WEIGHT MANAGEMENT OF OBESITY AMONG STUDENT IN UNIVERSITI MALAYSIA KELANTAN

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LIST OF SYSMBOLS & ABBREVIATIONS

Abbreviations

NHANES	National Health and Nutrition Examination Survey
UMK	Universiti Malaysia Kelantan
CVD	Cardiovascular Disease
PA	Physical Activities
BMI	Body Mass Index
PKU	Pusat Kesihatan Universiti
IJN	Institusi Jantung Negara
FFIQ	Food Frequency Intake Questionnaire
ASVD	Atherosclerotic Cardiovascular Disease
OB	Obstetrics
NCDS	Noncommunicable diseases
IV	Independent Variable
DV	Dependent Variable
BI	Business Intelligent
SPSS	Statistical Package for Social Sciences

ABSTRACT

Nowadays, fatness or known as obesity has been growing for the past few decades in Malaysia among Malaysians. Generally, physically inactive, unhealthy eating habits, genetic factors and socioeconomic conditions are conditions that can cause obesity. This study wants to identify unhealthy lifestyle, environment and control over behavior among students of Universiti Malaysia Kelantan. This is because of the high rate of obesity, changes in individual lifestyle habits and the inverse relationship between the amount of daily physical activity and body weight. This study will be completed as a method to obtain all the information of the respondents by using a survey study with a face-to-face questionnaire. Non-probability sampling technique will be used to conduct this research. The researchers used convenience sampling to perform the analysis to cover a large number of surveys easily and economically. In the survey, the researchers used Pearson's correlation coefficient which calculates the force between two variables, straight or linear.

ABSTRAK

Pada masa ini, kegemukan atau dikenali sebagai obesiti telah berkembang sejak beberapa dekad yang lalu di Malaysia di kalangan rakyat Malaysia. Lazimnya, tabiat pemakanan yang tidak aktif secara fizikal, tidak sihat, faktor genetik dan keadaan sosioekonomi adalah keadaan yang boleh menyebabkan kegemukan. Kajian ini ingin mengenal pasti gaya hidup tidak sihat, persekitaran dan kawalan ke atas tingkah laku di kalangan pelajar Universiti Malaysia Kelantan. Ini kerana kadar obesiti yang tinggi, perubahan tabiat gaya hidup individu dan hubungan yang berlawanan antara jumlah aktiviti fizikal harian dan berat badan. Kajian ini akan diselesaikan sebagai kaedah untuk mendapatkan semua maklumat responden dengan menggunakan kajian tinjauan dengan soal selidik yang bersemuka. Teknik persampelan bukan kebarangkalian akan digunakan untuk melakukan penyelidikan ini. Para penyelidik menggunakan persampelan yang mudah untuk melaksanakan analisis untuk merangkumi sebilangan besar tinjauan dengan mudah dan menjimatkan. Dalam tinjauan itu, para penyelidik menggunakan pekali korelasi Pearson yang mengira daya antara dua pemboleh ubah, lurus atau linear.

CHAPTER 1

BACKGROUND OF STUDY

1.1 INTRODUCTION

The inappropriate or excessive fat buildup that puts one's health in jeopardy is a component of the definitions of overweight and obesity. The inappropriate or excessive fat buildup that puts one's health in jeopardy is a component of the criteria for overweight and obesity. According to estimates of the burden of illness, the problem has a crisis point; in 2017, 3.5 million persons worldwide passed away if they are overweight or obese. Both in adults as well as kids, overweight and obesity are becoming increasingly prevalent. from 1975 as long as 2016, the prevalence of overweight or obesity between children and teenagers internationally aged 5 to 19 exceeded twofold, rising from 4% to 18%. Every nation suffers from the twin impact of malnutrition, except the exception of sub-Saharan African countries, where the proportion of overweight and underweight people is higher. Formerly considered to be problems solely affecting high-income countries, overweight and obesity have lately been becoming increasingly prevalent especially countries with low or middle incomes, especially in metropolitan areas. In nations with developing economies, whose growth rates have outpaced those of more nations with advanced economies by more

than 30%, the majority of overweight or obese children have been identified (World Health Organisation, 2022).

Obesity has been one of the issues that keeps growing concern in Malaysia. 17.4% of respondents report eating fast food at least once a week. But the majority of them claimed to eat fast food at least once a month. Moreover, it was shown that younger age groups, Malay people, and childless people were more significantly likely to consume fast food weekly. Compared to other ethnic groups, Malay people eat fast food more frequently. Most of the participants were overweight. Only 13.8% of obese people said they ate fast food weekly, and only 50.8% said they did so monthly. There is little correlation between fast food consumption frequency and obesity. Fast food eating on a regular basis is really concerning. Increased usage is significantly influenced by accessibility (Abdullah et al., 2017).

Besides, findings by Li et al., (2017), 15.8% of men and 7.5% of women between the ages of 15 and 24 were overweight or obese. With advancing age in both sexes, there was a discernible rise in the incidence of overweight, obesity, and abdominal obesity. Males' obesity prevalence peaked between the ages of 45 and 54, whereas female obesity prevalence peaked between the ages of 55 and 64. Men were more likely than females under the age of 55 to be overweight, obese, or have abdominal obesity, whereas females over the age of 55 were more likely than males to have these conditions.

Other findings showed that It is important to prevent obesity and all students should strengthen positive behavioral habits, increase awareness, and promote workable prevention methods. For preventing overweight and obesity is to raise public awareness (Hooper et al., 2017). Strong school-based policies, successful curricula, and knowledgeable mentors in

spreading healthy eating and physical activity programmes in schools. Similar significance was noted in recent studies, which claimed that school-based intervention strategies led to behavioral change in terms of an increase in dietary intake of nutritious foods and a decrease in consumption of unhealthy foods among the younger generation (Tong et al., 2022).

Around the world, being overweight or obese contributed to the deaths of 3.5 million people. Both in adults and children, overweight and obesity are becoming increasingly prevalent. Internationally, the prevalence of overweight or obesity among children and teenagers aged 5 to 19 has more than doubled between 1975 and 2016, increasing from 4% to 18%. In the university students' context, the percentage of overweight but also obesity among 22 countries with low or middle incomes indicated a 22% university admission rate (24.7% of men and 19.3% of women). This demonstrates how obesity is a widespread problem among university students worldwide, especially in Malaysia. According to (3), there were 21.7% and 16.8%, respectively, more overweight and obese university students in Malaysia. The psychological strain of studying and meeting its criteria causes pupils to invest more time and effort in doing so. According to studies, psychological stress is one of the factors that affects weight growth through a variety of systems, including bodily reactions to such stress that result in a spike in cortisol. Stress also affects behaviour, which results in a sedentary lifestyle and an increase in food consumption mood eating disorder.

1.2 BACKGROUND OF STUDY

The frequency and impact of obesity on societies across the world are rising. Changes in daily lifestyle that impact energy intake and usage can aid in the management of obesity. There is substantial evidence that regular exercise aids obese individuals in shedding pounds, burning fat, sustaining weight reduction, and enhancing metabolism (Petridou et al., 2019).

According to Anderson et al., (2019) the rates of obesity among children aged 2 to 19 in United States from 1978 to 2016 is shown, along with standard errors, Employing information from the NHANES (National Health and Nutrition Examination Survey) study. The findings are also shown visually, with each dot denoting the average prevalence of obesity in a specific survey wave, the solid line denoting temporal trends, and the dotted lines enclosing the data denoting standard errors. The frequency of data collection fluctuated with time; from the 1970s through the 1990s, data were obtained roughly every decade. Beginning in 2002, the survey was conducted constantly, allowing for the assessment of obesity every two years. 5 Over this time, the prevalence of obesity more than quadrupled, rising from 5% in 1978 to 18.5% in 2016.

Strong cultural norms and ideas have influenced students' misconceptions about overweight and obesity, and the knowledge-behavior gap is now widely acknowledged as the primary cause of teenagers' inability to successfully modify their lifestyles. Adolescence is a time when cultural conventions and ideas are particularly evident in how children are raised. Seven students (n = 7/32) indicated local massage and a hazy comprehension of infant feeding techniques. Parents maintain the tradition of local massage throughout their children's formative years, particularly with girls, since large is considered attractive in the

majority of Pacific Rim nations. Even the quantity of food given to toddlers is well over the recommended daily intake. Obesity and being overweight are the results of eating and receiving massages (Tong et al., 2022).

1.3 PROBLEM STATEMENT

This research with the highest prevalent of obesity in Malaysia, the researcher wishes to look at how students at Universiti Malaysia Kelantan (UMK) may manage their weight through exercise. According to earlier research, the prevalence of obesity ranged between 15.1% (NHMS 2011) and 17.7% (NHMS 2015) (Mohamad Nor, et al.,2018).

Most Asian nations have a high proportion of overweight people. During the past few decades, obesity has multiplied greatly and the extent differs between nations. South Western Pacific and East Asia are now dealing with a pandemic of obesity-related illnesses, including diabetes Cardiovascular Disease (CVD), too. India has the most individuals with China being second in the world for diabetes prevalence. There is no comprehensive national information on the rate of obesity in any Asian country. Its prevalence varies significantly. Asia's nations and areas are in a range of developmental phases. Others, like Vietnam and Indonesia, are still in the early phases of socioeconomic and lifestyle development, while some nations, like the nation of Japan, Singapore, Malaysia, and Hong Kong, among others, are at a more advanced stage of growth. Obesity and malnutrition coexist in many developing countries, including South Asia and the Asia-Pacific region, mostly because of the significant socioeconomic divide. The Republic of the Philippines is an example of an Asian country that experiences malnutrition and a lack of micronutrients. Less than 1% of preschool and school-age children are overweight, compared to more than 30% who are underweight. Adults are underweight 13.2% of the time and overweight 20.2% of the time (Ramachandran & Snehalatha, 2010).

Studies on the relationship between vigorous physical activity and adolescent obesity and overweight in Malaysia, according to Chan et al. (2017). According to the study's findings, men had a greater frequency of rising physical activity (PA) than women for both the normal weight and overweight/obese Body Mass Index (BMI) groups (p 0.001), even though women had a significantly higher percentage of low and moderate physical activity (PA) than men (p 0.001). In terms of BMI status, Men engaged in high levels of physical activity (PA) on average twice as often as women. When compared to the males of normal weight, The prevalence of high physical activity (PA) were considerably lower in the overweight or obese group than in the control group (p 0.001). When compared to women who were of normal weight, women who were overweight or obese reported somewhat higher amounts of moderate and strenuous physical activity (p = 0.021).

In addition to that, the study conducted by Abdullah et al., (2016) highlights the critical role that mothers play in shaping their children's dietary habits from an early age. With a total variation of 2% in comparison to their Chinese classmates, only snacks are substantially connected with the regionally based dietary patterns among Malay teens, which is an additional noteworthy observation. These eating habits among Malay individuals are not related to other dietary or lifestyle variables. This outcome is in line with the notion that regional cuisine customs are mostly derived from Malay traditions. It shows that behavior can also be the main role in defining food choices. More research is needed to manage the causes of obesity in Malaysia to reduce the highest obesity rate among Malaysians.

1.4 RESEARCH OBJECTIVES

The research objectives of this study are:

1.4.1. To investigate the relationship between unhealthy lifestyle and obesity of students in Universiti Malaysia Kelantan (UMK).

1.4.2. To investigate the relationship between environment factors and obesity of students in Universiti Malaysia Kelantan (UMK).

1.4.3. To investigate the relationship between the control over behavior and obesity students in Universiti Malaysia Kelantan (UMK).

1.5 RESEARCH QUESTIONS

In a simple term, this study will be conducted to identify factors that influence exercise in weight management of obesity in Student of Universiti Malaysia Kelantan. This following question are therefore mentioned in this study:

1.5.1 Ho 1: What is the relationship between unhealthy lifestyle factors that affect exercise in weight management of obesity among students of Universiti Malaysia Kelantan (UMK)?

1.5.2 Ho 2: What is the relationship between environment factors that influence exercise in weight management of obesity among students in Universiti Malaysia Kelantan (UMK)?

1.5.3 Ho 3: What is control over behavior factors that affect exercise in weight management of obesity among students in Universiti Malaysia Kelantan (UMK)?

1.6 SIGNIFICANT OF STUDY

After this study is finished, it will aid in the advancement of knowledge regarding the role of exercise in the treatment of obesity in students at Universiti Malaysia Kelantan (UMK). The researchers are trying to find out whether unhealthy lifestyle, environmental factors and control over behavior can be influenced by obesity. This study provides knowledge and awareness to the community to take care of body weight so that health is more guaranteed.

Next, this study is made available to students at all institutions so they may conduct a detailed analysis of obesity weight management and learn how to regulate their behavior while consuming foods that might contribute to obesity. The advantages of this study might encourage obese persons to maintain a healthy diet and weight. Improvements in risk variables that can be brought about by nutrition, exercise, and behavior management can be included.

This research could be used by Pusat Kesihatan Universiti (PKU). This is because they can make it a guideline to get sort of data about students who are in obesity class. By data and targeted students, Pusat Kesihatan Universiti (PKU) can create a medical check up event to be aware of obesity in students. This event can create health awareness among students and staff of Universiti Malaysia Kelantan (UMK). Lecture could be an important role to play in attracting more students and becoming a more healthy person. This could be one of steps to create a healthy community in Malaysia.

Next, the guidance and counseling of the university could use this research as an issue to create one healthy program in university. This is because the program can attract

students to be aware of their health status and can create a healthy community in future. This program could make students sensitive and aware of the situation where all the unhealthy activity could affect their study and lifestyle. The guidance and counseling play the role of advising students to keep healthy.

In addition, the Institut Jantung Negara (IJN) can play the role of guiding the community by using this research to create an event related to obesity. This data from the research could be used to find the fact that could affect the human body. Programs that involve the community can give health warnings about obesity that could affect the human body. This way can create more health to the community by providing the event and advice to the community.

Lastly, after the big involvement of the Institut Jantung Negara (IJN), the Ministry Youth and Sport can use this research as guidelines to find the way to create a healthy community. With all the data and statistics of the population of people who are overweight and obese, they can help to come up with a great event. This is because they can't collaborate with the Ministry of Health to create an event to provide community awareness to control the rate of obesity in Malaysia. By this way, Malaysians will keep in mind the healthy advice community. This way will create the healthy people of Malaysia.

1.7 DEFINITION OF TERMS

This is an important section in the study where the key or crucial concepts in the study are specified. To prevent reader confusion and misunderstanding, the definitions of all internal research words will be provided in full. The following are how the study defines the daily diet, individual factor, social culture factor, and environment factor:

1.7.1 OBESITY

Obesity is a metabolic condition that is influenced by lifestyle choices including physical activity, dietary choices, and genetics. It has recently grown significantly and at an alarming rate on a global scale. Both nutritional quality, which influences the energy balance through intricate processes, and an item of imbalanced energy expenditure, which serves as the primary cause of weight gain, are connected to the worldwide problem of obesity (Lee and Wan Muda, 2019). It was feasible to identify eating mistakes, which mostly involved inconsistent eating, not eating enough meals throughout the day, especially skipping breakfast. Overweight and obese students experienced it more regularly than students of normal weight (Zalewska & Maciorkowska, 2017). Obese students who have irregular sleep schedules and inefficient sleep patterns are widespread. While students with average weight got a good night's sleep (O' Shea et al., 2018). Operationally, obesity among students

in Universiti Malaysia Kelantan (UMK) can be influenced by unhealthy lifestyle, environments, and the control over behavior.

1.7.2 CONTROL OVER BEHAVIOURAL

While real behavioral control is supposed to reduce the effects of attitude and perceived norms on purpose, behavioral control is regarded to be connected to the impact of purpose on conduct. In other words, it is said that a good manner and a defending the subjective norm cause in individuals good behavioral creating purpose to the level that they feel they are feasible of carrying out the desired things. To the extent that they possess influence over how the conduct is carried out, the persons are expected as they can carry out their aims. While knowledge about actual behavioral influence is scarce, the behavior intents are used as a substitute in predicting behavior on the assumption that perceived control roughly corresponds to actual control (La Barbera et al., 2020). Operationally, control over behavioral components is measured by a Food Frequency Intake Questionnaire (FFIQ) among students of Universiti Malaysia Kelantan (UMK).

1.7.3 UNHEALTHY LIFESTYLE

Unhealthy lifestyle can lead to other risks of illness like obesity (Hassan, 2018). Next, unhealthy lifestyle choices made by school-age teenagers, such as interactive screen usage, poor sleep hygiene, and a lack of physical exercise (Gan et al., 2019). A risk factor for a disease that is adjustable and avoidable might include unhealthy food in addition to factors like physical inactivity, cigarette use, and other dangerous materials (Rea et al., 2018). The occurrence of unhealthy lifestyle variables is probably coincidental. Obesity became more of a concern in wealthy nations like Switzerland as a result of its prevalence. While smoking prevalence in the overall population dropped during the previous few decades, it has climbed. It is still unclear, though, if this decline took place. Additionally, it affects those fat people who are most at danger or, more commonly, healthy and wellbeing individuals (Lohse et al, 2016). Operationally, unhealthy lifestyle components are measured by a Food Frequency Intake Questionnaire (FFIQ) among students at Universiti Malaysia Kelantan (UMK).

1.7.4 ENVIRONMENT

The basic life support system is provided by the environment, which includes living organisms, physical surroundings, and environmental parameters. Individuals' weight increase may be impacted by regional environmental factors. Students from other countries provide a distinctive perspective on how environmental variables contribute to obesity. In comparison to students who live in locations with lower obesity prevalence, students in areas with higher obesity prevalence exhibit a physiologically meaningful and statistically substantially bigger gain in weight (Katare et al., 2018). Operationally, the environment factor component is measured by a Food Frequency Intake Questionnaire (FFIQ) among students Universiti Malaysia Kelantan (UMK).

1.8 SUMMARY

As a result, the following inquiries are listed in this research: What are unhealthy lifestyle factors that affect exercise in weight management of obesity at Universiti Malaysia Kelantan among students? What are the surroundings that affect exercise for controlling obesity among students at Universiti Malaysia Kelantan, and what follows? Last issue is what is control over behavior factors that affect exercise in weight management of obesity among students in Universiti Malaysia Kelantan? From this study, exercise on obesity control among Malaysians will be more understanding.

In addition, the investigation will explore the weight management of obesity among Malaysians due to the highest obesity prevalence in Malaysia in this report. Obesity is essentially a disease of the subcortical brain areas, and it is recognized by the pathognomonic signs of increased adiposity and excessive appetite, and poor satiation after meals. When subcortical brain networks are disrupted by the tumor itself or as a result of its treatment, obesity may quickly start to develop. A prominent clinical illustration of this is the weight gain that comes along with the development of craniopharyngiomas in youngsters (Martin et al., 2022). Obesity is the accumulation of bodily weight gain as well asn worldwide pandemic which has potentially dangerous side effects including increased risk for negative outcomes and decreased life expectancy (Chwartz et al., 2017). In both adolescents and adults, obesity has been associated to an increased likelihood of diseases including dyslipidemia, insulin resistance, high blood pressure or hypertension, and atherosclerosis (ASVD). A known particular danger factor for cardiovascular disease (CVD) is obesity.

Lastly, Numerous research has examined the rates of overweight and obesity in Malaysia. However, the results have been varied, and no meta-analysis has been done to assess the results of these investigations. In Malaysia, the percentages of this problem were 25.0% and 13.1%, it showed that greater percentages of obesity in women than men. More than 1.9 billion persons worldwide experience overweight or obesity (Tzyy et al., 2018).

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Waist circumference and obesity in adults are influenced by physical activity, purposeful behaviour, and food intake. Frequency of abdominal obesity among male and females was absolutely correlated to watching television and videos. Only among males did the prevalence remain substantial after accounting for physical activity. There has to be more research on how sedentary behaviour, food consumption, and physical activity varies across the sexes in relation to obesity (Kim et al., 2019).

Understanding chronic diseases can help prevent the development of obesity. There are many opportunities for training that can enhance understanding of the problem of obesity, teamwork, and caregiving for people with chronic, long-term conditions like obesity. The study discovered that the enrolling programme includes general practice. Their arguments against overweight and obese people and their associated disagreements grew (Blüher et al., 20I9). Rates of obesity in the population and showed that communities with higher obesity

prevalence were more likely to have high illness and virus related hospitalization rates (Moser et al., 2018).

Measurements of height and weight are made, while the body mass index will be applied to assess obesity. The percentages of underweight, overweight, and obese pupils were correspondingly 20.5, 14.7, and 1.7%. About 85.5 percent of kids reported eating breakfast each day. On average, 45 and 21.8% of students consume fruit and vegetables even more than three days each week.Processed food was consumed significantly more frequently by women (44.2%) than by men (27.3%) for even more than two days per week (p 0.01). Each day, many women (42.9%) than men (30.6%) watched television (p 0.039). Males (33.9%) had a higher likelihood of sleeping for less than 7 hours per day than women (23%; p = 0.016) (Musaiger et al., 2016).

Poor nutrition, insufficient exercise, and a greater level of sedentary behavior are all significant risk causes for obesity. Besides, to manage this probability to happen, it is important to comprehend how food and exercise contribute to obesity. In a meta-study that shows how obesity and recreational physical activity are adversely connected, data from the National Health and Nutrition Examination Survey (NHANES) has been utilised (Füzéki et al., 2017). Mostly the research pertaining to students lacks comparison analyses for various educational levels as well as model specifications based on student lifestyles. For instance, Some studies used gender as the only factor to compare the rate of obesity and overweight between male and female university students (Jiang et al., 2018).

Obesity is a complicated disease brought on by a number of physiological, environmental, behavioral, and sociopolitical elements, all of which contribute to a favorable

energy balance (Malik & Hu, 2022). Although a persistent low-grade inflammatory state is linked to obesity, it is unclear if this predisposes obese people to a possibly more severe clinical course (Kwok et al., 2020). The obesity pandemic is brought on by having lived in a food environment where it is difficult to resist consuming excessive amounts of calories. meals that are highly processed and high in sodium, glucose, and trans fats only temporarily make you feel full. It is produced and widely promoted by the international food industry (Tan, He, & MacGregor, 2020).

2.2 OBESITY

One in five young people suffer from obesity, a complex chronic condition. Numerous pediatric treatment interventions concentrate on attempts to modify behaviour or lead healthier lifestyles, but they are constrained by their intensity and rendered ineffective by their inability to address the social circumstances of obesity. The study's main goal was to examine the existing treatment methods for obese patients by pediatric primary care providers (Johnson et al., 2022). The existing of obesity has significantly grown since the last several decades ago, making it one of the most dangerous health burdens on the planet. One possibility is that obesity is a heritable characteristic. The brain-adipose axis and hypothalamic circuits have been linked to the control of appetite, hunger, and satiety, according to studies of rare instances of monogenic obesity (Rohde et al., 2019).

The cause of the global obesity (OB) epidemic is a combination of improper nutrition and sedentary lifestyles, as well as other the environment, related to health, and lifestyle changes (Wang, 2020). Obesity, a complex condition, is caused when dietary affects energy expenditure on a sustained healthy person. An rise in body fat and weight gain are caused by the transformation of additional energy into lipids, which are afterwards stored in expanding quantities of fatty tissue (Chooi et al., 2019).

Obesity that is chronic or non-communicable is now largely acknowledged as a disease. Recent research is shedding new light on the pathophysiology of unwelcome weight gain, the mechanisms by which obesity persists in the face of reasonable attempts to alter lifestyle choices, and the detrimental impact of both central and widespread obesity on health

(Purnell, 2018). Males in the lowest income group (31.5%) and highest income bracket (32.6%) had the same frequency of obesity, whereas obesity rates of women dropped with rising income (from 45.2% to 29.7%) (Hales et al., 2017).

2.2.1 UNHEALTHY LIFESTYLE

It's completely obvious that university students live unhealthy lifestyles. Poor diet, excessive drinking, smoking, and insufficient sleep are all contributors to this. When students can go out, many of them do so frequently and as a result are frequently intoxicated and worn out. It eventually causes illnesses and prevents pupils from attending lectures since they are too tired. Students usually turn to energy drinks as a quick fix for exhaustion, but these drinks are related to liver damage, high blood pressure, and an accelerated heart rate due to their high sugar content. Students' health might also be impacted by a diet that is deficient in nutrients and other necessary components. Examples of popular food choices consumed by the average student include frozen food, fast food, and ready meals. Initially, this kind of meal could appear like the greatest option because it is simple and quick to cook, but in the long run, it has no nutritional value for teenagers and is commonly heavy in salt and saturated fat. Fresh fruits and vegetables, high protein, complex carbs, and healthy fats should all be a part of a balanced diet. It should be hard for some students to incorporate this

into their daily lives, but it is crucial because many food groups provide vital vitamins and minerals, some of which help strengthen the immune system and reduce weariness. Therefore, given their hectic schedules, many students' health may ultimately suffer from a diet that lacks diversity and nutritious value, which is not ideal. (Griffin, 2016).

Specific cultural, motivational, and spatial cognition process patterns are determined by personality. It covers actions, mental processes, emotional reactions, and drive requirements (Young et al., 2018). While many have identified distinct differences in characteristics between obese and lean individuals as well as within obese individuals, some researchers have previously focused on personality aspects in obesity with various levels of success. This is also supported by surveys that were conducted among patients and physicians. In general, less than half of obese people get advice from doctors on how to lose weight. The low rates of obesity therapy are thought to be caused by a variety of factors, including a lack of counseling training, competing obligations, and low confidence in one's ability to treat and change patient behavior.

In connection with this, smoking is another bad habit that has an impact on kids. Students who only smoke when they go out on dates or socialize are known as "social smokers." The hazards of smoking do not go away even if you just smoke sometimes and "socially." Each cigarette raises the chance of developing lung, heart, and cancer problems, which together take up to six million lives annually. Even if they are only doing it "socially," Students must stop smoking since it is one of the biggest causes of mortality in the country. This is a likely scenario given that several countries throughout the world are supporting tobacco bans and beginning to oppose multinational cigarette companies (Chan, 2016).

In early human groups of hunter-gatherers, obesity was relatively uncommon due to their busy lifestyles that included physical exertion as well as periodically unexpected diets and food shortages. Obesity and several non-communicable illnesses are influenced by poor food choices and insufficient exercise (NCDs). In a review, the evidence was divided into numerous categories, including persuasive, probable, possible, and insufficient, regarding the role that meals, nutrient, and physical activity play in the avoidance of obesity. Unhealthy lifestyles and consuming large amounts of foods that are high in energy but poor in micronutrients were attempting to convince health risks for obesity, whereas consumption of dietary fiber free of starch polysaccharides and physical activity fell into the convincing category and were strongly defensive against obesity. In addition, aggressive marketing tactics employed by fast food restaurants and producers of items high in calories were recognized as potential risk factors for obesity (Lee and Wan Muda, 2019).

2.2.2 Environment

Social media is an environment that could have an impact on obesity. These days, social media, television shows, and smartphone applications heavily influence our eating habits and decision-making processes. Among the evidence, taking pictures of food for Instagram before eating, standing in long queues to buy the hot food or drink online, even filming their dinner live. This is usually driven by the desire to get "likes" and comments, which is a sense of enjoyment from the virtual world's attention. Sometimes trying new foods with friends is not wrong, but we need to be careful to what extent our food intake is influenced by social media and how not to be deceived (Yap, 2019). Unrestrained urges might result in imbalanced meals, overeating, and consuming excessive amounts of sugar, salt, oil, or fat. Negative effects include obesity and non-communicable illnesses as a result of this. Diabetes, heart disease, and cancer are a few examples.

Instead of biological factors, environmental variables including overeating, drinking sweetened beverages, being sedentary, and watching television are primarily to blame for the global rise in obesity. We frequently get exposed to advertising and images of enticing, inexpensive foods that are high in calories or fat as as a consequence of social globalisation. Our physical demands have evolved as well, which has led to an imbalance between our energy intake and utilization. The way we live now pushes us to eat more and exercise less, which creates an environment that encourages obesity. For instance, several studies found a connection between watching television as a child or adult and obesity. This contradicts the

past totally in terms of development, when individuals were more active and their food intake was limited (Albuquerque et al., 2017).

Next, the pressure of environment also will faced by students is mainly in terms of time and no breaks enough to cause them to choose to reduce stress by having fun and practicing unhealthy eating. The students will be extremely busy especially during exam week, because of that they will not maintain a good eating schedule, instead they will replace it with smoking and fast food. Some students do not eat during the day because they are busy with their assignments and they will fill the empty stomach with a late dinner, which is less than two hours before bedtime. In addition, there are also among students, especially male students who like to hang out in stalls or restaurants late at night. This, not only causes a person to not take good care of their diet, but also causes a person to not have enough sleep which is also a contributing factor to this obesity problem. However, students now like to eat at fast food restaurants because it is easier and saves time due to the existence of food delivery services. Besides, the students are also seen as teenagers who do not like vegetables and fruits, even Malaysian cuisine is also greasy and milky. Then, because of this the cases of obesity among students increase dramatically from year to year. (Illias, 2018)

2.2.3 Behaviour Control

The core components of weight-control therapy for overweight and obese patients are behavioral modifications with an emphasis on dietary and physical activity improvements. At least temporarily, behavioral changes can aid in weight loss and improve their health. This list of behavioural treatments for managing student obesity is provided. A structured approach to changing lifestyle behaviours that may affect behaviour includes disciplines like exercise, food, and others. Goal-setting, stimulus control, stress factor legislation, ego, reorganisation of thought, stress management, figuring out solutions, and support systems are elements of behaviour modification. More efficient and durable weight management can be accomplished by exercise, dietary modifications, and behavioural therapy. (Olateju et al., 2021). According to Radzi (2019), tension-producing situations not just the lack of social confidence and poor behavioral control among university students, but also elements like inadequate or disturbed sleep that can lead to obesity.

However, evaluating how sleep habits relate to weight and other weight-related lifestyle choices in a population of teenagers with overweight and obesity who are seeking treatment may have relevant therapy implications. Weight-loss programmes with many components are evidence-based therapies for obesity. By focusing on diet and exercise through behaviour modification techniques, they attempt to lose weight. Include interventions to enhance sleep hygiene, such as regular and early bedtimes, if sleep duration

and timing are related to the severity of obesity as well as weight-associated behaviours. The outcomes of a multi-component intervention might be improved (Hayes et al.)

2.3 RESEARCH HYPOTHESIS

2.3.1 Ho 1 : There is a significant relationship between unhealthy lifestyle and obesity among student Universiti Malaysia Kelantan

2.3.2 Ho 2 : There is a significant relationship between environment and obesity among student Universiti Malaysia Kelantan

2.3. Ho 3 : There is a significant relationship between control over behaviour and obesity among student Universiti Malaysia Kelantan

The data collection of this purpose study is about how environment, control over factors and unhealthy lifestyle could bring obesity to an issue among students of Universiti Malaysia Kelantan. The data collection is using non probability convenience sampling.

The unhealthy lifestyle is the term where people are not following the guideline of being healthy by government or any sources. The student of student at Universiti Malaysia Kelantan. Just keep to unhealthy ways like eating junk foods, smoking and also less exercise. Unhealthy lifestyle can be measured using a food frequency questionnaire K:10. This questionnaire can be used to find the answer in this research.

The environmental fact that causes obesity is by their surroundings. This is because of the location, curious nature, and also mindset. The strategic business location of a certain

place that can allow people easily access it also can make obesity among students in Universiti Malaysia Kelantan. Next, the curious nature of trying something new also could lead to obesity when trying almost all foods that attract people's appetite. Other than that, the mindset also could be one of the reasons why students in Universiti Malaysia Kelantan are having obesity problems.

Next, the control over behavior is also one of the factors that cause obesity among students in Universiti Malaysia Kelantan. The behavior is more on physical inactivity, unproductive sport and also unhealthy diet. All these reasons could lead to obesity.

2.4 CONCEPTUAL FRAMEWORK

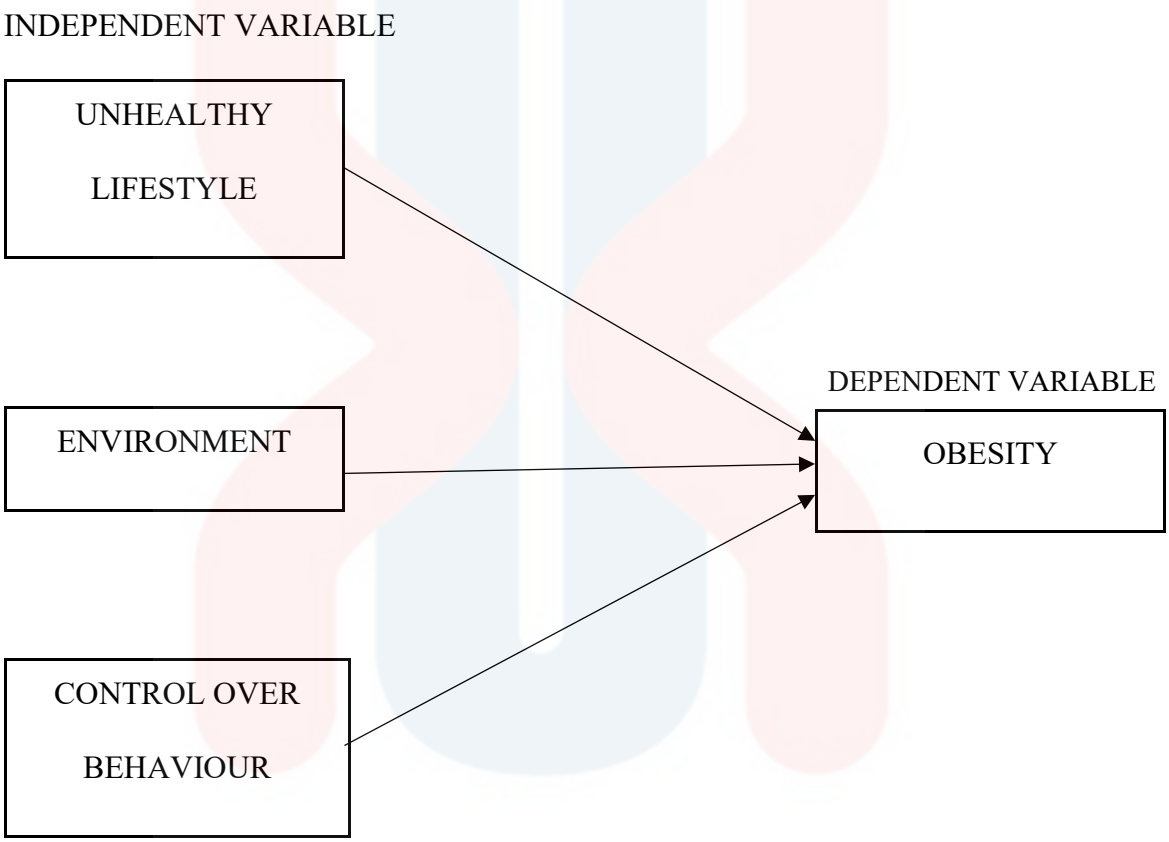

Figure 1.1 : The Conceptual Framework of relationship between the weight management of obesity among Malaysian

Figure 1.1 shows the The research's independent (IV) and dependent (DV) variables. The independent variable (IV) is the weight management that could affect obesity among students at Universiti Malaysia Kelantan meanwhile, the dependent variable (DV) is the obesity among students at Universiti Malaysia Kelantan. In this study, three independent

variables (IVs) were looked at, including control over behaviour, unhealthy lifestyle and environment. This figure shows the relationship between the weight management of obesity among students at Universiti Malaysia Kelantan (UMK).

2.5 SUMMARY

An individual who struggles with body size and weight control is said to have obesity. Obesity can alter a person's lifestyle and attitude toward fitness. Numerous studies have shown that a poor diet and insufficient exercise are the main causes of obesity. According to Jean et al., (2016), A matter that has received a lot of attention in the media and in publications that are relevant to behavioural management regarding how sleep deprivation may contribute to overweight and obesity.

This part of the discussion covered the definition of obesity, the independent variables of environment, unhealthy lifestyle, and control over behavior, the claim and the connection between independent and dependent variables, as well as a conceptual framework. It concluded with a review of the literature on weight management among Malaysians who are obese.

CHAPTER 3

METHODOLOGY

3.0 INTRODUCTION

In this chapter, research instruments, methods and procedures will be used in this study and will be explained in detail. The goal of this research is to find out about an exercise in weight management of obesity among students at Universiti Malaysia Kelantan. The detail of this chapter is represented under the following heading.

I) Introduction

II) Research Design

III) Target Population

IV) Sample size

V) Sampling method

VI) Data collection procedure

VII) Research Instrument

VIII) Data analysis

IX) Pilot Study

X) Summary

3.1 RESEARCH DESIGN

Making sure that the data collected enables the researcher to effectively focus on the study subject is the goal of research design. Therefore, a well-planned research design aids in ensuring that the researcher's methods suit their research objective and that they use the proper data analysis method. However, researchers could start their inquiry before they have thought about the data required to properly address the research question. The researcher should carefully evaluate which methods are most appropriate and useful for answering the issue in each case.

To gather every piece of data required for this study, the descriptive research approach will be used. In this theory-based approach, the researcher's main objective is to identify the study's issue. Thus, the technique using which the researcher is effectively describe the problem statement so that students may better understand the need for this research includes data collection, analysis, and presentation. In addition to acquiring the appropriate information, this study will also use a quantitative research approach. Because they may be easily transformed into numbers, statistics, graphs, and charts, closed-ended questions are frequently employed in quantitative data gaining methodologies. The study of Weight Management of Obesity Among Students in Universiti Malaysia Kelantan, the

researcher also uses the Food Frequency Intake Questionnaire (FFIQ) survey to quickly and easily acquire responses On a Likert scale, the students' responses on the obesity issue fluctuated between strongly disapproving to strongly concurring.

3.2 TARGET POPULATION

The target population is the group of people whom we plan to attribute our test results (Vonk et al., 2017). All the people or things that are being studied together are referred to as a "population." Selecting a portion of the population to research is another definition of sampling. It is necessary to select a percentage of components from a collection of information to evaluate the characteristics, attitudes, and perceptions of a population. The population for this research are students of Universiti Malaysia Kelantan (UMK). Hence, the population of the Students of Universiti Malaysia Kelantan was approximately 11, 965 students from three campuses, Kampus Bachok, Kampus Kota and Kampus Jeli. Based on the sample size Krejcie et al. (1970), 120 students will be chosen from the population of the Universiti Malaysia Kelantan based on data from Pusat Kesihatan Universiti (PKU).

Researchers chose Students of Universiti Malaysia Kelantan (UMK), because they were aware of the importance of managing one's weight and their propensity for obesity as a result of their studies in wellness and health. They were concerned about the student's unhealthy lifestyles. In order to study the environmental factors that contribute to obesity

and to identify the control over behavior among obesity in Students of Universiti Malaysia Kelantan (UMK), researchers have chosen them in the following.

3.3 SAMPLE SIZE

In research literature, the sample size has been widely explored (Rahi, 2017). Selecting the proper sample size for study analysis continues to be a challenge for researchers. Sample size needs to be carefully considered since it has a substantial influence on statistical approaches. the number of samples obtained from a population using a certain analytic technique, such as structural equation modeling. Additionally, it must be properly considered when performing construct validity, causal modeling with factor loadings, covariance structure analysis, and regression analysis, according to authors like Collis and Hussey who have made similar arguments. At an early stage of planning, the scale of the analysis should be taken into account. No official sampling size is ever established in these circumstances. The length of the sample is instead determined by how many people are available to researchers for a specific amount of time. Numerous clinical studies have shown a lack of prognostication or the capability to recognise intervention outcomes with a certain level of clinical relevance. This is because they did not properly consider the sample size criterion (Friedma et al., 2015). The sample of this study is the Student of Universiti Malaysia Kelantan.

Sample size data gathered by Krejcie & Morgan (1970) show that, 120 respondents will be chosen from students at Universiti Malaysia Kelantan (UMK) and the size is 92.

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

Table 3.1 : Sample Size of Known Population

3.4 SAMPLING METHOD

The researchers applied non-probability convenient sampling where everyone in the population has a chance of being picked, to achieve the research objectives on the Weight Management of Obesity among Students in Universiti Malaysia Kelantan. It is mostly in quantitative studies. For instance, non- probability sampling methods to get information from people who were utilizing huge volumes of water to discover the reasons behind their lack of interest in conservation and learn how to implement extension programs that will resonate and change behavior (Chaudhary et al., 2018). The researchers only take 120 respondents to fulfill the surveys.

The researchers use non-probability convenient sampling that include of factor related to Weight Management of Obesity among 120 respondent students in University Malaysia Kelantan from the population of 11 965 students. The researchers prefered to use this non-probability convenient sampling compared to probability samples which utilize mathematical procedures. To ensure that each individual within the community has an equal probability of being selected for the sample (Blizzard et al., 2015). The convenience sampling method is a non-probability sampling strategy used in research. The measures chosen for the sample are those that are easiest for the researcher to obtain. This can be caused by geographic accessibility, accessibility at a certain time, or a willingness to engage in the research.

Researchers in this study use the non-probability convenient sampling technique, in which the samples are taken without assigning a specific possibility to each component of the population. It is unknown how propensity affected the sample's selection. Researchers divided the population into strata depending on key characteristics such as gender, age range, whether they are included in the obesity group or not while studying at the University Malaysia Kelantan.

Following that, depending on the general proportions of the population, the researchers determine the appropriate sample size from each subgroup. Using huge samples in a short amount of time, the researchers then choose a sample from each subgroup. In order to cover a variety of surveys quickly and affordably, the researchers employed convenient sampling, which is possibly the most popular of all sampling techniques, to conduct the analysis. It is necessary to choose any accessible group of respondents that is simple for the researchers to employ since samples must be open to the researchers.

3.5 DATA COLLECTION PROCEDURE

Google Form questionnaires will be printed and handed to responses in the morning. To ensure that everyone will take their time and thoroughly answer all the questions, the timer will allow around 20 minutes per reply. The instruction of design will be conducted to avoid a social popularity bias and will be read to respondents, who will guarantee privacy. In this way, all data collection will be done in less than 20 minutes, as agreed in advance per respondent. The questionnaires will be distributed using the convenient sampling for wellness students in second year by using the hard copy form.

3.6 RESEARCH INSTRUMENT

The technique used to collect data in measuring all of the independent variables essential to our research approach is known as the research instrument. We used others' previous questionnaires as guidelines into our research to make it reliable and functions to be answered by respondents. In our questionnaire are divided into our three section which is well known Part A, Part B and Part C. In Part A comprises questions about demographic details of respondents such as sex, race, religion, age, education level and extra questions which is “Which campus are you?” and “what year are you study?”.

Next, In Part B which is our dependent variable is about obesity. Researchers used the Food Frequency Intake Questionnaire (FFIQ) because it applied the question about obesity and related to our research. These questionnaires are used as a guidelines to measure our dependent variable and there are consist of several times scored on likert scale of “1 = strongly disagree”, “2= disagree”, “3= not at all”, “4 = agree” and “5= strongly agree”.

While in Part C states of our independent variable which is unhealthy lifestyle. The researchers used the Food Frequency Intake Questionnaire (FFIQ) because it has been used by other researchers to measure the unhealthy lifestyle of respondents in aspects of weight management. These questionnaire as a guidelines to measure our first independent variable and there are consist of several times scored on likert scale of “1 = strongly disagree”, “2= disagree”, “3= not at all”, “4 = agree” and “5= strongly agree”. The questionnaire has selected in measure the second of independent variables in part C, which is the environment. This environment lifestyle questionnaire also by Food Frequency Intake Questionnaire

(FFIQ). FFIQ has suitable instrument questionnaire for assessing the quality of environment. In this questionnaire, there are consist of 30 example of food item and respondents can answer the question for instance with using a likert scale of "1 = strongly disagree", "2= disagree", "3= not at all", "4 = agree" and "5= strongly agree". Furthermore, in part C, there contains the third independent variable which is the control over behavior. The questionnaire is taken by the same place as the first and second independent variable (IV) for this part. Most of the questions are related to specific variants to determine the respondents' comprehension of and familiarity with the study topic. All conclusions were evaluated as supporting data for this study. The questionnaire consists of multiple items graded on the likert scale of "1 = strongly disagree", "2= disagree", "3= neutral", "4 = agree" and "5= strongly agree".

3.7 DATA ANALYSIS

Data analysis is a core element of the data analysis and Business Intelligence (BI) and is the method of gaining insights that guide business decisions making. A tool that is used in analyzing the data is a tool for Statistical Package Social Science (SPSS) version 29 programmed operation software. (SPSS) data, including such valid percentage and cumulative percentage, will be processed into statistics. To analyze the data, researchers have chosen easy descriptive analysis. The objective is to achieve a range of respondents correlated with different values of a single variable and to express these numbers in

percentages. This technique is used by researchers because it is about interpreting and analyzing.

3.7.1 DESCRIPTIVE STATISTIC

A descriptive statistical analysis well known as a statistic which summarized the features of data while in use those statisticand the process analysis. Descriptive statistics allow researchers to characterize the data based on the properties. These are three majors of measures such as measure of central tendency, distribution measures and dispersion measures. Therefore, researchers used a measure of central tendency in this study.

3.7.2 PEARSON'S CORRELATION

The Pearson correlation coefficient is a statistical test that evaluates the relationships or correlations among this two variables. It is likewise based on the correlation concept and is regarded as the finest way for figuring out the link between variables of significance. It provides details on the degree of similarity in the encounter and the development of the bond. Pearson correlation could be two categories in positive (+) and negative (-) numbers. The perfect positive correlation

between two values at all if the result is the between -1. Perfect positive correlation is in between two values is u,when indicates 1. When the result shown is 0, this implies that there's no relation among the independent and the dependent variable.

Size of correlation	Interpretation
0.90 to 1.00 (-0.90 to -1.00)	Very high positive / negative correlation
0.70 to 0.90 (-0.70 to -0.50)	High positive / negative correlation
0.50 to 0.70 (-0.50 to -0.70)	Moderate positive / negative correlation
0.30 to 0.50 (-0.30 to -0.50)	Low positive / negative correlation
0.00 to 0.30 (0.00 to 0.30)	Negligible correlation

Table 3.2 : The table shows the interpret of size (strength) of a correlation coefficient

3.8 PILOT STUDY

A pilot test will be conducted to identify any potential mistakes before conducting the actual survey. It gives opportunities for the researchers to discover any errors and prepare a new set questionnaire and improve it before conducting the actual questionnaire. A total of 120 respondents from Student at Universiti Teknologi Mara Machang Cawangan Kelantan (Kampus UiTM Machang) will be asked to answer this questionnaire and the feedback received will be utilized to improve the clearness of the questions. After the survey is gathered, a reliability test will be conducted by using SPSS Version 29. Cronbach's Alpha is a well-known reliability analysis approach for examining a scale's logical reliability.

It is noted that future research at Universiti Malaysia Kelantan will examine the connections between obesity and unhealthy environments, lifestyles, and approaches to managing chronic illnesses among students. This survey the researcher used coefficient of Pearson's correlation. The force connecting each of these straight or linear variables can be determined employing the correlation coefficient (or "y") in that statement. The range of numbers used to calculate the correlation coefficient is +1 to -1. It is regarded as the best technique for determining the connection between essential variables. The outcome of the pilot test was, nevertheless, shown in table 3.3.

Table 3.3: Pilot study report

Variable	No. of items	Cronbach Alpha	Explanation
Obesity	7	0.72	Excellent
Unhealthy Lifestyle	8	0.99	Strong
Environment	8	0.73	Excellent
Control Over Behavior	8	0.72	Excellent

Based on table 1, according to the data, the dependability for the environment is 0.73, the reliability for controlling behavior is 0.72, and the reliability for an unhealthy lifestyle is 0.99. Since samples are almost certainly impacted, the correlation seen could not even be a good approximation of the population correlation coefficient. Therefore, the researcher may distribute the identical questionnaires to more respondents during the next data collection. The questionnaire created for this study can be utilized for additional data gathering as a consequence of this pilot test.

3.9 SUMMARY

This chapter includes explanations of the demographics, sample size, sampling technique, data collection procedure, instrument for research, data analysis, and research methodology utilised for carrying out this study. Researchers may learn how to employ the research design in the thesis from this study, as well as the purpose of each component of the design, including the population, sample size, and sampling technique. data gathering process examination of the research instrument's data. The population consists of 120 students in Universiti Malaysia Kelantan. The administration of the questionnaire and how it relates to this research has been addressed in this chapter. The substance and understanding of each question may be clarified through the researchers. Non- probability sampling methods and easy sampling to perform this analysis in order to conveniently and cost-effectively cover a large number of surveys are used in the research. The researchers expect that all the research elements will be useful for future research after this chapter.

CHAPTER 4

RESULT AND DISCUSSION

4.1 INTRODUCTION

The data and outcomes of the analysis that was done on the information gathered from surveys will be covered in this section. The distribution of 120 sets of surveys to 120 respondents using Google Forms was done with no invalid responses. Utilizing inferential analysis, the questionnaire data was analyzed. The Statistical Package for Social Science (SPSS) software programmed has analyzed the data that were gathered from the survey. A reliability test was utilized to determine the validity of the variables before the real questionnaire was administered to the total of 120 respondents who participated in the pilot test.

4.2 RESULT OF DESCRIPTIVE ANALYSIS

4.2.1 Demographics Characteristics of Respondent

Descriptive analysis was used throughout the study to characterise the standard deviation mean of each statement in the independent and dependent variables. In this part will discuss on the results from the data in Part A which is the respondent population's demographics. The questionnaire was including the Gender, Year of study, Campus, Age, Race, Religion and Education level among student in Universiti Malaysia Kelantan.

Outcomes of respondents' demographic characteristics are shown in table 4.1. The researcher found that the data had a balanced number between female and male. Most of the respondents are from age 22 – 24 years old (72.5%), third year student (53.3%), from Campus Kota (51.70%), Malay race (49.20%), Muslims (48.30%) and Educational level from degree (97.50%).

Table 4.1 : The result of Demographic characteristics by Respondents

Demographic characteristics	Frequency	Percentage (%)
Gender		
Male	60	50.0
Female	60	50.0
Years of study		
Year 1	15	12.5
Year 2	35	29.2
Year 3	64	53.3
Year 4	6	5.0
Campus		

Campus Bachok	38	31.7
Campus Jeli	20	16.7
Campus Kota	62	51.7
Age		
18 – 21 years old	26	21.7
22 – 24 years old	87	72.5
25 and above	7	5.8
Race		
Chinese	34	28.3
Indian	27	22.5
Malay	59	49.2
Religion		
Buddha	25	20.8
Christian	11	9.2
Hindu	26	21.7
Muslim	58	48.3
Education Level		
Degree	117	97.5
STPM/ Diploma	3	2.5

4.2.2. Descriptive Analysis for Obesity.

The table 4.2 was represented the highest mean score is 4.83 it is "Is your physical health affected by obesity" with standard deviation is (0.417) in our

research. Other than that, for the questions “Do you believe exercise will help you lose weight” has 4.58 the lowest mean score with (0.657) at standard deviation.

Table 4.2: Descriptive Analysis for Obesity

Question	Scale					Mean SD
	1	2	3	4	5	
Do you believe your eating habits are the cause of your obesity condition?	0 0	1 0.8%	3 2.5%	32 26.7%	84 70%	4.66 0.572
Is your physical health affected by obesity?	0 0%	0 0%	2 1.7%	16 13.3%	102 85%	4.83 0.417
Have your social life been limited because of obesity?	0 0%	1 0.8%	11 9.2%	23 19.2%	85 70.8%	4.60 0.691
Are you depressed because you are obese?	0 0%	0 0%	2 1.7%	32 26.7%	86 71.7%	4.70 0.495
Do you believe obesity has triggered depression?	0 0%	2 0.8%	6 5%	26 21.7%	87 72.5%	4.66 0.615
Do you believe that you can lose weight?	0 0%	0 0%	14 11.7%	21 17.5%	85 70.8%	4.59 0.692
Do you believe exercise will help you lose weight?	0 0%	0 0%	11 9.2%	29 24.2%	80 66.7%	4.58 0.657
Do you believe that eating too often is	1 0.8%	1 0.8%	3 2.5%	22 18.3%	93 77.5%	4.71 0.640

the cause of obesity?

4.2.3. Descriptive Analysis for Unhealthy Lifestyle.

Based on table 4.3, Questions number 6 " I often eat foods high in sugar" were showed the highest mean score, it is 4.57 with standard deviation is (0.817) in our research. ln addition, for lowest of the mean score, which is "I drink alcohol everyday" which is 3.64 with standard deviation (1.295).

Table 4.3 : Descriptive Analysis for Unhealthy Lifestyle

Question	**Scale**					**Mean SD**
	1	**2**	**3**	**4**	**5**	
I feel fun when I do exercise.	0 0	2 1.7%	27 22.5%	25 20.8%	66 55%	4.29 0.873
I feel tired when I exercise regularly.	1 0.8%	1 0.8%	10 8.3%	30 25%	78 65%	4.53 0.756
I smoke cigarettes every day.	11 9.2%	2 1.7%	27 22.5%	20 16.7%	60 50%	3.97 1.275
I drink alcohol every day.	15 12.5%	3 2.5%	30 25%	34 28.3%	38 31.7%	3.64 1.295
I often eat fast food when I'm bored.	2 1.7%	2 1.7%	8 6.7%	26 21.7%	82 68.3%	4.53 0.829

I often eat foods high in sugar.	1 0.8%	2 1.7%	13 10.8%	16 13.3%	88 73.3%	4.57 0.817
I don't practice eating according to the food pyramid.	1 0.8%	3 2.5%	12 10%	25 20.8%	79 65.8%	4.48 0.840
I exercise less than 30 minutes a week.	1 0.8%	5 4.2%	10 8.3%	21 17.5%	83 69.25	4.50 0.879

4.2.4 Descriptive Analysis for Environment.

The results of the highest mean score in Table 4.15 stated that question number 7, “I often take 3 types of side dishes such as chicken, meat and eggs at the same time.” With mean 4.58 SD= 0.740) while the results of the lowest mean score was stated that question number 4, “I often go out gardening or walking in the park every evening.” With (M= 4.08, SD= 1.161).

Table 4.4 : Descriptive Analysis for Environment

Question	**Scale**					**Mean** **SD**
	1	**2**	**3**	**4**	**5**	
I often eat excessively at night because I am	0 0	2 1.7%	11 9.2%	30 25%	77 64.2%	4.52 0.733

tired and hungry when I get home.						
I often spend my free time playing video games, surfing the internet and watching television all day.	0 0%	2 1.7%	11 9.2%	30 25%	77 64.2%	4.52 0.733
I feel stress every day.	1 0.8%	9 7.5%	11 9.2%	12 10%	87 72.5%	4.46 0.995
I often go out gardening or walking in the park every evening.	3 2.5%	12 10%	22 18.3%	19 15.8%	64 53.3%	4.08 1.161
I exercise less than 30 minutes a day even on holidays.	1 0.8%	10 8.3%	8 6.7%	24 20%	77 64.2%	4.38 0.989
I regularly participate in doing household chores such as cooking, laundry and cleaning the home area.	0 0%	5 4.2%	30 25%	22 18.3%	63 52.5%	4.19 0.955
I often take 3 types of side dishes such as chicken, meat and eggs at the same time.	0 0%	4 3.3%	6 5%	26 21.7%	84 70%	4.58 0.740

I often eat rice in a day.	0 0%	1 0.8%	3 2.5%	23 19.2%	93 77.5%	4.73 0.546

4.2.5 Descriptive Analysis for Control Over Behavior.

The question number 4 with the greatest average score was "I have other work that must be completed instead of exercising." (Mean 4.53 SD= 0.756), while the question with the lowest average score was "I enjoy doing my exercising." (Mean 4.29 SD= 0.902).

Table 4.5 : Descriptive Analysis for Control Over Behavior

Question	**Scale**					**Mean** **SD**
	1	**2**	**3**	**4**	**5**	
I always eat late at night when I come home tired.	0 0	2 1.7%	15 12.5%	22 18.3%	81 67.5%	4.52 0.778
I always feel hungry even after eating.	1 0.8%	7 5.8%	8 6.7%	25 20.8%	79 65.8%	4.45 0.915
I don't see the benefit of doing exercise in my daily routine.	3 2.5%	7 5.8%	12 10%	18 15%	80 66.7%	4.38 1.046

I have other work that must be completed instead of exercising.	0 0%	2 1.7%	13 10.8%	25 20.8%	80 66.7%	4.53 0.756
I feel not confident with myself every time doing an exercise in public.	0 0%	0 0%	8 6.7%	28 23.3%	84 70%	4.63 0.607
I feel fun when I do exercise everyday.	0 0%	6 5%	25 20.8%	15 12.5%	74 61.7%	4.31 0.968
I feel tired when do not doing my exercise regularly.	1 0.8%	7 5.8%	13 10.8%	28 23.3%	71 59.2%	4.34 0.948
I enjoy doing my exercising.	0 0%	2 1.7%	30 25%	19 15.8%	69 57.5%	4.29 0.902

4.3 RESULTS OF RELIABILITY TEST

Study was conducted to 120 comments from the Universiti Malaysia Kelantan students. Measurement of the data's stability is the goal of reliability analysis. Cronbach alpha has a value between 0 and 1. The closer valuation is 1, the greater the convergent validity reliability can be identified.

Table 4.6 : Results Reliability Test for All Variables Analysis

Reliability Statistic	
Cronbach's Alpha	**N of Items**
0.956	32

The Cronbach's alpha coefficients for every variable are listed in Table 4.7. Cronbach's alpha of 0.95 indicates that resilience is a very favourable feature. Reliability testing was once more performed using survey data.

Table 4.7 : Results Reliability Test for Obesity

Reliability Statistic	
Cronbach's Alpha	**N of Items**
0.743	8

Values of Cronbach's alpha Table 4.8 displays data about obesity. With a Cronbach's alpha of 0.74, the strength is quite favourable.

Table 4.8 : Results Reliability Test for Unhealthy Lifestyle

Reliability Statistic	
Cronbach's Alpha	**N of Items**
0.894	8

Alpha values for Cronbach's Table 4.9 displays an unhealthy lifestyle. Strength is highly positive, as shown by Cronbach's alpha of 0.89.

Table 4.9 : Results Reliability Test for Environment

Reliability Statistic	
Cronbach's Alpha	**N of Items**
0.908	8

Values of Cronbach's alpha The setting is displayed in Table 4.10. The strength is exceedingly favourable considering a Cronbach's alpha of 0.90.

Table 4.10 : Results Reliability Test for Control Over behavior

Reliability Statistic	
Cronbach's Alpha	**N of Items**
0.902	8

Values of Cronbach's alpha Table 4.11 displays the environment. With a Cronbach's alpha of 0.90, the strength is quite favourable.

Table 4.11 : Statistical of Reliability for Independent and Dependent Variables

Variable	Cronbach's Alpha	Number of Items
All variable analysis	**0.956**	**32**
Obesity	**0.743**	**8**
Unhealthy lifestyle	**0.894**	**8**
Environment	**0.908**	**8**
Control Over Behavior	**0.902**	**8**

The results of overall variables analysis are 0.720 which in the strength of Cronbach's alpha consider as a moderate positive value. Aside from that, values of Cronbach's alpha in unhealthy lifestyle shows high positive of strength with value in 0.89. Meanwhile, Cronbach's alpha in environment and control over behavior share the same of strength in high positive with the value of 0.90. Based on the findings, the independent and dependent variables are all considered reliable according to Cronbach's alpha since the strength value is more than 0.50. This is due to the fact that Cronbach's alpha values range from 0 to 1. The closer valuation to 1, the greater the convergent validity reliability can be identified.

4.4 RESULTS OF INFERENTIAL ANALYSIS

In the content of structural equation modelling, there are two types of inferential analysis approaches, those that use operations before data collection and those that use operations after data collection. Randomly selected individuals from the wider group of persons we are interested in learning about are used in inferential analysis. The sampling error and confidence interval are directly influenced by the sample size and the level of variable in the study data (KL Andereck, 2017).

Table 4.12: Overall of Weight Management of Obesity Among Students In Universiti Malaysia Kelantan.

CORRELATIONS

		OBESITY	UNHEALTHY LIFESTYLE	ENVIRONMENT	CONTROL OVER BEHAVIOR
OBESITY	Pearson Correlation	1	0.497	0.560	0.555
	Sig. (2-tailed)		0.001	0.001	0.001
	N	120	120	120	120
UNHEALTHY LIFESTLE	Pearson Correlation	0.497	1	0.866	0.862
	Sig. (2-tailed)	0.001		0.001	0.001
	N	120	120	120	120
ENVIRONMENT	Pearson Correlation	0.560	0.866	1	0.873
	Sig. (2-tailed)	0.001	0.001		0.001
	N	120	120	120	120
CONTROL OVER BEHAVIOR	Pearson Correlation	0.555	0.862	0.873	1
	Sig. (2-tailed)	0.001	0.001	0.001	

N	120	120	120	120

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

Table 4.13: Results of pearson Correlation between the variables.

CORRELATIONS

	OBESITY	**UNHEALTHY LIFESTYLE**	**ENVIRONMENT**	**CONTROL OVER BEHAVIOR**
OBESITY	1	0.497	0.560	0.555
UNHEALTHY LIFESTYLE	0.497	1	0.866	0.862
ENVIRONMENT	0.560	0.866	1	0.873
CONTROL OVER BEHAVIOR	0.555	0.862	0.873	1

**_ Correlation is significant at the 0.01 level (2-tailed).

4.4.1 Ho1: There is a significant relationship between obesity and unhealthy lifestyle among students in Universiti Malaysia Kelantan.

Table 4.14 : Obesity and unhealthy lifestyle among students in Universiti Malaysia Kelantan

		OBESITY
	Pearson Correlation	0.497
UNHEALTHY	Sig.(2-tailed)	0.001
LIFESTYLE	N	120

**_ Correlation is significant at the 0.001 level (2-tailed).

the relationship between obesity and an unhealthy lifestyle is apparent in Table 4.14. According to the findings, an unhealthy lifestyle has a significant value below 0.05. When the p-value is less than 0.05, The hypothesis possibility was accepted, whereas the null hypothesis was rejected.. This demonstrates the strong link between obesity and bad lifestyle choices among students at Universiti Malaysia Kelantan.

4.4.2 Ho2: There is a significant relationship between obesity and environment among students in Universiti Malaysia Kelantan.

Table 4.15 Obesity and environment among students in Universiti Malaysia Kelantan.

		OBESITY
ENVIRONMENT	Pearson Correlation	0.560
	Sig.(2-tailed)	0.001
	N	120

**_ Correlation is significant at the 0.001 level (2-tailed).

The relationship between obesity and environment is shown in Table 4.15. According to the findings, the environment has a significant value below 0.05, and when the p value is less than 0.05, it signifies that the null hypothesis was rejected and the alternative hypothesis was accepted. Therefore, it can be concluded that there is a strong link between the environment and obesity among students at Universiti Malaysia Kelantan.

4.4.3 Ho3: There is a significant relationship between obesity and control over behavior among students in Universiti Malaysia Kelantan.

Table 4.16 Obesity and control over behavior among students in Universiti Malaysia Kelantan.

		OBESITY
CONTROL	Pearson Correlation	0.555
OVER	Sig.(2-tailed)	0.001
BEHAVIOR	N	120

**_ Correlation is significant at the 0.001 level (2-tailed).

The relationship between obesity and behavioural control is seen in Table 4.16. The significant value for control over behaviour is below 0.05 based on the results, and if the p value is less than 0.05, the alternative hypothesis has been accepted and the null hypothesis has been rejected. This research shows that among students at Universiti Malaysia Kelantan, behaviour control and obesity have a substantial association.

4.5 DISCUSSION BASED ON RESEARCH OBJECTIVES

Table 4.17 Summary for hypothesis testing

	Hypothesis	Pearson correlation result	
H1	A positive relationship exists between obesity and unhealthy lifestyle.	($r = .497$, $p < 0.01$)	Supported
H2	A positive relationship exists between obesity and environment factors.	($r = .560$, $p < 0.01$)	Supported
H3	A positive relationship exists between obesity and control over behaviour	($r = .555$, $p < 0.01$)	Supported

Using Pearson's correlation analysis based on table 4.17, the connections between the hypotheses on a significant association in such as an unhealthy lifestyle, factors affecting the environment, and control over behaviour with hypotheses have been accepted obesity, were examined.. The end result indicates that all at a 0.01 level of significance.

4.6 SUMMARY

This chapter's discussion of general findings and outcomes is based on the reliability test, descriptive analysis, and Pearson correlation analyses that were done on the data from the questionnaires. In this part, we also used the discussion based on the research objectives.

The most significant Pearson connection between the weight management of obesity and the data examined among student in Universiti Malaysia Kelantan is 0.497 (unhealthy lifestyle), followed by 0.560 (environment factors) and lastly 0.555 (control over behaviour). Hence, this three independent variable (IV) indicates that positive correlation along dependent variables (DV).

CHAPTER 5

CONCLUSION

5.1 INTRODUCTION

This chapter discusses the recapitulates of the findings from the result of the previous analysis. Besides, this chapter also includes and explained the limitation contributions provided by the study and recommendations for additional investigation.

5.2 RECAPITULATION OF THE FINDINGS

The research objective, research question, and hypothesis serve as the foundation for the recap of findings for this study. The discussion refers to Chapter 4, which is the chapter previous to this one.

5.2.1 Relationship Between Unhealthy Lifestyle and Obesity Of Students In Universiti Malaysia Kelantan (UMK)

Table 5.1: Research Objective 1, Research Question 1 and Hypothesis 1

Research Objective 1	**To investigate the relationship between Unhealthy lifestyle and obesity of students in Universiti Malaysia Kelantan (UMK).**
Research Question 1	What is the relationship between unhealthy lifestyle factors that affects exercise in weight management of obesity among students of Universiti Malaysia Kelantan (UMK)?
Hypothesis 1	There is a significant relationship between unhealthy lifestyle and obesity among students in Universiti Malaysia Kelantan.

To respond to RQ1, the findings of hypothesis H1 in Chapter 4 were examined.. The first research objective (RO1) is to investigate the relationship between unhealthy lifestyle and obesity of students in Universiti Malaysia Kelantan (UMK). According to H1, students at Universiti Malaysia Kelantan have an important connection with an unhealthy lifestyle and obesity. The result shows moderate correlation with a correlation coefficient value of 0.497. The p value of the interpersonal relationships between unhealthy lifestyle and obesity among students in Universiti Malaysia Kelantan (UMK) is 0.001 which is same to the very significant level at 0.001 Therefore, H1 accepted.

The study proven that there is significant relationship between unhealthy lifestyle and obesity among students in Universiti Malaysia Kelantan (UMK). Asghar et al. (2019) assert that high body fat accumulation among university students is assumed to be triggered by students' poor lifestyle choices. According to (Ttefan et al. 2017), Normal Weight Obesity (NWO) indicated that overweight or obese persons are far more prone than people with normal fat to pursue unhealthy lifestyles (such as poor eating, inactivity, and sedentary behaviour) than people with normal fat. According to Wijayatunga and Dhurandhar (2002), food, physical activity, and heredity may all play a role in the their origins of NWO. Finally, Social unhealthy lifestyle may also contribute to student obesity.

5.2.2 Relationship Between Environment Factor And Obesity Of Students In Universiti Malaysia Kelantan (UMK)

Table 5.2: Research Objective 2, research Question 2 and Hypothesis 2

Research Objective 2	**To investigate the relationship between environment factors and obesity of students in Universiti Malaysia Kelantan (UMK).**
Research Question 2	What is the relationship between environment factors that influence exercise in weight management of obesity among students in Universiti Malaysia Kelantan (UMK)?
Hypothesis 2	There is a significant relationship between environment and obesity among student Universiti Malaysian Kelantan (UMK).

According to H1, students at Universiti Malaysia Kelantan are aware of a significant connection between an unhealthy lifestyle and obesity. According to H2, there is a causal link between the environment and student obesity at Universiti Malaysia Kelantan. The result shows moderate correlation with a correlation coefficient value of 0.560. The p value of the interpersonal relationships between environment and obesity among students in Universiti Malaysia Kelantan (UMK) is 0.001 which is same to the very significant level at 0.001. Therefore, H2 accepted.

The study proven that there is significant relationship between environment and obesity among students in Universiti Malaysia Kelantan (UMK). According to (Omer et al., 2020), environmental factors are believed to compete a major role in the obesity pandemic. Certainly, an inequality between calorie intake and energy expenditure is the cause of obesity. The environment also plays a significant role in the source of obesity. as stated by Kadouh et al. (2017), obesity is typically the result of a biological tendency to develop that combines with environmental factors to emerge. Last but not least, according to (Katare et al., 2018), students who are situated in locations with a greater obesity prevalence show a physiologically crucial and statistically significantly larger weight gain than students who are doing not. The findings provide circumstantial evidence that an individual's weight gain can be influenced by the environmental characteristics of an area. This assertion is adequate evidence for the study's variables.

5.2.3 Relationship Between Control Over Behaviour And Obesity Of Students In Universiti Malaysia Kelantan (UMK)

Table 5.3: Research Objective 3, research Question 3 and Hypothesis 3

Research Objective 3	**To investigate the relationship between control over behavior and obesity of students in Universiti Malaysia Kelantan (UMK).**
Research Question 3	What is control over behavior factors that affect exercise in weight management of obesity among students in Universiti Malaysia Kelantan (UMK)?
Hypothesis 3	There is a significant relationship between control over behavior and obesity among student Universiti Malaysia Kelantan (UMK).

The results of hypothesis, H3 in Chapter 4 reviewed to answer RQ3. The first research objective (RO3) is to investigate the relationship between control over behavior and obesity of students in Universiti Malaysia Kelantan (UMK). According to H3, there is a causal link between behavioural self-control and obesity among students at Universiti Malaysia Kelantan. The result shows moderate correlation with a correlation coefficient value of 0.555. The p value of the interpersonal relationships between control over behavior and obesity among students in Universiti Malaysia Kelantan (UMK) is 0.001 which is same to the very significant level at 0.001. Therefore, H3 accepted.

The study proven that there is significant relationship between control over behavior and obesity among students in Universiti Malaysia Kelantan (UMK). According to (D Donofry et al,.2019) Obesity is linked to deficits in executive abilities like decision-making, inhibitory control, and reward analysis, which are thought to make it more difficult to maintain good lifestyle behaviours. Additionally, there are numerous and intricate relationships between teenage and student obesity and factors like physical inactivity, sedentary behaviour, excessive screen usage, and mental health. Likewise sedentary behaviour is considerably favourably associated with the risk of overweight or obesity in students and negatively connected with mental health. (Ma et al.,2021). Finally, adolescence is an age of transition during which a number of risky behaviours for their health, including use of tobacco, narcotics, inactivity, and bad diet, are started. The relationship between health risk behaviours and their correlation with overweight and obesity among students and teenagers has been studied in the past. (J. Campbell and Denney-Wilson, 2020)

5.3 LIMITATION

Throughout the whole research, there are a few attentions and discussion about the limitation should be emphasized in this study. The first limitation of this study were lacking of current studies on related subject. There are only a few researches that conduct related with knowledge of chronic disease among obesity which cause limit citations and difficulties to get journal especially in specific range of the year given. This is because most of the research were done long ago.

Lastly, limitation is that there were some respondents who did not give full cooperation in the data collection process which makes it difficult for the researcher to continue the study in a short period of time. Some of the respondents did not take the implementation of the study seriously and only gave random answers read the entire question when answering the questionnaire. Answers given from top to bottom are the same option.

5.4 RECOMMENDATION

Several suggestions have been made to enhance our research for next studies. Future study on how to effectively control obesity among responders might be beneficial to other researchers.

1. In order to attract attention throughout the whole study process, from conception to dispersal, we first considered to have a target for a long time period as researchers in order to demonstrate an extraordinary finding at the conclusion of study.

2. Next, because of the limited time available, it is proposed that future researchers broaden the unit's scope in order to generate their studies with a bigger target audience from only one particular course of students at Universiti Malaysia Kelantan (UMK).

3. Next, future researchers intend to use other independent variables to affect how important weight management is to our continued existence in society. The surroundings significantly contributes to promoting weight management and

simplifying daily movement plans. This would be an appropriate proposal given the importance of the independent variables.

4. Fourth, future researchers shouldn't depend just on surveys for gathering results. Face-to-face interviews will be employed in the future to get direct information from respondents. As a result, it was possible to contribute to the study with data than was more precise, reliable, and valuable.

Finally, it is recommended that the researcher apply the study in the end. This factor might allow independent analysts to gather more specific and comprehensive responses from those who are being targeted.

5.5 SUMMARY

This study aims mainly at examining the relationship between weight management of obesity. The factors that influence the outcome (independent variables) are control over behavior, unhealthy lifestyle and environment are given the impact to weight management of obesity among student in University Malaysia Kelantan. As mentioned in Chapter 3, Students at University Malaysia Kelantan were provided with a total of 120 questionnaires, and each and every single one of them was valid.

In additional, the findings from surveys with questionnaires that are examined employing descriptive and Pearson's Correlation analysis are presented in Chapter 4. A tool identified as Statistical Package for the Social Sciences (SPSS) was employed for analyzing the survey responses. The final study indicated a significant relationship between control over behavior, unhealthy lifestyle, and environment are given the impact to weight management of obesity among student in University Malaysia Kelantan. The finalised results demonstrated an important relationship between behavioural control, an unhealthy way of life, and the environment and the management of obesity among students at the Universiti Malaysia Kelantan.

Finally, a section on summarising the final findings based on the interpretation of data can be discovered in Chapter 5. As a result the three hypotheses are accepted in

relationship with obesity. Futhermore, by doing this study, There are specific restrictions and recommendations for future studies.

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APPENDICES

WEIGHT MANAGEMENT OF OBESITY AMONG STUDENT IN UNIVERSITI MALAYSIA KELANTAN

Assalamualaikum and greeting. Assalamualaikum dan salam sejahtera.

Dear Respondents, Responden yang dihormati,

Wa are student of Bachelor of Entrepreneurship (Wellness) with honour at Universiti Malaysia Kelantan. As a Partial fulfilment of completing our final year project, we are now conducting a survey for research entittled : **WEIGHT MANAGEMENT OF OBESITY AMONG STUDENT IN UNIVERSITI MALAYSIA KELANTAN**. This questionnaire would take a few minutes of your valuable to complete. Thank You for your rime and effort in helping us with our research.

Wa adalah pelajar Ijazah Sarjana Muda Keusahawanan (Kesihatan) dengan kepujian di Universiti Malaysia Kelantan. Sebagai sebahagian daripada penyiapan projek tahun akhir kami, kami kini sedang menjalankan tinjauan untuk penyelidikan bertajuk : **PENGURUSAN BERAT BADAN OBESITI DALAM KALANGAN PELAJAR DI UNIVERSITI MALAYSIA KELANTAN**. Soal selidik ini akan mengambil masa beberapa minit daripada nilai anda untuk dilengkapkan. Terima kasih atas usaha dan usaha anda dalam membantu kami dengan penyelidikan kami.

SECTION A : DEMOGRAPHIC DETAILS

1. SEX / JANTINA :

   Male / Lelaki ☐

   Female / Perempuan ☐

2. Race / Bangsa :

   Malay / Melayu ☐

   Chinese / Cina ☐

   Indian / India ☐

   Others / Lain - lain

   ----

3. Religion / Agama

   Muslim / Muslim ☐

   Christian / Kristian ☐

   Buddha / Buddha ☐

   Others / Lain – lain

   ----

4. Age Group / Kumpulan Umur :

   19 – 22 years / 19 – 22 Tahun ☐

   23 – 26 years / 23 – 26 Tahun ☐

   27 – 30 years / 27 – 30 Tahun ☐

   31 and above / 31 tahun dan ke atas ☐

5. Education level / Tahap Pendidikan

   Sijil Pelajaran Malaysia / Diploma ☐

   Degree / Ijazah Sarjana Muda ☐

   Master / Ijazah Sarjana ☐

   PhD / Ijazah Kedoktoran ☐

6. How tall are you? / Berapakah tinggi anda?

CM

---

7. How much do you weight? / Berapakah berat anda?

CM

SECTION B : OBESITY

(In this questions there used a Likert scale which is I : Strongly disagree, 2 -Disagree, 3:Neutral, 4-Agree, and 5:Strongly agree. / Soalan ini menggunakan skala Likert yang 1 : Sangat tidak setuju, 2: Tidak setuju ,3: Neutral, 4: Setuju, dan 5 : Sangat setuju.)

No.	Question	1	2	3	4	5
1	Have your physical health been negatively impacted by obesity? / Adakah kesihatan fizikal anda terimpak negatif oleh obesiti?					
2	Do you believe your eating habits are the cause of your obesity condition? / Percayakah anda tabiat pemakanan adalah punca keadaan obesiti anda?					
3	Do you believe your eating habits are the cause of your obesity condition? / Percayakah anda tabiat pemakanan adalah punca keadaan obesiti anda?					
4	Have your social life been limited because of obesity? / Adakah kehidupan sosial anda terhad kerana obesiti?					
5	Do you consider yourself to be a depressed person when you are obesity? / Adakah anda menganggap diri anda sebagai orang yang tertekan apabila anda obesiti?					
6	Do you believe your obesity has triggered depression? . / Adakah anda percaya obesiti anda telah mencetuskan kemurungan? .					
7	Do you believe that you can lose pounds? / Percayakah anda boleh kurus?					
8	Do you believe exercise will help you lose pounds? / Adakah anda percaya senaman akan membantu anda menurunkan pon?					

SECTION C : UNHEALTHY LIFESTYLE

(In this questions there used a likert scale of "1= less than once a week", "2 = one or two days per week", "3= three or four days per week", "4= five or six days per weeks", and "5= everyday" / Soalan ini menggunakan skala Likert yang 1 : Kurang dari sekali seminggu, 2: satu atau dua kali seminggu ,3: Tiga atau empat kali seminggu, 4: lima atau enam kali seminggu , dan 5 :setiap hari.)

No.	Question	1	2	3	4	5
1	I get pleasure and satisfaction after doing my exercise. / Saya mendapat keseronokan dan kepuasan setelah melakukan senaman					
2	I feel tired when do not doing my exercise regularly. / Saya berasa letih apabila tidak melakukan senaman dengan kerap.					
3	Do you smoke everyday? / Adakah anda menghisap rokok setiap hari?					
4	do you drink alcohol everyday/ / Adakah anda minum alcohol setiap hari?					
5	how often do you eat junk food/fast food due to boredom/distress/disappointment? / berapa kerap anda makan makanan ringan/makanan segera disebabkan oleh kebosanan / kesusahan / kekecewaan?					
6	how often do you consume foods with high sugar (such as sweet porridges, pastries, sweets and chocolate etc)? / berapa kerap anda mengambil makanan dengan gula tinggi (seperti bubur manis, pastri, gula-gula dan coklat dll)?					
7	how often do you have a balanced diet by including healthy ingredients (whole wheat, pulses, legumes, eggs, nuts, fruits and vegetables) in your meals? / berapa kerap anda mempunyai diet seimbang dengan memasukkan sihat bahan-bahan (gandum, kekacang, kekacang, telur, kacang, buah-buahan dan sayur-sayuran) dalam makanan anda?					
8	how often did you participate in 30 minutes of moderate intensity aerobic exercises/sports? / berapa kerap anda mengambil bahagian dalam 30 minit senaman aerobik intensiti sederhana/sukan?					

SECTION D : ENVIRONMENT

(In this questions there used a Likert scale which is I : Strongly disagree, 2 -Disagree, 3:Neutral, 4-Agree, and 5:Strongly agree. / Soalan ini menggunakan skala Likert yang 1 : Sangat tidak setuju, 2: Tidak setuju ,3: Neutral, 4: Setuju, dan 5 : Sangat setuju.)

No.	Question	1	2	3	4	5
1	I am often overeat supper because tired and hungry when getting to home. / Saya sering makan malam kerana letih dan lapar ketika sampai dirumah.					
2	how much screen time did you spend daily for watching television, using social media, mobile phones and playing video games? / berapa banyak masa skrin yang anda habiskan setiap hari untuk menonton televisyen, menggunakan media sosial, telefon bimbit dan bermain permainan video?					
3	how much stress or anxiety did you feel in a day? / berapa banyak tekanan atau kebimbangan yang anda rasa dalam sehari?					
4	how often did you participate in leisure related activities (grocery shopping, walking in park, gardening)? / berapa kerap anda menyertai aktiviti berkaitan masa lapang (belanja runcit, berjalan di taman, berkebun)?					
5	how often did you participate in 30 minutes of moderate intensity aerobic exercises/sports? / berapa kerap anda mengambil bahagian dalam 30 minit senaman aerobik intensiti sederhana/sukan?					
6	how often do you participate in household chores (cooking, laundry or cleaning)? / berapa kerap anda mengambil bahagian dalam kerja rumah (memasak, dobi atau pembersihan)?					
7	how often do you have one or more servings of pulses, egg or meat in a day? / berapa kerap anda mempunyai satu atau lebih hidangan nadi, telur atau daging dalam sehari?					
8	how often did you maintain a regular meal pattern? / berapa kerapkah anda mengekalkan corak pemakanan biasa?					

SECTION E : CONTROL OVER BEHAVIOUR

(In this questions there used a Likert scale which is I : Strongly disagree, 2 -Disagree, 3:Neutral, 4-Agree, and 5:Strongly agree. / Soalan ini menggunakan skala Likert yang 1 : Sangat tidak setuju, 2: Tidak setuju ,3: Neutral, 4: Setuju, dan 5 : Sangat setuju.)

No.	Question	1	2	3	4	5
1	I am often overeat supper because tired and hungry when getting to home. / Saya sering makan malam kerana letih dan lapar ketika sampai dirumah.					
2	I already finished my meal but still hungry at the same time there are cakes and t-ruits available. / Saya sudah selesai makan tetapi masih lapar pada masa yang sama ada kek dan buah-buahan yang ada.					
3	I can't see the benefits of doing an exercises in my daily life. / Saya tidak dapat melihat faedah melakukan latihan dalam kehidupan seharian.					
4	I have other work that must be completed instead of exercising. / Saya mempunyai kerja lain yang mesti diselesaikan selain daripada bersenam.					
5	I feel not confident with myself every time doing an exercise in public. / Saya berasa tidak yakin dengan diri saya setiap masa melakukan senaman di khalayak ramai.					
6	I get pleasure and satisfaction after doing my exercise. / Saya mendapat keseronokan dan kepuasan setelah melakukan senaman					
7	I feel tired when do not doing my exercise regularly. / Saya berasa letih apabila tidak melakukan senaman dengan kerap.					
8	I am happy with my exercise session. / Saya gembira dengan sesi senaman saya					

Ppta afiqah 7

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