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The Relationship Between Education Level, Income Figures and Sports Preferences: A Perspective on the Cost of Exercise and Physical Fitness

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Abstract

Education, income and sports preferences are indispensable needs for all humans. With education, income and sports preferences will certainly improve physical and spiritual health in humans. This study aims to determine the relationship between education level, income and sports preferences from the perspective of sports and physical fitness costs. This type of research is a type of correlation research to find out the relationship between variables. The population in this study is 276 and the basis for sampling in this study, the researcher uses purposive sampling, so that the sample in this study is 173 subjects. The data collection instrument in this study uses a questionnaire that has been validated by experts with a validity value of 0.87 and a reliability of 0.84. The data analysis technique in this study uses quantitative descriptive analysis with hypothesis testing analysis carried out in a gradual manner as a condition for standardized regression after which the model is refined. There are 4 hypothesis tests, namely: major hypothesis testing 1, minor hypothesis testing is divided into 3, hypothesis 1, hypothesis 2 and hypothesis 3. The results of this study are that there is a significant relationship at the level of education, income and sports preferences reviewed from the perspective of sports and physical fitness costs by being marked by the value of each variable, namely sig. (2-tailed) 0.000. Based on the nature of the correlation, it can be concluded that there is a significant relationship at the level of education, income and sports preferences reviewed from the perspective of sports and physical fitness costs. So the implication of this research is the importance of instilling a healthy soul, both physically and spiritually healthy. Physical activity is not expensive, depending on how we have the motivation to keep exercising.

Keywords: *Education, Income, Sports Preferences, Physical Fitness.*

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INTRODUCTION

Physical activity requires physical fitness to improve physical fitness, so the better the physical activity (Poon et al., 2024). So there is a reciprocal relationship between physical activity and physical fitness. The physical fitness needed to support daily activities in doing work must be optimal (Oh & Aquino, 2024). The work or activities carried out can affect daily physical fitness. Good physical fitness if someone does an activity, not easily tired in doing their work. In doing physical activity, people use more muscles to move the whole body (Kolunsarka et al., 2024). According to (Sprong et al., 2023) by doing physical activity is proven to prevent

heart disease, stroke, diabetes and several other types of cancer, in addition to doing physical activity regularly will help in preventing hypertension, maintaining an ideal weight and improving mental health. According to (Ábel et al., 2023) explained that in order for the body to always maintain its health, it must do consistent exercise every day to build strong immunity, and avoid various diseases that can attack the body's metabolism. According to (Solera-Sanchez et al., 2024) it is also explained that physical activity or exercise is a rehabilitative treatment (therapy) for cardiovascular diseases, cancer, obesity, and diabetes. Based on some of the explanations above about physical activity is carried out with the goal of achieving good physical fitness, with good physical fitness will make a person still look fit in doing the activity being done.

To achieve good physical fitness, everyone has different ways depending on the person's preferences in choosing the sport to be done (Basterfield et al., 2021). Simply put, exercise can be done by anyone, anytime and anywhere, depending on the person who wants to choose the sport which according to him makes him more enthusiastic in doing the sport (Unger et al., 2024). According to (Li et al., 2023) Preferences or selection of sports are divided into two, namely preference for expensive sports and cheap sports. So a person's participation in doing sports is influenced by the costs that will be incurred in doing the chosen sports activity (Mahfud et al., 2020). People's sports preferences are influenced by the income figures obtained in a certain period of time. With a high income figure, the desired sports preferences can be implemented (Rumpoko et al., 2022).

In fact, nowadays people rarely do physical activity, people are more likely to choose instant ways to meet their own needs, thus making people's physical activity less (Mulyana, 2017). Based on data from the Secretary of the Indonesian Ministry of Youth and Sports, (2010) shows a decrease in the number of community participation in sports activities in 2005 by 25.4%, in 2006 it decreased by 2.2% and in 2009 it decreased further by 1.4%. The cause of low community sports activities is the lack of public awareness of the importance of maintaining health by regularly doing physical activity every day.

The level of sports participation in each country is inseparable from the level of education that has been taken, with a high level of education, the country will have superior Human Resources (HR) in competing. In addition, the purpose of education is to prepare human resources to face a job. A person who is highly educated tends to get a better job and pay more.

As we know, high community income will increase the regional economy which has an impact on the country's economy. According to (Nugraha, 2015) in 2010 the country with the lowest income was caused by the low rate of education received by the community. It was recorded that 71 million were in the category of adolescents who did not receive formal education which had an impact on the low state income figure. Based on the above background, it is necessary to conduct a study that examines the Relationship Between Education Level, Income Figures and Sports Preferences: The Perspective of Sports and Physical Fitness Costs.

METHOD

This study uses a quantitative approach, before entering the analysis stage, hypothesis testing is carried out in a gradual way as a condition for standardized regression after which the model is refined. There are 4 hypothesis tests, namely: major hypothesis testing 1, minor hypothesis testing is divided into 3, hypothesis 1, hypothesis 2 and hypothesis 3. This hypothesis is detailed in the model to be perfect using path-by-path testing, if the path coefficient is significant it will be maintained, if the path coefficient is not significant it will be discarded or abolished, the standard in determining the path above refers to the work of Pegasur and Kerlinger with a coefficient of 0.05.

Based on the participation of participants of the National Seminar with the title Physical Fitness and Psychological Well-being, there were 276 respondents. However, there were 173 respondents who were willing to fill out the research questionnaire, so the number of samples in this study was 173 people. The data collection instrument in this study is using a questionnaire. The data analysis technique in this study is the path analysis technique. Path analysis is a technique to analyze causal relationships that occur in multiple regression if the independent variable affects the bound variable not only directly but also indirectly, where previously the data had to be normally distributed and have a correlation. And the calculation of the data is assisted by the SPSS Version 26 system.

RESULTS AND DISCUSSION

Result

Based on the results of the research that has been carried out in the form of questionnaire responses obtained from 173 respondents. The research data was collected and then to provide an overview of the respondents, frequency distribution techniques and statistics, descriptive, especially for demographic variables, namely: gender, place of residence, education level and income figures.

Table. 1. Gender

No.	Information	Sum	Percentage %
1.	Man	129	74,6%
2.	Woman	44	25,4%
	Total	173	100%

Based on the table above, it can be known from 173 respondents who filled out the questionnaire of participants of the National Seminar on Physical Fitness and Psychological Well-being who were male as many as 129 people or 74.6%, while for female respondents as many as 44 people or 25.4%. This number shows that the majority of participants in the National Seminar on Physical Fitness and Psychological Well-being in this study are male.

Table. 2. Residence

No.	Information	Sum	Percentage %
1.	City	24	13,9%
2.	Village	149	86,1%
	Total	173	100%

Based on the table above, it can be known from 173 respondents who filled out a questionnaire of participants of the National Seminar on Physical Fitness and Psychological Well-being who were domiciled in cities as many as 24 people or 13.9% and domiciled in villages as many as 149 people or 86.1%. This number shows that the majority of participants of the National Seminar on Physical Fitness and Psychological Well-being in this study live in villages.

Table. 3. Educational Qualifications and Relevance

No.	Weight	Information	Sum	Percentage %
1.	12	SLTA	36	20,8%
2.	16	Sarjana	116	67,1%
3.	19	Magister	17	9,8%
4.	23	Doktor	4	2,3%
		Total	173	100%

Based on the table above, the qualifications and relevance of education can be found out from 173 respondents who filled out the questionnaire of participants of the National Seminar on Physical Fitness and Psychological Well-being who had high school qualifications as many as 36 people or 20.8%, bachelor's qualifications as many as 116 people or 67.1%, master's qualifications as many as 17 people or 9.8% and doctoral qualifications as many as 4 people or 2.3%. This number shows that the majority of participants in the National Seminar on Physical Fitness and Psychological Well-being in this study are Bachelor (S1) qualifications.

Table. 4. Income Qualification

No.	Weight	Information	Sum	Percentage %
1.	1000	<1.000.000	113	65,3%
2.	2000	1.000.000 – 2.000.000	19	11%
3.	3000	2.000.000 – 3.000.000	15	8,7%
4.	4000	3.000.000 – 4.000.000	15	8,7%
5.	5000	4.000.000 – 5.000.000	4	2,3%
6.	6000	>5.000.000	7	4%
		Total		100%

Based on the table above, the income classification can be known from 173 respondents who filled out a questionnaire for participants of the National Seminar on Physical Fitness and Psychological Well-being who had an income below Rp 1,000,000 as many as 113 people or 65.3%, an income of Rp 1,000,000 – Rp 2,000,000 as many as 19 people or 11%, an income of Rp 2,000,000 – Rp 3,000,000 as many as 15 people or 8.7%, an income of Rp 4,000,000 – Rp 5,000,000 as many as 4 people or 2.3% and an income above Rp 5,000,000 as many as 7 people or 4%. Based on the above income classification table and diagram, the majority of respondents earn more Rp.1,000,000 by 65.3%.

Table. 5. Correlation Test

		Education Level	Income Figures	Sports Preferences BKO	Physical Fitness
Education Level	Person Correlation	1	.456**	.032	.340**
	Sig. (2-tailed)		.000	.675	.000
	N	173	173	173	173
Income Figures	Person Correlation	.456**	1	-.039	.498**
	Sig. (2-tailed)	.000		.615	.000
	N	173	173	173	173
Preferensi Olahraga	Person Correlation	.032	-.039	1	.043
	Sig. (2-tailed)	.675	.615		.572
	N	173	173	173	173
Physical Fitness	Person Correlation	.340**	.498**	.043	1
	Sig. (2-tailed)	.000	.000	.572	
	N	173	173	173	173

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

Based on the bivariate correlation matrix of the four variables, it appears that the only variable that does not have a significant correlation with other variables, is a preference for sports based on the cost of BKO, referring to the work of Pegasur and Kerlinger if the coefficient of the path is not significant with a coefficient of 0.05 then it will be discarded or abolished. Therefore, before proceeding with regression analysis and path analysis, the model is first refined by eliminating the sports preference variable based on the cost of BKO. The initial model of correlation with the significance value that has been tested or analyzed can be seen in the figure below.

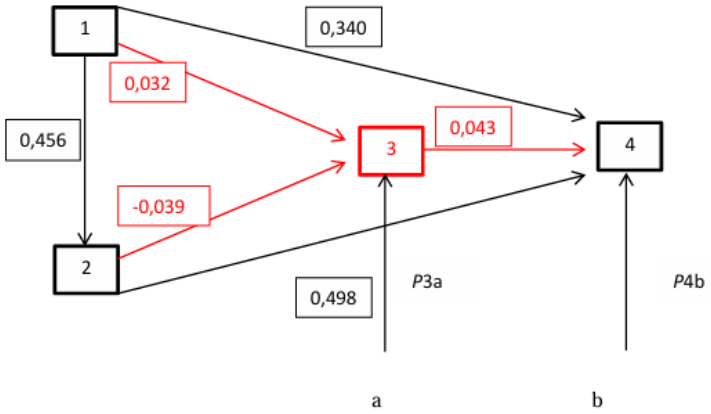

Figure 1. Initial Model of Correlation Values

Furthermore, the model of the improvement results to be further tested or analyzed are as follows.

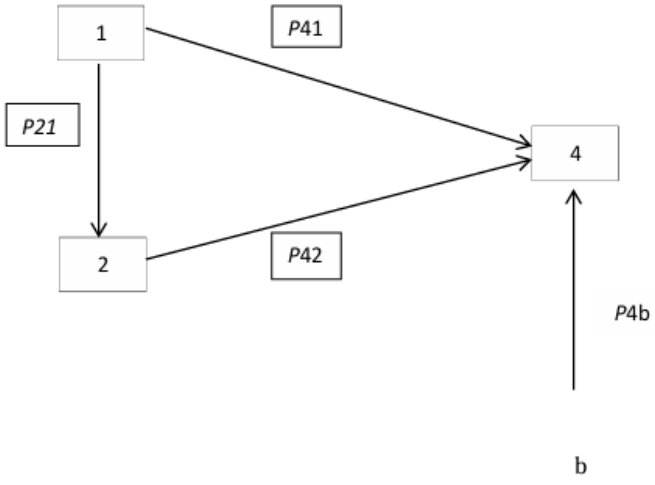

Figure 2. Enhancement Model

From the refined model, there are two stages of analysis with a refined hypothesis. First, the regression analysis of the education level with income figures. Second, the regression analysis of education level and income figures on physical fitness.

1. Testing the First Minor Hypothesis

Table. 6. Income Correlation Test

Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1.	(Constant)	B	Std. Error	Beta		
	Education	-271.090	68.638	.456	-3.950	.000
	Level	29.300	4.379		6.691	.000

With a regression coefficient of 29.300 and a standardized regression coefficient with a positive value of 0.456 with a significance interval value of 0.000, it was decided to reject the null hypothesis and accept the alternative hypothesis, which reads: there is a relationship between the variable of education level and the graduation rate among the participants of the National Seminar on Physical Fitness and Psychological Well-being. It can be interpreted that the high level of education is followed by the high income rate obtained by the participants of the National Seminar on Physical Fitness and Psychological Well-being.

2. Second Minor Hypothesis Testing

Table. 7. Fitness Correlation Test

Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1.	(Constant)	B	Std. Error	Beta		
	Education	33.244	3.044	.142	10.922	.000
	Level	.402	.209		1.927	.056
	Income Figures	.019	.003	.434	5.867	.000

With regression coefficients of 0.402 and 0.019 and stranded regression coefficients (B) of 0.142 and 0.213 and significance interval values of 0.056 and 0.000 respectively, it was decided to accept the null hypothesis and reject the alternative hypothesis, which reads that there is no relationship between education level and income and physical fitness among the participants of the National Seminar on Physical Fitness and Psychological Well-being. Means. The higher the level of education and income level of the participants of the national seminar

among the participants of the National Seminar on Physical Fitness and Psychological Well-being, it will not have a positive effect on their physical fitness. The regression equation for this three-variable relationship can be written as follows.

$$Y=33.244+0,402\ X1+0,019\ X2$$

The path construction obtained based on the results of the analysis is as follows.

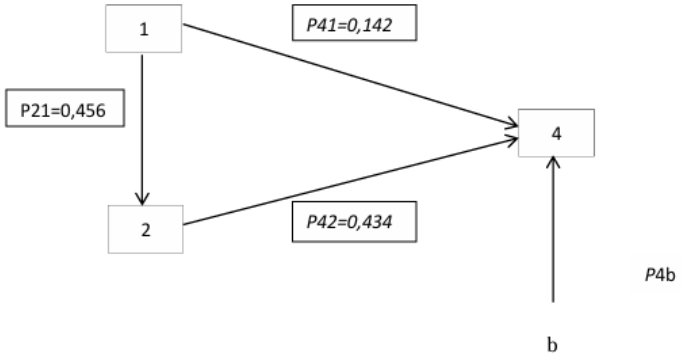

Figure 3. Path Construction Analysis

It is known that the direct and indirect relationship of each independent variable to physical fitness is the National Seminar on Physical Fitness and Psychological Well-being.

1) First line

That is a direct causal relationship between the level of education and physical fitness.

Y =P41

Y = 0,142

2) Second Path

Causal relationship between education level and income figures on physical fitness.

Y = P21+P42

Y = 0,456 + 0,434

Furthermore, to compare the direct and indirect effects of the existing paths by multiplying the path coefficients in each path formed, the highest multiplication value is the best path that can be used.

Direct influence P41 = 0,142

Indirect Influence = P21 X P42

= 0,456 X 0,434

= 0,197

Thus, the best path of influence is the indirect path through the level of education and income figures on physical fitness. So that in achieving a fit physique for the participants of the National Seminar on Physical Fitness and Psychological Well-being, it is better to use the path of education level and income figures, this path will have a greater influence on physical fitness.

Discussion

Based on the results of data analysis in the analysis of the path to meet the requirements of the correlation of all variables must be significant with other variables, in this study there are four variables used, but there is one variable that does not have a significant correlation with other variables, namely sports preferences based on BKO costs, thus the variable of sports preferences based on costs will be abolished. The results of the improvement of the analysis of the paths used are: First, the level of education with income figures and Second, the level of education and income figures on physical fitness. The results of the significance test of each causal relationship pathway can be found that the level of education has a significant relationship with the income figure, then the level of education and the income figure are simultaneously tested to have no significant relationship with the physical fitness of the participants of the National Seminar on Physical Fitness and Psychological Well-being, this shows that to achieve physical fitness the seminar participants must have a good education and income, With good physical fitness, seminar participants will be able to carry out daily tasks without feeling excessive fatigue in activities. This is in accordance with the results of research (Ryman

Augustsson et al., 2024) which states that physical activity has a significant relationship with the level of physical fitness.

The results of the path analysis as described earlier answered the problem of the causal relationship between education level and income figures to the physical fitness of participants of the National Seminar on Physical Fitness and Psychological Well-being is better through indirect channels when compared to direct channels through income figures, meaning that in an effort to improve physical fitness, seminar participants need to pay attention to the characteristics of education levels and income figures, With a high level of education and income figures, it will be easier for seminar participants to achieve the ability to carry out daily tasks without feeling unnecessarily tired and looking fresh (physical fitness).

CONCLUSION

Based on the results of the above study, it can be concluded that the results of the study show that Sports Preferences based on the cost of participants in the national seminar on physical fitness and psychological well-being, do not have a significant relationship with the variables of education level, income and physical fitness. Meanwhile, the level of education, income and physical fitness figures have significant numbers both directly and indirectly according to the results of significant regression cocompetence, which is above 0.05.

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