



## HEALTH LITERACY AND PHYSICAL FITNESS PROFILE OF STUDENTS AT SENIOR HIGH SCHOOL

Nur Budhi Utama<sup>1</sup>, Destriani<sup>2</sup>, Silvi Aryanti<sup>3</sup>

<sup>1,2,3</sup>Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sriwijaya, Indonesia

[destriani@fkip.unsri.ac.id](mailto:destriani@fkip.unsri.ac.id)

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### ABSTRACT

This research aims to determine the level of health literacy and physical fitness of students at Senior High School PGRI 2 Palembang. This study is a quantitative descriptive research. There are two methods used in this research, namely the survey method using the Health Literacy Study-European-Short Question 10-Indonesia questionnaire to assess the level of health literacy and the test method using the TKPN to determine the level of physical fitness. In this study, the research population consists of all students at Senior High School PGRI 2 Palembang, totaling 806 students. The sample for this research uses the Slovin formula approach, which results in a sample size of 88 students from classes X1, X2, and X3. Data analysis techniques employ quantitative descriptive analysis presented in the form of percentages using Microsoft Excel. The results of the health literacy level showed that 31.8% of students (28 students) were in the "insufficient" category, 33% (29 students) were in the "problematic" category, 30.7% (27 students) were in the "sufficient" category, and 4.5% (4 students) were in the "perfect" category. Based on the average score is 28.8, the health literacy level of students at Senior High School PGRI 2 Palembang falls into the "problematic" category. For physical fitness the data reveals that 15.9% of students (14 students) have a "very good" level of physical fitness, 37.5% of students (33 students) have a "good" level of physical fitness, 46.6% of students (41 students) have "sufficient" level of physical fitness, and 0% of students (0 students) have "low" or "poor" physical fitness. Based on the average score is 3.15, the level of physical fitness of students at Senior High School PGRI 2 Palembang falls into the "good" category.



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### Penulis Korespondensi:

Destriani,  
FKIP, Universitas Sriwijaya  
Email: [destriani@fkip.unsri.ac.id](mailto:destriani@fkip.unsri.ac.id)

### INTRODUCTION

In the face of dynamic educational challenges, students are required to master knowledge from various fields in line with the changing times. With the presence of the latest educational curriculum, students are expected to be more active, possess a high level of curiosity, think critically, have the ability to express their opinions, and collaborate and work together with their peers. All of these components can be achieved by students with good literacy skills and good physical fitness.

Literacy skills are crucial for the academic success of an individual. Therefore, literacy skills should be acquired and nurtured from an early age, as they are the primary weapon of the Indonesian generation. Good physical fitness is also essential in order to achieve the best results in literacy activities, in line with what (Bayu, Waluyo, et al., 2021) have stated, that physical fitness is an important indicator that every human should possess in order to engage in activities to their maximum potential, thereby yielding the best results in all activities. Reflecting on this statement, it is only right for high school students to dedicate their time to enhancing their literacy skills and maintaining their physical fitness.

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Health literacy is the personal, cognitive and social skills which determine the ability of individuals to gain access to, understand, and use information to promote and maintain good health (Nutbeam, 2015). According to (Beauchamp et al., 2015) Health literacy is the personal characteristics and social resources needed for individuals and communities to access, understand, appraise and use information and services to make decisions about health. Health literacy includes the capacity to communicate, assert and enact these decisions. According to (Parnell et al., 2019) Health literacy is a dynamic, collaborative, and mutually beneficial skill that integrates previous health knowledge and experiences, along with cognitive abilities that influence the organizational, provider, and recipient abilities in health services to access, understand, and use health information and services in making actionable decisions that enhance their health. According to (Anisah et al., 2021) Health literacy is the cognitive ability that determines an individual's motivation and capacity to access, understand, and use information to enhance good health.

Health literacy has a broad and inclusive definition that refers to the personal characteristics and social resources needed by individuals and communities to access, understand, appraise, and use information and services to make health-related decisions or have implications for health (World Health Organization, 2015). Based on this definition, health literacy indicators are divided into four dimensions, which consist of seeking, comprehending, appraising, or evaluating, and applying or utilizing information relevant to health. Health literacy also encompasses three domains: healthcare, disease prevention, and health promotion (Candrakusuma, 2020).

Physical fitness is the dynamic state of an individual's health, which forms the foundation for the successful execution of tasks that need to be performed. Physical fitness is closely related to the activities of individuals in their work and movements. The physical fitness required to support a person's daily activities (work) is essential for those activities to be optimized (Destriani & Yusfi, 2021). According to (Ningrum et al., 2022) Physical fitness is the result of the work of the body's system functions that embodies an increase in the quality of life in every activity that involves physical activity. According to (Wanto, 2018) Physical fitness is defined as the level of health that is appropriate for the body to perform certain tasks. According to (Safitri et al., 2021) Physical fitness is a supporting factor for a student to actively participate in learning activities at school and is a contributing factor for students to be able to achieve good learning outcomes. According to (Aryanti et al., 2021) Physical fitness is a person's ability to carry out physical activities and other activities and as a support in daily activities. Physical fitness is generally influenced by two main factors: internal factors, which include elements already present in a person's body that are relatively stable, such as genetics, age, and gender. Meanwhile, external factors include physical activity, fatigue, the environment, and smoking habits. In addition to physical activity, other factors affecting physical fitness include maturity, age, heredity, environment, and lifestyle, including nutrition and stress management.

The age of high school students is a transition period from adolescence to adulthood, during which individuals undergo changes in self-maturation behavior. This age is considered to be the physical peak for an individual, which is why it is essential to determine their level of health literacy and physical fitness. Senior High School PGRI 2 Palembang, located on Jalan Jend. Ahmad Yani Lorong Gotong Royong, 9/10 Ulu Plaju Palembang, is one of the high school institutions. However, there is no valid and reliable data available regarding the health literacy and physical fitness levels. Therefore, it is considered necessary to conduct research on the level of health literacy and physical fitness of students at Senior High School PGRI 2 Palembang to understand how high or low their levels of health literacy and physical fitness are.

## **METHOD**

The type of research being conducted is quantitative descriptive research. According to (Syahza, 2021) descriptive research is intended to provide descriptions of situations or events. In this sense, descriptive research involves accumulating basic data in a purely descriptive manner, without the need to seek or explain relationships, test hypotheses, make predictions, or derive meanings and implications. The research methodology involves data collection using questionnaires to assess the level of health literacy. Additionally, measurements and tests are employed to determine the level of physical fitness. The scores obtained are then analyzed using quantitative descriptive analysis presented in the form of percentages using Microsoft Excel.

The research is conducted at Senior High School PGRI 2 Palembang, located at the following address: Jl. Jend. Ahmad Yani, Lorong Karya, 11 Ulu, Kec. Seberang Ulu II, Kota Palembang, Sumatera Selatan 30116. The research is carried out during the odd semester from May 29th to August 31st in the academic year 2023/2024, in accordance with the academic calendar at Senior High School 2 Palembang. Specifically, there is three days for the health literacy questionnaire survey on August 21 to August 24, 2023, and five days for the physical fitness test research from August 25 to August 31, 2023.

Population is defined as a group of individuals or objects within a specific area with distinctive characteristics that are of interest in a research study or observation (Ul'fah Hernaeny, 2021). The population in this research consists of students in grades X through XII at Senior High School PGRI 2 Palembang, totaling 806 students. According to Arikunto in (Ul'fah Hernaeny, 2021) a sample is a part or representative of the population under study. The determination of the sample size is based on the Slovin formula, which has been widely used in research because it is considered easy and practical to use (Riyanto & Hatmawan, 2020). In this case, 88 samples were obtained using the Slovin formula approach.

To collect data for the research on the health literacy profile of Senior High School PGRI 2 Palembang students, this study employs a questionnaire method. A questionnaire is a data collection technique that involves providing a set of questions to respondents for them to answer (Riyanto & Hatmawan, 2020). In this case, the researcher creates written questions in a digital or online format using Google Forms for respondents to answer. The questionnaire used is the HLS-EU-SQ10-IDN, which is a Health Literacy Questionnaire with multiple-choice questions, allowing respondents to choose their preferred answers.

To collect data for the research on the profile of physical fitness, instruments or measuring tools are used in the data collection process. The measurement process requires tools that yield data as a result of the measurements. The data obtained from the measurements are then recorded on paper and analyzed to determine whether the results conform to established norms. In this case, the examiner utilizes the Indonesian National Student Fitness Test (Tes Kebugaran Pelajar Nusantara or TKPN) to conduct these measurements. Several tools are used to perform the TKPN test, including cones, a stopwatch, mats, a height meter, body weight scales, rulers, black tape, a sound system, pens, paper, and an examination board.

The data analysis technique used in this research employs the quantitative descriptive analysis method in terms of percentage. This involves processing data as stated by Suherman in (Malik & Chusni, 2018), where frequency is divided by the total number of respondents, multiplied by 100 percent, using the following formula:

$$P = \frac{F}{N} \times 100 \%$$

Explanation:

P : Percentage

F : Frequency

N : Total number of respondents

## RESULT AND DISCUSSIONS

A description of the results of health literacy levels with 10 items using a linear scale with scores as follows: 1 (Very Difficult), 2 (Quite Difficult), 3 (Quite Easy), and 4 (Very Easy) can be presented in the following table:

Table 1. Frequency Distribution of HLS-EU-SQ10-IDN

Questions	VD	%	QD	%	QE	%	VE	%	Total	%
Find information about symptoms of illnesses that concern you?	21	23,9	45	51,1	19	21,6	3	3,4	88	100
Find out what to do in case of a medical emergency?	14	15,9	41	46,6	28	31,8	5	5,7	88	100
Judge how reliable health warnings are, such as smoking, low physical activity and drinking too much?	14	15,9	12	13,6	29	33	33	37,5	88	100
Judge which vaccinations you may need?	13	14,8	22	25	31	35,2	22	25	88	100

Decide how you can protest yourself from illness based on advice from family and friends?	8	9,1	24	27,3	31	35,2	25	28,4	88	100
Find out about activities (such as meditation, exercise, walking, pilates, ect.) that are good for your mental well-being?	7	8	24	27,3	39	34,1	27	30,7	88	100
Find out about political changes (such as legislation, new medical examination methods, changes in government, restructuring of health sevices, etc.) that may affect health?	14	15,9	34	38,6	27	30,7	13	30,7	88	100
Understand advice on health from family members of friends?	2	2,3	14	15,9	32	36,4	40	45,5	88	100
Judge how where you live (such as your community, neighborhood) affects your health and well-being?	6	6,8	25	28,4	39	44,3	18	20,5	88	100
Make decisions to improve your health?	5	5,7	11	12,5	33	37,5	39	44,3	88	100

Explanation:

VD : Very Difficult

QD : Quite Difficult

QE : Quite Easy

VE : Very Easy

The standard values used for categorizing HLS-EU-SQ10-IDN in this research as follows: Insufficient (0-25), Problematic (>25-33), Adequate (>33-42), Exellent (>42-50) (Rachmani & Nurjanah, 2020). Based on the analysis of the health literacy questionnaire in this study, the following statistics were obtained: minimum score 5, maximum score 45, mean 28,78, dan standart deviation 8,3.

Table 2. Frequency Distribution of HLS-EU-SQ10-IDN Categories

Category	Frequency	%
Insufficient	28	32
Problematic	29	33
Adequate	27	31
Exellect	4	5
Total	88	100

The description of the results of physical fitness levels refers to the guidelines in the Indonesian National Physical Fitness Test Implementation Handbook. The test implementation is carried out according to each class, recording carefully and accurately the results of the tests that have been conducted by the students. The tests conducted by the students include BMI test, V Sit and Reach, Squat Thrust, Sit Up, and a Pacer Test.

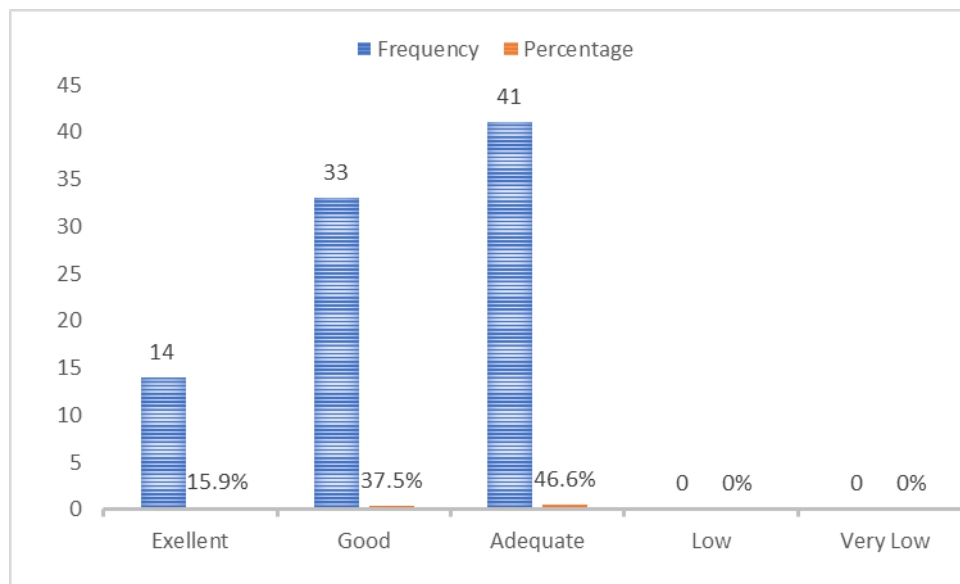
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The collected research data were then analyzed using quantitative descriptive analysis techniques using Microsoft Excel. The analysis of the physical fitness test results conducted by Senior High School PGRI 2 Palembang students yielded the following statistics: the lowest score was 2.2, the highest score was 4.5, the average score was 4.15, and the standard deviation was 0.63. The results of the data analysis are presented in the following table:

Table 3. The Results of Analysis of the National Student Fitness Test Data

Classification	Value Interval	Frequency	Percentage
Excellent	>4	14	15,9%
Good	3-3,9	33	37,5%
Adequate	2-2,9	41	46,6%
Low	1,9	0	0%
Very Low	<1	0	0%
<b>TOTAL</b>		88	100%

Based on the results, students of Senior High School PGRI 2 Palembang at the level of physical fitness are as follows: Excellent are 14 students with a percentage of 15,9%, Good are 33 students with a percentage of 37,5%, Adequate are 41 students with a percentage 46%, Low and Very Low 0 Students. The research findings are presented in the following bar chart.:



Picture 1. Bar Chart of Indonesian National Student Fitness Test of Senior High School PGRI 2 Palembang

**Discussions**

In the results of health literacy levels, the majority of respondents fall into the problematic category, specifically 29 respondents. This is evident from how students cannot identify the factors that influence health. The percentage of these health literacy research findings aligns with previous studies, which have indicated that many individuals (students) still do not have sufficient health literacy skills (Bayu, Syafaruddin, et al., 2021).

According to (Wu et al., 2017) there are several factors influencing the level of health literacy, including the content of health education, language barriers, cultural appropriateness, and the ease with which health information is understood and followed. Students with problematic health literacy tend to have difficulty understanding health-related information, including how to stay healthy, recognize symptoms of diseases, and

engage in appropriate preventive measures. This difficulty can negatively impact their quality of life because they struggle to make better decisions for their own health. Students with problematic health literacy may find it challenging to be aware of the importance of health and the significance of maintaining a healthy lifestyle.

The fitness test conducted by Senior High School PGRI 2 Palembang students follows the guidelines for the National Student Fitness Test, which consists of Body Mass Index (BMI), V Sit and Reach, Squat Thrust, Sit-Up, and Pacer test. The highest proportion of value is attributed to the Pacer test, with a value proportion of 2.5, while both the Squat Thrust and Sit-Up tests have the same value proportion, which is 1. The V Sit and Reach test has a value proportion of 0.5 (Ary Moelyadi, 2022).

Students who have good physical fitness will have concentration, endurance, and energy in carrying out their learning activities (Aryanti et al., 2021). According to (Rismayanthi, 2013) the physical fitness of students is expected to support the achievement and learning outcomes of students, especially in sports achievements related to the sports discipline they are involved in. According to (Suwo et al., 2023) individuals with inadequate physical fitness tend to be less vigilant in monitoring their physical activities. This contrasts with the findings of this research because almost all the students in this study actively monitor their physical activities. They actively participate in positive extracurricular activities at school such as futsal, flag-raising, volleyball, and many other extracurricular activities that significantly contribute to improving their physical fitness.

## CONCLUSION

The health literacy of Senior High School PGRI 2 Palembang students, as assessed using the HLS-EU-SQ10-IDN questionnaire, falls into the problematic category. On the other hand, the physical fitness of Senior High School PGRI 2 Palembang students, as evaluated using the National Student Fitness Test, falls into the good category.

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