

Physical Activity Level of University Students

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Abstract: The purpose of this study is to examine the difference of students' physical activities in Universitas Pendidikan Indonesia (UPI) in urban city with the students of the Universitas Galuh Ciamis (Unigal) in the rural area. In addition, it is also seen in the extracurricular involvement in each university. The method used is causal comparative. The samples are 283 people (148 UPI students and 135 UGM students). The instrument used is the IPAQ-SF that has been translated into Indonesian. The results of the study show that there is no difference between the physical activities of UPI and Unigal students (p .065), but there is interaction between the college (campus) with the involvement of extracurricular (p .034). These results show that both students who are studying in urban city and rural area are relatively similar in terms of doing physical activity.

1 INTRODUCTION

In recent years, the research showing the effects of physical activity on promoting health and preventing various non-infectious diseases has become a trend in Indonesia. The involvement of physical activity is believed to prevent a lot of risks that are damaging to healthcare, non-infectious diseases like coronary heart disease, type 2 diabetes, and immunodeficiency cancer, as well as improving life expectancy (Lee, 2012).

The number of benefits does not make everyone aware to perform regular physical activity. The high level of knowledge does not necessarily correlate positively to physically active lifestyle behavior (Sultoni et al., 2016). Awareness to do physical activity is still relatively low. This is evidenced by the research results of the Ministry of Health of the Republic of Indonesia which states that in general, about 26.1% of the population in Indonesia are classified as less physically active. In fact there are five provinces with physical inactivity behavior above the national average, namely Riau (39.1%), North Maluku (34.5%), East Java (33.9%), West Java (33.0%) , and Gorontalo (31.5%) (Badan Penelitian dan Pengembangan Kesehatan, 2013).

This low physical activity behavior is influenced by various factors. In general, the obstacles faced by everyone are relatively similar, the difference lies in

social influence and lack of will (Jajat et al., 2016). Level of income and residential (countryside and urban city) also become two of the important predictors of physical activity in adults (Parks et al., 2003).

Some studies suggest that the students living in urban area are more actively engaged in physical activity than those who live in rural area (Loucaides et al., 2004; Moore, 2013). When it comes to gender factors, men are more active than women (Azevedo, 2007). Meanwhile, women aged over 40 years in rural area have higher sedentary behaviors compared with urban women (Wilcox et al., 2000).

Unlike other studies in some countries, one study in Indonesia states that the behavior of physical activity in the village is higher than in the city (Saraswati and Dieny, 2012). Differences in some of the results of this study underlie the need for further research on the differences in physical activity, especially at the age of adolescents in rural and urban colleges. Why university students? Because at this level not all students get physical activity lesson. Physical activity lesson in Indonesia is obtained only at the high school level.

The purpose of this study is to see the difference of physical activity between UPI students in big city and Unigal students in small town/rural area. The study also examines the students' involvement in extracurricular in each university.

2 METHODS

2.1 Participants

This study was conducted in two universities, namely UPI and Unigal. The participants are 148 UPI students and 135 Unigal students with the total of 283 students.

The participants consist of various study programs, namely primary school teacher education (PGSD), physical education and recreation (PJKR), special education, science (IPA), and social science education (PIPS). Participants were asked to fill in PSDQ and IPAQ short questions based on internet via google form.

2.2 Measures

To simplify the data collection, google form was used to make it easier in getting response by enabling a larger number of respondents. Next the respondents were asking to fill in the questionnaire based on the instructions and the condition he or she has experienced in the pas one week.

The physical activity is measured by using the International Physical Activity Questionnaire - Short Form (IPAQ-SF) which has been translated into Bahasa Indonesia. The participants are required to report the number of days and duration of ongoing (W), moderate (M), strong (V) activities in the past one week, then combine the whole scores of physical activities. All of them are stated in MET-minutes / week (www.ipaq.ki.se).

2.3 Data Analysis

Data processing used was SPSS software (Version 22). The score and the SD were calculated from the total MET score. Furthermore, to see the difference in mean of the physical activities between UPI and Unigal students, the independent sample t-test was applied, meanwhile to test the interaction between the universities and the extracurricular activity was done by two way anova.

3 RESULTS

Table 1 demonstrates the descriptive statistics of each group's physical activities based on university consisting of mean and standard deviation. From table 1, the average learning activity of UPI students is lower than Unigal students (4474.95 < 5314.33).

Table 2 shows the descriptive statistics of each group's physical activities based on extracurricular involvement. It is stated that the mean score of physical activity is the highest among other groups.

Table 1: Physical Activity Score of UPI and Unigal Students.

Physical Activity Score	<i>M</i>	<i>SD</i>
UPI	4474,95	2725,15
Unigal	5314,33	4706,42

Table 2: Students' Physical Activity Score Based on Extracurricular Involvement.

Physical Activity Score	<i>M</i>	<i>SD</i>
Sports	5813,09	3746,31
Non-Sports	4856,41	6104,86
Non-Extracurricular	4027,84	2337,62

Out of 148 UPI students, 27.7% or 41 people were involved in the sports extracurricular, 25.68% or 38 in non-sports extracurricular and 46.62% or 69 were not involved in any extracurricular activities. On the other hand, out of 135 Unigal students, 64.55% or 71 were involved in sports extracurricular, 7.27% or 8 non-sports extracurricular and 50.91% or 56 were not involved in any extracurricular activities.

Table 3 presents the results of the two mean scores T-Test of physical activity between UPI and Unigal students. The results show that, as a whole, there is no difference between the physical activities of UPI and Unigal student's $p > .05$. However, it is clear that the data on mean scores of Unigal students are much higher than UPI students.

Table 3: Result of two means T-Test of both sample groups.

<i>Physical Activity</i>	<i>t</i>	<i>df</i>	<i>Sig.</i>
	1.856	281	.065

Table 4 shows the results of interaction between universities and extracurricular activities on students' physical activity. The results of the test indicated that there is interaction between the universities with the extracurricular involvement to the students' physical activity ($p < .05$).

Table 4. Interaction Result between the University and the Extracurricular to the Physical Activity.

<i>Physical Activity</i>	<i>F</i>	<i>df</i>	<i>Sig.</i>
	3.433	2	.034

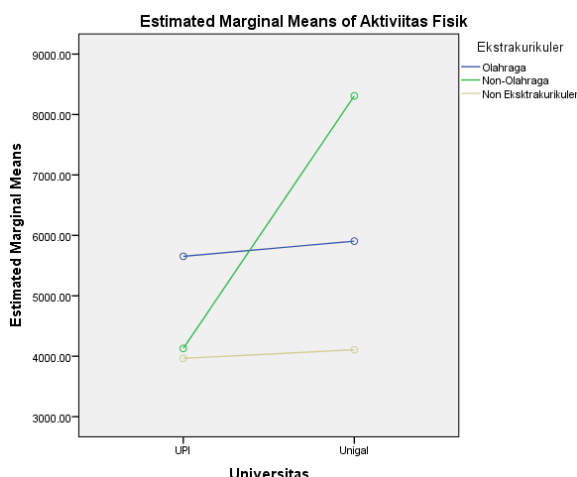


Figure 1: Interaction between University and Extracurricular to Physical Activities.

4 DISCUSSION

The purpose of the study is to find out the differences of physical activities between UPI students in urban city and Unigal students in countryside. The results indicate that there is no difference between the physical activities of UPI and Unigal students, but there is interaction between the university (campus) and the extracurricular involvement. When it is viewed from Figure 1, UPI students who are engaged in non-sports extracurricular activities have a lower mean score than Unigal students.

For students who are involved in sports extracurricular, both UPI and Unigal students have a relatively similar mean score. Meanwhile, for students who are not involved in any extracurricular, both UPI and Unigal have a low mean score of activity compared with other groups.

When viewed from the overall mean score, the student groups that are involved in sports extracurricular have the highest mean compared with the other groups, and the student groups that are not involved in extracurricular have the lowest mean score. Some previous studies have indicated that children who live in small town have a high level of physical activity (Joens-matre, 2008).

Other studies have suggested that different physical activity also occurs among people who live in rural and urban areas. Promotion intervention of physical activity should be targeted to the women aged 46-59 years old (Plotnikoff, 2004). In addition, intervention program of physical activity should pay attention to the difference of geographical locations

(Loucaides et al., 2004). Meanwhile other studies have reported that adults who live in urban city have more physical activities such as walking and cycling compare with those who live in rural area (Dyck, 2011).

The research has many limitations one of which is that it has not considered the course taken by the students, so that it may cause the non-homogeneous sample. Besides, the use of questionnaire without being supported by pedometer or other supporting instruments enables the respondent to give the answer which is not suitable with the actual conditions. Therefore, the further study will be conducted to improve this study.

5 CONCLUSIONS

There is no significant difference of physical activities between UPI students who live in urban city and Unigal students who live in rural area. There is a significant interaction between the universities and the extracurricular involvement on the students' physical activity.

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