

Analysis of the physical conditions of Indonesian police officers training school students

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Abstract

The purpose of this study was to determine the physical condition of members of the police officers who were educated at the Indonesian Police career officer school. The method used is descriptive quantitative with test and measurement techniques. Materials and methods: the population is the whole object of study. The population consists of 300 students from the School for the Formation of Training Officers of the National Police of the Republic of Indonesia, who are used as the research sample. The instruments used are tests and measurements including (1) a 12-min running test, (2) pull-up tests, (3) sit-up tests, (4) push-up tests, and (5) a shuttle run test. Data analysis used the T score. The results of the analysis show that the participants in the very good account for 0% (0 people), in the good category – 94% (300 people), in the average category – 6% (14 people), in the sufficient category – 0% (0 people), in the insufficient category – 0% (0 people). With an average of 314, the analysis of the physical condition of the students from the School for the Formation of Training Officers of the National Police of the Republic of Indonesia shows that the students belong to the good category. Based on the analysis of the physical condition of police officer students, the author suggests for them to better maintain their physical condition when preparing for the Indonesian police schools. The training program should be adjusted to the physical condition of each student. Students from the District Officer Formation School are still in the average category and require additional training to improve their physical condition.

Key Words: analysis, physical condition, police

Introduction

In line with the era of the industrial revolution 4.0, the task of the National Police is to maintain the operation of dynamic kamtibmas as a prerequisite for future national development, which will be increasingly complex. The dynamics of the strategic environment at the global, regional, and national levels result in crimes, which requires the readiness of competent and superior police human resources (Safiri, 2020). To realize this task, it is necessary to have human resources (HR) with excellent physical fitness. The police not only perform their duties as "crime hunters" and "law enforcement" but are also obliged to act as public role models and even as "problem solving, order maintaining officers, public services, public observers, and chief executive officers" who have solid background in various social problems.

The operational standards for the implementation of the physical fitness test of the national police have several stages. There are two groups of tests, namely the "A" fitness test and the "B" fitness test. In the "A" test, there is one type of test, which is a 12-min running test. In the "B" fitness test, there are four types of physical fitness tests, i.e., the pull-up, sit-up, push-up, and shuttle run for a distance of 6 × 10 meters tests. In each group of the national police physical fitness test, there is a focus on several components of physical condition. In the physical fitness test "A", the 12-min running test evaluates the components of muscle endurance, heart resistance, and respiratory or circulatory condition (cardiorespiratory endurance). In the "B" fitness test, the pull-up test measures the strength and endurance of the inner arm muscles. The sit-up test measures the strength and endurance as well as flexibility of the abdominal muscles. The push-up test measures the strength and endurance of the outer arm muscles. The shuttle run test measures the components of speed, agility, and balance of the body. (Coskun & Sahin, 2014; Greco et al., 2022)

This effort is made to make sure that the physical fitness of future police officers is in accordance with the desired expectations. To achieve the vision and mission of the National Police of the Republic of Indonesia, the police physical fitness test is an effort to manage human resources. The physical fitness test is one of the

recruitments and a selection process that is performed by the National Police when selecting prospective students. The test is divided into several components that test physical condition, and various types of tests are grouped. The physical fitness tests used by the National Police include (1) a 12-min running test, (2) pull-up tests, (3) sit-up tests, (4) push-up tests, and (5) a shuttle run test (Susanto, 2020a).

(Saefudin et al., 2021) have previously performed research on this subject and developed the design of an Integrated Report System in the Religious Development Section of the Website-based Police Ssdm Personnel Care Bureau. Furthermore, (Susanto, 2020b) evaluated the results of the police map test in Mojokerto from 2014 to 2018. (Achmad et al., 2021) developed a Decision Support System for eligibility of prospective police brigadiers based on the physical fitness test at the Papua Regional Police using the simple additive weighting (SAW) method.

(Lockie et al., 2019) published a study entitled “The influence of physical fitness on reasons for academy separation in law enforcement recruits”, which analyzed the effects of physical fitness on law enforcement recruitment. (Naumova, 2020) published a study entitled “Effects of baseline fitness and BMI levels on changes in physical fitness during military service” to determine the effects of basic fitness during military service. (Pihlainen et al., 2020) published a study entitled “Effects of an Experimental vs. Traditional Military Training Program on 2-Mile Run Performance During the Army Physical Fitness Test”, where they compared the newly created exercise program with the old exercise program in terms of 2-mile running performance during the army physical fitness test. (Greco et al., 2022)

(Páez-Maldonado, 2020; Ramírez-Zea et al., 2015) published a study entitled “Association between mild anemia and physical fitness in a military male cohort: The CHIEF study” to evaluate the effect of anemia on physical fitness in the Taiwanese military. They determined that anemia is associated with a decrease in cardiorespiratory. (Páez-Maldonado, 2020; Ruotsalainen, 2020) published a study entitled “Associations of physical fitness and body composition characteristics with simulated military task performance”. The purpose of this study is to evaluate the relationship of physical fitness characteristics and body composition with anaerobic endurance performance tested in combat loads using a military simulation test (MST). MST is a promising military-specific method for assessing lower extremity muscle strength and endurance capacity, which are important performance components in combat situations. (Taufik et al., 2021) published a study entitled “The Effects of Sleep Loss on Military Physical Performance”, which showed that that lack of sleep has a significant negative impact on aerobic capacity, muscle endurance, and military-specific performance in the military population.

What is the purpose of this research? The objective was to evaluate the physical condition of the Police Officer School students aiming to become police chiefs of the police units. In a previous study, the research sample included 30 male athletes from PGRI University Mahadewa Indonesia, and their physical condition was evaluated. (Putu et al., 2021) In contrast, in our study, a large sample is used to perform a broader analysis. The novelty of this research is that we analyzed the physical condition of a large specific sample, i.e., police officers who are candidates for police leadership in each area. What are the contributions of the obtained results? By performing various analyzes, we evaluated the physical condition of each police officer. We hope to show that Indonesian police officers have the good physical condition. (de RONZI et al., 2021)

(Pihlainen et al., 2020) published a study entitled “Changes in physical fitness and anthropometrics differ between female and male recruits during the Finnish military service.” Physical fitness and anthropometrics differ between female and male recruits in Finnish military service. As a result, differences by sex in adaptation to standard military training were determined. Both recruited men and women improved their physical fitness, but smaller increases were observed in women using the same training program. (Greco et al., 2022) published a study entitled “Physical fitness as a risk factor for injuries and excessive stress symptoms during basic military training”, which evaluated physical fitness as a risk factor for injury and symptoms of excessive stress during basic military training. Based on the provided description, the abovementioned researchers wanted to evaluate the physical condition of 30–45-year-old prospective officers with the rank of brigadier and who graduated from the Officer Formation School of the National Police Education and Training Institute of the Republic of Indonesia.

Method

The research method used in this study is a quantitative method that used the test and measurement approach to determine the physical condition of students at the Indonesian Police Officers Training School Students. The use of this research method should lead to scientifically expected and accountable goals. Another goal of this study is to describe the physical condition of students at the School for the Formation of Training Officers of the National Police of the Republic of Indonesia. The design used in this study is a test and measurement approach. This research is a descriptive study.

The population of the study includes 300 students from the Indonesian National Police Officers Development School (aged 35–40 years) who are prepared to become leaders in each area of traffic police in various areas in Indonesia; this population will be used as research samples. In this study, using test and measurement techniques, data are collected from (1) a 12-min running test, (2) pull-up tests, (3) sit-up tests, (4)

push-up tests, and (5) shuttle run test. This research is a descriptive study that aims to evaluate the physical condition of students at the School for the Formation of Training Officers of the National Police of the Republic of Indonesia in 2022. In this study, data analysis is performed using a T score. The data obtained from each test item are rough data from the results of each test achieved by each student. After the data are converted into a T score, the data are categorized and grouped into five categories, i.e., excellent, good, average, sufficient, and insufficient.

Research procedure Students from the National Police Training Officer Formation School of the Republic of Indonesia were given a 15-min warm-up using static and dynamic exercises. Several examples were shown by the commander of each team; then, the test was performed to evaluate the physical condition of the students from the School of Formation of Training Officers of the Republic of Indonesia. First, the students performed a 12-min running test. Then, the students were divided into 3 groups (i.e., 100 people per squad), and the pull-up test was conducted, which evaluated the number of completed pull-ups in one minute. Then, sit-up and push-up tests were performed using the same procedure as in the pull-up test. The final test was a shuttle run. For this test, the students were divided into 3 groups with 100 people in each group. The test ended when all 300 students completed each test. The total time to perform all test by all students was 3 h or approximately 180 min.

Results

After performing the tests, the data consisted of the results of (1) a 12-min running test, (2) pull-up tests, (3) sit-up tests, (4) push-up tests, and (5) a shuttle run test.

The final step in this study was to perform statistical analysis and report the results. The questionnaire data obtained from the respondents was tabulated into a table and can describe all values and number of responses. The data are tabulated to simplify statistical analysis, i.e., to identify dependencies. Furthermore, the results were analyzed and discussed.

Table 1. Descriptive Statistics Data Analysis of the Physical Condition of Indonesian Police Students

	Descriptive Statistics						Skewness	
	N	Range	Mean	Std. Deviation	Variance	Statistics	Std. Error	
VO2max	314	2960.00	2068.1847	269.69552	72735.672	-2.639	.138	
Pull-ups	314	115.00	9.4108	6.85682	47.016	11.761	.138	
Push-ups	314	55.00	37.3917	5.15226	26.546	-2.062	.138	
Sit-ups	314	57.00	37.5955	5.42790	29.462	-1.779	.138	
Shuttle run	314	23.23	19.6953	1.86997	3.497	-7.386	.138	
Physical Condition	314	91.50	64.9705	8.41289	70.777	-2.301	.138	

The test data on the physical condition of police students for all 314 students are as follows: VO2max = 2960.00, and pull-ups = 115.00, push-ups = 55.00, sit-ups = 57.00, shuttle run = 23.23, physical condition = 91.50. These results indicated that all 314 students were in good physical condition.

Table 2. Interval Data of Indonesian Police Students

Interval	Absolute	Category	Presentation
25–20	0	Excellent	0%
19–15	15	Good	94%
14–10	1	Sufficient	6%
9–5	0	Sufficient	0%
4–0	0	Insufficient	0%

Results of physical condition frequency distribution (T score)

Table 3. Results of the distribution of the frequency of physical condition (T score) Analysis of Indonesian Police Students

	N	Excellent	Good	Average	Sufficient	Insufficient
VO2max	314	0%	314 /100 %	0%	0%	0%
Pull-ups	314	14/ 81%	300/ 19%	0%	0%	0%
Push-ups	314	0%	0%	81%	19%	0%
Sit-ups	314	81%	19%	0%	0%	0%
Shuttle run	314	6/38%	4/38%	6/25%	0%	0%
Result	Physical Condition = 91.50 = (94%) Good					

Table 3 shows the overall results of the physical condition profile of Lamdik Police Students in 2021. There are 313 people (94%) in the good category, and 1 person (6%) in the average category. The results are displayed in the form of a bar chart in Figure 1.

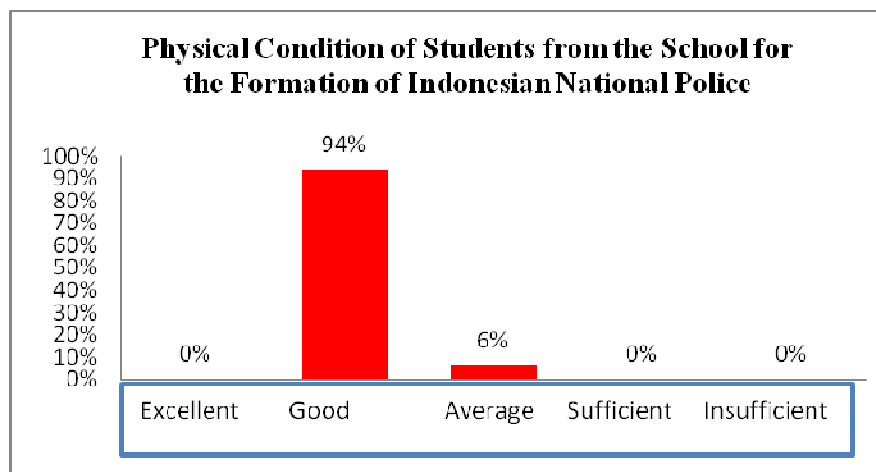


Figure 1. Physical Condition Frequency Bar Chart

Discussions

After analyzing the physical condition of the students from the School for the Formation of Training Officers of the Republic of Indonesia in 2021 (based on the results of data analysis, description, testing, and discussion), the profile of the physical condition of the students from the School for the Formation of Training Officers of the National Police of the Republic of Indonesia of 2021 is obtained. Based on the results of the analysis, the profile of the physical condition by category is as follows: very good – 0% (0 people), good – 94% (300 people), average – 6% (14 people), sufficient – 0% (0 people), insufficient – 0% (0 people). With an average of 17, the 2021 National Police Training Officer Formation School student analysis result is physical condition= 91.50 = good category.

A police chief is expected to maintain and improve the training of the physical condition of his subordinates. The Chief of Police School officers should know which students need to improve their physical condition in terms of the technique or other criteria. School Police Chiefs should pay attention to what factors need to be improved in their students. Students should be able to maintain discipline when performing exercises and adhere to diets to maintain the best physical condition. Students must encourage each other to maintain and improve their training to improve their physical condition to the excellent category to achieve the peak results in Police

This study aims to determine the physical condition profile of officer formation school students in 2021 based on the T score. The obtained results show the profile of the physical condition by category: as follows very good – 0% (0 people), good – 94% (300 people), average – 6% (14 people), sufficient – 0% (0 people), insufficient – 0% (0 people). With an average of 17, the physical condition of students in the Formation School in 2021 belongs to the good category.

The obtained results show that the physical condition profile of the students at the Officer Formation School in 2021 is good; a total of 94% of the students (314 people) belong to this category. The officer's school advises the students to better maintain their physical condition; specifically, the training program can be adjusted to the physical condition of each student. Because many students belong to the good category, this result can be improved to achieve excellent physical condition, which will allow police officers to obtain the highest achievements.

Previous studies (e.g., on badminton) evaluated physical condition by only evaluating whether it was good or bad. Badminton is a complex sport, which requires the players to have good physical performance. The purpose of this research was to evaluate the physical exercise program of the training of Suryakencana athletes was conducted for three months. The assessment evaluated physical strength, muscle endurance, speed, agility, and VO₂max. This research is quantitative and is related to physical condition (Galan et al., 2018). The purpose of this study is to evaluate the program at the Jambi training in Jawa Barat (Ilham & Oktadinata, 2018). Another study evaluated the program for a special class of sport at the senior high school level (Thomas, 2020). Another study evaluated the basic physical and sports activity program for preschool children (Reisberg, 2020; Trajkovi, 2020)

Based on a previous study on the physical condition of students from the Suryakencana University Officer Formation School, it was determined that the physical condition of students was lacking; thus, it was recommended for the students to spend additional hours performing exercises related to physical condition to

achieve excellent physical condition. Students from the Cianjur District Officer Formation School, when preparing for the regional sports week, demonstrated that their physical condition was average; thus, they need a lot of programmatic training to improve their physical condition. The results of the three abovementioned studies indicate that this study can be used as a reference and there are differences in the obtained research results.

Conclusions

The obtained results showed that the physical condition of the students from the Officer Formation School in Cianjur district in 2021 was good; 94% (300 people) of the students belonged to this category. Based on the analysis of the physical condition of police officer students, the author suggests for them to better maintain their physical condition when preparing for the Indonesian police schools. The training program should be adjusted to the physical condition of each student. Students from the District Officer Formation School are still in the average category and require additional training to improve their physical condition.

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