

## Lifestyle Practices among Obese Adolescents and Adults Batanguenos

Asia Pacific Journal of Allied Health Sciences

Vol. 6, No 2, pp 32-43

December 2023

ISSN 2704-3568

Dr. Bella Magnaye, Ms Janet Gui & Ms. Maricel Magboo

College of Nursing, Lyceum of the Philippines University – Batangas

bpmagnaye@lpubatangas.edu.ph

**Abstract** – This quantitative research investigates the impact of lifestyle factors on the physical and psychological health outcomes in obese individuals. The study compares the lifestyle practices between obese adolescents and adults, emphasizing the significance of diet, physical activity, sleep, and vices on obesity's health implications.

Data were collected from 150 respondents, comprising both adolescents and adults with obesity. Statistical analyses, including t-tests, were utilized to decipher the direct correlation between lifestyle habits and the development of obesity-related physical and psychological effects. The findings demonstrate a highly significant influence of diet, activity, and exercise on both physical and psychological health in obese adolescents, while for obese adults, diet, activity, and sleep patterns were recognized as significant factors for psychological effects only.

The study underscores that improper lifestyle practices, including unhealthy diet, insufficient exercise, and substance abuse, substantially elevate the risk of obesity onset and exacerbate existing cases. Notably, sleep patterns did not show a considerable impact on the physical aspects of obesity within the population studied.

The conclusions reveal that lifestyle practices are critical in the onset and progression of obesity, potentially leading to severe health complications. Hence, the study recommends that health workers and local governments initiate targeted health promotion activities, body weight consciousness campaigns, and monitoring programs that focus on lifestyle modification to combat obesity.

**Keywords** – Obesity, Lifestyle Practices, Physical Health, Psychological Effects

### INTRODUCTION

Emerging diseases are those that emerge to an area that rapidly increases. Human demographics and behavior are often considered as an important factor in the emergence and reemergence of diseases.

Health is not just about the over all well being of a person which contributes to a better way of living but also the freedom from disease and illness. Wellness of a person includes mental, social, emotional, spiritual and physical wellbeing within the limits of one's personal abilities.

Since 1980, one of the major factors that contributes to heart disease diabetes and premature mortality is obesity which is the top public health concern by the National surveys have measured the body mass index where the result was 6% for men and 8% women of the respondents were found out to obese or with the "Body Mass Index" of above 30 (WHO, 2016).

Furthermore, last 2011 it was concluded that the fifth leading risk for the global death is obesity where it is estimated that 2.8 million adults die every year. Diabetes burden, ischemic heart disease and various types of cancers were the growing results of being obese. As shown in the study of Department of Science and Technology, in comparison to underweight there is a lesser linkage to other degenerative disease while a person who is obese has a higher chance to be threaten by different diseases [1].

Physical, psychological and social problems are likewise adverse effects of obesity, specifically adolescent obesity. Obese adults more often than not

withdrew themselves from social groups for fear of ridicule. They developed a low self-esteem because being fat or obese is considered unattractive. They are often the source of jokes among their peers. The longer they experience alienation from their age group the more they succumb to depression which may pose another health problem. Being fat is not socially bad

after all, but this line of thinking should be supported, many adults will be suffering from depression and other psychological health problems [2].

This study was conducted to enhance awareness among people how the ubiquity of being overweight is obesity nearly related with the arise of the modern lifestyles. Since Philippines is a developing country and competing with global economy with a large service sector, living standards continued to rise but decreasing prices and smaller families, real incomes increased. These significant facts and urbanization have an excessive impact of the health of people. Thus, this will be beneficial, only to the people who suffers obesity but to general health problems that might occur.

The researchers as nursing students are in most advantage of adopting a comprehensive study about the lifestyle and effect of obesity among adolescents and adults in San Pascual, Batangas. People do not consider obesity as problem because they do not feel pain, or they do not foresee any major alteration to their health and that is one of the reasons why the researchers chose obesity study.

This can enhance the awareness of readers on what is the implication of this health state. As people engage in healthy lifestyle to prevent obesity then it can be at least a step to achieve the goal of DOH to make Filipino healthy.

### OBJECTIVE OF THE STUDY

This study aimed to determine the lifestyle and effects of obesity to adolescents and adults in San Pascual, Batangas. Specifically, it determined the following the lifestyle of the respondents in terms of diet, activity, sleep, vices, and exercise: the perceived effects of obesity analyze the relationship between the lifestyle and effects of being overweight and analyze the significant difference between the responses of the respondents.

### MATERIALS AND METHODS

#### Research design

The research study used a descriptive-correlational with comparative survey method to provide differences between the effects of obesity to adolescents and adults to their physical and psychological health.

According to Polit & Beck [3], descriptive research has its main objective of having an accurate portrayal of the characteristics of a person, situation, or group, and/or the frequency with which the phenomena occur. On the other hand, correlational research is

defined as research that explores the interrelationships among variables of interest without any active intervention by the researcher. The effects of obesity to the physical and psychological health were described in this study. The results that would be obtained were compared between adolescents and adults.

#### Respondents of the Study

The study used a quota sampling procedure to attain the numbers of participants. There are 150 obese participants from San Pascual Batangas. The participants were from San Antonio, Pook ni Kapitan, Sto. Nino, Poblacion, Alalum, San Mariano, Malaking Pook and Mataas na Lupa. The criteria that is used for choosing the respondents are: (a) age level of the respondents divided into two categories namely, adolescents (13-20 years old) and adults (20-65 years old), and (6) Body Mass Index (BMI) of 30 kg/m<sup>2</sup> and above.

Majority of the adolescent respondents are female with a frequency of 46 or 71.88% and only 10 or 28.12% are male. As to adult respondents, there are more male with a frequency of 49 or 56.98% and only 37 or 43.02% are female.

Among the 150 respondents, majority of them are adult with a frequency of 86 or 57.33% while 64 are adolescents or 42.67%. Obesity among adults are much higher than the adolescents.

On the 64 adolescent they were all students with 42.67% while on the adult, there were 4 students or 2.66%, 2 housewives or 1.33%, 19 businessman/woman with 12.67% and 61 employees or 40.67% of adults.

On the civil status, the entire adolescents were single which is 64 or 42.67% whereas on the adults there were 13 adults or 8.67% who are single, 63 are married or 42%, 7 are separated or 1.33%, and 3 who are widow/widower or 2.0%.

With regards to their BMI, the adolescent respondents' show that 46 or 71.88 are above 25 while 18 or 28.12 is above 30. In adults' respondents it shows that 49 or 56.98% are above 25 and 37 or 43.02% are above 30.

#### Data Instrument

The researchers developed a questionnaire, which is the main instrument used in this study to gather pertinent data. The questionnaire is composed of three parts. The part I is about the profile of the respondents.

Part II is about the lifestyle of the respondents. The questions were answered using the 4-point Likert scale of always, often, sometimes and never, that is composed of 25 questions Part II is about the effects of obesity on the physical and psychological aspect. This was answered using a four-point Likert scale of strongly agree, agree, disagree, strongly disagree. It also consists of 15 questions each.

**Data Gathering Procedure**

The researchers prepared a questionnaire which was presented to their adviser for validation. It is also presented to other clinical instructors for more criticism and validation. After being approved it was distributed for pilot testing in San Pascual, Batangas.

After the pilot test, the actual survey started by, the researchers went to District 1 - 4 to conduct the study. The researchers personally presented the questionnaires to the respondents at the same time explained the directions and answered the queries of respondents regarding the content of questionnaires.

The researchers gave the respondents ample time to answer the questionnaire.

**Data Analysis**

To interpret the results, the following were used: Percentage and Frequency distribution were used to determine the demographic profile of the respondents in terms of gender, age, occupation, civil status and body mass index. Weighted Mean was used to determine the lifestyle of the respondents and the perceived effects of obesity. Pearson r correlation was used to analyze the relationship between the lifestyle and effects of obesity and t-test was used to analyze the significant difference between the responses of the respondents.

**Ethical Consideration**

Ethical clearance was obtained from different institutions involved in the study. Since the study was retrospective by design, written consent from patients was not required. Anonymity was secured by analyzing and presenting the data in aggregate.

**RESULTS AND DISCUSSION**

Table 1.1 presents the weighted mean distribution of the respondents' lifestyle in terms of diet. Adolescents ate more than 3 times a day obtained a weighted mean value of 3.09 which is verbally interpreted as "often" while adult respondents' likes to eat sweets got a mean value of 3.17 also interpreted often.

**Table 1.1**  
**Respondents' Lifestyle in terms of Diet**  
**N=64; N=86**

Item	Adolescent			Adult		
	WM	VI	R	WM	VI	R
1. I like to eat sweets.	3.08	Often	3	3.17	Often	3
2. I eat in fast-food restaurants than at home.	2.72	Often	5	2.84	Often	4
3. I eat more than 3 times a day.	3.09	Often	1	2.99	Often	3
4. I eat a lot when I feel bored, stressed and nervous/ frightened	2.81	Often	4	2.51	Often	5
5. I like fried foods	3.08	Often	2	3.00	Often	2
<b>Composite</b>	<b>2.9531</b>	<b>Often</b>		<b>2.9011</b>	<b>Often</b>	

These results shows that adolescents tend to eat more than 3 times a day. The usual eating patterns must still be followed because it is also associated withobesity. Studies have shown that the weight depends on the energy balance which is defined as the connection between energy intake and expenditure. Potential causes of overweight or obesity are the alteration of the dietary habits and physical activities of the younger generation.

These findings are justified by Rathi, Riddell and Worsley, (2016) entitled "Food consumption patterns of adolescents aged 14–16 years in Kolkata, India" which states that nutrition transition of the adolescents has been in a rapid change. Thus, promoting health food consumption with the regular measures is the suggestion of the Indians to improve their health especially the adolescents. Quality and quantity of the food consumption of the teens in India were focused for effecting healthy eating.

Adolescents and adults liking fried foods got a weighted mean of 3.03 and 3.00 was both interpreted as often and ranked first. This could be because frying food is much easier to do compare to other dishes. Many people find the taste of fried food good that is they impulsively indulge it without having a wider knowledge of the consequences of it in their health. They are more likely to eat fried foods that they considered as easy to prepare and delicious. And most of the respondents don't have much time in cooking due to their schedule.

This shows that they still eat fried foods, but it is still associated with their obesity. Eating fried and fast foods regularly can lead to obesity while those who were considered as overweight can more likely suffer and develop different disease in connection with their obesity like type 2 diabetes.

However, obese people can still enjoy their favorite fried foods and fast foods but in a minimal consumption unlike before. A single-serving size of fast-foods and fried foods once in a while but the rest

of the time managing a healthier lifestyle with proper and healthier food consumption which mostly consist of lean proteins, fresh produce, whole grains and low-fat dairy are the advisable foods for them. Replacing french fries to oven-baked sweet potato fries and grilled chicken breast instead of eating fried drumstick are just some healthier suggestions for their food consumptions. Moreover, this simple steps in changing their lifestyle can improve their health and help them lessen the risk of the development of more severe diseases that are related to obesity.

Eating sweets was on the third rank in adolescents and first rank in adults and verbally interpreted as often with a weighted mean of 3.06 and 3.17 respectively.

This also implies that adults would eat sweet but not with high demand. At this age, salty food is much more appealing to them than sweets and because the hospitality industry such as restaurant, bars and other fast-food chains are offering more salty food than sweets adolescent is engage in eating salty food, while adults, because of stress to work, they prefer to eat sweet during break time or while working. For they feel that sweet foods can make them more awake especially during overtime in work.

Diet that contains high refined sugar leads to cause obesity. In consuming sugar, the body directly convert the sugar to fats that is why the more sugar they eat the greater chance of a person to gain more weight (Samson,2014). In addition to this for Filipinos, no meal is complete without a dessert whether it is simple fruit or prepared sweet like sweet potato in syrup or a special dessert like leche flan. Obesity is known to be associated with high triglycerides and decreased HDL cholesterol.

Cook et al., [4]explained that with a small portion of food that contains sugar, there is a large number of calories that enters the body. The calories consumed by the body depend on the body and related to internal factors.

The least but they still practice eating a lot when they feel board, stressed, and nervous tightened with weighted mean of 2.81 ranked 4 and rank 5 for adults with weighted mean of 2.51.

Moreover the item "I eat in fast food restaurants than at home" with weighted mean of 2.72 rank 5 for adolescent and weighted mean of 2.84 for adults in rank 4. Some people had the op on that eating food at home is superior to eating food at restaurants in many ways. The main reason is that eating meals at home do well to them while eating food at restaurant does harm to their body. When they prepare a meal at home, they will find a lot of fun.

**Table 1.2**  
**Respondents' Lifestyle in Terms of Activity**  
**N=64; N=86**

Item	Adolescent			Adult		
	WM	VI	R	WM	VI	R
1. I participate in recreational activities.	2.23	Sometimes	4	2.21	Sometimes	5
2. I usually go to mall for a walk.	2.48	Sometimes	3	2.29	Sometimes	4
3. I like to do activities alone than with others	2.22	Sometimes	5	2.57	Often	3
4. I usually take a ride when going home	3.21	Often	1	3.03	Often	1
5. I help in doing chores at	2.98	Often	2	2.91	Often	2
<b>Composite Mean</b>	<b>2.62</b>	<b>Often</b>		<b>2.61</b>	<b>Often</b>	

Table 1.2 shows adolescents and adults activity lifestyles obtained the composite mean of 2.62 and 2.61 respectively and verbal interpreted as often.

They have activities as part of their lifestyle that can affect their health status which is obesity.

Having a regular physical activity is one of the most beneficial things to do for our health. Consuming more calories through eating and drinking than the amount that can burn in a daily basis through their lifestyle activities can really be the factor to gain weight. That is why it is important to maintain a balance calorie for a person's everyday diet and having a regular physical activity that uses more energy to burn more fats and calories than what a person can intake daily [5].

Adolescents and adults usually take a ride when going home obtained a weighted mean of 3.21 for adolescents and 3.03 for adults and interpreted as "often".

They often take a ride when going home because adolescents and adults are usually out in their work or school, late in the evening. Most of the respondents take a ride when going home because they are easily got tired from school or from work.

These findings are supported by Porter (2016), that the excessive consumption of junk foods and the sedentary lifestyle of a person can be the top cause of obesity worldwide. With the aging year, benefits of the development and more innovations through technology continues to make man's life easier. Manual structures like stairs were rarely used when there is an escalator. Instead of climbing trees that uses manual power, adolescents want to use the easier way with the use of different equipments and machines. Instead of using bike or walking, many prefer to use bus, car. And cabs as their means of transportation. It cannot be denied that technology has many benefits to most of the people but in the other hand, manual power that uses more energy has been left behind which generally causes higher rates of obesity even in the young generation.

The respondents both help in doing chores at home with weighted mean of 2.98 for adolescents and weighted mean of 2.91 for adults in rank 2. Calories burned while doing household chores was said to be greater than having workouts. Yard work, digging and raking are just some household activities that can burn a lot of calories.

The item "I usually go to mall for a walk" with weighted mean of 2.48 which is in 3rd rank for adolescents and weighted mean of 2.29 in 4th rank for adults.

This means that the respondents would go to mall to make errands for last minute shopping and to make the most of it they would prefer to walk to burn up calories.

Calories that can burn while shopping depends on the body weight and the time spent standing, walking and sitting. Moreover, carrying heavy packages can increase the calorie expenditures that adds to burn more calories [7].

And lastly, the item "I like to do activities alone than with others" with weighted mean of 2.22 5th rank for adolescents and weighted mean of 2.57 in ranks 3 for adults. Doing activities alone is the least because they would prefer to have company or friends around them.

According to WHO (2016), in maintaining weight loss physical activity is possibly one of the most important factors and should be the top priorities of the public health to improve and lessen the obesity epidemic. Activity accounts for 40% of the daily calorie intake which is equals to an increase in excess body weight due to fat storage.

**Table 1.3**  
**Respondents' Lifestyle in Terms of Sleep**  
N=64; N=86

Item	Adolescent			Adult		
	WM	VI	R	WM	VI	R
1. I spend 4 hours at night watching TV	2.56	Often	2	2.46	Sometimes	2
2. I wake up early in the morning.	2.85	Often	1	3.26	Often	1
3. I sleep 8-10 hours	2.52	Often	3	2.34	Sometimes	3
4. I sleep even when I am full after eating.	2.33	Sometimes	4	2.31	Sometimes	4
5. I wake up in the middle of the night to eat.	1.90	Sometimes	5	1.99	Sometimes	5
<b>Composite Mean</b>	<b>2.43</b>	<b>Sometimes</b>		<b>2.48</b>	<b>Sometimes</b>	

Table 1.3 explains that weighted mean distribution of the respondents' sleep pattern that causes obesity. It obtained the composite mean of 2.43 for adolescent and 2.48 for adults.

This shows that they have their sleeping patterns and sleeping too little is correlated with obesity because

lack of sleep or inadequate sleep makes people to eat. This is because they feel uneasy and sleepy in the middle of the day and they tend eat so they would not fall asleep.

Loss of sleep result to increase the rate of hunger of the person due to the raise of the ghrelin hormones which is the hunger hormone of a person that is detected in the blood. Moreover, it was said that the shorter the time of sleep the hungrier the person will feel. In addition, a person who stays awake for one whole night reduces the energy by the body when resting. And lastly, this study states that sleep deprivation causes weight gain because loss of sleep tends to result to eat more which will increase the intake of calories in our body that will eventually lead to gaining more weight than sleeping on time [8].

Adults and adolescents mostly wake up early in the morning with weighted mean of 3.28 and 2.85 respectively which is interpreted as "often". This happens because they may have disrupted sleep pattern because instead of having their complete sleep they wake up early in the morning to attend school while adults to their work. Sometimes, these adolescents and adults sleep late at night to study or they watch televisions for 3-4 hours watching their favorite shows.

According to a study conducted in Australia by Maher (2015), it is true, as most of the wise people recommend waking up early in the morning though this waking up issue is quite painful for most of the teenagers. But a new research has notified that if the teenagers wake up early then they are less likely to be obese or overweight. The researchers observed nearly 2200 Australian youngsters regarding their sleeping habits. It was noted that the ones who slept quite late and even woke up late were more prone to become obese and were not physically active compared with the early bed companions. The lead researcher of the study. Carol Maher stated that more research is required to identify why the time is plays a significant role on the well-being of the children.

They spend 4 hours at night watching TV with weighted mean of 2.56 for adolescents and 2.46 for adult in rank 2. Setting up television inside the room may be a special treat but can negatively affect their sleeping habits. In addition, computer, video games, cellular phones and other electronic gadgets may destruct and change the sleeping time and duration of a child.

Both group of respondents sleep 8-10 hours with weighted mean of 2.52 for adolescents and 2.34 for adults. This got low value because it means that they

were not able to have enough sleep every night. This happens due to several reasons such as wavering active schedules and using bedroom where people frequently sit to think about paying bills, doing homework and watching Television, then sleeping is really hard for them. They will consider their bed to be used for daytime activities rather than sleeping. Furthermore, not having enough sleep can be associated with their obesity.

Furthermore, in the study by Davis [10] tackled that a person who sleep less than six hour a night can be more likely increase their body mass index compared to a person who sleep seven to eight hours. People who have a sleeping habit of less than 7 hours can gain more weight and calories because of the feeling of hunger when they are awake.

The respondents sometimes sleep even when they are full after eating with weighted mean of 2.33 for adolescents and 2.34 for adults is in rank 4th.

People fill up the body with food and there are foods to be collected in the stomach then the body sends blood to stomach so that it will produce the acids and enzymes needed to digest the food and send it to the intestines. As a result of blood going to the stomach, person may feel drowsy or tired because the body is hard at work. People may feel the urge to nap, but there are disadvantages to sleeping after they eat. Lying down immediately after eating can increase your likelihood of experiencing heartburn [10].

When you lie down, the passageway between your esophagus and stomach becomes horizontal, which can make the gasses that cause heartburn travel more easily, Fatty and acidic foods are particularly bad for heartburn and cause the most problems for those with digestive issues. Alcohol is another common cause of heartburn, and it can diminish your quality of sleep. And lastly, they sometimes wake up in the middle of the night to eat with weighted mean of 1.90 and 1.99. They are people who wake up and cannot go back to sleep without eating. Either way, a dependency on food for sleep can be dangerous and lead to poor sleep and rapid weight gain or obesity. It is sometimes called “night eating syndrome”. This urges a person to eat in the middle of the night and often feel incontrollable which was triggered by various stressors such as boredom of extensive diet. But typically, night eating leaves the individual with feelings of guilt, anxiousness, and disgust.

**Table 1.4**  
**Respondents' Lifestyle in terms of Vice**

N=64; N=86

Item	Adolescent			Adult		
	WM	VI	R	WM	VI	R
1. I smoke more than 3 sticks of cigarettes a day.	1.85	Sometimes	3	1.77	Sometimes	3
2. I drink alcoholic beverages.	2.02	Sometimes	2	1.89	Sometimes	1
3. I play computer games and join social networking sites on computer.	2.60	Often	1	1.82	Sometimes	2
4. I play mah jong or other card games for long hours.	1.63	Sometimes	4	1.76	Sometimes	4
5. I am a past prohibited drug	1.11	Never	5	1.22	Never	5
<b>Composite Mean</b>	<b>1.84</b>	<b>Sometimes</b>		<b>1.69</b>	<b>Sometimes</b>	

Table 1.4 shows the weighted mean distribution of the respondents' vices that causes obesity. Playing computer games and joining social networking sites is what most adolescents do, while drinking alcoholic beverages is what most of adults do with weighted mean of 2.60 interpreted as "often" and 1.89 interpreted as "often", respectively.

Nowadays, social networking has been very common. Likewise, adolescents are getting addicted to computers. They spend most of their time playing computer games chatting with friends and more. Just like reading, fishing, or paying sports playing computer games is a form of entertainment. This may result in less body activity and reduced quality life. They also missed going out and playing with others to socialize. Getting hooked with computers makes an individual lazy of moving and mingling with others.

According to Wang [11], because of video game playing of adolescents the cases of obesity among teenagers was tripled in the past two decades. This result to more adolescents suffering from serious diseases which is associated with their obesity

Drinking alcohol is in rank 2 of the adolescents which got the weighted man of 2.92 and playing computer games is in rank 2nd of adults with weighted mean of 1.82. Drinking and social networking and even online games has been the scapegoat or stress release of every individual Lifestyle "Vices" are cutting life expectancy, according to Caledonian Life, an insurance company. The company hos cited expert research by the Irish Heart Foundation showing that 39 percent of Irish adults are overweight and 20 percent are obese - which is in turn causing premiums to rise. The company also stated that 7,000 people have died from smoking related diseases in Ireland every year, which is just one of the lifestyles characteristics which pushed the life assurance premiums of certain demographics in the country. Lifestyle 'vices' such as smoking and alcohol Consumption were all taken into account when pricing a policy, the company says. "When we underwrite Specified Serious illness and Life assurance applications, the most common medical issues that we

encounter are obesity, elevated lipids (cholesterol) and hypertension (raised blood pressure). There has also been a rise in the numbers of applicants with Type 2 Diabetes which is often related to obesity," said Daragh Feely Sales Manager at Caledonian Life. "A higher than average Body Mass Index (BMI) continues to be a tell-tale sign of potential problems down the road for many people."

The adolescents and adults smoke more than 3 sticks of cigarettes a day weighted mean of 1.85 and 1.77 respectively. They engage in smoking because they have the misconception of being thin as they smoke. However, many people do not have enough knowledge about the harmful effects of substance abuse, smoking and obesity which they can suffer when not ceased earlier. People who engage to activities that abuse their health and body does not know and does not correctly weigh the pros and cons of their unhealthy lifestyle.

Behavioral factors which include smoking and alcohol consumption are associated with obesity. Alcohol consumption causes higher prevalence of weight gain and smoking leads to increase of weight ones the user quit using it [12].

They play mah-jong or other card games for long hours with weighted mean of 1.63 for adolescents and 1.76 for adults in rank 4th. They play mahjong and other card games to have fun and be positive / optimistic thinker. This game is essential more on cognitive aspect of person rather than physical aspect

However, "Mahjong" is a Chinese game of skill where strategy and calculations are needed. Researchers believed that playing mahjong benefits individuals who suffers from dementia cognitive and memory difficulties. Card game can also enhance their cognitive and logical thinking using the color, shape and numbers of the card [13].

However, they never been past prohibited drug user with weighted mean of 1.11 for adolescents and 1.22 for adults. It is a fact that obesity sometimes in chronic cases need medication; however, using prohibited drugs got the least which means that the respondents never engage in such activities. Their situation is not truly frustrating that would lead them in using drugs. Physical appearance can also influence a person who engage in drugs such as facial defects, obesity and body defects [13].

**Table 1.5**  
**Respondents' Lifestyle in terms of Exercise**  
**N=64; N=86**

Item	Adolescent			Adult		
	WM	VI	R	WM	VI	R
1. I exercise for a while	2.22	Sometimes	1.5	2.18	Sometimes	1
2. I play physical sports rather than computer games	1.09	Sometimes	4	2.06	Sometimes	2
3. I use stairs than elevator or escalator in public places (i.e., shopping mall schools)	2.22	Sometimes	1.5	1.86	Sometimes	3
4. I like dancing	2.16	Sometimes	3	1.83	Sometimes	4
3. I go to gym for exercise	1.68	Sometimes	5	1.44	Never	5
<b>Composite Mean</b>	<b>2.05</b>	<b>Sometimes</b>		<b>1.87</b>		

Table 1.5 shows the weighted mean distribution of the respondents' exercise lifestyles that causes obesity.

Exercising for a while with a weighted mean of 2.22 verbally interpreted as "sometimes" is what most of the adolescent. On the other hand, most of the adults exercise for a while with a weighted mean of 2.18 verbally interpreted as "sometimes".

This shows that exercise has been a good way of losing weight for obese people and though it is time consuming, but it is the cheapest way to lose weight and control weight. Obesity can still be prevented and treated through regular exercise and a healthy diet. Physical activities at home can also be a way to lessen obesity and burn fats. Thus, combination of exercise and a healthy diet can be a ticket to weight loss.

The item "I use stairs than elevator or escalator in public places" with a weighted mean of 2.22, and verbally interpreted as "sometimes" in adolescents were also on the third rank in adults with a weighted mean of 1.86 and verbally interpreted as sometimes.

It is because obese people easily get tired, so they prefer to use elevator and it is not time consuming. And since walk of life nowadays are with mostly gadgets, machine and robotics. The respondents are not use to daily activities and even physical activities.

Suggestions that people use stairs more often than elevator and escalator is a significant way of increasing the physical activity of a person. In motivating obese person, it is more convenient and the most effective to have activities which is light to moderate physical activities. However, the current approach to the use of stair design poses a problem. "Stairs are frequently hidden from entrances, with only small signs denoting their locations, typically in connection to the fire exit," said the authors.

The more obese people move their body, the more calories can be burn. In order to lose a kilogram of fat, a person need to burn 8000 calories. In connection, walking briskly is a good start to increase the physical activity of a person. Combining increased physical activity with a good diet will increase the chance of losing weight successfully and permanently (Johnson, 2015).

They like dancing as it got the weighted mean of 2.16 for adolescents in rank 3rd and 1.83 for adults in rank 4th. This is a very particular activity where people would lose weight and at the same time would enjoy. So, engagement in dancing can easily help obese people.

According to Bullo (2016), a good form of “mind-body-spirit” dancing. In general, physical activity keeps the body and brain healthy which increase the amount of chemicals in the brain that encourage nerve cells to grow. Thus, dancing can benefit all ages to get and stay in shape. In addition, dancing can also help an obese person to lessen stress and depression that an obese may experience.

They play physical sports rather than computer games with weighted mean of 1.99 in rank 4th for adolescents and 2.08 in rank 2nd for adults. This shows that the respondents are still engaging in physical sports to lower their weight.

The adolescents sometimes went to gym to exercise with weighted mean of 1.68 for adolescents while adults never went to gym with weighted mean of 1.44 in rank 5. This is the least because they would rather not go to gym due to intimidation or phobia of being stared at and being too self-conscious. They feel that someone's staring at them while they work out and make them feel pity. However, there are a lot of materials that can be seen inside the gym that would help obese people to attain their ideal weight. They were not supposed to use tools that is not fit to their program and that is why it is advisable for obese people to undergo exercise program that is provided in gym.

Table 2.1 shows the weighted mean distribution of the respondents’ effect of obesity for the physical health. It shows that both groups of respondents are sometimes experiencing physical effects of obesity as it obtained the composite mean of 2.32 for adolescents and 2.42 for adults.

For adolescents, immediate health consequences and weight-related health problems may be experienced especially in their adulthood. At the moment, since they are healthier than adults, then they can say that there are times that they experience these effects. Furthermore, adolescents are more prone to psychosocial effect rather than physical effects. An obese adolescent often experiences social pressure, stress and difficulties with regards in accomplishing developmental tasks.

**Table 2.1**  
**Perceived Effects of Obesity to Physical Health**

**N=64; N=86**

Item	Adolescent			Adult		
	WM	VI	R	WM	VI	R
1. I experience headache.	2.44	Sometimes	5	2.46	Sometimes	7
2. I usually have feelings of fatigue.	2.56	Often	1	2.45	Sometimes	8
3. I experience disrupted sleep patterns.	2.38	Sometimes	7	2.36	Sometimes	12
4. I typically have stomach trouble.	2.07	Sometimes	13.5	2.09	Sometimes	14
5. I normally have an increase in my blood pressure and heart rate.	2.56	Sometimes	3.5	2.66	Often	1.5
6. I experience excessive Sweating	2.53	Sometimes	2	2.51	Often	6
7. I experience blurring of vision	2.31	Sometimes	9.5	2.57	Often	4
8. I experience tensed muscles and joints	2.31	Sometimes	9.5	2.63	Often	3
9. I have decreased ability to function	2.27	Sometimes	12	2.43	Sometimes	9
10. I feel tired easily.	2.56	Sometimes	3.5	2.54	Often	
11. Experience menstrual problem	1.93	Sometimes	15	1.98	Sometimes	15
12. I snore at night during sleep	2.07	Sometimes	13.5	2.22	Sometimes	13
13. I experience back and his pain	2.36	Sometimes	8	2.37	Sometimes	11
14. I experience frequent urination	2.40	Sometimes	6	2.39	Sometimes	10
15. experience severe thirst and severe hunger	2.30	Sometimes	11	2.66	Often	1.5
<b>Composite Mean</b>	<b>2.32</b>	<b>Sometimes</b>		<b>2.32</b>	<b>Sometimes</b>	

However, as for adults, the experience physical effects due to their lifestyle and stress from work, and other obligations. And for their age, weighing many increases the risk of developing various health problems.

Obesity increases the risk of more damaging health problems like diabetes, fatty liver disease, osteoarthritis, stroke and high blood pressure. However, losing weight may seem hard, but the good thing is even 5% of weight loss can decrease the risk of experiencing health problems in the future [15].

People who are obese often have feelings of fatigue with a weighted mean of 2.56, verbally interpreted as often while the adult respondents assessed that they experience severe thirst and hunger and an increase in blood pressure and heart rate which got a weighted mean of 2.66 verbally interpreted as "often".

The adolescents experience fatigue due to more physical activities from school and other recreational activities that is appealing to them. However, due to bring work, they are having problem or their weight which leads to tiredness and over fatigue. As quoted by Liangco [16], “obese children and adolescents are much more likely to experience fatigue due to a lot of active work and for various reasons having to carry a lot of weight is tiring, obese children and adolescents are having a higher risk of developing diseases and conditions where fatigue is a common symptom, such as diabetes and sleep apnea”.

Adults experience severe thirst and hunger and an increase in blood pressure and heart rate due to many jobs related stress or daily chores that exhaust them which lead to thirst and hunger. Furthermore, this is a



symptom that leads to diabetes. But it can be avoided through proper intake of calorie, carbohydrates and even dietary lifestyle. This is supported by study of Obesity As one of the highest weighted mean physical effects perceived by adults is the increase in high blood pressure and heart rate because once a person is fat, their cholesterol level is usually high due to excess fats in their body. This is associated with their age and health status or being obese. Maya [17] a contributor in eHow.com, explained that obese adults are more likely to experience high blood pressure compared to a person who have a healthy weight. Obesity causes a high level of LDL or the “Bad cholesterol” that can build-up on the arterial walls. Thus, narrowing of the arterial passageway will increase that forces the heart to pump harder to move blood that elevates the blood pressure. The adolescent respondents often experience excessive sweating which got the weighted mean 2.53. Excessive sweating is due to obesity or weight gain. Their weight causes internal warmth that is converted to sweat that comes out the body.

Among the low value items, it shows that the both groups of respondents assess that they snore at night during sleep which got the weighted mean of 2.07 at the both groups of respondents not me weighted mean of 2.07 for adolescents and 2.22 for adults in rank 13. Snoring occurs due to an obstruction in the airway during sleep that causes poor muscle tone or overly relaxed neck muscles which sag out of place, forcing the air to vibrate through the airway. Temporary blockage and snoring can result from congestion caused by illnesses and allergies.

The respondents perceived that they sometimes experience stomach trouble with weighted mean of 2.07 for adolescents in rank 13 and 2.09 for adults in rank 14. The presence of excessive amount of fat near the stomach can exert a strong pressure on the stomach causing comfort or pain. And obesity is a quite common cause of stomach trouble, pain and discomfort. It was said that obesity can lead to stomach aches which can be experienced frequently due to the fats that surround the stomach which exert pressure on the abdominal walls. Moreover, abdominal pain and stomach aches can also be a effect of inadequate food intake, diet or hunger. The presence of an excessive amount of fat near the stomach can exert a strong pressure on the stomach causing discomfort or pain, [18].

The least among the items shows that the adolescents and adults experience menstrual problems which got the weighted mean 1.93 and 1.98

respectively. Obesity can also affect the menstrual cycle of women because fat cells produce extra estrogen, tricking the ovaries into thinking the body is pregnant so the menstruation stops completely.

**Table 2.2**  
**Perceived Effects of Obesity to Psychological Health**  
**N=64; N=86**

Item	Adolescent			Adult		
	WM	VI	R	WM	VI	R
1. I feel apathetic	2.23	Sometimes	10	2.14	Sometimes	10
2. I experience difficulty in concentration.	2.22	Sometimes	11	2.24	Sometimes	9
3. I have enough patience	2.73	Often	5	2.41	Sometimes	6
4. I easily feel irritable	2.41	Sometimes	8	2.28	Sometimes	8
5. I easily get stressful	2.49	Sometimes	7	2.47	Sometimes	5
6. I get angry for no reason	1.99	Sometimes	14	1.93	Sometimes	11
7. I have decreased self-esteem	2.02	Sometimes	12	1.79	Sometimes	13
8. I am teased by my friends	1.98	Sometimes	15	1.66	Sometimes	15
9. I am easily depressed	2.56	Often	6	2.30	Sometimes	7
10. I am the type of person who is a negative thinker/pessimist.	2.01	Sometimes	13	1.07	Sometimes	14
11. I believe that I can do better things	3.16	Often	2	2.95	Often	3
12. I seek advice from my family.	2.74	Often	4	2.91	Often	4
13. I am focus on my own responsibilities and goals	3.00	Often	3	3.15	Often	1
14. I develop good relationship with others	3.17	Often	1	3.14	Often	2
15. I am worried that I will be neglected & be discriminated by others because of my condition	2.26	Sometimes	9	1.82	Sometimes	12
<b>Composite Mean</b>	<b>2.47</b>	<b>Sometimes</b>		<b>2.33</b>	<b>Sometimes</b>	

Table 2.2 shows the weighted mean distribution of the respondents’ effect of obesity to the psychological health. It shows that both groups of respondents and sometimes experiencing psychological effect as it obtained the composite mean of 2.47 for adolescents and 2.33 for adults. This shows that the respondents are affected psychologically due to their physical appearance. Obese people are also more likely to lose the psychological benefits of exercise.

As perceived by the respondents, it shows that they often develop good relationship with others as it got the weighted mean of 3.17 in rank 1 as perceived by the adolescents and 3.14 in rank 2 as perceived by adults.

Most of the respondents develops good relationship with others because for them obesity is not a hindrance to have good relationship with others. And this behavior vary from person to person that involves in improving and building close friendships and intimacy, practicing empathy and effective listening, caring for others and for the common good, and lastly for allowing others to care for them. Followed by them also often believe that they can do better things which got the weighted mean of 3.16 in rank 2 for adolescents and 2.95 in rank 3 for adults.

This only shows that obesity is not a hindrance in making themselves good at anything. They have a positive view of their situation and a good defense mechanism.

Since they will not be in an advantage regarding physical aspect, then they can be good among other things and that is a good attitude. They often focus on their own responsibilities and goals which got the weighted mean of 3.00 in rank 3 for adolescents and 3.15 in rank 1 for adults. As for adolescents, this is a positive outlook in life and nurturing life ultimately leads to positive emotional and intellectual health, that is a sense of purpose or direction and awareness which is very important.

Among the low value items include experiencing that negative thinking or being pessimistic which got the weighted mean of 2.01. While the adults perceived that they sometimes experience a decreased self-esteem which got the weighted mean of 2.02.

Obesity has been linked to depression for many years and depression is a form of negative thinking. Moreover, unsatisfied with one's self and feeling tired are some of the factors that may cause the feeling of depression and anxiety to a person who is obese. Many people judged an obese person as lazy and lacking in self care. Discrimination causes an obese person to get more depressed which can result to other psychological problems.

Adolescents sometime get angry for no reason which got the weighted mean of 1.99 in rank 14 while adults perceived that they sometimes experience that they are the type of person who is a negative thinker/pessimist which got the weighted mean of 1.78 in rank 14. Due to emotional distress, a person tend to eat more when they are feeling angry, sad and bored. Difficulty in weight management is associated with emotional and psychological issues. The least among their experience is that both groups of respondents sometimes being teased by their friends with weighted mean of 1.98 for adolescents and 1.66 for adults. Being overweight and bullied may share a common underlying cause. The reason for bullying are they are imitating other people's behavior and sometimes kids can imitate adults.

As observed by Harwood [19] obesity causes psychological and social repercussions where many people who were characterized as obese were lectured by their relatives and were given negative remarks by strangers. In addition, it is believed that obesity is generally caused by lack of self-disciplines and moral weakness.

**Table 3**  
Perceived Effects of Obesity to Psychological Health  
N=150;  $\alpha=0.05$

	Physical			Psychological		
	r	p-value	VI	r	p-value	VI
Diet	0.129	0.311	NS	-0.097	0.545	NS
Activity	0.1317**	0.004	HS	0.236*	0.034	S
Sleep	0.139	0.215	NS	0.377**	0.001	HS
Vices	0.217	0.052	NS	0.228*	0.041	S
Exercise	0.484**	0.00	HS	0.210	0.061	NS

\*\*Correlation is significant at the 0.01 level (2-tailed test)

\*Correlation is significant at the 0.05 level (2-tailed test)

Table 3 indicates the relationship between the respondents' lifestyle and effects of obesity. At 0.01 level of significance, respondent's lifestyle on activity, exercise and sleep are highly significantly related to physical with Pearson r values of 0.317 and 0.484, respectively and psychological effects with Pearson r and p-values of 0.377 and 0.001. While activity and the vices are significantly related to psychological with r values of 0.236 and 0.228, respectively at 0.05 level but another lifestyle are not significantly related.

Activity and exercise lifestyle are highly significant to the physical effects of obesity to an individual. If the person does not have a highly active and does not exercise properly, a person is highly predisposed to obesity. On the other hand, sleep lifestyles is highly significant to the psychological effects of obesity to a person. If a person has 8-10 hours of sleep, he/she develops more self-esteem.

McVay [15] explicated that the rate of obesity and overweight among adults and especially the young ones can result to serious physical, psychological and emotional issues that can be destructive for their overall development. Thus, educating and warning the public about these problems can reduce the serious effects of the epidemics and lessen the future consequences and result of this issue.

**Table 4**  
Comparison Between Respondents' Lifestyles and Effects of Obesity in terms of Physical Effect  
N=150;  $\alpha=0.05$

	Physical			Psychological		
	t	p-value	VI	t	p-value	VI
Diet	7.356	0.000	HS	8.998	0.00	HS
Activity	4.870	0.000	HS	3.055	0.000	HS
Sleep	1.651	0.103	NS	1.245	0.217	NS
Vices	-6.372	0.000	HS	0.227	0.041	S
Exercise	0.326	0.000	HS	0.209	0.006	HS

Table 4 shows the comparison between adolescents and adult responses on their lifestyle practices and its effect to physical. Both adolescents

and adult have highly significant difference on diet with t-values of 7.356 and 8.998; activity (t=4.870 and t=3.055); exercise (t=0.326 and t=0.209); and vices (t=-6.372 and t=0.227). Only lifestyle on sleep is not significantly different with t-values of both adolescents and adults of 1.651 and 1.245, respectively.

Diet, activity, vices and exercise lifestyles are highly significant to the physical effects that are manifested by obese adolescent respondents. If one of the foresaid lifestyles is improper, it increases their risk of developing obesity as well as the physical effects. On the other hand, diet, activity and exercise lifestyles are highly significant to the development of physical symptoms by an obese adult. These lifestyles contribute to the risk of developing obesity. In this research study, it was seen that sleep pattern does not contribute that much to the development of physical effects of obesity.

In connection with this, a study entitled “Impact of Lifestyle on Health” by Farhud [20], stated that lifestyle is the way a person live it is the day-to-day behaviors, functions and activities of an individual in jobs, activities, fun and diet. Furthermore, it was also tackled that lifestyle is an important factor that determines the health status. Million of people follow an unhealthy lifestyle which the consequences were illness, disability and even death. Today negative changes in the way of living like unhealthy diet, smoking, alcohol and drug abuse were the dominant form of lifestyle. Those changes affect the person mentally and physically.

**Table 5.2**  
**Comparison Between Respondents’ Lifestyles and Effects of Obesity in terms of Psychological Effect**  
 N=150;  $\alpha=0.05$

	Physical			Psychological		
	t	p-value	VI	t	p-value	VI
Diet	0.562	0.000	HS	10.419	0.000	HS
Activity	3.002	0.000	HS	4.835	0.000	HS
Sleep	-0.751	0.456	NS	3.611	0.001	HS
Vices	-11.169	0.000	HS	0.224	0.041	S
Exercise	-3.532	0.001	HS	0.201	0.016	S

Table 5 shows the comparison between respondents' lifestyles and psychological effects of obesity. As to psychological effects, lifestyle on diet, activity, vices and exercise have highly significant difference in adolescent respondents with t-values of diet (t=0.562): activity (3.022): vices (-11.169), and exercise (-3.532). On the other hand, adults' lifestyle on diet, activity, and sleep is highly significant to the psychological effects of obesity with t-values of diet (10.419), activity (4.835), and sleep (3.611) respectively.

Diet, activity, vice and exercise lifestyle patterns are highly significant to the risk of developing the psychological effects of obesity to adolescents. It was shown in this study that these lifestyles, if not properly followed, a person will beat risk of developing obesity. Moreover, only diet, activity, and sleep are highly significant to the development of psychological effects of obesity to obese adults. This lifestyle, if it is improper, increases the risk of developing obesity to adults. This means that lifestyle of the respondents can affect their perception about the effects of obesity to them, because there is no specific cause of obesity for each individual and doing unhealthy lifestyle may lead to a higher risk of obesity and physical effect.

**CONCLUSION AND RECOMMENDATION**

Based on the findings that this study has described and correlated the researchers have hereby come up that this lifestyle practices have great impact on health and development of obesity. Environmental factors such as diet, exercise, vices, and less domestic and other work activities are involved in development of obesity. Obesity has effect on physical and psychological health effects which include risk of developing diseases. The lifestyle practices by obese individual are highly significant with the physical and psychological health of an individual. There is significant difference on the physical effect of obesity to both groups of respondents.

Community or barangay health workers must add additional promotional activities to maintain appropriate weight for the residents of their community. They could devise an everyday exercise program which is for obese residents of their community. Local government unit must encourage people to be conscious of their body weight mass. They can make mass campaign and monthly BMI for every individual in their locality. Those people who have BMI of higher than 25 or higher than 30 must be segregated and undergo programs for obesity to attain an appropriate weight for them. Psychological and physical health of the respondents must be monitored by the barangay health worker using a program that can include direct observation from family members to lower the risk for further damage with regards to their obesity.

**REFERENCES**

[1] Mabutias, G S. (2015). Obesity in Young Filipinos Rising, Manila Bulletin.

- [2] Rand, K., Vallis, M., Aston, M., Price, S., Piccinini-Vallis, H., Rehman, L., & Kirk, S. F. (2017). "It is not the diet; it is the mental part we need help with." A multilevel analysis of psychological, emotional, and social well-being in obesity. *International Journal of Qualitative Studies on Health and Well-being*, 12(1), 1306421.
- [3] Polit, D. F., & Beck, C. T. (2010). *Essentials of nursing research: Appraising evidence for nursing practice*. Lippincott Williams & Wilkins.
- [4] Cook, E. A., Lee, Y. M., White, B. D., & Gropper, S. S. (2015). The diet of inmates: an analysis of a 28-day cycle menu used in a large county jail in the state of Georgia. *Journal of Correctional Health Care*, 21(4), 390-399.
- [5] CDC, (2020). Benefits of Physical Activity. Centers for Disease Control and Prevention. Retrieved from: <https://www.cdc.gov/physicalactivity/basics/physical/index.htm>
- [6] Porter Starr, K. N., McDonald, S. R., Weidner, J. A., & Bales, C. W. (2016). Challenges in the management of geriatric obesity in high risk populations. *Nutrients*, 8(5), 262.
- [7] Shaw, H. J. (2019). Lefebvre and the inequity of obesity: Slim chance of food justice for the urban poor. In *The Routledge Handbook of Henri Lefebvre, The City and Urban Society* (pp. 432-440). Routledge.
- [8] Higgs, S., Spetter, M. S., Thomas, J. M., Rotshtein, P., Lee, M., Hallschmid, M., & Dourish, C. T. (2017). Interactions between metabolic, reward and cognitive processes in appetite control: Implications for novel weight management therapies. *Journal of Psychopharmacology*, 31(11), 1460-1474.
- [9] Maher, C. (2015). Sleep and Obesity. *Journal of Medical Surgical Nursing*
- [10] Davis, S. (2015). Live Strong Retrieved from LiveStrong.com. <http://www.livestrong.com/article/69121-alcohol-obesity/>
- [11] Wang, H. (2015). Video Game Playing Effects on Obesity in an Adolescent with Autism
- [12] Tubbits, M. (2015). Socioeconomic Status, Smoking, Alcohol use, Physical Activity, and Dietary Behavior as Determinants of Obesity and Body Mass Index in the United States: Findings from the National Health Interview Survey. *Maternal and Child Health Aids*.
- [13] Oisten, O (2016). Staff nurse perceptions of the contributions of students to clinical agencies Nursing Education Perspectives, 25(6), 297-303
- [14] Bullo, T. (2016). The direct health care costs of obesity in the United States of America. *Journal of Public Health*.
- [15] McVay, R. (2016). Live Strong. Retrieved from [www.livestrong.com/article/363259-psychological-effects-of-teen-obesity/](http://www.livestrong.com/article/363259-psychological-effects-of-teen-obesity/)
- [16] Liangco, D. W. (2015). Obesity. Health and Lifestyle Live Strong. Retrieved from <http://www.livestrong.com/article/353259-psychological-effect-of-teen-obesity/>
- [17] Maya, P (2016) Evaluation of a mentor-arranged clinical practice placement for student nurses. *Collegian*, 9(2), 27-32.
- [18] Luppino, E S. (2015). Overweight, Obesity and Depression: A Systematic Review and Meta-analysis of Longitudinal Studies. *Arch Gen Psychiatry*, 67 (3) 220-229
- [19] Harwood, A. K. (2017). *An ethical analysis of obesity, weight stigma, and public health* (Doctoral dissertation).
- [20] Farhud, D. (2015). Impact of Lifestyle on Health. NCBI. *Iranian Journal of Public Health*.

### COPYRIGHTS

Copyright of this article is retained by the author/s, with first publication rights granted to APJAHS. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4/>).