

# Investigating the Level of Physical Fitness of Flag-hoisting Ceremony Candidates in Sleman

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**Abstract :** This research is based on the absence of physical fitness test on flag-hoisting ceremony candidates (PASKIBRAKA candidates, henceforth) of Sleman regency in accordance with the samples' age category. In the previous test, the Indonesian Armed Forces (TNI) entrance test was used. The purpose of this research is to find out the level of physical fitness of flag-hoisting ceremony candidates in Sleman using Indonesia Physical Fitness Test (TKJI), so that flag-hoisting ceremony candidates can find out their own level of physical fitness. This study was a descriptive research using a method of survey, including test and measurement. The population was 100 PASKIBRAKA candidates, consisting of 50 male and 50 female students. Data of physical fitness level of PASKIBRAKA candidates of Sleman were taken using the measurement of TKJI in 1999 for the age of 16-19 years. A quantitative descriptive analysis with percentage was used in this research as a technique of data analysis. The analysis result showed that from 96 male and female students, the students' physical fitness level with (1) very good category (BS) was 0 %, (2) good category (B) was 16.67 %, (3) medium category (S) was 53,12 %, (4) less category (K) was 29,17 %, and (5) very less category (KS) was 2,04 %.

## 1 INTRODUCTION

PASKIBRAKA candidates consisting of special and outstanding students from high schools located in the district, city, and province, have an active role in the organization and perform a variety of youth activities. They have academic achievement above the average, and have been through the selection. They manage to be elected as a Paskibraka members. A Physical Employment Standard (PES) was developed for the British RAF Regiment by measuring the physiological demands of critical tasks on a representative cohort of incumbent personnel. A task-based PES should ensure that only those candidates, irrespective of gender, race or disability, with the necessary physical attributes to succeed in training and beyond, are selected. (鈴木, 1970) Feasible for assessing skill-related fitness in young children, although the scientific reliability of the two tests should be questioned and the tests should be tailored to fit the age group of the children. (Vrbik *et al.*, 2017).

These tests are designed to replicate essential occupational tasks frequently performed by officers in the field (Dawes *et al.*, 2017). The tests were

conducted in district lasted for three days. The basic health test was conducted in the first day in the form of blood pressure test and also eye and teeth health test. Basic health tests were carried out by the Sleman District's Department of Health. In the series of test, PASKIBRAKA candidates of Sleman who pass the test on the first day, get the chance to get to the second day which includes the marching test and physical tests. Marching test was performed by the selection team. Next, PASKIBRAKA candidates of Sleman who passed the second stage, entitled to continue the selection process to the third stage, which are interview and skills test. For those who passed the test on the third day, they will be gathered for implementing a weekly exercise, and follow quarantine for 23 days to do the intensive training for flag raising heirloom. Students who qualify eligible quarantine and raising training flag, accompanied by male Paskibraka formed in team gladian regional centers (TGSD). The project has provided a fitness-test battery based on systematic reviews, regarding reliability, validity and

relationship with health, offfield-based fitness tests in student (Ortega *et al.*, 2015).

The physical fitness test is a basic way to understand the physical condition of athletes for the coach (Lockie *et al.*, 2018). Tests in this district-level shows to qualify for the province as well. Three males and three females students with the best ranking will be sent to the province and will be carried out to the national selection, if not qualified, they will be on duty in the province. Specifically, improvements in physical fitness should continue during the second 8 weeks, and specificity of training should include more functional and job specific training tasks. Although, all aspects of fitness should be targeted, those directly related to reported occupational demands, such as strength, power, and flexibility, could be advantageous. (Rawley *et al.*, 2016)

“Total force fitness” is a state in which the individual, family, and organization can sustain optimal wellbeing and performance under all conditions (Url *et al.*, 2013). The term “physical fitness” is foremost associated with attributes that people have or achieve and is related to their ability to perform physical activity (Caspersen, Powell, & Christenson, 1985). The test which is suitable for the age of the hoisting ceremony candidate is Physical Fitness Indonesia (TKJI) test for students aged 16-19 years. This is the battery test and the objective of the test battery is to bring open-source versions of common testing paradigms to the research and clinical testing community (Mueller and Piper, 2014). Researchers carried out the physical fitness test on the second day of the district. In previous years, the physical fitness test was done by using a physical fitness test Indonesian Armed Forces (TNI). Recruitment physical training programs generally use group-based runs of a "one size fit all" approach (Orr, Ford and Stierli, 2016). Physical training programs can improve the fitness of tactical athletes (Rawley *et al.*, 2016). Army physical fitness test has a benchmark which is a test to become a member of the military, so this test is usually done by prospective cadets who have graduated from high school. Tests were carried out, namely, shuttle run, push-ups, back up, and run for 12 minutes. The writer feels this test is less precise if it is conducted for hoisting ceremony candidate who aged 16-19 years old, because it is not an age to be prospective cadets. In general, when applying physical fitness tests a physiological capacity rationale is normally the hegemonic explanation. Still, people's performance and fitness cover more than the physiological capacity alone, and physical fitness

tests are used to monitor a variety of physical fitness related components like health, motivation, and readiness. (Sookermany and Sand, 2019)

Meanwhile, TKJI is intended for high school students aged 16-19 years. TKJI is a measurement that contains a series of tests consisting of five-point tests. The fifth item of the tests carried out on the whole, to assess the level of physical fitness hoisting ceremony candidate. The author hopes that the implementation of complete physical fitness test will have a positive impact because hoisting ceremony candidate physical fitness can be represented fully by the results of TKJI. The results can be a reference for TGSD to make physical fitness exercise program during training for hoisting ceremony candidate quarantine

## **2 RESEARCH METHOD**

### **2.1 Research Type**

This research used descriptive research with qualitative methods

### **2.2 Research Time and Place**

The research was conducted in the Tridadi Field, Sleman on March 22, 2017.

### **2.3 Research Target/Subject**

According to Arikunto (2006: 173), population is the overall subjects of the research. The population in this study was all hoisting ceremony candidates of Sleman District. The sample is part of the the number and characteristics of by population (Sugiyono 2015: 80). The population in this study was all the candidates of paskibraka Sleman in 2017 which amounted to 100 people, consisting of 50 males and 50 females.

### **2.4 Data, Instrument, Data Collection Technique**

The research instrument was the result of a series of tests, equipment or facilities used to measure natural and social phenomena (Sugiyono 2015: 102). The success of the research is determined by the instrument used in this study which is TKJI for ages 16-19 years. Data collection recorded the results of

the test series, grouped and put into value TKJI. Data included in the total value of the column norm TKJI which converted the data into a category.

### 2.5 Data Analysis Technique

To find the data collected, the researcher used descriptive statistics with percentage to determine the level of physical fitness according to the norm TKJI. According Widiastuti (2015: 56), by assessing the physical fitness of students in accordance with TKJI aged 16-19, the research data can be obtained consisting of results and scores with the following explanation.

#### 2.5.1 Rough Results

The percentage of each item test is achieved by noting hoisting ceremony candidates, called rough results. Physically fitness cannot be assessed directly by percentage that has been achieved, because the unit that is used by each of the test items is not the same, namely: 1) running and hanging elbow using a unit of time (minutes and seconds); 2) lying and sitting using a unit of measure motion replay number (how many times); and 3) doing vertical jump using the unit of measure of the distance (centimeters).

#### 2.5.2 Test Scores

Rough results are part of different units of measure. They need to be replaced with one the same size. It is the unit of measure replacement value. TKJI value can be seen in Table 2 and Table 3. After the rough cut, each item test is converted into value, and then summed up the values of the five points. The sum is the basis for determining the classification of physical fitness using physical fitness norms. Norma physical fitness can be seen in Table 4.

Table 1: Value TKJI Age 16-19 Year Old for Male (Ministry of National Education, 2010: 28)

60 METRES SPRINT	PULL UP	60 SECONDS SIT UP	VERTICAL JUMP	1200 METRES RUN	SCORE
s.d - 7.2	19 above	41 above	73 above	s.d - 3'14"	5
7.3"-8.3"	14-18	30-40	60-72	3.15"-4.25"	4
8.4"-9.6"	9-13	21-29	50-59	4.26"-5.12"	3
9.7"-11.0"	5-8	10-20	39-49	5.13"-6.33"	2
11.1"-etc	0-4	0-9	38 etc	6.34-etc	1

Table 2: Value TKJI Age 16-19 Year Old for Female (Ministry of National Education, 2010: 23)

60 METRES SPRINT	PULL UP	60 SECONDS SIT UP	VERTICAL JUMP	1200 METRES RUN	SCORE
s.d - 8.4"	41" above	28 above	50 above	s.d - 3.52"	5
8.5"-9.8"	22"-40"	20-28	39-49	3.53-4.56"	4
9.9"-11.4"	10"-21"	10-19	31-38	4.57"-5'58"	3
11.5"-13.4"	0-2	3-9	23-30	5.59"-7.23"	2
13.5" etc		0-2	22 etc	7.24 etc	1

Table 3: Norms TKJI to Teens Age 16-19 Years (Ministry of National Education, 2010: 25)

SUM OF SCORE	CLASSIFICATION
22-25	EXCELLENT
18-21	GOOD
14-17	FAIR
10-13	POOR
5-9	VERY POOR

After knowing the value TKJI, the next step was to analyze the formula.

$$P = FN \times 100\% \tag{1}$$

Information:

F = frequency being, sought percentage.

N = number of individuals.

P = the percentage figure.

The percentage then was grouped in five classifications of physical fitness, divided into five categories, namely, excelent (E), good (G), fair (F), poor (P), and very poor (VP). The grouping is based on calculation of the results of the test (Heige Ma'shum, 2015: 1).

## 3 RESEARCH RESULT AND DISCUSSION

Based on the analysis of physical fitness level of PASKIBRAKA candidates Sleman district in 2017, it can be seen that the level of physical fitness was mostly in the medium category. From 96 students who took the tests of physical fitness, 16 candidates fell under the category no good at all. The results

also showed that 28 candidates fell in the category of less and 1 candidate categorized as very less. The results showed 16 (16.67%) male hoisting ceremony candidate included in either category, it happened because physiologically they own the high level of *VO2 Max*. The physical condition is well supported by some components, namely *VO2 Max*, strength, endurance, speed, agility and elasticity. This was confirmed by the results of research by Marrow cited by Ruslan (2011: 50) that if the physical condition either: (1) there will be an increase in the ability of the circulatory system and heart action, (2) there will be an increase in strength, flexibility and stamina speed, (3) there will be a better economic time motion exercises, (4) there will be a more rapid recovery in organs, organs of the body after exercise, and (5) there will be a prompt response from the organism's body at any time when such a response is required.

The results showed 32 males candidates (66.67%) and 21 females candidates (43.75%) were in the medium category. Based on the interview in the area, the major reason was candidates with moderate fitness level were actively participating in many extracurricular sports. This is reinforced by Giam (1993: 9) saying that those who have physical conditions related to appearance, have the ability to perform better in physical activities related to sports and work.

There were 28 candidates who were included in the less category and 1 candidate was categorized as very less. The results showed 16 (16.67%) males candidates classified as good. It is because physiologically they own high *VO2 Max*. Good physical condition is supported by several components namely *VO2 Max*, strength, endurance, speed, agility and elasticity. This was confirmed by the results of research Marrow cited by Ruslan (2011: 50) that if the physical condition either (1) there will be an increase in the ability of the circulatory system and heart action, (2) there will be an increase in strength, flexibility and stamina speed, (3) there will be a better economic time motion exercises, (4) there will be a more rapid recovery in organs, organs of the body after exercise, and (5) there will be a prompt response from the organism's body if so required by any time response.

The results showed 32 males candidates (66.67%) and 21 female candidates (43.75%) fell in the medium category. Based on the interview in the area, the main reason was many candidates in this category had been active in extracurricular sports, so that they had a moderate physical fitness. This is reinforced by Giam (1993: 9) saying that those who

have physical conditions related to appearance have ability to perform better in physical activities related to sports and jobs. The results showed 2 male candidates (4.08%) and 26 female candidates (54.16%) were included in less category. The main reason was because they rarely did activities sport so they were less ready to perform physical fitness tests in this Paskibraka selection. Students who were active on sport activity have better physical and psychological fitness because they had been trained, had more durability, and were accustomed to the activities which are conducted in the training. On the other hand, students who were passive in conducting activities exercise and physical fitness have less fitness level. It can be concluded that students who were active sport and had physical and psychological fitness, were likely better than the passive ones. The results showed 1 female candidates (2.04%) signed in the poor category. This case was due to the student's poor physical condition. During that time, the student was not feeling well but had a strong desire to do the test.

The results showed 2 male candidates (4.08%) and 26 female candidates (54.16%) fell into the category of less. The average physical fitness among candidates Sleman district was in the poor category.

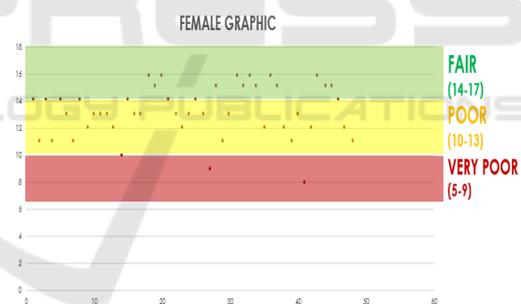


Figure 1: Graphic Result Test of Female Participants

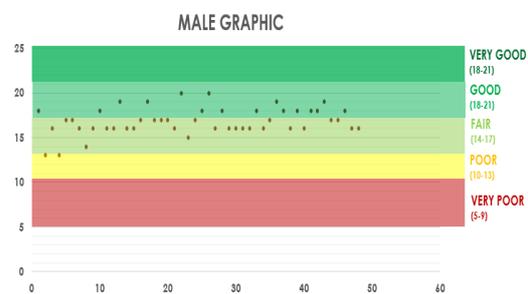


Figure 2: Graphic Result Test of Male Participants

## 4 CONCLUSIONS

Based on the conclusion, there are some suggestions that can be submitted as follows. 1) TGSD should provide programs which are specially designed with exercises to improve the physical fitness, especially for candidates who have a very less physical fitness; 2) There should be further research to deepen knowledge by adding variables and population research is experimental.

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