moderate category and 2.3% in the moderate category.
- 190 good category. Based on these results, it provides evidence that physical fitness in test 2 is in
- 191 the moderate category. The results can be seen in table 2 and figure 3.
- The results of the physical fitness 5 est 3 showed that out of 133 students there were 9% in the 192
- 193 low category. Next there are 82% in the moderate category and 9% in the good category. Based
- 194 on these results, it provides evidence that physical fitness in test 3 is in the moderate category.
- 195 The results have changed quite well, white the changes are clearly visible from the percentage
- 196 of physical fitness that is getting better. The results can be seen in table 3 and figure 4.
- 197 >>>Table 1. table attached<<<
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- 199 >>>Figure 2. Figure attached<<<
- 200 >>>Table 2. table attached<<<
- 202 >>>Figure 3. Figure attached <<<
- 203 >>>Table 3. table attached<<<
- 205 >>>Figure 4. Figure attached<<<
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- Based on descriptive data analysis shows 33 at the results of physical fitness through the mean 207
- 208 value of the increase that occurs. Where the results in test 1 show a mean value of 2.936 and 209
- the mean test 2 results are 3.051 where these results show an increase although not so great.
- 210 The next result in test 3 physical fitness shows a mea 26 alue of 3.376 which is greater than the
- 211 mean results of test 1 and test 2. Based on this data, it can be said that there is an increase in
- 212 physical fitness that occurs after internalizing active lifestyle through project-based learning-
- 213 based physical lieracy awarnes. To clarify the results can be seen in table 4 and figure 5.
- 214 >>>Table 4. table attached<<<
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- 216 >>>Figure 5. Figure attached<<<
- 217 >>>Table 5. table attached <<<
- 218 >>>Table 6. table attached<<<
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- 220 Based on the results of the normality test with Kolmogorov-Smirnov, A shows that the
- 221 significance value is p = 0.200 > 0.05, so the data can be said to be normal. The results can be
- 222 seen in table 5. Furthermore, the results in table 4 show the value of the physical fitness
- 223 homogeneity test on students. The results obtained a significance value of 0.181> 0.05 which
- 224 provides information that the data is homogeneous. So that further tests can be carried out to
- 225 see the difference in the data.
- 226 >>>Table 7. table attached<<<
- 227 The results of further tests in this study 25 ing the Tukey HSD test, the results of the study
- 228 provide information on the significance value of 0.053> 0.05, the data can be concluded that
- 229 Test 1 paired with Test 2 has no significant difference. The results of Test 1 paired with Test 3
- 230 sl₂₀/ed a significant difference of 0.000 <0.05. The next data Test 2 is paired with test 1 with
- 231 a significance value of 0.053> 0.05 which means there is no significant difference. The results
- 232 of Test 2 are paired with test 3 with 33 significance value of 0.000 <0.05, so the data has a
- 233 significant difference. The results of Test 3 paired with Test 1 and Test 2 show a sign 45 ant
- 234 difference, this is clearly seen in the mean value of Test 3 which is more dominant. These results
- 235 can be seen in table 7.
- 236 Discussion
- 237 This study aims to determine and examine how internalizing an active lifestyle through physical
- 238 racy awareness based on project-based learning can improve physical fitness. The results
- 239 showed that there was an increase in physical fitness by internalizing an ac 15 lifestyle through
- 240 physical literacy awareness based on project-based learning. These results can be seen from the
- 241
- fact that the mean value of test 3 is greater than the values of test 1 and test 2. In addition, the 242 results of further tests also show significant differences when test 3 is paired with test 1 and test
- 243 2. Therefore, these results have provided valid information that the application of an active
- 244 lifestyle through physical literacy awareness based on project-based learning can increase
- 245 students' physical fitness.
- 246 According to a research (Rudd et al., 2020), physical literacy is a cause to increase physical
- 247 activity performance, which is associated to fitness. It will build an active lifestyle with high
- 248 physical literacy. Furthermore, research indicates that a physically active lifest 39 plays an
- 249 essential role in enhancing fitness and health (Nooijen et al., 2012). This remark is supported
- 250 by study by (Filgueira et al., 2021), which found that a physically active lifestyle and physical

- 251 fitness can offer immunological protection. Increased physical exercise will improve physical
- 252 fitness and may help minimize the risk of cardiovascular illness (Nooijen et al., 2012). As a
- 253 consequence, the development of many facts will result in parallels and discrepancies with the
- study's findings. Furthermore, project-based learning (Candra et al., 2023) shows that the
- adoption 22 f project-based learning can boost students' physical fitness. According to other
- studies, project-based learning is one of the most popular learning methodologies in modern
- education (Simonton et al., 2021).
- Although not emphasized in this presentation, we suspect that active lifestyle through physical
- 259 literacy awareness based on project-based learning can be an appropriate learning model in
- 260 physical education, especially in maintaining physical fitness. This conjecture can be based on
- 261 (Tables 1,2,3 and 4) where changes are clearly visible, so this is an illustration to improve and
- 262 mai 46 in physical fitness. In addition, sports teachers who implement 42 ject-based learning
- 263 can simultaneously improve student learning and gain an 43 ual position with other educational
- subjects by connecting wit school initiatives (Simonton et al., 2021). (Simonton et al., 2021).
- 265 The results showed that project-based learning with interactive multimedia can improve
- 266 18 aststroke swimming skills. (Mashud et al., 2023).. In the case of physical fitness, it turns out
- that the project-based learning model is better than the case method to improve physical fitness.
- 268 (Candra et al., 2023).
- 269 Although it is not specifically mentioned in this presentation, we believe that an active lifestyle
- 270 based on physical literacy awareness and project-based learning can be an acceptable learning
- paradigm in physical education, particularly for sustaining physical fitness. This hypothesis
- 272 may be supported by (Tables 1,2,3, and 4) where improvements are plainly evident,
- 273 demonstrating how to develop and maintain physical fitness. Furthermore, by collaborating
- with school projects, sports teachers may simultaneously boost student learning and attain
- 275 garity with other educational topics (Simonton et al., 2021). The findings demonstrated that
- 276 project-based learning with interactive multimedia may enhance breaststroke 22 vimming
- abilities (Mashud et al., 2023). In the instance of physical fitness, it turns out that the project-
- based learning model is superior to the case approach (Candra et al., 2023).
- Therefore, pl24 cal education must be of high quality to encourage and support all learners. So
- that they can develop into lifelong participants in a way that maintains their own health, fitness,
- and well-being (Griggs & Fleet, 2021). Research findings conducted by (Wong et al., 2022)
- 282 Early life frequency in socioeconomic status has an important role in childhood and adolescent
- physical fitness. Osteoarthritis in children can be prevented by early-life interventions (Antony
- 284 et al., 2016). This statement is 47 einforced by (Kang et al., 2015). The results of a
- 285 multicomponent training program can improve the physical fitness of elderly women.
- Several studies have shown that physical activity has a positive impact on physical fitness.
- 287 (Pahkala et al., 2013; Suryadi, 2022; Suryadi, Suganda, et al., 2023), health (Moreno-Quispe et
- al., 2021), physical fitness (Dede Pebriandi Sihotang & Novita, 2021), pediatric knee structure
- 289 (Antony et 41, 2016), adiposity, bone health, psychological health, and cardiorespiratory fitness
- 290 (Loprinzi et al., 2012). Furthermore, the provision of physical activity was also found to
- 291 27 prove children's vascular hemodynamics (Köchli et al., 2021), reduce body fat levels (Dias
- 292 et al., 2018; Magaizies et al., 2019; Ortega et al., 2013; Türk et al., 2017). Prevention of
- 293 overweight (Obert et al., 2017; Wewege et al., 2017), obesity (Afrasyabi et al., 2019; de Lira et
- 294 al., 2017; De Lorenzo et al., 2018; Musálek et al., 2021; Ortega et al., 2013; Soh et al., 2020),
- 295 type 2 diabetes mellitus (Rush & Simmons, 2014), muscle endurance (Alficandra et al., 2019),
- and possibly increasing sports participation in high school (Battista et al., 2021).

- 297 These evaluations highlight the need of physical exercise, but particular dosages of physical 298 activity that are appropriate for this age are required (Laurent et al., 2021). Multifaceted treatments can enhance preschoolers' body composition and physical fitness (Zhou et a 22014). 299 300 The research intended to offer an overview of effective learning activities that promote physical 301 fitness. The key drawback of this 23 dy is the activities that students engage in prior to taking 302 the exam, whether heavy or light. Further research should encourage regular exercise since the 303 study on internalizing an active lifestyle through project-based learning-based physical literacy 304 awareness on physical fitness has not bee pipplied. In some of these talks, sports practitioners' 305 readiness must be more mature (Parnell et al 2020). Despite the limitations indicated, this 306 study should provide a significant addition to physical fitness as well as physical fitness 307 research, and it will be valuable in understanding the key unfavorable aspects (Kljajevi et al., 308
- 309 The realization of physical fitness through the internalization of an active lifestylephysical 310 literacy awareness based on project-based learning. Where in this research study is it 311 tointernalize the concept of physical activity by applying the principles of physical literacy 312 using project-based learning methods in a patterned and structured manner so that 313 periodicallyembedded awareness in students for an active lifestyle in everyday life. The 314 discipline of carrying out the internalization stage with full awareness, ihklas, without any 315 element of coercion, then students will be physically literate and form a body that is physically 316

Conclusions

317 318 The result 4 of the study have a strong foundation related to physical fitness, which has 319 beenlisted in the discussion. The results showed that internalization of an active lifestyle 320 throughPhysical learning provides an increase in physicalfitness. The results also showed that there was a significant difference between test 3 321 paired with tests 1 and 2. Further gre, test 1 paired with test 2 and test 2 paired with test 1 322 323 showed no significant difference. The results of this study have provided new references in 324 physicaleducation, especially in maintaining fitness. Where in this study is the internalization 325 of activelifestyle through physical literacy Awareness can be a reference for trainers, teachers, 326 and the general public to maintain physical fitness. That way, an active lifestyle through physical 327 literacy awareness will be created by maintaining physical fitness in the environment of 328 students, sportsmen, and the general public. Further research recommendations can add 329 othervariables so that they can be comparable in improving physical fitness in students.

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335 Conflict of interest

336 There is no conflict of interest.

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TABLES AND FIGURES

613 Tables

Table 1. Physical Fitness Test 1 Results

Category	Frequency	Percent	Valid Percent
Very Low	2	1,5%	1,5%
Low	54	40,6%	40,6%
Fair	76	57,1%	57,1%
Good	1	0,8%	0,8%
Excellent	0	0	0
Total	133	100%	100%

Table 2. Physical Fitness Test 2 Results

Category	Frequency	Percent	Valid Percent
Very Low	0	0	0
Low	44	33,1%	33,1%
Fair	86	64,7%	64,7%
Good	3	2,3%	2,3%
Excellent	0	0	0
Total	133	100,0	100,0

Table 3. Physical Fitness Test 3 Results

Category	Frequency	Percent	Valid Percent
Very Low	0	0	0
Low	12	9%	9%
Fair	109	82%	82%
Good	12	9%	9%
Excellent	0	0	0
Total	133	100%	100%

Table 4. Descriptive Results of Physical Fitness

Results	N	Mean	Std.	Std.	Minimum	Maximum
			Deviationr	Error		
Test 1 Physical Fitness	133	2,936	0,4195	0,0364	1,8	4,2
Test 2 Physical Fitness	133	3,051	0,4124	0,0358	2,0	4,2
Test 3 Physical Fitness	133	3,376	0,3734	0,0324	2,4	4,4
Total	399	3,121	0,4425	0,0222	1,8	4,4

Table 5. Kolmogorov-Smirnov Normality Test

19 sults	test	Statistic	df	Sig.
Physical Fitness	Test 1 Physical	.139	133	.200*
Results	Fitness			
	Test 2 Physical	.118	133	.200*
	Fitness			
	Test 3 Physical	.166	133	$.200^{*}$
	Fitness			

Table 6. Homogeneity Test Results

Results		Levene	df1	df2	Sig.
	11	Statistic			
Physical Fitness	Based on	1,717	2	396	0,181
Results	Mean				
	Based on	1,286	2	396	0,277
	Median				
	Based on	1,286	2	394,382	0,277
	Median and				
	with				
	adjusted df				
	Based on	1,525	2	396	0,219
	trimmed				
	mean				

Table 7. Tukey HSD Further Test Results

Results	Physical	Mean	Std. Error	Sig.	Lower	Upper
	Fitness	Difference (I-			Bound	Bound
		J)				
Test 1	Test 2	-0,1150	0,0493	0,053	-0,231	0,001
Physical	Physical					
Fitness	Fitness					
	Test 3	4398*	0,0493	0,000	-0,556	-0,324
	Physical					
	Fitness					
Test 2	19 st 1	0,1150	0,0493	0,053	-0,001	0,231
Physical	Physical					
Fitness	Fitness					
	Test 3	3248*	0,0493	0,000	-0,441	-0,209
	Physical					
	Fitness					
Test 3	Test 1	.4398*	0,0493	0,000	0,324	0,556
Physical	Physical					
Fitness	Fitness					
	Test 2	.3248*	0,0493	0,000	0,209	0,441
	Physical					
	Fitness					

Selecting participants for the group Measurement or observation Measurement or observation Measurement or observation Measurement or observation

Equivalent Times-Series Design

Figure 1. Design of the Times Series Experimental Method Applying the Equivalent Time-Series Design

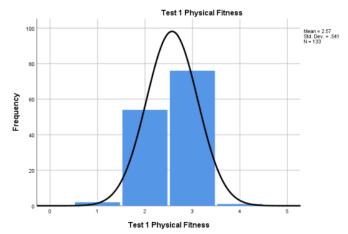


Figure 2. Description of Physical Fitness Test 1 Results

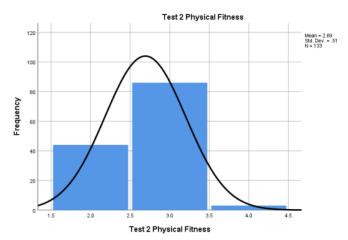


Figure 3. Description of Physical Fitness Test 2 Results

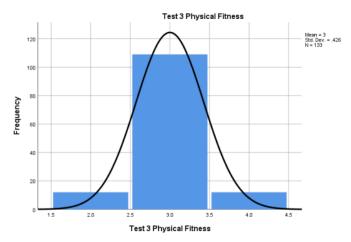


Figure 4. Description of Physical Fitness Test 3 Results

Physical Fitness: Effects of Active Lifestyle Internalization Through Physical Literacy Awarenes Based Project

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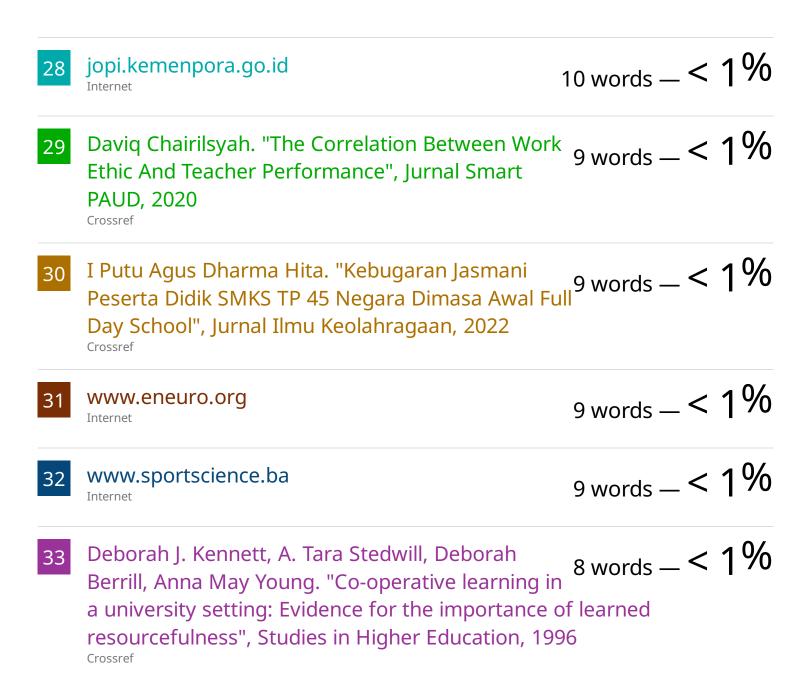
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