10 (3) (2021) 150 - 154



Journal of Physical Education, Sport, Health and Recreations



http://journal.unnes.ac.id/sju/index.php/peshr

Physical Activity Levels, Anthropometric Characteristics, and Attitudes of Nationalism at State High School Paloh on the Indonesia-Malaysia Border

Muhammad Fachrurrozi Bafadal^{1™}, Fitriana Puspa Hidasari², Mimi Haetami³

Physical Education, FKIP Tanjungpura University, Pontianak, Indonesia¹²³

Article History

Received November 2021 Accepted November 2021 Published Vol.10 No.(3) 2021

Keywords:

Physical activity level; anthropometry; attitude of nationalism .

Abstract

The purpose of this study was to investigate the level of physical activity, anthropometric characteristics, and attitudes of nationalism among secondary school children in the Indonesia-Malaysia border region (Border Aruk/Sajingan, Sambas Regency). The method used in this research is a quantitative descriptive study in the form of a survey. The population and sample used are students at the high school level in the border area. Participants in this study were based on the following criteria: 1) Willingness to be a participant in the study, and 2) Present at the time of field data collection. The instrument used in this research is the International Physical Activity Questionnaire (IPAQ) Short Form version to measure the variable level of physical activity. Anthropometric measurements use eleven parameters. Assessment of the attitude of Nationalism using a questionnaire. Based on the results of the study, the level of physical activity of students at the border showed a moderate category. Meanwhile, anthropometric measurements show varying results, the measurement results can be categorized into three types based on these results, namely: ectomorph, mesomorph, and endomorph. Overall in the attitude of nationalism of the Indonesian-Malaysian border students in Paloh sub-district, Sambas district, shows that the dominant border students are in the good category in interpreting nationalism..

How to Cite

Bafadal, M. F., Et al. (2021). Physical Activity Levels, Anthropometric Characteristics, and Attitudes of Nationalism at State High School Paloh on the Indonesia-Malaysia Border. *Journal of Physical Education, Sport, Health and Recreation,* 10 (3), 150-154.

© 2021 Universitas Negeri Semarang

p-ISSN 2460-724X e-ISSN 2252-6773

INTRODUCTION

Indonesia is a developing country that has complex problems including the problem of preparing a superior generation with global competitiveness but still has an attitude of nationalism. Education plays an important role in realizing this, including Penjasorkes in Senior High Schools. The formation of a superior generation with global competitiveness through physical education can be carried out through types of physical activity/sports to support the improvement of health status while at the same time being able to bring students closer to local culture when humans are increasingly attached to screenbased technology through an internet network that is almost seamless between countries and even between continents so that it has the potential erode the sense of nationalism because today many children grow up in an unbalanced environment such as increasing passive lifestyles and decreasing physical activity (Mead et al., 2017).

Through physical education, physical activity and sports can be used as a medium to increase a sense of nationalism and health status which will have an impact on student anthropometry because based on many scientists' opinions, Physical Education teachers should apply the method of morphological differentiation of body shape (anthropometry) and it is important to note is the physical differences of students such as height(Vaskan et al., 2018). The level of physical activity of academics is important to map because it will contribute to improving the quality of learning and teaching culture at the level of good health (Ramania et al., 2020).

When physical education is claimed to improve health status, a research result shows something different, that in developing countries it is found that young people tend to have low levels of physical activity (Cheng et al., 2020). This finding is reinforced by the results of the National Basic Health Research (Riskesdas) which found 63.21% of children aged 10-14 years and 43.78% of children aged 15-19 years we're still at a low level of physical activity or less (Riset Kesehatan Dasar, 2018), of course, these results need to be followed up on to the smallest sample so that problems can be found and related to physical activity (Apriantono et al., 2020). Furthermore, a study in Semarang City showed that the level of student activity was still low and required efforts to improve health and an active lifestyle among students (Widiyatmoko & Hadi, 2018) plus research findings from (Suhadi et al., 2020) which stated that Physical Education learning currently does not facilitate the maximum increase in students' physical and mental abilities. So, if the ratio of exercise activity is lowered, it will reduce the level of fitness (Kwon et al., 2019). The low active lifestyle among adolescents is directly related to a body shape because low physical activity can cause body weight to increase which in turn affects body anthropometry. Human anthropometric measurements are mostly used in the medical field, but nowadays they are often used for kinesiology applications in the field of sports. It is known that ideal individual physical characteristics or known as anthropometry will have a positive impact on harmonious physical development, increase work efficiency and strengthen the body's functional abilities in the future (Bolotin & Bakayev, 2017). This statement contradicts the worrying trend of weight gain occurring in children and adolescents and this is detrimental to the health status of the current population in the future (Soleimaninanadegani & Shahmohammadi, 2013). It should be noted that A study involving 78 developing countries found that developing countries overestimate the state of underweight and stunting while underestimating the incidence of overweight and obesity (Najafi et al., 2020). In addition, the World Health Organization (WHO) has also declared that being overweight is one of the top ten health risks and one of the top five in developing countries (Soleimaninanadegani & Shahmohammadi, 2013). This is allegedly due to the low physical activity style and then has an impact on anthropometry. Therefore, physical activity is suggested as a preventive measure to improve health in the 21st century (Martinovic et al., 2021).

METHODS

This study uses a quantitative descriptive method in the form of a survey. Where will be seen the results of physical activity, anthropometry, and attitudes of nationalism in high school students in the border area of Sambas District?

The instruments used in this study are as follows: a) International Physical Activity Questionnaire for physical activity data collection, b) Anthropometric measurements using eleven parameters, namely: 1) Body height, 2) Arm Length, 3) Width of shoulders, 4) Diameter of the ankle, 5) Circumference of the forearm, 6) Circumference of the upper arm, 7) Circumference of the leg, 8) Body Mass, c) collecting data on nationalism attitudes using a questionnaire.

The data collection technique uses indirect communication techniques using questionnaires

to measure the variables of physical activity and nationalism attitudes, while anthropometric variables will be taken with test and measurement techniques.

The population of this study was high school students on the Indonesia-Malaysia border with the Paloh District Border, Kab. Sambas. Participants in this study were based on the following criteria: 1) Willingness to be a participant in the study, and 2) Present at the time of field data collection. Analysis of research data using descriptive quantitative.

RESULTS AND DISCUSSION

Physical activity levels were measured through the International Physical Activity Questionnaire (IPAQ). The questions in the questionnaire are about daily activities including type, frequency, and duration with the value of Metabolic equivalents (METs)/minute/week. The results were obtained by multiplying the METS value by the type of activity per minute for the duration of the day of the week (walking=3.3, moderate activity=4, and vigorous activity=8). The following are the categorical norms of the IPAQ instrument: low with a score of <600 METs/min/week, moderate with a score of 600-1499 METs/min/week, and high with a score of >1500 METs/min/week (Hamrik, et al. 2014).

The data on the physical activity of students at the border and the city of Pontianak can be seen in the **Table 1** below:

Table 1. The activity level of students at the border

Variable	Borders Area (Paloh, Sambas)			
Number of Samples	n=30			
Age	15-19 th			
Gender				
Man	13 (43.3%)			
Woman	17 (57.7%)			
Physical Activity (METs/minutes/weeks)	833.5 ± (110.0-2200.0)			
Low (<600)	10 (33%)			
Medium (600-1499)	16 (53%)			
High (>1500)	4 (14%)			

The results of the research on physical activity on the Indonesian-Malaysian border students in Paloh sub-district, Sambas district showed that for the low physical activity category as many as 10 students with a percentage of 33%, for the moderate physical activity category as many as 16 students with a percentage of 53% and for the high activity category as many as 4 students. with a percentage of 14%. Next are the results of anthropometric measurements in the Indonesia-Malaysia border area in the Sambas district, the data is presented in the **Table 2** below:

Table 2. Anthropometry of students at the border of Sambas

of Sambas								
Variable	Borders Area (Paloh, Sambas)							
Number of Samples	n=30							
Age	15-19 th							
Gender								
Man	13 (43.3%)							
Woman	17 (57.7%)							
Height								
Man	155-176 cm							
Woman	143-168 cm							
Sleeve Length								
Man	19-24 cm							
Man	18-22 cm							
Shoulder Width								
Man	19-24 cm							
woman	16-21 cm							
Ankle Diameter								
Man	7-11 cm							
Woman	7-10 cm							
lower a:	rm circumference							
Man	Man 8-10 cm							
Woman	8-10 cm							
Upper a	rm circumference							
Man	11-16 cm							
Woman	10-18 cm							
leg circumference								
Man	7-11 cm							
Woman	7-10 cm							
Weight								
Man	48-78							
woman	40-61							

	Indicators of Nationalism						
Scala	Proud to be Indo- nesian	Love the homeland and nation	Willing to sacrifice for the nation	Accept diver- sity	Proud of diverse culture	Appreciating the services of the heroes	Prioritiz- ing public interest
strongly agree	75	65,5	40	78,3	80	78,3	80
agree	20	24,5	36,7	11,7	11,7	21,7	11,7
doubtful	0	10	5	0	0	0	0
do not agree	0	0	0	0	0	0	0
strongly disagree	5	0	18,3	10	8,3	0	8,3

Based on the results of the study in **Table 1**, it is known that the level of physical activity of students at the border shows a moderate category. Referring to the statement of WHO 2020, most of the evidence shows that both children living at the border, in fact, the digital world conquers both and offers fewer opportunities for physical activity.

Meanwhile, anthropometric measurements showed varying results. Based on **Table 2**, it can be seen that the range of measurement results can be categorized into three types based on these results, namely: ectomorph, mesomorph, and endomorph.

In the indicator of nationalism, namely the attitude of being proud as an Indonesian nation, it shows that high school students on the Indonesian border with Malaysia are dominantly 75% proud to be Indonesian citizens, 20% agree, 0% doubtful and 0% disagree and only 5% have no attitude, proud to be an Indonesian citizen. The indicator of love for the homeland and nation shows that the dominant students strongly agree with a percentage of 65.5% and 24.5% agree and 10% doubtful disagree, 0% and 0% strongly disagree. The indicator of being willing to sacrifice for the sake of the nation shows that the dominant students strongly agree with a percentage of 40% and 36.7% agree and 5% are unsure and 18.3% strongly disagree. with this attitude. In the Accepting plurality indicator, it shows that the dominant students strongly agree with a percentage of 78.3% and 11.7% agree and 0% doubtful disagree 0% and 10% strongly disagree. The Proud indicator in diverse cultures shows that the dominant students strongly agree with a percentage of 80% and 11.7% agree and 0% doubtful disagree 0% and 8.3% strongly disagree. On the indicator Appreciating the services of the heroes shows that the dominant students strongly agree with the percentage of 78.3% and 11.7% agree and 0% doubtful disagree 0% and 10% strongly disagree. The Proud indicator in diverse cultures shows that the dominant students strongly agree with a percentage of 80% and 11.7% agree and 0% doubtful disagree 0% and 8.3% strongly disagree.

Overall in the attitude of nationalism of Indonesian-Malaysian border students in the Paloh sub-district, Sambas district shows that the dominant students strongly agree with the percentage of 71% and 19.7% agree and 2.14% undecided disagree 0% and 7.16% strongly disagree. The results of this study indicate that the dominant border students fall into the good category in interpreting nationalism.

CONCLUSION

This study concludes that the level of physical activity of students at the border shows a moderate category, Meanwhile, anthropometric measurements show that the measurement results can be categorized into three types based on these results, namely: ectomorph, mesomorph and endomorph. Overall in the attitude of nationalism of Indonesia-Malaysia border students in Paloh sub-district, Sambas district, it shows that the dominant students strongly agree with the percentage of 71%. The results of this study indicate that the dominant border students fall into the good category in interpreting nationalism.

REFERENCES

Apriantono, T., Herman, I., Hasan, M. F., Juniarsyah, A. D., Ihsani, S. I., & Hidayat, I. I. (2020). Physical Activity Level Mapping of Senior High School Students in West Java. Jurnal Pendidikan Jasmani Dan Olahraga, 5(1), 17–21. https://doi.org/10.17509/jpjo.v5i1.20673

Bolotin, A., & Bakayev, V. (2017). Pedagogical Conditions Necessary for Effective Speed-Strength Training of Young Football Players (15-17 Years Old). Journal of Human Sport and Exercise, 12(2), 405–413. https://doi.org/10.14198/jhse.2017.122.17

Cheng, L., Pohlabeln, H., Ahrens, W., Lauria, F., Veidebaum, T., Chadjigeorgiou, C., Molnár, D.,

- Eiben, G., Michels, N., Moreno, L. A., Page, A. S., Pitsiladis, Y., & Hebestreit, A. (2020). Cross-Sectional and Longitudinal Associations Between Physical Activity, Sedentary Behaviour and Bone Stiffness Index Across Weight Status in European Children and Adolescents. International Journal of Behavioral Nutrition and Physical Activity, 17(1), 54. https://doi.org/10.1186/s12966-020-00956-1
- Kwon, S. Bin, Ahn, J. W., Lee, S. M., Lee, J., Lee, D., Hong, J., Kim, H. C., & Yoon, H.-J. (2019). Estimating Maximal Oxygen Uptake From Daily Activity Data Measured by a Watch-Type Fitness Tracker: Cross-Sectional Study. JMIR MHealth and UHealth, 7(6), e13327. https://doi.org/10.2196/13327
- Martinovic, M. B., Jaksic, M. Z., Spahic, E. S., Lukic, M. Z., & Nedovic-Vukovic, M. M. (2021). Physical activity and nutritional status of school-children in montenegro. Sport Mont, 19(1), 65–70. https://doi.org/10.26773/SMJ.210216
- Mead, E., Brown, T., Rees, K., Azevedo, L. B., Whittaker, V., Jones, D., Olajide, J., Mainardi, G. M., Corpeleijn, E., O'Malley, C., Beardsmore, E., Al-Khudairy, L., Baur, L., Metzendorf, M.-I., Demaio, A., & Ells, L. J. (2017). Diet, physical activity and behavioural interventions for the treatment of overweight or obese children from the age of 6 to 11 years. In Cochrane Database of Systematic Reviews. https://doi.org/10.1002/14651858.CD012651
- Najafi, F., Naderpour, S., Moradinazar, M., Khoramdad, M., Vahedian-Azimi, A., Jamialahmadi, T., & Sahebkar, A. (2020). Percentiles for anthropometric measures in 11–18 years-old students of 73 developing countries. Diabetes & Metabolic Syndrome: Clinical Research & Reviews, 14(6), 1957–1962. https://doi.org/10.1016/j.dsx.2020.10.002

- Ramania, N. S., Apriantono, T., Syafriani, R., & Kusnaedi, K. (2020). Analisis Aktivitas Fisik dan Derajat Kebugaran Dosen dan Karyawan Institut Teknologi Bandung. Jurnal Pendidikan Jasmani Dan Olahraga, 5(2). https://doi.org/10.17509/jpjo.v5i2.26738
- Riset Kesehatan Dasar. (2018). Laporan Nasional Riset Kesehatan Dasar tahun 2018. In Badan Penelitian dan Pengembangan Kesehatan Kementrian Kesehatan Republik Indonesia (pp. 1–476). http://labdata.litbang.kemkes.go.id/images/download/laporan/RKD/2018/Laporan Nasional RKD2018 FINAL.pdf
- Soleimaninanadegani, M., & Shahmohammadi, N. (2013). The Impact of Mindfulness-based Cognitive Therapy on Anthropometric Indices Balance in High-School Obese Girls' Students in Iran. Procedia Social and Behavioral Sciences, 84, 542–548. https://doi.org/10.1016/j.sbspro.2013.06.601
- Suhadi, S., Soegiyanto, S., Rahman, H. A., & Sulaiman, S. (2020). Evaluation of the Bodily-kinesthetic Intelligence Model in Physical Education Teaching in Indonesia Primary School. Jurnal Cakrawala Pendidikan, 39(2), 471–479. https://doi.org/10.21831/cp.v39i2.29542
- Vaskan, I., Moseychuk, Y., Koshura, A., Kozhokar, M., Tsybanyuk, O., Yarmak, O., & Galan, Y. (2018). Comparative analysis of indicators of the morpho-functional condition of the young men aged 15-16 years during the process of physical education. Journal of Physical Education and Sport, 18(4), 2504–2508. https://doi.org/10.7752/jpes.2018.04375
- Widiyatmoko, F., & Hadi, H. (2018). Tingkat Aktivitas Fisik Siswa di Kota Semarang. Journal Sport Area, 3(2), 140. https://doi.org/10.25299/ sportarea.2018.vol3(2).2245.