

UNIVERSITI TEKNOLOGI MARA

**SCREEN TIME, PHYSICAL ACTIVITY
AND BMI STATUS AMONG
SECONDARY STUDENTS IN KUALA
SELANGOR**

SITI NORAZWANI BINTI PAK RUDIN

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requirements for the degree of**

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AUTHOR'S DECLARATION

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other institution or non-academic institution for any degree or qualification

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of student : Siti Norazwani Binti Pak Rudin

Student I.D No. : 2012854824

Programme : Bachelor Hons. Of Nutrition and Dietetics

Faculty : Faculty of Health Sciences

Thesis/Dissertation : Screen Time, Physical Activity and BMI Status Among
Secondary Students in Kuala Selangor

Signature of Student :

Date : January 2016

ABSTRACT

Excessive screen times has been associated with displacements of physical activity among adolescents in this new developing advanced technologies as adolescents are exposed to various types of media electronics that can be assessed widely. Engagement with sedentary based media caused higher screen time thus exceeding the recommendation of two hours of screen time per daily basis thus cause physical inactivity among adolescents that give rise to obesity and increased risk of cardiovascular disease .This study then is designed in order to answer a few of research questions in terms of (1) time spent for the screen time activity by the secondary students in Kuala Selangor District (2) level of physical activity among secondary students in Kuala Selangor District and (3) association between total screen time, level of physical activity and BMI status of adolescents. A total of 291 students of 14 and 16 years old from two schools of Puncak Alam in area of Kuala Selangor had been adopted in this study. The instruments used was the self-administered questionnaires of screen times in which consisted of questions about viewing and usage of television, video games, computers, iPad or tablets and smartphones at home. Physical activity of adolescents was assessed by using Physical Activity Questionnaires for Adolescents. The students from three classes of Form Two and Form Four were selected randomly. The data of this study was analysed by using Statistical Package for Social Science (SPSS) version 21.0. The mean BMI of students was 21.18 ± 4.99 . Result shows the mean of total screen time during weekdays among male and female which is 431.16 ± 261.96 and 414.95 ± 245.47 respectively while during weekend, 689.53 ± 408.94 and 611.15 ± 346.38 respectively. Physical activity score for male is 2.9 ± 0.7 while for female is 2.2 ± 0.57 . Apart from that, this study also outlines of significance difference between physical activity score with gender ($p=0.000$) and no association of physical activity score and age group ($p=0.067$). There is also no association between total screen times and physical activity level. Weekdays ($p=0.837$) and weekend ($p=0.774$). There was also no association between BMI and screen times (weekdays and weekend) as well as physical activity, $p= 0.776, 0.553$ and 0.139 respectively.

Keywords: Screen time, adolescents, physical activity level, BMI status, multi-screening.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The prevalence of childhood and adolescent obesity had been increasing tremendously throughout the world, but there is still great differences in regional aspect. The differences can be seen in Europe includes the Southwestern countries likes Greece, with a high prevalence of obesity and overweight among youth that can reach about 23%. Meanwhile, in the Nordic countries, including Finland, there is about 15% of recorded overweight prevalence among youth (Veltista et al., 2010). Unfortunately, this scenario seems to be infectious to developing Asian countries with childhood obesity more than 25%. The highest rate of obesity in Asia was in Thailand, the lowest was in India followed by Philippines. China which once had the leanest of populations, is now rapidly catching up with prevalence of childhood obesity at the age of 7 to 17 years old is more than 20% (Prentice, 2006).

Malaysia is also experiencing the same trend in which there is about 19.5% prevalence of overweight and obesity that is twice the prevalence of underweight (10.5%) (Rezali, Chin, & Yusof, 2012). The previous study done mentioned that the overweight and obesity in children are mostly associated with the high level of sedentary lifestyle which is contributed by lower engagement with the physical activities. For instance, a study conducted in a district in Selangor, Malaysia found that majority adolescents at the age of 13 to 15 years old tend to lead a sedentary lifestyle but there is less study conducted to determine the sedentary behaviour that lead to this unhealthy and unproductive way of life among Malaysian adolescents (Lee et al., 2014).

The American Associations of Pediatrics (AAP) recommends that the screen time allowed for the children of more than two years is must not be exceed more than one to two hour of quality programming of entertainment media per day. This issue arises because based on the updated National Health and Nutrition Examination Survey (NHANES) states