

# Predictors of physical activity for weekdays and weekends among adolescent - a cross-sectional study in Sarawak, Malaysia

Whye Lian Cheah<sup>1 ABCDEF</sup>, Helmy Hazmi<sup>1 ABCDE</sup>,  
Ching Thon Chang<sup>2 ABCDE</sup>

## Authors' Contribution:

A Study Design  
B Data Collection  
C Statistical Analysis  
D Data Interpretation  
E Manuscript Preparation  
F Literature Search  
G Funds Collection

Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, Sarawak, Malaysia

<sup>1</sup> Department of Community Medicine & Public Health

<sup>2</sup> Department of Nursing

## abstract

### Background

This study aimed to describe the patterns of physical activities both at weekends and on weekdays and to identify their associated factors.

### Material/Methods

This was a cross-sectional study conducted among secondary school students aged 13-15 years old in Kuching Division, Sarawak, Malaysia. A self-administered questionnaire was used to collect socio-demographic information and to measure perceived barriers, self-efficacies and social influences. Anthropometric measurements were taken and used to determine BMI-for-age, while pedometers were used to assess the physical activity levels. Data were analyzed using SPSS.

### Results

A total of 474 students from six secondary schools participated. About 16% of the respondents were overweight and obese, majority of them males. The mean BMI was  $21.21 \pm 12.93$ , higher among males. The mean steps per day were  $6251.37 \pm 3085.31$ , with weekends recorded a higher number of steps. The number of steps among males was higher than among females. On weekdays, self-motivation scores significantly predicted the participants' number of steps/physical activity rate ( $b = 521.43$ , 95% CI -72.78 to 1050.19). At weekends, lack of interest and knowledge scores ( $b = -427.82$ , 95% CI -837.72 to 17.92) and making choices scores ( $b = 737.41$ , 95% CI -197.94 to 1276.88) were significant to predict the number of steps/physical activity levels.

### Conclusions

These findings indicated the importance of investigating predictors of physical activity for weekdays and weekends. Thus, efforts should focus on how to motivate adolescents to be more physically active targeting the identified predictors for weekdays and weekends.

### Key words

determinants, physical behavior, youth.

## article details

### Article statistics

Word count: 2850; Tables: 3; Figures: 0; References: 19

Received: July 2014; Accepted: February 2015; Published: March 2015

### Full-text PDF:

<http://www.balticsportscience.com>

### Copyright

© Gdansk University of Physical Education and Sport, Poland

### Indexation:

Celdes, CNKI Scholar (China National Knowledge Infrastructure), CNPIEC, De Gruyter - IBR (International Bibliography of Reviews of Scholarly Literature in the Humanities and Social Sciences), De Gruyter - IBZ (International Bibliography of Periodical Literature in the Humanities and Social Sciences), DOAJ, EBSCO - Central & Eastern European Academic Source, EBSCO - SPORTDiscus, EBSCO Discovery Service, Google Scholar, Index Copernicus, J-Gate, Naviga (Softweco, Primo Central (ExLibris)), ProQuest - Family Health, ProQuest - Health & Medical Complete, ProQuest - Illustrata: Health Sciences, ProQuest - Nursing & Allied Health Source, Summon (Serials Solutions/ProQuest, TDOne (TDNet), Ulrich's Periodicals Directory/ulrichsweb, WorldCat (OCLC)

### Funding:

No external funding was received.

### Competing interests:

Author has declared that no competing interest exists.

### Corresponding author:

Dr. Whye Lian Cheah, PhD, Dep. of Community Medicine and Public Health, Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia. Tel : +6082 585525. E-mail : [wlicheah@fmhs.unimas.my](mailto:wlicheah@fmhs.unimas.my)

### Open Access License:

This is an open access article distributed under the terms of the Creative Commons Attribution-Non-commercial 4.0 International (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits use, distribution, and reproduction in any medium, provided the original work is properly cited, the use is non-commercial and is otherwise in compliance with the license.