



The Relationship Between Stress Levels And Physical Activity On The Physical Fitness Level Of Students At Sma Negeri 1 Talang Padang, Tanggamus Regency

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Abstract

This study aims to determine the relationship between stress levels and physical activity on the physical fitness level of high school students. The population in this study consists of students from grades X, XI, and XII at SMAN 1 Talang Padang, with a randomly selected sample of 96 students. The research method used is a quantitative descriptive method with a correlational approach. The instruments used for data collection include the Perceived Stress Scale Questionnaire (PSSQ), the Physical Activity Questionnaire for Adolescents (PAQ-A), and the Indonesian Student Fitness Test (TKSI). For data analysis, the researcher utilizes SPSS 25. The results of the study show a significant relationship between stress levels and physical activity on physical fitness, as indicated by a Sig. F Change value of $0.000 < 0.05$, with an R value of 0.838. From this output, the coefficient of determination (R square) is 0.702, indicating a strong correlation. It can be concluded that stress levels and physical activity have a strong relationship with physical fitness.

Keywords: *Stress Levels, Physical Activity, Physical Fitness*

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INTRODUCTION

In today's modern era, the rapid development of technology and information significantly impacts human life, including lifestyle and health. Especially among young people who still have the status of students, as part of the younger generation, they are inseparable from this influence. One crucial aspect of concern is the level of physical fitness, which is the leading indicator of a person's physical health. High school students face various challenges and demands in their lives, both in academic and social environments. The stress experienced by high school students can impact their health and physical fitness.

In addition, physical activity is one of the key factors in maintaining physical fitness. Physically active students tend to have better physical condition than less active students. Physical activity, such as sports, is not only beneficial for improving physical fitness but can also be a way to reduce stress. However, not all students have adequate levels of physical activity, which can be caused by various reasons, such as lack of facilities, support from the environment, and lack of awareness of the importance of sports; physical activity is also an

essential factor that affects the level of physical fitness in adolescents, especially in high school students. An optimal level of physical fitness is needed to support daily activities and academic and non-academic achievements.

Stress is a physical and psychological response to demands or pressures faced by individuals (American Psychological Association, 2020). In adolescent students, especially high school students, stress can be caused by various factors, such as heavy academic loads, social pressures, and hormonal changes during puberty (Sawyer et al., 2012). Stress that is not managed properly can have a negative impact on students' mental, physical, and academic health.

Stress and physical activity have a close relationship in influencing students' physical fitness levels. High school students face various pressures that have the potential to increase stress, which in turn can have a negative impact on their physical fitness. On the other hand, adequate physical activity has been shown to reduce stress levels and improve students' physical health effectively. However, several challenges still need to be overcome, such as the lack of sports facilities, busy academic schedules, and low student awareness of the importance of physical activity. Therefore, the involvement of various parties, from the school, teachers, parents, and students themselves, is needed to create an environment supporting regular physical activity. Through this collaboration, students can maintain physical fitness and manage stress well to achieve optimal physical and mental well-being. Further research on the relationship between stress levels, physical activity, and physical fitness among high school students is also needed to produce more complete data and effective strategies for improving students' quality of life.

Observations conducted by researchers at SMAN 1 Talang Padang as an illustration were based on the results of observations with Guidance and Counseling (BK) Teachers at SMAN 1 Talang Padang, Tanggamus Regency, Lampung; it was found that the level of stress experienced by students varied, but tended to increase when approaching exams or when the burden of academic tasks piled up. The main causes of student stress are academic pressure, exam preparation, parental expectations, new curriculum, bullying, long hours of class that make students feel bored, social problems, and lack of rest time. Students often consult about stress, especially before exams. BK teachers also found a pattern in which high-stress students experience decreased academic and physical performance. BK teachers provide guidance through counseling, relaxation, and time management to overcome stress and recommend physical activity to reduce stress. More physically active students are considered to have lower stress levels and find it easier to manage academic workloads.

Observation results with Physical Education (Penjas) teachers show that students routinely participate in sports activities twice weekly. Physical Education (Penjas) teachers observed that students who appear more stressed tend to be less active in sports activities. Students who routinely exercise generally have good levels of physical fitness. In contrast, students who rarely exercise and have high stress show lower physical fitness. Physical activity effectively reduces student stress, with students who exercise more often showing more relaxed behavior and being ready to face academic challenges. The sports program at school is effective in helping students manage stress. However, more encouragement is needed for less active students.

Based on the background supported by previous theories and research, this study aims to determine the relationship between stress levels and physical activity on physical fitness levels in students of SMA Negeri 1 Talang Padang, Tanggamus Regency.

METHOD

The method used in this study is a quantitative descriptive method using a correlation approach (correlational research). The population used as a sample in this study was 96 students of SMAN 1 Talang Padang, Tanggamus Regency, with a random sampling technique. The research instrument is a tool used to measure natural and social phenomena that are observed (Sugiono 2013 in Salmaa, 2023: 1). This study used the Perceived Stress Scale (PSS) questionnaire instrument, a questionnaire used to measure psychological stress levels that have been modified in the form of several additional indicators in the questionnaire questions, these additions are based on Selye's theory (1974) and have previously been tested by other researchers. The Perceived Stress Scale (PSS) questionnaire has been adapted into Indonesian. It is valid and reliable with a Cronbach alpha of 0.81 (Nurrachmawati et al., 2022: 57). The Physical Activity Questionnaire for Adolescents (PAQ-A) questionnaire developed by Kent C. Kowalski, et al (2004) which has been modified into Indonesian. This physical activity questionnaire is an instrument carried out by remembering activities carried out in the previous seven days. The physical fitness test uses the TKSI Indonesian Student Fitness Test published by (tksi.kemdikbud.go id) which has been tested by the PPPK Penjas team.

The data collection technique used in this study was a measurement test and by distributing questionnaires. To determine the level of physical fitness using the EF phase TKSI for high school / vocational high school students consisting of: Coordination test: Hand Eye Coordination Test, Explosive Power Test: Standing Broad Jump, Agility Test: T-test, Arm and

Shoulder Muscle Endurance Test: Dipping Test, Cardiorespiratory Endurance: Multi-Stage Fitness Test. Meanwhile, questionnaires were distributed offline to measure the level of stress and physical activity, all of which will later be analyzed using a hypothesis test assisted by SPSS 25 software, which is carried out using bivariate analysis and multiple regression. Hypotheses 1 and 2 were tested with product-moment correlation, while hypothesis 3 was analyzed with multiple linear regression. Before doing that, conducting a prerequisite test is very important to meet the normality and homogeneity tests.

RESULTS AND DISCUSSION

Result

The data described in this study are data from each variable, namely independent variable data consisting of stress levels (X_1) and physical activity (X_2), and dependent variable data, namely physical fitness (Y). The data is then processed and analyzed using IBM SPSS Statistics 25.

1. Stress Level

Static descriptive data of research results on the stress level of students of SMAN 1 Talang Padang, Tanggamus Regency, were obtained with the lowest score (minimum) of 21, the highest score (maximum) of 68, the average (mean) of 40.06 and the standard deviation of 11.49. The results can be seen in the following table:

Table 1. Static descriptive

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Stres Level	96	21	68	40,06	11,49
Valid N (listwise)	96				

Table 2. Frequency Distribution of Stress Levels

Interval	Category	Frequency (f)			Percentage (%)		
		ALL	M	F	ALL	M	F
0-26	Mild Stress	18	14	4	19	29	8
27-53	Moderate Stress	65	30	35	68	63	73
54-80	Severe Stress	13	4	9	14	8	19
Total		96	48	48	100	100	100

From the frequency distribution table of stress levels of students of SMAN 1 Talang Padang above, it can be concluded: as many as 14 male students (29%) and 4 female students

(8%) with a total of 18 students (19%) have stress levels in the mild stress category, 30 male students (63%) and 35 female students (73%) with a total of 65 students (68%) have stress levels in the moderate stress category, 4 male students (8%) and 9 female students (19%) with a total of 13 students (14%) have stress levels in the severe stress category. The description of the frequency distribution and percentage of stress levels of students of SMAN 1 Talang Padang, Tanggamus Regency above can be described through the following bar diagram:

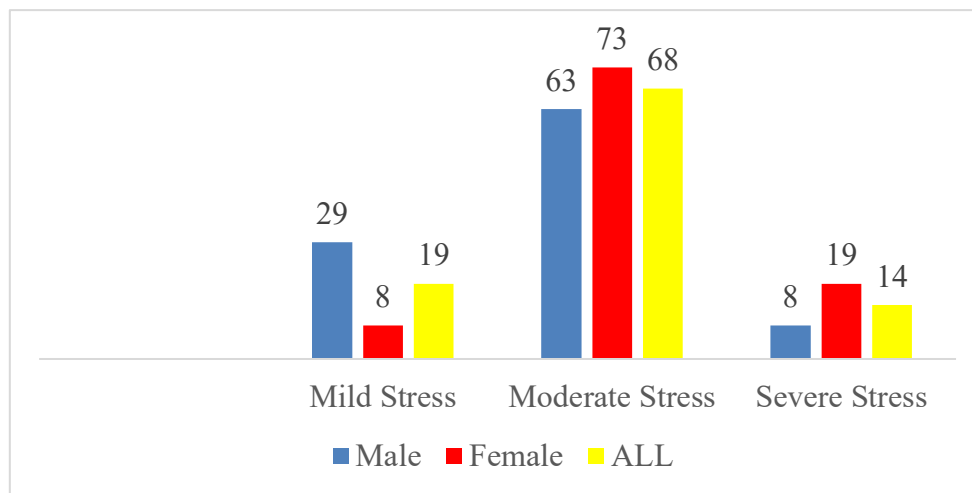


Figure 1. Diagram Distribution of Stress Levels

2. Physical activity

Static descriptive data from the results of the study on the physical activity of students at SMAN 1 Talang Padang obtained the lowest score (minimum) 2, the highest score (maximum) 6, the average (mean) 3.61, and the standard deviation 0.766. The results can be seen in the following table:

Table 3. Static descriptive

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Physical activity	96	2	6	3,61	0,766
Valid N (listwise)	96				

Table 4. Frequency Distribution

Interval	Category	Frequency (f)			Percentage (%)		
		ALL	M	F	ALL	M	F
5	Very High	7	5	2	7	10	4
4	High	20	13	7	21	27	15
3	Moderate	48	26	22	50	54	46
2	Low	19	4	15	20	8	31
1	Very Low	2	0	2	2	0	4
	Total	96	48	48	100	100	100

Based on the table above, there is data on the level of physical activity in students of SMAN 1 Talang Padang, Tanggamus Regency. A total of 5 male students (10%) and 2 female students (4%), with a total of 7 students (7%) are categorized as having very high physical activity, 13 male students (27%) and 7 female students (15%) with a total of 20 students (28%) are categorized as having high physical activity, 26 male students (54%) and 22 female students (46%) with a total of 48 students (50%) are categorized as having moderate physical activity, 4 male students (8%) and 15 female students (31%) with a total of 19 students (20%) are categorized as having low physical activity and 0 male students and 2 female students (2%) with a total of 2 students (2%) are categorized as having very low activity. The data can be illustrated in the form of a bar chart as follows:

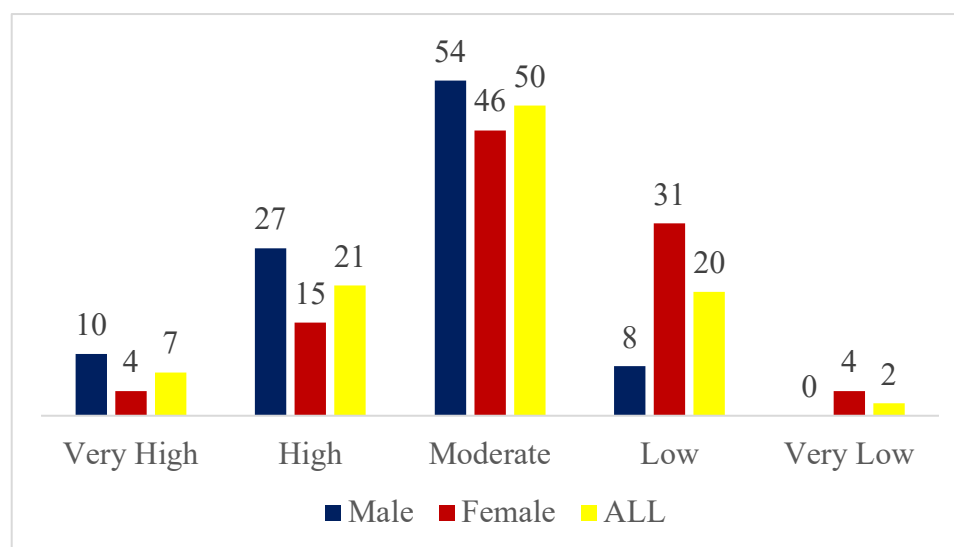


Figure 2. Diagram Frequency Distribution

3. Physical Fitness

Static descriptive data of research results on the physical fitness of students of SMAN 1 Talang Padang obtained the lowest score (minimum) of 8, the highest score (maximum) of 24, the average (mean) of 15.65, and the standard deviation of 4.029. The results can be seen in the following table:

Table 5. Static descriptive

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Physical Fitness	96	8	24	15,65	4,029
Valid N (listwise)	96				

Table 6. Frequency Distribution of Physical Fitness

Interval	Category	Frequency (f)			Percentage (%)		
		ALL	M	F	ALL	M	F
22-25	Very Good	10	6	4	10	13	8
18-21	Good	20	16	4	21	33	8
14-17	Fair	37	19	18	39	40	38
10-13	Poor	18	7	11	19	15	23
5-9	Very Poor	11	0	11	11	0	23
Total		96	48	48	100	100	100

The data above is the frequency distribution of physical fitness level data. A total of 6 male students (13%) and 4 female students (8%) with a total of 10 students (10%) are categorized as having very good physical fitness, 16 male students (33%) and 4 female students (8%) with a total of 20 students (21%) are categorized as having good physical fitness, 19 male students (40%) and 18 female students (38%) with a total of 37 students (39%) are categorized as having moderate physical fitness, the number categorized as having poor physical fitness is 7 male students (15%) and 11 female students (23%) with a total of 18 students (19%). Meanwhile, 0 male and 11 female students (23%), with 11 students (23%) included in the inferior physical fitness category. The data can be illustrated in the form of a bar chart as below.

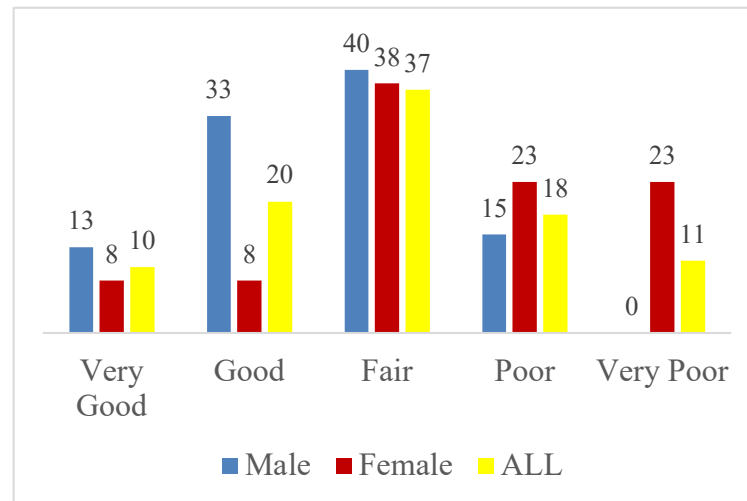


Figure 3. Diagram Frequency Distribution of Physical Fitness

Table 7. Test of normality

		Stress Levels	Physical Activity	Physical Fitness
N		96	96	96
Normal Parameters ^{a, b}	Mean	40.0625	3.6161	15.6458
	Std. Deviation	11.49170	.76612	4.02879
Most Extreme Differences	Absolute	.059	.093	.066
	Positive	.059	.093	.066
	Negative	-.049	-.050	-.059
Test Statistic		.059	.093	.066
Asymp. Sig. (2-tailed)		.200 ^{c, d}	.041 ^c	.200 ^{c, d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

The table of data normality test results using Kolmogorov-Smirnov shows that the distribution of stress level, physical activity, and physical fitness data is normal, with a significance level of 0.200 stress level, 0.041 physical activity, and 0.200 physical fitness. This value is greater than the established significance limit. Therefore, it can be concluded that the data is normally distributed.

Table 8. Linearity Stress Levels (X_1) and Physical Fitness (Y)

			Sum of Squares	df	Mean Square	F	Sig.
Physical Fitness * Stress Levels	Between Groups	(Combined)	657.125	40	16.428	1.021	.466
		Linearity	.403	1	.403	.025	.875
		Deviation from Linearity	656.722	39	16.839	1.047	.432
	Within Groups		884.833	55	16.088		
	Total		1541.958	95			

Table 9. Linearity Physical Activity (X_2) and Physical Fitness (Y)

			Sum of Squares	df	Mean Square	F	Sig.
Physical Fitness * Physical Activity	Between Groups	(Combined)	1516.458	89	17.039	4.009	.042
		Linearity	1075.428	1	1075.428	253.042	.000
		Deviation from Linearity	441.030	88	5.012	1.179	.464
	Within Groups		25.500	6	4.250		
	Total		1541.958	95			

Based on Table 8 above, it is known that the sig. Deviation from the Linearity value is 0.432, which means it is greater than 0.05, so it can be said that the correlation between stress level (X_1) and physical fitness (Y) is linear. Based on table 9 above, it is known that the sig. Deviation from the Linearity value is 0.464, which means it is greater than 0.05, so it can be said that the correlation between physical activity (X_2) and physical fitness (Y) is linear.

Table 10. Hypothesis

Correlation Analysis of Predictors and Criteria

		Stress Levels	Physical Activity	Physical Fitness
Stress Levels	Pearson Correlation	1	.103	.016
	Sig. (2-tailed)		.317	.876
	N	96	96	96
Physical Activity	Pearson Correlation	.103	1	.835**
	Sig. (2-tailed)	.317		.000
	N	96	96	96
Physical Fitness	Pearson Correlation	.016	.835**	1
	Sig. (2-tailed)	.876	.000	
	N	96	96	96

** . Correlation is significant at the 0.01 level (2-tailed).

1. Relationship between stress levels and physical fitness

With a probability value of 0.05, if the significance value is > 0.05 , it means there is no correlation. If the significance value is < 0.05 , it is correlated. Based on the table above, it can be stated that stress levels and physical fitness do not have a correlation because sig. Shows 0.876 where the value is > 0.05 . With an R-value or correlation coefficient of 0.016. This shows a very weak positive correlation value.

2. Relationship between physical activity and physical fitness

Furthermore, physical activity and physical fitness have a correlation because the sig. Value is 0.000, where the value is < 0.05 . With a correlation value of 0.835, it means that there is a strong degree of relationship and a positive correlation, so the higher the physical activity, the higher the physical fitness.

3. Relationship between stress level and physical activity with physical fitness.

This study used multiple regression analysis of 2 predictors, with a probability value of 0.05. This means if the sig. Predictor value < 0.05 , then the stress level variable (X_1) and physical activity (X_2) have an effect on Y. And vice versa if the sig. predictor value > 0.05 then the variables X_1 and X_2 do not affect Y.

Table 11. Regression analysis results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.838 ^a	.702	.696	2.221	.702	109.755	2	93	.000

a. Predictors: (Constant), Physical Activity, Stress Levels

b. Dependent Variable: Physical Fitness

Based on Table 11 it can be concluded that the calculated F value is 109.755 with a sig. Value of 0.000 which means < 0.05 , then the regression model can be used to predict stress level variables and physical activity variables. In other words, it can be said that the stress level variables (X_1) and physical activity (X_2) affect the physical fitness variable (Y). For the magnitude of the relationship value, namely R of 0.838, from the output, the coefficient of determination or R square of 0.702 is obtained, which means that the effect of the independent variables of stress level (X_1) and physical activity (X_2) on the physical fitness variable (Y) is 70.2%.

4. Analysis of the contribution or contribution of each predictor

The contribution or contribution of each predictor is carried out to determine the amount of contribution from each variable of stress level and physical activity to the level of physical fitness in students of SMAN 1 Talang Padang, Tanggamus Regency. The

calculation of effective contribution and relative contribution can be done by calculating the following formula:

$$SE(x)\% = \text{Beta X Koefisien correlation} \times 100\%$$

$$SR(x)\% = \frac{SE(X)\%}{R \text{ Square}}$$

Table 12. Beta Coefficient, Correlation Coefficient and R Square Values

Variable	Beta Coefficient	Correlation Coefficient	R Square
X1	-0.071	0.016	0,702
X2	0.842	0.835	

Table 13. Effective Contribution and Relative Contribution

Physical Fitness		
Variable	SE	SR
Stress Levels (X ₁)	-0.114%	-0.16%
Physical Activity (X ₂)	70.31%	100%

Discussion

Based on the analysis that has been done, the following is an explanation of the relationship between stress levels and physical activity on physical fitness. In accordance with the data analysis that has been done, it was found that the results of stress levels with physical fitness in students of SMAN 1 Talang Padang, Tanggamus Regency, did not correlate. Because based on the hypothesis test, the sig. Value was obtained. Of 0.876 where the value is > 0.05. As seen from the R-value or correlation coefficient, 0.016 was obtained. This means a positive relationship with low closeness between stress levels and physical fitness exists. The effective contribution of stress levels to physical fitness is -0.114%, and the relative contribution is -0.162%. It can be concluded that high-stress levels do not contribute to low physical fitness in students of SMAN 1 Talang Padang, Tanggamus Regency.

This is similar to research (Radha and Hijrin, 2021), which shows no relationship between a person and stress levels on physical fitness. At SMAN 1 Talang Padang, Tanggamus Regency, some things trigger stress, both physiological, psychological, and social factors that occur in the school, family, and social environments. Here are some of the main factors that cause stress in adolescent students:

1. Academic Pressure

Many students experience stress not because of their physical condition but because of the piling up of assignments and tight exam schedules that can make students feel overwhelmed; the demands of high grades to get good grades, both from themselves, parents, and teachers, can be a source of stress and preparation for college entrance exams, especially grade 12, often experience severe stress because they have to prepare for college selection exams.

2. Social Factors and School Environment

Academic and social competition at school can make students feel anxious or inferior, bullying students who experience bullying directly or through social media can trigger severe stress and relationships with teachers, and teachers who are too harsh or unsupportive can make students feel depressed.

3. Family Problems

High expectations from parents pressure from parents to excel can be a burden for students, family economic problems, difficult family financial conditions can cause anxiety and stress for students, and conflict in the family, quarrels between parents or lack of attention from the family can cause emotional stress can significantly affect stress even though physical fitness is in good condition.

4. Extracurricular and Extracurricular Activities

Students who participate in too many extracurricular activities are likely to feel overwhelmed and have difficulty managing their time between academics and other activities. They also have good fitness but are stressed because of the demands of time and responsibility.

5. Psychological and Personal Factors

Lack of self-confidence in students who feel inadequate or lack self-confidence can be more susceptible to stress, fear of the future, worries about career choices, continuing education, or the future in general can be a burden on the mind. Someone with a good coping mechanism is unlikely to show increased stress even though their fitness decreases, or vice versa.

6. The Influence of Technology and Social Media

Pressure from social media and comparison with friends on social media can cause anxiety and feelings of inadequacy, and excessive gadget addiction can disrupt sleep patterns and cause stress.

7. Study Habits and Rest Time

Students who often stay up late or study continuously can stay fit because they are still young but experience high stress due to mental fatigue.

Activities carried out with pressure and coercion will increase the cortisol hormone, which has an effect on increasing stress levels. Based on research data showing no significant relationship between stress levels and physical fitness, the results of this study are similar to research (Osteras et al., 2017) that shows that physical fitness and stress levels do not affect a sample of Norwegian adolescents. Stress is an individual phenomenon; the same problem does not necessarily cause various problems for other individuals. So, the stress experienced by a person is very subjective depending on age, gender, experience, way of thinking, skills, and habits of dealing with previous problems (Firdaus, 2012). This happens because stress management is able to ward off the negative impacts of stress. Yuliastrid et al. (2025) stated that recreational sports play a major role in reducing adolescent stress by increasing endorphin levels and decreasing anxiety. According to N. M. Yusuf & Yusuf (2020), academic stress is not only influenced by internal factors within the individual but also by external factors. Internal factors include self-efficacy, hardiness, optimism, achievement motivation, and procrastination, while external factors consist of parental social support. Academic stress is indicated by several aspects, such as excessive academic workload, students' perceptions of exams, school assignments, and tight schedules.

The results of the data analysis show that physical activity and physical fitness have a strong correlation and closeness. This can be seen from the sig.0.000 value where the value is <0.05 . With a correlation value of 0.835, which means it has a strong degree of relationship and a positive correlation relationship; the higher a person's activity, the higher their level of physical fitness. High Intensity Interval Training (HIIT) has been recognized as an effective approach to improve physical performance, which supports the foundation of physical fitness enhancement programs (Sari et al., 2024). The practical contribution of physical activity to physical fitness is 70.31%, and the relative contribution is 100%. The relationship between physical activity and physical fitness levels in this study is also strengthened by the theory presented (Budiwanto, 2012), which states that there are physiological changes in the body due to exercise, namely changes in the cardiorespiratory system due to the heart working more efficiently and being able to circulate more blood with fewer beats. O₂ uptake and CO₂ release are better; physical activity influences changes in the skeletal muscle and digestive systems.

Based on the analysis conducted, it is stated that the variables of stress level and physical activity simultaneously influence physical fitness. This can be seen from the F count of 109,755 with a sig. Value of 0.000, which means <0.05 , so the regression model can be used to predict the stress level and physical level variables. In other words, the variables of stress level (X_1) and physical activity (X_2) influence the variable of physical fitness (Y). For the

magnitude of the relationship value, namely R of 0.838, from the output, the coefficient of determination or R square of 0.702 is obtained, which means that the influence of the independent variables of stress level (X_1) and physical activity (X_2) on the variable of physical fitness is 0.702% with a level of closeness of the relationship in the strong correlation category. Although there is no significant relationship between stress level and physical fitness, it slightly affects physical fitness, just like physical activity. The contribution of stress level and physical activity is 70.2% to physical fitness, and other aspects influence the rest.

Other factors that influence a person's physical fitness as conveyed by several researchers:

1. Genetic factors, which are traits inherited from parents since birth. The genetic influence on muscle strength and endurance is usually associated with the amount of red and white muscle fibres. Individuals with more red muscle fibres are better at performing aerobic physical exercises, while those with more white muscle fibres excel in anaerobic physical exercises (Nugraha, 2019).
2. Age factor: As children age, their physical activity declines. When a person enters the workforce, their activities take up time, leading to a decrease in the frequency of their activities. Physical fitness continues to improve until the age of 25-30. After that, the functional capacity of all organs in the human body declines by 0.81 – 1%. However, by regularly engaging in exercise, this decline can be slowed to half (Nugraha, 2019).
3. Gender factors: Men's physical fitness levels are usually better than women's. This is because boys engage in more physical activities than girls. Before puberty, boys' physical fitness is usually almost the same as that of girls. After reaching or surpassing puberty, boys' physical fitness levels are usually much higher than those of girls (Nugraha, 2019).
4. Dietary patterns and nutritional status. By paying attention to the nutritional value consumed daily, a person's endurance will increase. One way is to consume foods that are high in carbohydrates and adequate protein, which is an effort to maintain the nutritional intake in the body. Nutrient-rich foods will impact physical freshness (Prayoga & Susanto, 2020).
5. Smoking habits. Smoking habits are caused by an unhealthy lifestyle and environment that affect a person's physical fitness. In addition, the lack of parental supervision in daily activities such as attending college, going to school, working, or socializing with others also plays a role. Smoking habits can disrupt a person's cardiovascular system. The nicotine and carbon monoxide (CO) present in cigarettes can affect the body's endurance (Prayoga & Susanto, 2020).

Solutions that can be provided to reduce stress, increase physical activity, and optimize physical fitness among students include: the first solution to reduce stress in adolescents is good time management; psychological approaches and school counselling can provide counselling services to help students cope with academic and social stress. The second solution to increase physical activity is to encourage students to participate actively in sports extracurricular activities to enhance their physical fitness, promoting an active lifestyle outside of school. The third solution to improve physical fitness is to conduct regular fitness tests such as the bleep test or physical endurance tests to assess and enhance physical fitness, encouraging students to have adequate sleep patterns. Wahid (2023) found a significant relationship between sleep quality and both health and physical performance, including physical fitness. The use of engaging physical education strategies such as play-based methods is proven to enhance both physical fitness and student motivation (Herana & Wibowo, 2025). A study on the physical fitness level of high school students emphasizes the importance of regular assessment and training in maintaining student fitness, which aligns with this research (Prawironastro & Ridwan, 2025).

CONCLUSION

Based on the research conducted, it is known that stress level does not have a relationship with physical fitness, as the significance value is $0.876 > 0.05$, meaning the significance value is greater than 0.05. Second, there is a relationship between physical activity and physical fitness, as the significance value is $0.000 < 0.05$, meaning the significance value is less than 0.05. Moreover, based on the research, there is a significant relationship between stress levels and physical activity towards students' physical fitness at SMA Negeri 1 Talang Padang. This study shows that the higher the level of stress experienced by students, the lower their physical fitness level. Conversely, students who engage in good physical activity tend to have better physical fitness. This is evidenced by the significance value of F Change $0.000 < 0.05$ with an R-value of 0.838, from which a determination or R square of 0.702 is obtained, indicating a strong correlation. The contribution of stress levels and physical activity to physical fitness is 70.2%, while the rest comes from other influencing factors.

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