

Survey of Interest and Talent in Participating in Aerobic Gymnastics on the Nusantara Aerobic Gymnastics Team in 2021

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Abstract

Background: The background of this research is based on the results of the researchers' observations, namely the Nusantara aerobics gymnastics team that has not been able to recruit new members from other majors and the uneven development of aerobic gymnastics talent possessed by members.

Objectives: This study aimed to determine the level of interest and talent in aerobics among members of the Nusantara Aerobics Gymnastics Team in 2021.

Methods: This study used a quantitative descriptive approach with a survey method. The subjects in this study were members of the Nusantara Aerobics Gymnastics Team, which consisted of 30 members. The sampling technique used is total sampling because the number of members is relatively small. The data collection technique used an instrument in the form of a questionnaire for interest data and a potential talent test in a sports search. The data analysis technique is in the form of a percentage using Microsoft Excel 2016 and SPSS v.23 software for windows.

Results: Based on the study results and the results of the analysis, it can be seen that the level of interest in participating in aerobic exercise on the Aerobic Gymnastics Team is included in the very high category with a percentage score range of 90% - 100%. While the aerobic gymnastics talent possessed by members of the Aerobics Gymnastics Team can be seen in the results, namely, five members are classified as potential with a percentage of 16.7%, nine members are quite potential with a percentage of 30%, 13 members are classified as less potential with a percentage 43.3%, and three members are classified as not potential with a percentage of 10%.

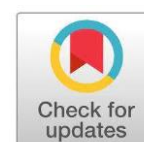
Conclusion: In conclusion, the interest of the Nusantara Aerobics gymnastics team members is very high, but they are less talented.

Keywords: Interests, talents, aerobics.

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INTRODUCTION

Aerobic gymnastics is one of the many types of sports currently being followed by many people (Candrawati et al., 2016). People think that aerobic exercise can reduce weight (Andini & Indra, 2016), nourish the body (Darsi, 2018), and there are no rules on when to do this type of exercise. Not only that, but people also like to take part in aerobic exercise because it is a type of fun sport and has a lot of positive impacts on the body and health. Many schools and offices invite aerobic trainers to carry out these activities every Friday because schools and offices have healthy Friday activities. In addition to schools and offices, college aerobics is also in great demand by students, lecturers, and campus employees. Usually, aerobic exercise is carried out when certain activities, such as a student activity unit and a course in the Department of Physical Education.

Universitas Nusantara PGRI Kediri is one of the private universities located in Kediri. This university has an aerobics team called the “Nusantara Aerobic Gymnastics Team”. The team, which was established in 2019, has quite some members every year, but the problem is that the members of the Nusantara Aerobics gymnastics team only come from students of the Physical Education Study Program, there are no students from other study programs who join the team. Apart from this, when participating in competitions related to aerobic exercise, the members who are included in the competition are not evenly distributed, which means that not all members are included in the competition.

Research investigating aerobic exercise has been widely reported. Aerobic exercise has many benefits, including reducing weight, cholesterol, and fat (Utomo et al., 2012). Candrawati et al. (2016) reported that aerobic exercise could increase cardiac endurance and muscle flexibility. Not only that, but aerobic exercise can also reduce blood sugar levels in people with Type 2 Diabetes Mellitus (Indriyani et al., 2007).

Research that has been produced is limited on the benefits of aerobic exercise. Research investigating the interest and talent for participating in aerobic exercise is limited to the public (Basuki et al., 2021). This study aims to determine the interests and talents of the Indonesian Aerobics Gymnastics Team members. The results of this study can be used as guidelines for recruiting more members. The purpose of this research is to find out the level of interest of members and what aspects attract members to join the Nusantara Aerobics gymnastics team so that in the future, it can be used as a reference for recruiting new members, especially students from study programs outside of physical education. In

comparison, research related to talent aims to determine the potential of aerobic gymnastics talent possessed by each member so that when they take part in the competition, all members can be included according to the level of potential talent they have.

METHODS

Study Design and Participants

This study uses a descriptive quantitative approach where the data results will be described based on existing facts and supported by numbers. The data collection method in this study used a survey method in which researchers conducted research directly. The sample in this study was members of the Nusantara Aerobics Gymnastics Team, totaling 30 people. The sampling technique used was total sampling, where all populations were used as research samples so that it could be called population research. The subjects in this study were an average age of 20 years, an average height of 156 cm, and an average bodyweight of 62 kg.

Research Instruments

Interest data collection techniques using questionnaires in the form of questionnaires and talent potential data using sports search scouting. The questionnaire used in this study was closed because the respondents chose the answers already available from each positive statement or negative statement. The rating scale for each statement is a Likert scale. The number of statements used in the study was 50 statements containing negative and positive statements that had been validated by one of the physical education study program lecturers as expert judgment before the questionnaire was used in the trial. Based on the results of the questionnaire validity test of 50 statements, it can be seen that the r table value is 0.514 at a significance level of 0.05 (5%), and there are five invalid statements, and the remaining 45 statements can be used in the study. While the reliability test results show that the Cronbach's Alpha value obtained is 0.977, the statement can be said to be reliable for research. Data retrieval of potential talent tests using sports search includes 10 test items as follows: (1) Height test, (2) Weight test, (3) Sitting height test, (4) Arm span test, (5) 30 sprint running meters, (6) vertical jump, (7) Throw a tennis ball, (8) Throw a basketball, (9) Run back and forth, and (10) Multistage Fitness Test.

Data Analysis

The data was analyzed by tabulating the data into Microsoft Excel 2016 software and then calculating the average value, highest value, lowest value, standard deviation, and percentage. Furthermore, the value that has been obtained is adjusted to the norm of each test item. While the data analysis of the interesting instrument during the trial, namely the questionnaire, was analyzed using SPSS v.23 software to test the validity and reliability and use the benchmark reference assessment (PAP) to determine the level of mastery of interest in aerobic exercise after the research. The following is a benchmark assessment table for the interest test:

Table.1 Benchmark Reference Assessment

No	Mastery Level	Category
1.	90% - 100%	Very high
2.	80% - 89%	High
3.	65% - 79%	Average
4.	55% - 64%	Low
5.	< 55%	Very low

Source : [Herpandika \(2014\)](#)

The formula used to find out the percentage is:

$$X = \frac{n}{N} \times 100\%$$

Information:

X = Expected score

n = Score earned

N = Maximum score

Source : [Sugiyono \(2016\)](#)

RESULTS

The research results discussed are the results of data analysis in the form of questionnaires and sports search tests. The data taken in the study were interest data and gifted data, which consisted of ten (10) kinds of test items, namely height, weight, sitting height, arm span, 30-meter running test, vertical jump, throwing and catching tennis balls, throwing balls basketball, running back and forth, and the Multistage Fitness Test (MFT). The following data shows the identification of the level of interest in participating in aerobic exercise and the potential for talent for aerobics in the Nusantara Aerobics Gymnastics Team.

A. Interest

This research, which was conducted at the end of December 2021, shows the results of the interest questionnaire data analysis consisting of 45 statements in Table 2 below.

Table 2. Interest Analysis Results

Mastery Level	Score Interval	Frequency	Percentage	Category
90% - 100%	175 – 195	17	56,6%	Very high
80% - 89%	156 – 174	11	36,6%	High
65% - 79%	127 – 155	2	6,7%	Average
55% - 64%	108 – 126	0	0%	Low
< 55%	0 – 107	0	0%	Very low
Total		30	100%	

Based on the results of table 2, the level of interest owned by the Nusantara Aerobics Gymnastics Team is very high, the total frequency is 17 members with a percentage level of 56.6%. The data from the analysis can also be shown in Figure 1.

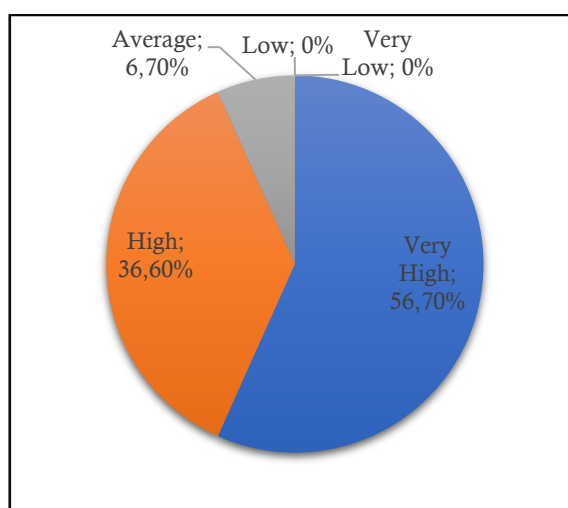


Figure 1. Distribution of frequency and percentage of interest

B. Talent

The data taken in the study were giftedness data consisting of ten (10) kinds of test items, namely height, weight, sitting height, arm span, running 30 meters, jumping upright, throwing and catching tennis balls, throwing basketballs, running back, and Multistage Fitness Test (MFT). The following is data on the classification of potential talents due to the identification of aerobic gymnastics talent for the 2021 Aerobic Nusantara Gymnastics Team.

Table 3. Classification of Giftedness Quality Based on Modified Test Score *Sport Search*

No	Classification	Score
5	Very Potential	≥ 27
4	Potential	23 – 26
3	Potential Enough	19 – 22
2	Less Potential	15 – 18
1	No Potential	≤ 14

Source : [Faizin \(2015\)](#)

Table 4. Talent Analysis Results

No	Name	Age	Score						Score Total	Gifted Quality
			30m	LT	LTB	LBB	LBb	MFT		
1.	LNA	21	3	2	4	3	3	3	18	Less Potential
2.	MR	21	3	2	3	2	3	3	16	Less Potential
3.	APS	19	4	4	4	4	3	4	23	Potential
4.	IVPA	19	4	4	4	3	4	3	22	Potential Enough
5.	NRI	24	3	3	5	2	3	3	19	Potential Enough
6.	FDAP	19	3	2	3	3	5	3	19	Potential Enough
7.	ADA	20	2	3	2	3	2	2	14	No Potential
8.	SRJ	19	2	3	4	3	2	2	16	Less Potential
9.	DSN	19	3	3	3	2	3	2	16	Less Potential
10.	TNF	18	4	4	3	3	2	2	18	Less Potential
11.	DAA	21	2	2	2	2	2	2	12	No Potential
12.	AK	21	3	2	4	3	3	3	18	Less Potential
13.	DKP	21	3	4	4	4	4	3	22	Potential Enough
14.	CP	21	4	4	4	3	5	4	24	Potential
15.	APS	19	4	4	5	3	5	4	25	Potential
16.	WDSR	18	3	2	4	3	3	3	18	Less Potential
17.	RSN	18	4	4	5	3	3	4	23	Potential
18.	NKK	19	2	4	5	2	3	3	19	Potential Enough
19.	YK	18	4	4	5	4	4	4	25	Potential
20.	LF	19	2	2	4	2	2	2	14	No Potential
21.	UH	20	3	3	2	4	3	2	17	Less Potential
22.	YKR	21	3	2	4	2	2	2	15	Less Potential
23.	VYP	21	3	3	5	2	3	3	19	Potential Enough
24.	DAWH	20	3	3	3	3	2	2	16	Less Potential
25.	EAC	20	4	2	3	3	2	2	16	Less Potential
26.	DP	24	4	3	3	3	2	2	17	Less Potential
27.	AAA	22	3	3	2	2	3	3	16	Less Potential
28.	HP	21	3	3	5	2	4	3	20	Potential Enough
29.	ARP	21	4	3	5	4	3	3	22	Potential Enough
30.	RDC	20	3	3	4	4	3	3	20	Potential Enough

Description:

30m : 30-meter running test

LT : vertical jump

LTB : throwing and catching tennis balls

LBB : throwing balls basketball

LBb : running back and forth

MFT : Multistage Fitness Test

Table 5. Results of Identification of Aerobic Gymnastics Talent

No	Classification	Frequency	Percentage
1	Very Potential	0	0%
2	Potential	5	16,7%
3	Potential Enough	9	30%
4	Less Potential	13	43,3%
5	No Potential	3	10%
Total		30	100%

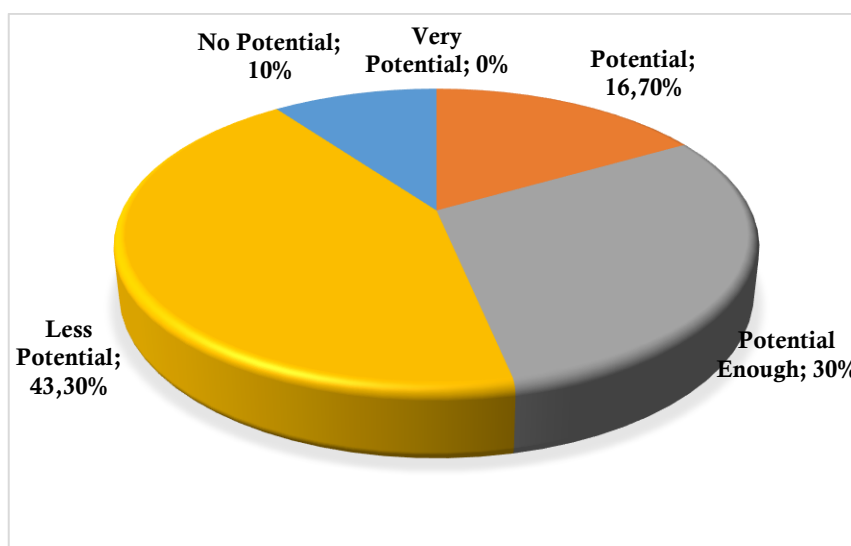


Figure 2. Results of Identification of Aerobic Gymnastics Talent

Based on table 5 and Figure 2, the results show that there are 0 (0%) members who are declared Very Potential, 5 (26.7%) are declared Potential, 9 (30%) are declared Potential Enough, 13 (43.3%) who declared Less Potential, and 3 (10%) declared No Potential.

DISCUSSION

Based on the analysis and research results, the level of interest of members in participating in aerobic exercise is very high, and the potential for aerobic gymnastics talent possessed by members on average is classified as less potential. Aspects of interest in this study can be obtained that the interests of members of the aerobic gymnastics' domain come from the health aspect, which can be concluded that the members of the aerobics team participate in aerobics because they prioritize health. Members think that participating in aerobic exercise can improve health or immunity in the body and make the body fitter. This is in accordance with research reports conducted by [Darsi \(2018\)](#) and [Listyarini \(2012\)](#).

Interest in aerobic exercise needs to be increased, especially in people with low physical activity levels, considering the benefits of participating in the aerobic exercise are many. Aerobic exercise is an activity that encourages the performance of the heart and lungs in distributing oxygen to the muscles that work during exercise sessions. Aerobic exercise has several benefits, including increasing Vo2max ([Darsi, 2018](#)), increasing muscle flexibility ([Candrawati et al., 2016](#)), reducing weight, fat, and cholesterol ([Andini & Indra, 2016](#); [Utomo et al., 2012](#)), and a decrease in sugar levels in patients with type 2

diabetes mellitus (Indriyani et al., 2007). Recently, Yang & Chen (2018) reported that aerobic exercise can reduce stress and improve sleep quality.

A person's talent for aerobics also needs to be explored to find talented prospective instructors. This talent is a shortcut to creating a competent gymnastics instructor. In terms of talent, the potential talent possessed by members still requires a lot of regular and more diligent practice. On average, it is still relatively low in potential, so it will be difficult to achieve when participating in competitions related to aerobic exercise.

CONCLUSION

The study results show that members' level of interest in participating in aerobic exercise is very high, and the potential for aerobic gymnastics talent possessed by members on average is classified as less potential.

CONFLICT OF INTEREST

The author hereby declares that this research is free from conflicts of interest with any party.

AUTHOR'S CONTRIBUTION

Masruroh contributed to preparing concepts, formulating methods, and conducting research. Puspodari contributed to conducting research and analyzing data. Herpandika contributed to interpreting, discussing, and concluding.

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