

## Physical Fitness and Mental Health Index Lecturers and Staff of Yogyakarta State University



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**ABSTRACT:** This study aims to determine the level of physical fitness index and mental health of lecturers and educational staff at Yogyakarta State University. The research design used in this study uses an experimental research method. The population of this study were lecturers and educational staff at Yogyakarta State University. The instrument for measuring physical fitness used the Rockport Test. The instrument for determining the level of mental health used the Self Reporting Questionnaire-20 (SRQ-29). The study was conducted at the UNY Athletics and Football Stadium and the UNY Wates Stadium. The sample consisted of 202 UNY Lecturers and 62 UNY Educational Staff. The results of the study that have been carried out, obtained the results that the level of physical fitness of UNY Lecturers was 1% indicating good, 3% indicating very poor, 43% indicating sufficient, 53% indicating less. While for the percentage results of the Fitness Test for UNY Educational Staff, 13% indicated good, 2% indicated very poor, 48% indicated sufficient, 37% indicated less. Meanwhile, the mental health test of UNY Education Staff showed that 92% were good, 6% were quite good and 2% were lacking. Meanwhile, the mental health test of UNY Lecturers showed that 97% were good, 2% were quite good and 1% were lacking.

**KEYWORDS:** physical fitness, mental health, lecturers, education staff.

### INTRODUCTION

Sports are an important factor in improving a person's physical fitness. Physical fitness itself can improve a person's survival. Previous research has shown that physical fitness consists of components related to health and skills that have been shown to correlate with a person's competitive ability. (Xiao et al., 2022). The same thing was also expressed in a study which revealed that physical activity has become one of the important ways for people to improve physical fitness (Zhang, 2023). After the COVID-19 pandemic, most universities changed their education model from online courses to on-site learning, so that lecturers and students can attend regular face-to-face classes. These changes can cause stress for lecturers and students, which has an impact on physical fitness (Suwannakul et al., 2023). Exercise is an effective strategy to improve quality of life and physical fitness (Dieli-Conwright et al., 2018). Physical fitness is one of the health indicators that plays a role in preventing non-communicable diseases that threaten public health (Dong et al., 2023).

Physical activity is a body movement by the body's muscles and supporting systems that require energy expenditure (Riyanto & Mudian, 2019). Physical activity is any body movement produced by skeletal muscle contractions that increase energy expenditure above resting levels and consists of daily routine tasks such as commuting, work-related activities, or household activities, as well as purposeful health-improving movements/activities (Aziz & Arofiati, 2019). This means that physical activity is an activity that is carried out consciously in moving the body by expending energy supported by the body's muscles. (Maharani & Sudaryanto, 2021) state that physical activity is a form of human behavior, including all body movements from small movements to participating in marathons. It can be concluded that physical activity is not only sports but daily activities such as cleaning the house, washing clothes, cycling, and jogging are also included in physical activity and can be done from simple activities to measured and planned activities.

The importance of mental health is an important aspect in improving a person's physical fitness. Mental health has been recognized as one of the most important determinants of mental health and has the potential to improve the mental health of both individuals and society (Muslić et al., 2020). Based on this, researchers in collaboration with lecturers and staff at Yogyakarta State

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University are interested in conducting research on the index of physical fitness and mental health. Mental health is one of the most serious health conditions that has a negative impact on every aspect of life. Mental health disorders are a growing global public health challenge and have a major impact on society (Javed et al., 2021). The high level of mental health problems is a growing concern in higher education, negatively impacting performance and well-being. Despite poor mental health, people often do not seek help because of a sense of shame about the mental health problems they experience (Kotera et al., 2022). Maintaining mental health can provide benefits including being better able to cope with stress and pressures of life, being physically or mentally healthy, being able to establish good relationships with other people, being able to contribute to society, working productively, and being aware of their potential (Fadilah, 2021).

Mental health is a condition where a person can do an activity happily, safely, and peacefully without any bias towards the mental condition. (Rosmalina, 2016) states that mental health is a mental condition that is always in a calm, safe and peaceful state, and tries to find inner peace through self-adjustment through resignation (complete surrender to God). Mental health is something that is very important for all humans, similar to physical health which needs to be maintained in general (Auliasin et al., 2019). Good mental health allows people to work well, cope with the pressures of their lives, and be able to realize their potential (Maharani & Sudaryanto, 2021). This indicates that if a person is mentally healthy, their physical health will be maintained simultaneously so that they are able to do something well, according to their mind and abilities. This statement is reinforced by the statement (Rahmayanthi et al., 2021) that mental health is defined as a state of well-being where individuals are aware of their own abilities, can cope with normal life pressures, can work productively and usefully and are able to contribute to their community. Based on the background above, this study aims to determine the level of physical fitness and mental health index of lecturers and education staff at Yogyakarta State University.

### METHOD

The research design used in this study uses an experimental research method. The population of this study were lecturers and educational staff at Yogyakarta State University. The instrument for measuring physical fitness used the Rockport Test. The instrument for determining the level of mental health used the Self Reporting Questionnaire-20 (SRQ-29). The research was conducted at the UNY Athletics and Football Stadium and the UNY Wates Stadium. The research was conducted every Friday, on July 26, August 2, August 9, and August 16, 2024. The sample consisted of 202 UNY Lecturers and 62 Educational Staff.

#### 1) Rockport Test Instrument

This test aims to evaluate human lung capacity based on the volume of exercise that can be tolerated. This test is designed for women and men aged 20 to 69 years. The test is done by walking fast/jogging at a constant speed for 1600 meters, then calculating how many minutes for 1600 meters. The Rockport test has a validity of 0.75 and a reliability of 0.071.

#### Assessment criteria

No	Travel Time (Minutes-Seconds)	VO2 Max (ml/kg/min)
1.	5'18"-5'-23"	62
2.	5'24"-5'-29"	61
3.	5'30"-5'-35"	60
4.	5'36"-5'-42"	59
5.	5'43"-5'-49"	58
6.	5'50"-5'-56"	57
7.	5'57"-6'-04"	56
8.	6'05"-6'-12"	55
9.	6'13"-6'-20"	54
10.	6'21"-6'-29"	53
11.	6'30"-6'-38"	52
12.	6'39"-6'-48"	51
13.	6'49"-6'-57"	50
14.	6'58"-7'-08"	49
15.	7'09"-7'-19"	48
16.	7'20"-7'-31"	47
17.	7'32"-7'-43"	46
18.	7'44"-7'-56"	45

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No	Travel Time (Minutes-Seconds)	VO2 Max (ml/kg/min)
19.	7'57"-8'10"	44
20.	8'11"-8'24"	43
21.	8'25"-8'40"	42
22.	8'41"-8'56"	41
23.	8'57"-9'14"	40
24.	9'15"-9'32"	39
25.	9'33"-9'52"	38
26.	9'53"-10'14"	37
27.	10'15"-10'36"	36
28.	10'37"-11'01"	35
29.	11'02"-11'28"	34
30.	11'29"-11'57"	33
31.	11'58"-12'29"	32
32.	12'30"-13'03"	31
33.	13'04"-13'41"	30
34.	13'42"-14'23"	29
35.	14'24"-15'08"	28
36.	15'09"-16'00"	27
37.	16'01"-16'57"	26
38.	16'58"-18'02"	25
39.	18'03"-19'15"	24
40.	19'16"-20'39"	23
41.	20'40"-22'17"	22
42.	22'18"-24'11"	21

### Fitness Level/Norm Category:

VO2MAX NORMS FOR WOMEN					
Female	Fitness Level Category/Norm:				
Age	Less than once	Not enough	Enough	Good	Very Well
20-29	<24	24-30	31-37	38-48	>49
30-39	<20	20-27	28-33	34-44	>45
40-49	<17	17-23	24-30	31-41	>42
50-59	<15	15-20	21-27	28-37	>38
60-69	<13	13-17	18-23	24-34	>35

VO2MAX NORMS FOR MEN					
Male	Fitness Level Category/Norm:				
Age	Less than once	Not enough	Enough	Good	Very Well
20-29	<25	25-33	34-42	42-52	>53
30-39	<23	23-30	31-38	39-48	>49
40-49	<20	20-26	27-35	36-44	>45
50-59	<18	18-24	25-33	34-42	>43
60-69	<16	16-22	23-30	31-40	>41

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### 2) Mental Health Test Instrument

The mental health instrument used in this study, namely the Self-Reporting Questionnaire-29 (SRQ-29), the collection of validity evidence using confirmatory factor analysis showed that the SRQ-29 had met the model fit criteria (Triwahyuni & Prasetyo, 2021). Consisting of 29 questions. Each question has two answer choices, namely "yes" and "no". The answer "yes" is scored 1, while the answer "no" is scored 0. Individuals who get a total score of 6 are categorized as individuals who are indicated to have psychological disorders (neurotic disorders) and are advised to meet with a psychologist or other mental health workers (Triwahyuni & Eko Prasetyo, 2021). If you get a score of 0-7, you have good mental health, 8-15 have sufficient mental health, and 16-29 have poor mental health.

Variable	Indicator	Question Item Number	Number of Questions
Mental Health	Depression Symptoms	6,9,10,14,15,16,17	7
	Anxiety Symptoms	3,4,5	3
	Somative Symptoms	1,2,7,19	4
	Cognitive Symptoms	8,12	2
	Energy Decreased Symptoms	11,13,18,20	4

## ANALYSIS AND DISCUSSION

### Fitness Test Results

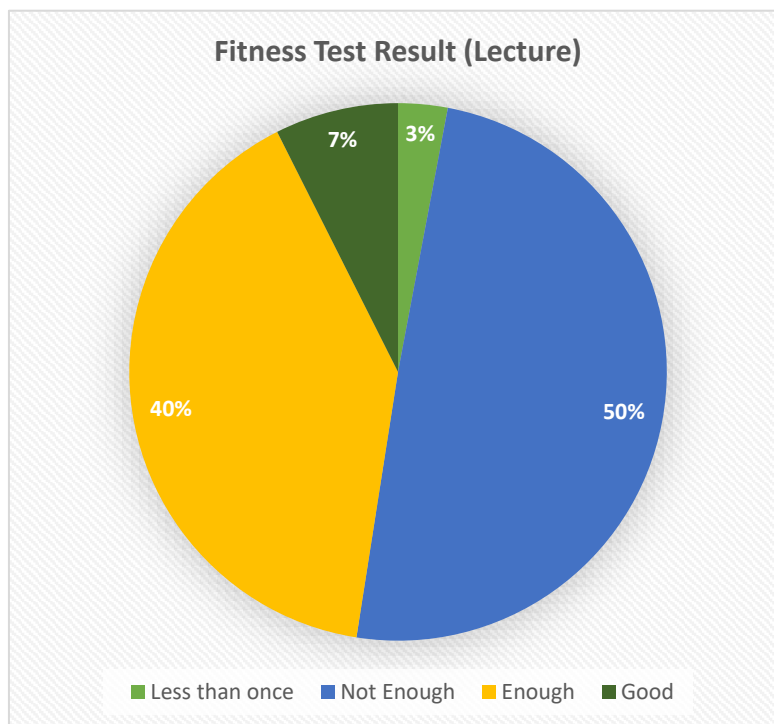


Figure 1. Lecturer Fitness Results

The percentage results of the Fitness Test for Lecturers, 1% shows good, 3% shows very poor, 43% shows sufficient, 53% shows poor.

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Table 1. Fitness Test Categories

CATEGORY	AMOUNT
Good	15
Enough	81
Not enough	100
Less than once	6
<b>Amount</b>	<b>202</b>

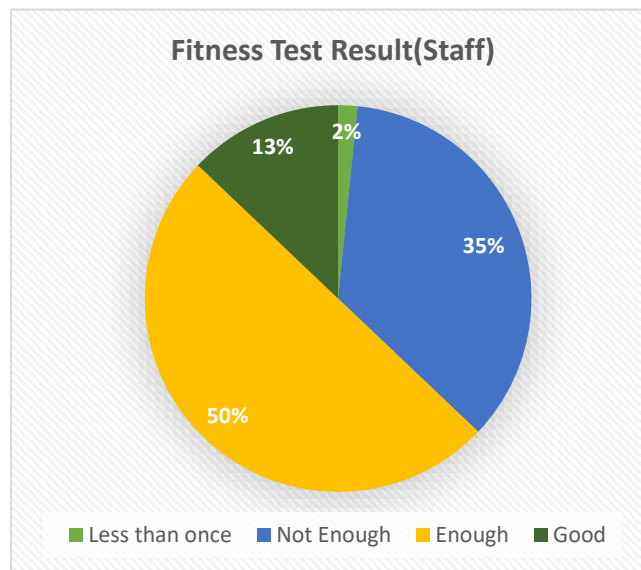


Figure 2. Staff Fitness Results

The results of the Fitness Test percentage for Education Staff, 13% showed good, 2% showed very poor, 48% showed sufficient, 37% showed poor.

Table 2. Fitness Test Categories

CATEGORY	AMOUNT
Good	8
Enough	31
Not enough	22
Less than once	1
<b>Amount</b>	<b>62</b>

## Mental Health Test Results

Table 3. Number of Education Staff

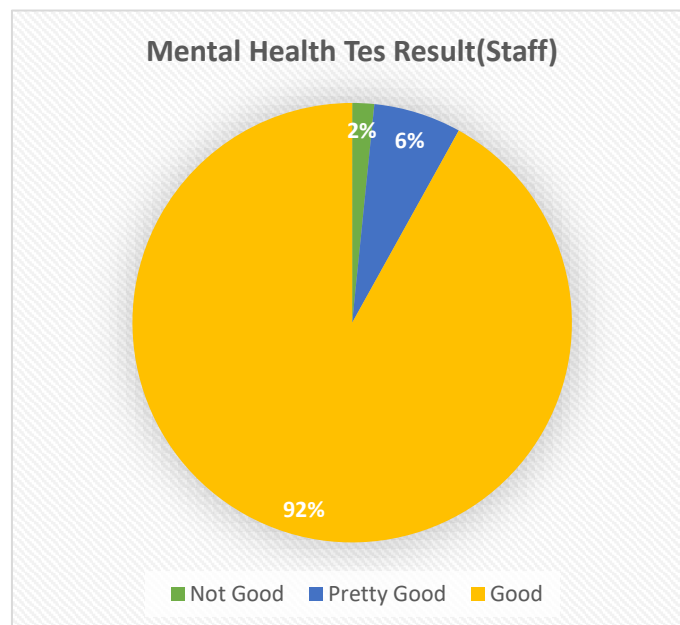
STAFF STATUS	AMOUNT
Employees with employment agreements	15
Contract employees	17

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Civil Servant Employee	15
Non ASN permanent employees	15
<b>Amount</b>	<b>62</b>

**Table 4. Mental Health Test Categories**

CATEGORY	INFORMATION	AMOUNT
Good	Low levels of psychological problems or clinically insignificant symptoms.	57
Pretty Good	Moderate level of psychological problems, further assessment and psychological consultation required.	4
Not Good	Severe level of psychological problems, requires in-depth assessment and psychological therapy	1
<b>Amount</b>		<b>62</b>



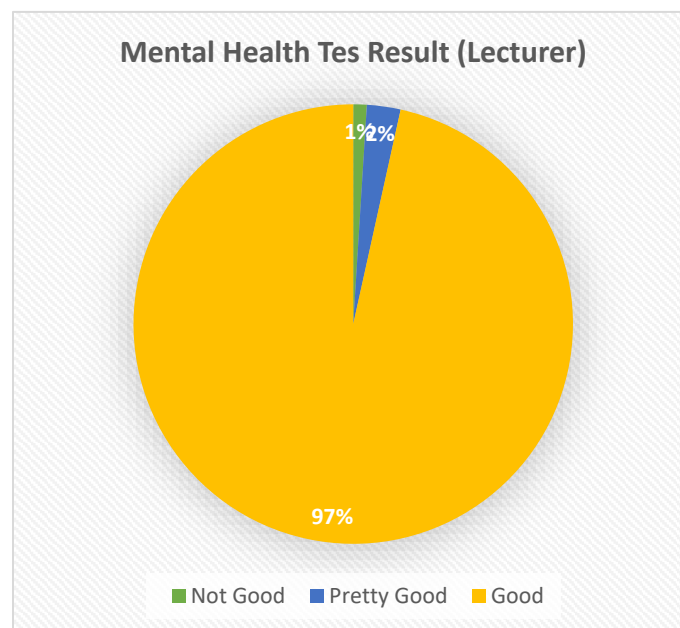
**Table 5. Number of Lecturers**

LECTURE STATUS	AMOUNT
Civil Servant Lecturer	45
PPPK Lecturer	16
PTNBH Lecturer	141
<b>Amount</b>	<b>202</b>

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Table 6. Mental Health Test Categories

CATEGORY	INFORMATION	AMOUNT
Good	Low levels of psychological problems or clinically insignificant symptoms.	195
Pretty Good	Moderate level of psychological problems, further assessment and psychological consultation required.	5
Not Good	Severe level of psychological problems, requires in-depth assessment and psychological therapy	2
Amount		202



### CONCLUSION

This study aims to determine the level of physical fitness and mental health index of lecturers and educational staff at Yogyakarta State University. Based on the results of the research that has been carried out, it was found that the level of physical fitness of UNY Lecturers was 1% indicating good, 3% indicating very poor, 43% indicating sufficient, 53% indicating less. While for the percentage results of the Fitness Test for UNY Educational Staff, 13% indicated good, 2% indicated very poor, 48% indicated sufficient, 37% indicated less. While for the mental health test of UNY Educational Staff, the results showed that 92% were good, 6% were quite good and 2% were lacking. While for the mental health test of UNY Lecturers, it showed that 97% were good, 2% were quite good and 1% were lacking.

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