

Healthy Lifestyle Behaviors: An Investigation of Students

Dwiko Febrama Rizki
Yogyakarta State University
Yogyakarta, Indonesia
dwikofebramarizky@gmail.com

H. A. Rachman
Yogyakarta State University
Yogyakarta, Indonesia
hari.rachman68@gmail.com

Abstract—Students' lifestyle is more likely to follow emerging trends in the present era of globalization such as consuming junk food, spending time social media, playing online games until midnight. This study was therefore aimed to describe a dataset of students' healthy life style acquired with GPAQ, BMI, PSQI and Coping Stress. The method was descriptive qualitative with cross-sectional design. Samples were all undergraduate students aged 18 years old and above of STKIP Muhammadiyah Muara Bungo in academic year of 2015-2017. The result revealed that (1) in physical activity, 12% of the students had heavy activity, 60% of them had moderate activity, and 28% of them had light activity, (2) in nutritional status, 4% of students was very thin, 12% was thin, 75% was normal, 9% was obese, and 0% was obesity, (3) in resting patterns, 28% of students had good sleep quality, 72% had poor sleep quality, and (4) in stress control, 6% of students had very high stress, 18% had high stress, 46% had medium stress, 26% had low stress, and 4% had very low stress. In short, STKIP students mostly have moderate activities. Likewise, they have most normal nutritional status, yet they have a poor rest pattern. In addition, they have medium stress control criteria.

Keywords—healthy lifestyle behaviors, student, online games.

I. INTRODUCTION

The era of globalization can be referred to as the spread of habits that are one of the lifestyle and habits of a person in a country. The rapid communication technology, the latest online games, social technology, and technology used in everyday life can change one's habits and lifestyle. The emergence of the internet and sophisticated communication tools that produce information can be obtained easily and quickly.

In this globalization era, the lifestyle of someone is determined by the individual and the environment. Lifestyle is defined as a way of life, how people spend their time, what they think about themselves and the surroundings [1]. The emergence of several hang-out places and cafes for a hangout used by someone today to gather with friends just to meet and face to face and aim to release tired or to do the work. This factor is one that can change a person's lifestyle at this time.

A person with an unhealthy lifestyle will be susceptible to illnesses such as heart disease, diabetes mellitus, even stroke with which this condition makes the quality of a person to be decreased [2]. University students are a group of individuals included in the period of adolescence and young adulthood. The food courts, frequency of food consumption such as

meat, bread, fast food and physical activity affect the lifestyle and eating habits [3]. Such findings show that lifestyle affects the behavior of food consumption in adolescents or young adults. The prevalence of university students who got stress reached 68.2% [4]. In addition, the university students also often suffer insomnia. The prevalence of university students who suffer from insomnia is approximately 49.4% [5].

Based on the results of those empirical grounds, it is postulated that all unhealthy lifestyle will have an impact on students' low academic achievement scores. This avowal is accentuated by an emerging study showing that the majority of students who have good healthy lifestyle have a very satisfying academic achievement: it has moderate and significant relationship [6]. Likewise, a research on the relationship between healthy lifestyle and students' academic achievement of General Sudirman University Health Sector shows that there is a significant relationship (positive correlation) between students who have healthy lifestyle and the increase of their academic achievement [7].

Motivated from above explanation, this paper presents healthy lifestyle behaviors as an investigation of students. The rest of this paper is organized as follow: Section II describes the proposed method. Section III describes the obtained result and following by discussion in Section IV. Finally, Section V concludes this work.

II. PROPOSED METHOD

This study was descriptive qualitative with cross-sectional design. Samples were all students of High School Teacher Training Education from Muhammadiyah Muara Bungo in the academic year of 2015, 2016, and 2017 and they were is the age of 18-21 years. This indicated that they are classified into late adolescence or early adulthood. This qualitative research process involved significant efforts, such as interviewing and procedures, collecting specific data from the participants, analyzing the data inductively from the themes that were particular to general themes, and interpreting the meaning of the data [8].

This study was aimed to investigate university students' healthy lifestyle in High School Teacher Training Education of Muhammadiyah Muara Bungo in four indicators of physical activity, nutrition, and rest patterns, controlling stress. Thus, this study was not to test the hypothesis but to describe the phenomenon. The data collection techniques were instruments (e.g., questions about student life force) or collect information with the help of a checklist of behavior

(such as, observation over a worker involved in a complex skill) [8].

The data collection techniques were primary and secondary data collection. The primary data were the data from the research results by using a questionnaire. Instruments questionnaire on each indicator (physical activity level, nutritional status, and resting patterns, Control aspect) was named differently as follows: GPAQ, PSQI, BMI, Stress Coping. Besides, the secondary data were from interviews and documentation.

III. RESULTS

This study was conducted in May-June 2018 at STKIP Muara Bungo. The subjects were all undergraduate students of bachelor program of STKIP Muara Bungo in 2015, 2016 and 2017. The subjects were 701 students consisting of 197 students of Sport Science Education Department (SCED), 47 students of the English Education Department (EED), 457 students from Elementary Teacher Education Department (ETED). From a total of 701 students, there were several students resigned from the college, was on leave, and the students who returned the questionnaire were 446 students. The following Table I is the profile of the students.

TABLE I. STUDENT PROFILE STKIP MUARA BUNGO

Year	Department	Gender		Total	Age (years)	
		Man	Woman		16-20	21 & above
2015	SCED	72	15	87	19	68
	ETED	34	83	117	42	75
	EED	6	6	12	7	5
2016	SCED	40	3	43	16	27
	ETED	66	100	166	68	98
	EED	5	14	19	14	5
2017	SCED	53	14	67	56	11
	ETED	41	133	174	149	25
	EED	0	16	16	14	2
Total		317	384	701	385	316

Table I above showed that the total number of students in STKIP Muara Bungo was 701 students. The details were (1). The total students at the academic year of 2015 was 216 consisting of 87 SCED (72 men, 15 women), 12 of EED (6 male, 6 female), 117 ETED (34 male, 83 female), 68 student age range 17 to 20 years and 148 age range of 21 years and older; 2). Furthermore, in the academic year of 2016, the total of students was 228 consisted of 43 SCED (40 men, 3 women), 19 EED (5 men, 14 women), 166 ETED (66 men, 100 women), 98 students of age range from 17 up to 20 years and 130 age range of 21 years and older; 3). Besides, in academic year of 2017, the total of students was 257 consisting of 67 SCED (53 male, 14 female), 16 EED (0 male, 16 female), 174 ETED (41 male, 133 female) 219 students range from 17 to 20 years old, 38 age range 21 years and above.

A. Physical Activity Level

The aspect of physical activity of the students of STKIP Muara Bungo based on GPAQ is described in Tables II, III and IV as follows:

TABLE II. CRITERIA GPAQ STUDENT QUESTIONNAIRES

No	Commentary	Frequency	percentage
1	Tough Activity	55	12%
2	Moderate Activity	266	60%
3	Low Activity	125	28%
	total	446	100%

TABLE III. DETAILS GPAQ STUDENT QUESTIONNAIRES

No	Commentary	Time period	The longest	At least	Average
1	Tough Activity	One week	7 days	1 day	3 days 7 hours 30 minutes
		One day	24 hours	30 minutes	6 hours 5 minute
2	Moderate activity	One week	7 day	1 day	3 days 5 hours
		One day	13 hours	10 minutes	2 hours 48 minutes
3	Low Activity	One week	7 days	1 day	4 days 8 hours 24 minutes
		One day	7 hours	5 minutes	1 hour 31 minutes

TABLE IV. THE STUDENT SPORTS ACTIVITIES

Activity		Time period	The longest	At least	Average
Sports, Fitness or recreation	Tough Activity	One week	7 days	1 day	2 days 7 hours 30 minutes
		One day	3 hours	15 minutes	1 hours 18 minute
	Moderate Activity	One week	7 day	1 day	2 days 5 hours
		One day	3 hours	5 minutes	1 hours 17 minutes
Sit or lie down/ Low activity		One day	15 hours	10 hours	3 hour 16 minutes

The results of research using questionnaires of GPAQ physical activity demonstrated that 55 or 12% students of STKIP Muhammadiyah Muara Bungo were into strenuous activity. Overall, the students got an average of the highest activity for 3 days 7 hours 30 minutes in 1 week, and the lowest for 6 hours 15 minutes in 1 week. The students of Muara Bungo STKIP who do sports activities, fitness or recreation do in a maximum of 3 hours and at least 15 minutes each day by calculating the average total activity for 1 hour and 18 minutes. In details, 40 students were from SCED, 12 students were from ETED, and three students were from EED, these students were male.

There were 266 students or 60% of the students who had the classification of moderate activity. Overall, they got an average of the highest activity for 3 days, 5 hours per week, and the lowest for 2 hours and 48 minutes. The students did sports activities, fitness or recreation with a maximum of 3 hours and at least 5 minutes each day by calculating the average total activity for 1 hour 17 minutes. The students were from SCED as many as 35 students, ETED as many as 221 students, and EED as many as 10 students. They consisted of 46 males, 220 females.

There were 125 or 28% of the students who were in the light activity. Overall, the students got an average of the highest activity for 4 days 8 hours 24 minutes in a week, and the lowest for 1 hour 31 minutes. The students did sports activities, fitness or recreation with a maximum of 3 hours and at least 5 minutes each day by calculating the average

total activity for 1 hour 17 minutes. The students were from SCED as many as 5 students, 101 students of ETED, and 19 of EED students. These students were all female.

In addition, the results showed that the students who sit or lied down were the students who performed daily activities in a maximum of 15 hours per week and at least 10 hours in the last week with the totals from an average of 3 hours 16 minutes of activity a sitting or lying in a last week.

B. Nutritional Status

Instruments nutritional status was referred to Body Mass Index (BMI) and obtained results described in Table V as follow:

TABLE V. BMI CATEGORY OF COLLEGE STUDENT

No	Commentary	Frequency	Percentage
1	Very thin	16	4%
2	Thin	54	12%
3	Normal	336	75%
4	Fat	40	9%
5	Obesity	0	0%
Total		446	100%

Table V above demonstrated that from the total of 446 respondents, 16 students or 4% were categorized "very thin", 54 students or 12% were in "thin" category, 336 students or 75% were normal, 40 students or 9% were categorized "fat", and no student had obesity.

C. Resting Patterns

In resting pattern test using PSQI questionnaire showed that from the total of 446 students, there were 125 students or 28% who had a good sleep quality as shown in Tables VI and VII. On the other hand, there were 321 students or 72% who had poor sleep quality. The had a duration of sleeping for an average 6.71 hours with details of the longest sleep duration 9.5 hours and the fastest has a duration of 3 hours. In addition, the students who had slept only 3 hours was because they suffered from shortness of breath, flu, cough, etc. The students who had poor sleep quality were male students. This was because male students often played online games on their mobile phones until midnight and even until morning.

TABLE VI. BMI CATEGORY OF COLLEGE STUDENT

No.	Criteria	Frequency	Percentage
1	Good quality of sleep	125	28%
2	Bad quality of sleep	321	72%
Total		446	100%

TABLE VII. BREAKDOWN OF SLEEPING STUDENTS

No	Sleeping time	Freq	Percent	Time off wake up	Freq	Percent
1	20.00-22.00	156	35%	02.00-04.00	63	14%
2	22.01-24.00	203	46%	04.01-06.00	247	61%
3	00.01-02.00	78	18%	06.01-08.00	78	18%
4	02.01-04.00	8	2%	08.01-10.00	31	7
Total		446	100%	Total	446	100%

D. Stress Control

The result of coping stress questionnaires revealed that there were 26 (6%) of students got very high stress, 82

(18%) got high stress, 204 (46%) got enough stress, 114 (26 %) got little stress, and 20 (4%) got a very little stress. In addition, the result of interviews to students with a very high stress rate showed that they had a very high stress due to frustration regarding prolific assignments from the courses and not to mention the problems that he encounters in his daily life.

Conversely, the students who had a very low stress criteria confessed that they preferred to turn the attention of the problems to other things like exercising, traveling, karaoke, etc., rather than always thinking of things that could create stress. This coping type is intended to regulate the emotional state caused by stress. Thus, it is known as emotion-focused coping that obtained through avoidance of the stressor, re-evaluates the cognitive and/or pay attention to the positive aspects of yourself and the situation.

TABLE VIII. CRITERIA STRESS LEVELS OF STUDENTS

Score (X)	Criteria	Frequency	Percentage
X > 181	Very high	26	6%
146 < X ≤ 181	High	82	18%
112 < X ≤ 146	Moderate	204	46%
77 < X ≤ 112	Low	114	26%
X ≤ 77	Very low	20	4%

IV. DISCUSSION

This section presents the discussion.

A. Physical Activity Level

Based on the results research that i have found, that there are 60% of students categorized as moderate physical activity plus 12% of students categorized as heavy physical activity. That means there are a total of 72% of the students who do a healthy lifestyle from the aspect of physical activity accordingly. This finding is reinforced by a statement from the WHO states that a healthy lifestyle indicator appropriate and well known according to WHO criteria which do 150 minutes of at least moderate activity sifik to do their weight per week, balance weight in the range 18,5- 25.99 Kg / M2, healthy nutrition such as the Mediterranean diet or regular eating fruits and vegetables, no consumption of tobacco and alcohol intake [9].

There are 55 students of the male who perform strenuous activity and 0 female students who perform strenuous activities. These findings are directly proportional to the statement of NCHS states that women are consistently having an alcoholic drink less than men, but also women exercise less than men [6].

B. Nutritional Status

Based on the results of the study of nutritional status, body mass index (BMI) is used to measure the nutritional status of students STKIP Muara Bungo total of 446 respondents found that more female students have poor eating habits. Therefore, the category of fat 9%, with the highest weight of 79 kilograms and a very meager 4% with the lowest body weight by 39 kilograms category female. This data is confirmed from the research conducted by [10] who argued that some teens, especially young women often consume food in disproportionate numbers compared to their needs. Female students have a habit dinner lower than male students, but the habit of eating snacks that are higher.

This is supported by research conducted [9] that young women are very fond of snack foods and eat them every day in addition to eating a main meal.

After the interviews, it was found that students who weighs 79 Kilogram often irregular eating, and junk-food-consuming hobby. Some teens also admitted that they rarely consume four or five perfectly healthy like vegetables, meat, milk, rice, fruit overall. Student recognition is directly proportional to some experts who claim that teenagers love to snack unhealthy snack, especially sweet pastries [5]. Meanwhile, the group of vegetables and fruits that contain lots of nutrients to the body is not popular among adolescents. Juveniles have a low level of consumption of the vegetables and fruits [11].

The average weights Muara Bungo STKIP by 54 Kilogram. Ie have a maximum height of 1.8-meter male gender, height 1.45 meters lowest is female, the average height of students STKIP Muara Bungo is about 1.6 meters.

C. Resting Patterns

On break pattern test using PSQI questionnaire showed that a total of 446 students Muara Bungo STKIP there are 125 students who have a good sleep quality, or 28%, on the contrary there are 321 students who have poor sleep quality, or 72%. Students with poor sleep quality if male dominated because male students often play on-line games on their mobile phones until midnight and even until dawn arrives. One sleep disorder in which the students had poor sleep quality is influenced by factors such diseases as asthma, fever, cough, runny nose, etc. On break pattern findings STKIP students Muhammadiyah Muara Bungo is reinforced by the opinions [12] states that people suffering from various diseases certainly experiencing sleep deprivation. Everyone needs sleep in order to maintain optimal health. Meeting the needs of more sleep is very important for people who are sick to heal faster and repair damaged cells. However, illness makes a person less sleep, cannot even sleep, especially in diseases of respiratory disorders such as asthma bronchitis, cardiovascular disease, and neural disease.

Muara Bungo STKIP Muhammadiyah Students had an average sleep duration was 6.71 hours with details of the longest sleep duration and sleep 9.5 hours fastest has a duration of 3 hours. This finding is reinforced by the opinions [9] states of sleep can restore, rejuvenate and energize the body and brain. Therefore, third (8 hours) or fourth (6 hours) of human life in a day if passed by the bed will have a big impact on the other two thirds in terms of alertness, energy, mood, weight, perception, memory, thought, dexterity reaction, productivity, performance, creativity, communication skills, safety and good health.

D. Stress Control

Based on the results obtained from questionnaires stress coping was found that students STKIP Muara Bungo there are 26 or 6% of the students with the criteria of stress is very high, 82 students or 18% of the students with the criteria of high stress, 204 or 46% of the students with the criteria of moderate stress, 114 or 26 % of students with low stress criteria, 20 or 4% of students with very low stress criteria.

Based on the sources of stress researchers conducted interviews in students who have the criteria of stress is very high and get the results that students who have stress levels are very high and found students were frustrated because many of the tasks of the course and not to mention the problems that he encounters in his daily life , These findings are directly proportional to the views expressed by[3] states that there are several sources of stress experienced by adolescents, one of which is on school stress. School stress is the pressure obtained in the academic issues that tend to be high in the final two years at school, the desire to get a high score, or success in the field of sports in which teenagers are always trying to not fail, these things can all lead to stress. Needlman statement reinforced by the opinions according to [3], which says there are four factors that can make teenagers become stressed, namely the use of illegal drugs, juvenile delinquency, and the negative influence, academic problems.

Conversely, students who have a very low stress criteria confessed that he prefers to problems turned his attention to other things like exercising, traveling with friends, shopping, singing, etc., rather than always thinking about things that create stress. This coping option aims to regulate the emotional state caused by stress. Coping with this type known as emotion-focused coping obtained through the avoidance of the stressor, re-evaluates the cognitive and / or pay attention to the positive aspects of yourself and the situation.

Findings of students who perform stress coping with emotion-focused coping strategy is reinforced by the statement of [11] states that emotion-focused coping aims to regulate the emotional state caused by stress. Evasion to a stressor, re-evaluates the cognitive or attention to the positive aspects of yourself and the situation. Individuals who use a coping that focus on emotion-focused coping will perform some ways to do that; (1) Seeking emotional social support. Individuals attempting to gain emotional and social support from others. (2) distancing. Expend cognitive effort to rid himself of the problem or make a positive expectation. (3) Escape avoidance. Imagine the situation or take action to entertain himself from an unpleasant situation. Individual play of imagination and suppose to not think about or even sleeping. (4) Self-control. Trying to regulate feelings of self in the act to solve the problem. (5) Accepting responsibility. Receiving problems encountered while thinking of a way out of the problem. (6) Positive reappraisal. Creating a positive sense of the situation in the personal development of the religious nature. Receiving problems encountered while thinking of a way out of the problem. (6) Positive reappraisal. Creating a positive sense of the situation in the personal development of the religious nature. Receiving problems encountered while thinking of a way out of the problem. (6) Positive reappraisal. Creating a positive sense of the situation in the personal development of the religious nature.

V. CONCLUSION

This paper has presented healthy lifestyle behaviors of university students. The lifestyles including: (1) Physical activity; (2) Nutritional status; (3) Resting patterns; and (4)

Stress control. In summary, the students mostly have moderate activities. Likewise, they have most normal nutritional status, yet they have a poor rest pattern. In addition, they have medium stress control criteria.

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REFERENCES

- [1] Papalia, D, E., Olds, SW., & Feldman, R.D. 2008. *Human Development. Tenth Edition*. New York: McGraw-hill Companies, Inc.
- [2] Cahyono, J.B.S.B. 2012. *Gaya Hidup Sehat dan Penyakit Modern*. (Accessed on 2 March 2015)
- [3] Needlman, R. 2004. Adolescent Stress. (Accessed on 24 Maret 2018) <http://www.drspock.com/article/0.1510.7961.00html>.
- [4] Machfoedz, I. 2003. *Pendidikan Kesehatan Masyarakat*. Yogyakarta: Fitramaya.
- [5] Hurlock, E. (1980). *Psikologi Perkembangan: Suatu Pendekatan Sepanjang Rentang Kehidupan*. Jakarta: Erlangga.
- [6] National Center for Health Statistics (NCHS). (2013). *Health*, United States 2012. Hyattsville, MD.
- [7] Monk, F. J., Knoers, A. M. P., Haditono, S. R. 2001. *Psikologi Perkembangan: Pengantar dalam Berbagai Bagianya*. Yogyakarta: Gadjah Mada University Press.
- [8] Creswell, J.W. 2013. *Research Design: Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Edisi Ketiga. Pustaka Pelajar: Yogyakarta.
- [9] Potter and Perry. 2005. *Guide to Basic Skill dan Prosedur Dasar Edisi III*. Ahli Bahasa Ester Monica. Jakarta: Penerbit Buku Kedokteran EGC.
- [10] Przystawski, J., Stelmach, M., Grygiel-Gorniac, B., Mardas, M., & Walkowiak, J. (2011). Dietary Habits and Nutritional Status of Female Adolescents from the Great Poland Region. *Polish Journal of Food and Nutrition Science*, 61 (1). 73-78.
- [11] Kozier. 2004. *Fundamental of Nursing. Seven Edition*. Vol 2. Jakarta: EGC.
- [12] Saufika, A., Retnaningsih., Alfiasari. (2012). Gaya hidup dan kebiasaan makan mahasiswa. *Jurnal Ilmu Keluarga dan Konsumen*, 5(2), 157-165.