# UNVEILING INFLUENCES: EXPLORING SOCIETAL FACTORS ON WEIGHT LOSS SUPPLEMENTS AMONG YOUNG ADULTS IN MALAYSIA

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- 3) Equal contribution has been made by each group member in completing the FYP.
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### LIST OF ABBREVIATIONS

HBM Health Belief Model

SPSS Statistical Package for Social Sciences

US United States

EWLB Extreme Weight Loss Behaviors

UTAR University Tunku Abdul Rahman

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#### **PREFACE**

The Final Year Project is a crucial part of every Bachelor of Business Administration (Hons) student's journey in Healthcare Management. Our research, titled "Unveiling Influences: Exploring Societal Factors on Weight Loss Supplements among Young Adults in Malaysia," tackles an important issue prevalent in our society.

In today's world, where beauty standards are constantly evolving, many turn to weight loss supplements to help achieve their desired look. Despite concerns about their safety and effectiveness, advancements in technology have shown that some supplements can indeed assist in reaching fitness goals and promoting overall health. As a result, attitudes toward these supplements have become more accepting, opening up an opportunity to investigate how social factors influence people's opinions.

Our study aims to uncover the various factors that shape young adults' intentions and behaviors when it comes to using weight loss supplements. By examining the social influences at play, we hope to gain a better understanding of why and how young adults choose to use these supplements.

Through this research, we hope to shed light on the societal forces at work and provide insights into the patterns of weight loss supplements usage among young adults.

#### **ABSTRACT**

This study examines the influence of societal factors, including social media exposure, perceived social pressure, and socio-cultural norms on weight loss supplements among young adults in Malaysia. Quantitative approach that consists of 497 participants within all Malaysia's state has been executed to gather the data. The questionnaire covered demographic information, independent variables: social media, perceived social pressure, and socio- cultural factors that will affect weight loss supplements intake and intention. Additionally, a pilot study was conducted with 50 respondents to ensure the reliability of the questionnaire.

The literature review revealed the significant impact of social media on promoting weight loss supplements and the detrimental effects of idealized body images on social media platforms. It also explored the influence of perceived social pressure and socio-cultural factors on body image dissatisfaction and weight-related behaviors. Building upon this literature, a conceptual framework was developed, and hypotheses were proposed to investigate the relationship between societal factors and weight loss supplements consumption.

Both probability (simple random sampling) and non-probability (snowball sampling) techniques were employed to select the sample from the young adult population in Malaysia. The questionnaire, administered through Google Forms, captured primary data on demographics, independent variables, and the dependent variable. Prior to distribution, a pilot study was conducted, and the questionnaire's reliability was assessed using SPSS software.

This study aims to provide insights into the intricate interplay between societal influences and individual behaviors regarding weight loss supplements consumption among young adults in Malaysia. The findings are expected to contribute to a better understanding of the factors shaping weight-related behaviors and intentions among this demographic, thereby informing efforts to promote their health and well-being.

Keywords: Social media, social pressure, Socio-cultural, Weight loss supplements, Young Adults.

#### **CHAPTER 1: RESEARCH OVERVIEW**

#### 1.0 Introduction

This study delves into the nexus between societal factors and weight loss supplements intention and consumption among young adults. Titled "Unveiling Influences: Exploring Societal Factors on Weight Loss Supplements Among Young Adults in Malaysia", the research stems from the imperative of understanding these supplements' impact on individual health. By scrutinizing the intricate interplay of societal influences, the study aims to illuminate how these factors sway young adults' choices in this realm, with far-reaching consequences for both individuals and the wider community. Under the first section of chapter 1, the research background is stated, and followed by the issue description, research objectives, which contain in-depth detailed objectives, and then the research question, study hypotheses, importance, chapter structure, and chapter summary.

## 1.1 Research Background

According to Gottdiener, Hohle & King (2019), social factors are defined by contemporary sociologists as events or conditions that affect people's lifestyle and well-being. The influence of social factors on weight loss supplements consumption has garnered substantial attention in recent years. Research in this area highlights the intricate connections between societal dynamics and individuals' decisions to use these supplements.

Cultural norms and societal expectations play a significant role in shaping attitudes towards body image and weight management. Studies have shown that cultures emphasizing thinness as an ideal body type tend to foster a higher prevalence of supplements use among individuals striving to meet these standards. According to Perloff (2014), exposure to idealized and unrealistic body images on social media platforms, like Instagram and Facebook, has been linked to increased body

dissatisfaction and unhealthy weight management behaviors among young adults. This highlights the significant impact of social media on attitudes towards body image and weight management.

The role of peer influence and social networks cannot be overlooked. young adults are susceptible to peer pressure and the desire to fit in. Research demonstrates that young adults who perceive their friends and peers as using weight loss supplements are more likely to engage in similar behaviors. According to Wertheim et al. (1997), within school environments, students may be indirectly influenced by the idealization of "popular" girls who are seen as thin and attractive. This can create a desire among other students to conform to these standards of popularity, potentially leading some individuals to engage in dieting, even without direct persuasion from the popular girls themselves. This underscores the power of social circles in shaping behaviors related to supplements consumption.

Understanding the socio-cultural factors intertwined with supplements consumption is essential. For instance, in cultures where thinness is highly prized, the pressure to conform can lead to heightened supplements use. Individuals may feel compelled to rely on supplements as a means to achieve the desired body image, driven by the influence of societal pressures and cultural ideals (Nasser, 1988) The influence of socio-economic status should also be considered, as individuals from certain backgrounds may be more vulnerable to the allure of supplements marketed to achieve the societal ideals they aspire to.

Research in this area helps unravel the complex web of interactions between societal influences and individual behavior regarding weight loss supplements consumption. By shedding light on these dynamics, interventions and educational initiatives can be developed to promote healthier decision-making and a more nuanced understanding of well-being in the context of prevailing social norms and values.

#### 1.2 Problem Statement

#### 1.2.1 The ideal

In a weight-hate-free world of the twenty-first century, individuals would be judged on their personality, behavior, and contributions to society rather than their body size or appearance. Weight stigma and criticism would be replaced with a realization that beauty, value, and worth are not limited to physical attributes. Everyone would be deserving of love and respect, and their bodies would be free of arguments and criticism (Kronengold, 2020). Members of the National Eating Disorders Association envisage a world in which they can shop without fear of being judged for their body size and eat without feeling guilty (National Eating Disorders Association, 2020). Mental health concerns related to body image, such as eating disorders and body dysmorphia, would be less widespread in this ideal society, leading to enhanced self-esteem and well-being for all.

## 1.2.2 The reality

Many people are concerned about their bodies (Buhlmann et al., 2010), which leads to negative perceptions and feelings about one's body known as body dissatisfaction (Grogan, 2016). According to a 2019 UK online survey, one in every five adults felt shame about their body image, and more than a third experienced anxiety or depression as a result of body image concern (Mental Health Foundation, 2019). Weight bias is a common kind of discrimination in the US (Puhl et al., 2018), especially against those with higher body weight, who often face stereotypes such as being sluggish, lacking self-control, or unintelligent (Puhl & Brownell, 2003). Weight-based teasing is common among young adults, and it was first identified as a significant issue in the early twenty-first century (Neumark-Sztainer et al., 2002). According to Ahirwar and Mondal (2019), obesity is a leading cause of weight-related teasing, which is becoming increasingly problematic nowadays, with over 1.9 billion adults worldwide overweight and more than 650 million obese.

As obesity rates rise, negative body shape and size emotions tend to overpower them (Schachter et al., 2018), leading people to seek effective weight loss strategies. Weight loss supplements are becoming popular due to their promise of quick results without much effort (Austin et al., 2017). In Malaysia, a 2019 nationwide survey revealed that obesity prevalence has increased steadily (Lin et al., 2020), with studies relating obesity to body dissatisfaction (Rezali et al., 2012; Chin et al., 2008). As more Malaysians desire an attractive figure in order to increase their self-esteem and quality of life, this fuels the market for weight loss supplements as a convenient alternative to lifestyle changes (Malik et al., 2019). As a result, weight loss supplements played an important role in Malaysians' weight management. According to a report, the weight management product market in Malaysia will expand by over 50% due to urban customers' desire to improve their appearance and body shape (Whitehead, 2013).

According to the National Health and Morbidity Survey 2019, the obesity rate among Malaysian adults aged 18 years old and above is projected to more than double in approximately 12 years (CodeBlue, 2023). Individuals frequently develop body image dissatisfaction when the ideal beauty standard is a slim or muscular figure. Latif (2020) highlighted that young adults in Malaysia are more inclined than others to be dissatisfied with their bodies if they have a distinct body shape or weight than their peers or a body shape that is different from the 'ideal' portrayed in the media. Meanwhile, Malik et al. (2019) established a statistically significant relationship between self-perception of body weight and the consumption of weight loss products. People dissatisfied with their weight and believing themselves to be overweight are four times more likely to turn to these products. Therefore, young adults in Malaysia, who are prone to body dissatisfaction, may turn to weight loss supplements. A case in the United States highlighted that young adults with severe obesity or excess weight have begun to use weight-loss medication "Wegovy" as weight-loss medications popularity grows (Messer & Kindelan, 2023). According to the author, weight-loss supplements are an essential alternative for treating obese young adults when dieting and exercising alone are insufficient. Also,

these supplements have changed their body image.

#### 1.2.3 Research gap

Despite the lack of empirical studies on the factors affecting weight loss supplement consumption, many studies are evident in dietary supplement consumption. For instance, Piorecka et al. (2022) investigated socio-economic factors influencing dietary supplement consumption in children and young adults from Malopolska Voivodship in Southern Poland. Hys (2020) identified factors driving consumer dietary supplement purchases. Likewise, Pajor et al. (2017a) studied socio-cognitive and psychosocial determinants of dietary supplement use among Dutch people.

The literature review reveals a gap in research concerning the influence of social media, perceived social pressure, and sociocultural factors on weight loss supplement consumption in Malaysia, particularly among young adults. To date, no studies have explored these societal factors in relation to weight loss supplement consumption in this demographic. However, studies on this topic should not be overlooked because these factors play a significant role in shaping the decisions of Malaysian young adults when it comes to weight loss supplement consumption, affecting the quality of the supplements they choose. Hence, this study aims to examine societal factors influencing weight loss supplement consumption among young adults in Malaysia.

#### 1.2.4 The consequences

The researchers have categorized the motivational determinants of weight loss supplement consumption and proposed to investigate the factors of social media, perceived social pressure, and sociocultural factors that affect weight loss supplement consumption and intention.

For the first IV social media, Raghupathi and Fogel (2013) found a

significant association between Facebook advertisements and weight loss product purchases. Nonetheless, no past studies have explored the relationship between perceived social pressure and weight loss supplement. Lastly, there is an ongoing stigmatization of weight and obesity which will lead to body dissatisfaction (Puhl & Brownell, 2003; Vartanian & Novak, 2011; Nutter et al., 2020). This suggests a positive relationship between sociocultural and weight perception affecting weight loss supplement consumption.

As past research has paid little or no attention to the factors influencing weight loss supplement consumption and intention, it leaves the relationship between independent and dependent variables unclear. Further, no studies have been conducted in the context of Malaysia or among young adults. Although several previous studies have indicated positive or significant relationships, these results may not necessarily apply to the proposed study. Given this study's gap, it is critical to examine the factors influencing weight loss supplement consumption and intention among Malaysian young adults. This opens up opportunities to examine how social media advertisements, perceived social pressure, and sociocultural factors interact with weight loss supplement consumption in this demographic.

# 1.3 Research Objectives

This research aims to study the intricate connection between social influences and the utilization of weight-loss supplements among young adults in Malaysia.

## 1.3.1 General Objectives

The general objective of this study is to explore the influence of societal factors on weight loss supplements intake and intention among young adults in Malaysia.

### 1.3.2 Specific Objectives

The specific objectives of this study are:

- To investigate the significant impact of social media advertisements on the consumption and intentions to take weight loss supplements.
- To investigate the significant impact of perceived social pressure on the consumption and intentions to take weight loss supplements.
- To investigate the significant impact of socio-cultural on the consumption and intentions to take weight loss supplements.

## 1.4 Research Questions

This study will find out the answers to the issues regarding societal influences and young adults' use and intentions of weight-loss supplements in Malaysia.

## 1.4.1 General Research Questions

In this research, the general question is:

 How do societal factors contribute to the patterns of weight loss supplements consumption and intentions to take among young adults in Malaysia?"

## 1.4.2 Specific Research Question

• How does the influence of social media advertisements shape the consumption and intentions to take weight loss supplements among young adults in Malaysia?

- How does perceived social pressure influence the consumption and intentions to take weight loss supplements among young adults in Malaysia?
- How does socio-cultural influence affect the consumption and intentions to take weight loss supplements among young adults in Malaysia?

## 1.5 Hypotheses of the Study

H1: Exposure to social media advertisements has a significant impact on weight loss supplements consumption and intentions to take among young adults in Malaysia.

H2: Perceived social pressure has a significant impact on weight loss supplements consumption and intentions to take among young adults in Malaysia.

H3: Socio-cultural factors have a significant influence on weight loss supplements consumption and intentions to take among young adults in Malaysia.

# **1.6** Significance of study

Based on our review on this topic, we have found that there is complex interaction between societal factors and young adults' choices on consumption and intentions of weight loss supplements. Firstly, the study views at the independent variables including social media, perceived social pressure, and socio-cultural to understand the reasons why young adults choose to consume or planned to take the weight loss supplements. This information is essential for tackling weight control practices in a culture that is becoming more self-concerned.

Secondly, according to CodeBlue (2023), the prevalence of obesity in Malaysia is 19.7% in 2019 and it is expected to continuously increase by 4.7% annually from 2020 to 2035. Therefore, we conduct this research to improve the young adults' health and wellbeing by understanding the variables influencing them to consume and intentions to take the weight loss supplements.

Lastly, we conduct this research to improve the young adults' awareness towards weight loss supplements as not all the supplements consist of high-quality ingredients. Hence, by conducting this research, it assists the young adults and their parents in making knowledgeable decisions about the efficacy as well as the safety of the supplements.

Overall, we carry out this research not only to determine the factors that influence the young adults to consume the weight loss supplements but also to improve their awareness towards the supplements as well as health and well-being. The absence of exploring these factors causes the young adults to continue to consume weight loss supplements without even realizing it because weight loss supplements can be self-prescribed (Dini & Mancusi, 2023). This could lead to having the risks of health issues among the young adults as the supplements can cause side effects such as colitis, liver disease, colitis, and cardiac arrhythmias (Inayat et al, 2018).

# 1.7 Chapter Layout

Chapter 1 is the opening section of this report that covers the introduction, explanation of the analyses performed, the purpose of the study, background, problem statement, objectives, questions, hypothesis, research significance, chapter layout and summary.

Chapter 2 provides literature review that briefly summarizes and analyses the earlier studies from journals, books, articles, textbooks, and the internet undertaken by other scholars. This chapter includes introduction, underlying theories, review of the literature, proposed conceptual framework, hypotheses development and chapter summary.

Chapter 3 focuses on the research methodology of our study. This chapter will explain survey approaches, data collection of our study. Besides, the chapter included introduction, research design, method for data collection, sampling design, research instrument, constructs measurement, data processing, data analysis, and chapter summary.

## 1.8 Chapter Summary

To sum up what has been stated, this chapter has explained about the aim of our study. We conduct this study to examine the factors that will influence the young adults weight loss supplements consumption or intention to take in Malaysia. This chapter has presented the background and objectives of this study. Factors that influence the young adults weight loss supplements consumption intention to take are identified in this chapter. Chapter 2 will provide the literature review of this research.

#### **CHAPTER 2: LITERATURE REVIEW**

#### 2.0 Introduction

The chapter's purpose is to study and review on the work of the researchers done previously in this field. The first section discusses the underlying theory that is relevant to this study. The second section will be discussing the dependent variable and independent variable identified in Chapter 1. The third section discusses the proposed conceptual framework in view of the research objectives. The fourth section outlines and explains the relationship in the hypotheses. The last section concludes the summary of this chapter.

## 2.1 Health Belief Model (HBM)

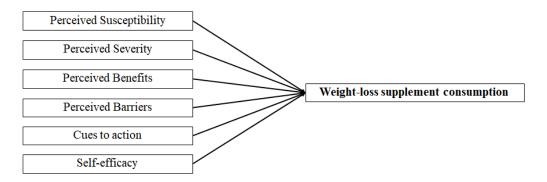


Figure 2.1.1 Health Belief Model (HBM)

The Health Belief Model (HBM) is a psychological framework that aims to understand and predict health behaviors based on individuals' attitudes and beliefs (Snetselaar, 2001). It focuses on how people perceive the threat of a health issue and evaluate the potential benefits and barriers associated with taking action. In this context, the HBM provides valuable insights into how social factors influence young adults' perspectives on weight loss supplement consumption.

.

Young adults may assess their vulnerability to weight-related concerns, such as body image issues, with social factors significantly shaping these perceptions. Exposure to media portrayals of ideal body types can influence how young adults perceive their susceptibility to weight-related problems.

Regarding perceived benefits and barriers, the HBM considers how young adults evaluate the advantages of taking specific actions and the obstacles they perceive in doing so. Young adults might see benefits in terms of fitting in with peer groups or achieving a desired appearance. However, barriers may include concerns about potential health risks and conflicting societal norms.

Cues to action, a fundamental aspect of the HBM, suggest that individuals are more inclined to take action when they receive prompts or cues. For instance, peer pressure, such as peer discussions, can encourage young adults to consider weight loss supplements consumption.

Lastly, self-efficacy plays a crucial role as it reflects an individual's belief in their ability to successfully carry out a behavior. Social factors, such as peer support and positive role models, can significantly influence young adults ' self-efficacy in relation to using weight loss supplements.

In summary, the Health Belief Model provides a comprehensive framework for understanding how young adults' perceptions of weight loss supplements consumption are influenced by their views on susceptibility, severity, benefits, barriers, cues to action, and self-efficacy, all of which can be shaped by social factors in their environment.

#### 2.2 Review of Literature

A literature review is an analysis of scholarly sources on a particular topic and it provides insights into current knowledge, relevant theories, methods, and research gaps applicable to our research study.

#### 2.2.1 Dependent variable

According to Chang and Chiou (2014), weight loss supplements are an alternative method to help the individuals become physically fit and are now used by them regularly. The natural way to become physically fit requires control on diet and increases the physical activities for individuals. However, relying on these two natural methods to lose weight requires a long time and persistence to see the outcomes. Therefore, people choose to take advantage of low-cost approaches to lose weight because of insufficient persistence and impatience. The authors conducted a study to find out whether the psychological belief that weight-loss supplements are effective affected the participants' dietary control. The results showed that there is no evidence linking the frequent use of weight loss supplements to the accomplishment of weight loss because the participants' food consumption increased after they took the supplements.

Besides, based on the article by Nachtigal et al (2005), they conducted a 10-year study on weight loss supplements in a middle-age population in the United States (US). The reason they conduct this study is that numerous health issues in the US are associated with obesity, which is rapidly expanding into an epidemic health issue. They investigate whether there is a strong relationship between the consumption of weight loss supplements and weight changes. The authors stated that according to many surveys, the proportion of individuals in the US who are trying to reduce weight is around one-third of all respondents, with somewhat more females than males doing so. They employ a variety of strategies including consumption of weight loss supplements, calorie restriction, and do exercises to reach their weight-loss objectives. In their study, the results showed that the people who have obesity show the highest correlations between the supplements consumption and weight change in both genders. The usage of the supplements was associated with a decreased rate of weight increased in this study of middle-aged men and women.

Moreover, according to Abd Malik et al (2019), weight loss supplements have emerged as a quicker, more practical option for individuals to change their lifestyle and achieve their desired perfect weight. Most of the individuals who use it are women as they typically are thought to be more concerned with their physical appearance and are willing to spend the money on weight loss supplements to obtain the physique they seek. This resulted in the weight loss supplements company marketing their products towards both susceptible youthful women and those who have a negative body image.

Overall, based on the journal articles we have read, we can conclude that weight loss supplements have become one of the alternative strategies to make individuals achieve their ideal body without putting any effort in terms of limiting their diets and physical activities. We also found that most of the reasons that individuals consume weight loss supplements are health concerning and personal desires for body shape. However, we believe that societal factors which are social media, social pressure, and socio-cultural will influence the individuals to consume the weight loss supplements.

#### 2.2.2 Independent variable

#### 2.2.2.1 Social Media

Social media has revolutionized the way young people access information, as it now relies on users sharing news and individual preferences. This transformation has sparked a growing interest in understanding the factors that drive weight loss supplements consumption among young adults in Malaysia. This literature review aims to provide an in-depth exploration of societal influences, with a special emphasis on the role of social media in shaping these consumption behaviors, as highlighted by Riddle in 2017.

Alarfaj (2021) explores the substantial impact of social media on advertising, specifically its role in promoting weight loss supplements among

young adults The article underscores the influence wielded by social media influencers in spreading information about dietary supplements, yet it also highlights concerns about misinformation. This underscores the need to scrutinize influencer credibility, rethink the one-size-fits-all approach to supplements, and consider the negative impact of imagery in this context.

The article by Bauer (2020) underscores the adverse effects of exposure to idealized images on social media, especially Instagram, on the mental well-being of young women. It highlights the propensity for appearance comparisons made on Instagram to result in body dissatisfaction and negative body image. The application of social comparison theory is mentioned to understand this phenomenon. These findings are significant in the context of young adults weight management because they illuminate how social media, particularly Instagram, can contribute to body image concerns among young women. When young adults are exposed to these idealized images and engage in appearance comparisons, they may develop dissatisfaction with their bodies and in some cases may involve purchasing weight loss supplements.

These three articles cover various facets of social media's impact on young adults weight loss supplements consumption and body image. Riddle (2017) examines how social media transforms information-sharing and consumption among the younger generation, providing a broader context. Alarfaj (2021) focuses on the significant influence of social media in advertising weight loss supplements to young adults. In contrast, Bauer's study delves into the harmful effects of exposure to idealized images on platforms like Instagram. Considering our research's primary interest in understanding social media's role in young adults weight loss supplements consumption in Malaysia, Alarfaj's (2021) article stands out as the most relevant, addressing the direct impact, influencer roles, and potential issues associated with supplements promotion on these platforms.

#### 2.2.2.2 Perceived Social Pressure

According to the Theory of Planned Behavior proposed by Ajzen (1991), there are three conceptually separate drivers of a person's willingness to perform a behavior, which are attitudes, subjective norms, and perceived behavioral control. The theory states that subjective norms (or normative influence), refer to the perceived social pressure from significant people in the social context to engage in the desired behavior. Subjective norms are how people interpret the pressures of the opinions of other people who are deemed important to them (family, friends, colleagues, and others) that signal whether they should perform or refrain from performing an action. It also shows how perceived social pressure can influence behavior even when no incentives or punishments are given.

Besides, based on a basic theoretical foundation under the social psychology of peer pressure, individuals are susceptible to influence from significant others (Ajzen, 1989; Grasmick & Bursik, 1990) or influential socializing agents (Lau et al., 1990). Perceived peer pressure or peer influence, according to the social norms approach by Berkowitz (2004), represents the degree to which peers are believed to be able to exert social pressure on a person by endorsing or disapproving of his/her behavior and by partaking in it themselves. Lashbrook (2000) stated that peer pressure may have a bigger impact on an individual's behavior than any other factors as people try to prevent feelings of inadequacy or alone by matching many of their social behaviors with their perceptions about the prevalence and acceptability of these behaviors in their surroundings.

The study conducted by Helfert and Warschburger (2013) highlighted the crucial role of social mediators, particularly peers and parents who are important to young adults in influencing their appearance-related norms. The authors identified both parental and peer pressure in the formation of body dissatisfaction and eating disorders during adolescence because they are the ones who convey and promote the construction of beauty ideals, norms, and standards and the significance of appearance to

them. Moreover, the results of Jones and Crawford (2006) revealed that boys perceived stronger appearance-related pressure and taunting, while girls reported more appearance-related conversations. The authors discovered that teenagers with greater BMI perceived greater impact from friends as well as overall appearance pressure from peers (e.g., schoolmates). Further, Wertheim et al. (2002) discovered a moderate positive correlation between weight status and parental encouragement to lose weight for both early young adults' boys and girls.

Taken together with all these findings, it was found that perceived social pressure is impactful to a certain extent on individuals' perception of their bodies. Several studies have highlighted how perceived social pressure or social influences contributed to body dissatisfaction or body image disturbance. Although past studies have yet to investigate the impact of perceived social pressure on weight loss supplement consumption, research on this topic is imperative in view of the increasing usage of weight loss supplements to address the weight or appearance-related issues aforementioned and to assure more informed decision when it comes to weight-loss supplements consumption.

#### 2.2.2.3 Socio-Cultural

Marika Tiggemann's (2012), "Sociocultural Perspectives on Body Image," looks at how our society and culture affect how we see our bodies, especially for women and girls. The study finds that feeling unhappy with how we look is common and can affect our self-esteem. It shows that ideas about how our bodies should be, shown in the media, by family, and friends, can make us feel unhappy about our bodies and lead to eating problems. The study also talks about how seeing very thin models in fashion magazines can shape what we think is beautiful. This idea can affect how we feel about our own bodies. The study says that these ideas affect everyone differently and calls for more research on this. It also talks about the bad effects of feeling unhappy with our bodies and suggests ways to help. This study helps

us understand how these social ideas can make us unhappy with our bodies, which can influence our decisions about using weight loss supplements.

In "Culture and Weight Consciousness" by Mervat Nasser (1988) which examines the relationship between culture and weight consciousness, particularly in eating disorders like anorexia nervosa and bulimia. It suggests that the increase in these disorders in Western cultures is influenced by the adoption of beauty norms related to thinness. The article also discusses the variations in the prevalence of these disorders across different cultures, highlighting the cultural differences in body weight and feminine beauty ideals. The cultural values of self-discipline, sexual liberation, socioeconomic status, and competitiveness have combined with traditional notions of beauty, leading to a cultural preoccupation with body weight and a continuum of disorders related to binge eating and deliberate weight loss. This example highlights the influence of societal factors on women's perception of their bodies and the formation of eating disorders.

According to Jones (2004), the research on Body Image and the Appearance Culture Among Young Adults Girls and Boys examines the impact of appearance culture, including appearance magazine exposure, appearance discussions with friends, and critique of peers' appearances, on the internalization of appearance ideals and body image dissatisfaction among young adults' girls and boys. The study found that internalization served as mediator in the relationship between boys' and girls' body dissatisfaction and appearance discussions with friends. Additionally, internalization, peer criticism of appearance, and the body mass index (BMI) had a direct contribution to body dissatisfaction, although the strength of these relationships varied by gender. Only girls showed evidence of a mediated relationship between exposure to appearance magazine exposure and body dissatisfaction. Overall, the findings highlight the importance of the peer appearance culture in shaping body image disturbances in young adults.

In summary, our examination of weight loss supplements consumption reveals a profound influence of sociocultural factors. These factors show how cultural ideals are shaping individuals' perceptions of their bodies. The normalization of body dissatisfaction and the role of unrealistic beauty standards in media underscore the societal impact on body image. These influences interact uniquely with individual characteristics, prompting the need for varied research. Additionally, the adverse effects of negative body image emphasize the importance of interventions. It's proven that these societal influences contribute to an overarching "appearance culture," with implications for decisions such as weight loss supplements usage. Acknowledging and addressing these influences is vital for fostering healthier attitudes and decisions in the realm of weight loss supplements consumption.

## 2.3 Proposed Conceptual Framework

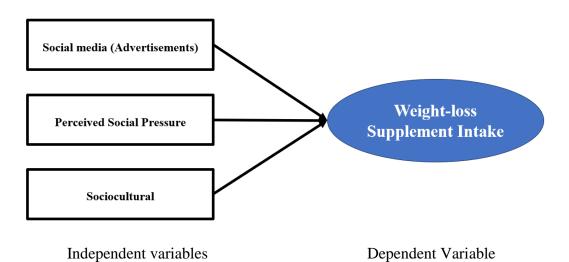


Figure 2.3.1 Conceptual Framework

The diagram above is the proposed conceptual framework for the foundation of our study. It shows the factors affecting weight-loss supplements intake or intention among young adults in Malaysia.

The first factor that impacts young adults consuming or intention of weight loss supplements is social media. According to O'Keeffe (2011), teens may do many of the activities that are important to them offline on social media sites, such as making new friends, discussing ideas, interacting with friends and family, and sharing images. Participating in social media may also benefit teenagers that affect the way they see themselves, their neighborhood, and the rest of the world. As a result, it enhances the likelihood that they may be exposed in social media ads. Therefore, it would encourage young people to compare themselves to others and feel compelled to appear a certain way. Besides, exploring the outside world may bring young adults with a sense of pressure from society as in the internalization of appearance ideals and body image dissatisfaction among teenage girls and boys is the influence of appearance with friends and peer appearance criticism.

Lastly, sociocultural is an important factor to understand as it explains how young adults change their behaviors in taking weight-loss supplements due to dissatisfaction with their body imaging. It may be because of their social relationship (friend and family), cultural involvement in an environment where they live. Especially for young adults, as there is a group of people who are in a critical stage for social development that is easily influenced by their society and close connections such as peers, family and community.

# 2.4 Hypotheses development

H1: Exposure to social media advertisements has a significant impact on weight loss supplements consumption and intentions to take among young adults in Malaysia.

According to Klein and Schweikart (2022), social media influencers endorse a diverse array of products, among them being dietary supplements. The classification of dietary supplements falls under the jurisdiction of the US Food and Drug Administration and the Federal Trade Commission, categorized as food rather than pharmaceuticals. Influencers—"social media personalities compensated to

leverage their popularity to market products". It has been increasingly popular in marketing dietary supplements in recent years.

Jane et al. (2018) noted the World Health Organization's recognition of social media's role in promoting health behavior change. Young adults frequently encounters advertisements for unhealthy food and beverages, influencing their dietary choices and overall well-being. Molenaar et al. (2021) conducted research to understand young adults' attitudes toward food-related supplements, particularly those on social media. Repeated exposure to weight loss supplements ads on social platforms fosters the perception of a quick and easy solution to weight management. These ads use compelling visuals, persuasive language, and endorsements by influencers or celebrities to enhance their appeal.

Young adults are frequently exposed to unhealthy food and drink advertisements, which can affect their dietary choices and overall well-being. This study by Molenaar et al. (2021) aimed to understand young adults' attitudes and experiences regarding food-related supplements, particularly those encountered on social media. Repeated exposure to weight loss supplements ads on social media platforms can create the perception that these products offer an easy and rapid solution to weight management. These ads often feature compelling visuals, persuasive language, and endorsements from influencers or celebrities, collectively enhancing the supplements' allure and appeal.

# H2: Perceived social pressure has a significant impact on weight loss supplements consumption and intentions to take among young adults in Malaysia.

According to the study conducted by Hutchinson and Rapee (2007) which examines the role of friendship networks and peer influences in extreme weight loss behaviours (EWLB) among young teenage females, it was discovered that participants in the Clique scored similarly on measures of EWLB. This indicates that peer influences played a crucial role in the study in affecting EWLB. Results of the study also revealed that girls who viewed their friends as a significant source of influence had higher levels of EWLBs. Besides, Helfert and Warschburger

(2011) found that parental motivation to regulate weight and body shape is especially prevalent among high-average and overweight girls and boys. Moreover, further study conducted by Helfert and Warschburger (2011) has proven that friends' effects influenced gender-specific body image concerns, leading to weight concerns in girls. Last but not least, a systematic meta-analysis of the last 18 years' findings on teasing conducted by Menzel et al. (2010) found that a moderate positive link between teasing and body dissatisfaction is well established.

Although a direct relationship between perceived social pressure and weight loss supplements consumption cannot be established, a significant relationship is found between perceived social pressure and other related aspects such as weight concern, EWLB, and body dissatisfaction. This can indirectly affect their weightloss-seeking behaviour including the consumption of weight loss supplements as these supplements have become the option for people who hope to lose weight to obtain desired results without much effort (Austin et al., 2017), thus leading to the development of H2.

# H3: Socio-cultural factors have a significant influence on weight loss supplements consumption and intentions to take among young adult in Malaysia.

According to Puhl & Brownell (2003), the article explores the relationship between socio-cultural factors and weight loss. It suggests that societal norms and cultural values can influence individuals' beliefs, attitudes, and behaviours related to weight. On one hand, these factors can create pressure to conform to certain body standards, leading to weight loss efforts. On the other hand, socio-cultural factors can also contribute to weight stigma and discrimination, which can hinder weight loss. It also emphasizes the need to challenge societal norms and promote body positivity and acceptance to support successful weight loss. Overall, socio-cultural factors play a significant role in shaping individuals' perceptions and approaches to weight loss.

In "Internalized Societal Attitudes Moderate the Impact of Weight Stigma on Avoidance of Exercise" by Vartanian & Novak (2011), Socio-cultural factors have a significant influence on weight loss efforts. Cultural beliefs, societal norms, media influences, and social support systems all play a role. Cultural ideals of body image can shape individuals' perceptions and goals for weight loss. Media portrayal of thin bodies as the standard of beauty can create unrealistic expectations and contribute to body dissatisfaction. Social support, both positive and negative, from family, friends, and community can either facilitate or hinder weight loss efforts. Recognizing and addressing these socio-cultural influences is crucial for promoting healthy and sustainable weight loss strategies.

According to Garner & Garfinkel (1980), study highlights the impact of socio-cultural factors on body image and weight-related behaviours. The study on anorexia nervosa suggests that cultural pressures for thinness can contribute to the development of the disorder. Similarly, in the context of weight loss supplements consumption among young adults in Malaysia, socio-cultural factors play a significant role. Young adults in Malaysia may be influenced by societal norms and ideals that prioritize a slim body shape, leading to a desire for weight loss and a willingness to try weight loss supplements. The emphasis on appearance and the pressure to conform to certain beauty standards can contribute to the adoption of weight loss supplements consumption patterns. Understanding these socio-cultural factors is crucial in addressing weight-related concerns and promoting healthy body image among young adults in Malaysia.

# 2.5 Chapter summary

This chapter has offered a thorough review on dependent variables (Weightloss supplements intake) and independent variables (social media, Perceived Social Pressure and Socio-cultural). We also proposed conceptual framework and hypotheses development as this research study guideline. In chapter 3, we will carry out the research methodology according to the themes set in this chapter.

#### **CHAPTER 3: RESEARCH METHODOLODY**

#### 3.0 Introduction

Chapter 3 outlines our research methodology. It begins by discussing research design (qualitative or quantitative). Then it discusses techniques for gathering data, designing samples, research tools, build measurement, and data analysis. There is a summary at the end of the chapter.

# 3.1 Research Design

Our study adopts quantitative research to examine the impact of sociocultural factors on the usage of young adults' weight loss supplements in Malaysia. Quantitative research uses a numeric and statistical approach, systematically collecting numerical survey data to discover the connection between independent variables (social media, perceived social pressure, and socio-culture) and the dependent variable (supplements consumption) among Malaysian young adults.

We used causal research to examine the association between supplements consumption (dependent variable) among Malaysian young adults and social media, perceived social pressure, and sociocultural (independent variables). The use of supplements will be directly impacted by changes in social media, perceived social pressure, and socio-culture. This has shown a positive relationship between the variables. After reviewing existing studies and literatures, we believe that the independents variables and dependent variable have cause-and- effect relationship.

#### 3.2 Data Collection Method

Data collection entails the systematic collecting and analyzing information related to specific variables of interest. This process enables researchers to address their research inquiries, assess hypotheses, and evaluate results. Data collection is an essential component of research across various domains, encompassing the physical and social sciences, humanities, business, and more. Although the methods employed may differ depending on the field of study, the fundamental goal of ensuring precise and ethical data collection remains consistent (Data collection. n.d.).

#### **Primary Data**

Primary data refers to information gathered directly by a researcher, and it represents the first instance of data collection. It is inherently original and boasts a higher level of reliability. For instance, primary data can be exemplified by the population census conducted by the government every decade, as it involves the direct collection of information from the source (Admin, 2021). We employ a robust survey methodology, employing the questionnaire approach, wherein respondents are provided with a structured list of choices and they are allowed to choose the option most relevant to their perspective. The questionnaire is meticulously crafted and administered through the Google Forms platform. It is subsequently distributed to a selected sample of 50 young adults' participants hailing from the diverse demographic landscape of Malaysia. These participants are afforded the autonomy to deliberate and choose the response that most accurately aligns with their individual viewpoints and experiences.

# 3.3 Sampling Design

Sampling is the process of selecting a subset of the population of interest in a research study. (Turner, D.P. 2020) As a result, it is essential to employ a sampling design to pick a subset of the population of interest in order to obtain the necessary

data for accurate measurements. A population will be recognized based on the sample chosen (Datta, 2018).

#### 3.3.1 Target Population

The target population is a unique and well-defined group of potential participants to whom the researcher may reach out and who appropriately represent the features of the community of interest (Casteel & Bridier, 2021). The concept of a well-defined target population refers to the establishment of inclusive or exclusive criteria that determine the individuals or entities eligible to participate in a particular study. This group possesses distinct characteristics that enable clear differentiation from the broader general population. The selection of characteristics depends on the medical literature and practices, the study's objectives, and contextual information (Louise. B et al, 2018). In this study, young adults in Malaysia that age between 18 – 27 are the target population to measure how societal factors influence weight loss supplements consumption.

#### 3.3.2 Sampling Frame and Sampling Location

The list from which units are selected for the sample is known as the sampling frame. In this study, we are investigating young adults in Malaysia. The sampling location is targeted for the population in Malaysia. The survey was done at the sampling location. Thus, our questionnaire will be distributed to young adults in Malaysia randomly and collected from their responses through an online survey questionnaire.

#### 3.3.3 Sampling Element

A sample element is a single unit of analysis or a particular case that is part of a broader population that is being studied or measured. As stated

previously, young adults in Malaysia have been targeted as our target respondents in this study. Thus, every young adult will have the opportunity to take part in the questionnaire. The respondents will be answering based on their gender, age, ethnicity, education level, whether they are taking supplements, and their opinion on social media, perceived social pressure, and socio-cultural affecting their consumption of weight loss supplements.

#### 3.3.4 Sampling Technique

The choice of a sampling technique plays a crucial role in ensuring the survey's accuracy when studying a population. It is influenced by factors such as the characteristics of the target population, available financial and time resources, and the feasibility of covering the entire population size. There exist two main categories of sampling techniques: probability and non-probability sampling.

In probability sampling, various methods like simple random sampling, systematic sampling, stratified sampling, and cluster sampling are employed. Conversely, non-probability sampling includes methods such as convenience sampling, quota sampling, judgment (purposive) sampling, and snowball sampling.

To maximize the inclusivity and robustness of our research, we implemented a dual-method sampling approach. Firstly, we utilized the simple random sampling technique from probability sampling. This method ensured that every individual within our target population had an equitable opportunity to be part of the study, enhancing the representativeness of our sample.

Additionally, we incorporated snowball sampling from the nonprobability sampling category. This strategic inclusion allowed us to expand the pool of respondents. By leveraging the connections and networks of our initial participants, we aimed to increase both the diversity and quantity of respondents, ultimately enhancing the accuracy and depth of our research findings. This comprehensive approach enabled us to capture a broader spectrum of perspectives and experiences within our study, further enriching our understanding of the subject matter.

#### 3.3.5 Sampling Size

In Malaysia, there are approximately 3.38 million young adults aged between 18 to 23 in 2020 (Kneoma, n.d.). Thus, according to the Krejcie and Morgan table, since there will be one million participants in the research population, the sample size will be at least 384.

While the minimum required sample size should exceed 384 samples for statistical reliability, we have chosen to begin with **50 samples** as an initial step. However, we acknowledge that a larger sample size may provide more robust results, and we are open to expanding our sample size in subsequent phases of the project.

TABLE 1

Table for Determining Sample Size from a Given Population

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.

Table 3.3.5.1. Sample Size

Source: Adopted from Krejcie & Morgan, 1970

#### 3.4 Research instrument

The techniques used by us to retrieve the data for this study is a questionnaire instrument. The reason to use this method is cost and time saving, and being able to gather data from a larger population.

One of the questionnaire design methods is through Google form. We used three days to design the questionnaire. We searched for several journals and articles' questionnaires which are relevant to the study and adapted it into our study. After we designed the questionnaire, we immediately distributed it to the respondents.

In this questionnaire, we used **fixed-alternative questions** to ask the respondents. The questionnaire comprises five sections. Section A covers respondents' demographics, while Sections B to D focus on independent variables (social media, perceived social pressure, and socio-cultural factors). Section E addresses the dependent variable, weight loss supplements intake, by asking for respondents' opinions. Section A uses multiple-choice questions, and Sections B to E employ a five-point Likert scale.

Before distributing the questionnaire to our main respondents, we conducted a pilot study involving **50 participants** through email and social media. This initial study helped us identify and rectify any potential errors in the questionnaire. Subsequently, we used SPSS software to input and perform a reliability test on the collected survey data.

### 3.4.1 Reliability Test of Pilot Study

Types of Variables	Variables	Alpha Value
	Social media	0.923
Independent Variable	Perceived social pressure	0.739
	Socio-cultural	0.840
Dependent Variable	Weight loss supplements intake	0.917

**Table 3.4.1 Reliability Test of Pilot Study** 

# 3.5 Construct Measurement (Scale and Operational Definitions)

#### **Origin of construct**

Variables	Dimensions	Items	Source
Dependent:		Section E	Adopted from Chiba
Weight loss	Weight loss	Q1 – Q6	et al (2020)
supplements	supplements		
Independent:		Section B	Adopted from
G ' 1 1'	T C	01 02	Alalwan (2018),
Social media	Informativeness	Q1 – Q3	Dummanonda &
	Credibility	Q4 – Q6	Nuangjamnong
			(2021)

Independent:		Section C	Adopted from Azila
Perceived social	Peer pressure	Q1 – Q3	Mohd Noor et al (2014), Triharini et al
pressure	Family support	Q4 – Q6	(2018)
Independent:		Section D	Adopted from Jones
Socio-cultural	Appearance norms	Q1 – Q6	et al (2004)

Table 3.5.1 Origin of construct

According to the National Institutes of Health, weight loss dietary supplements come in various forms (capsules, tablets, liquids, powders, and bars) and are marketed with claims of reducing macronutrient absorption, suppressing appetite, lowering body fat, aiding weight loss, boosting metabolism, and enhancing thermogenesis. Therefore, it is shown that weight loss supplements consumption and intentions to take among young adults results from the societal factors mentioned. Questions regarding their current supplements consumption will be considered as representative of the overall population.

For social media, there are two dimensions related to the distributed questionnaire. Informativeness refers to how social media provides a better understanding of supplements and convinces young adults to trust the product. Credibility will affect the overall reliability of the product and how well the target consumers perceive weight loss supplements.

Perceived social pressure consists of two main dimensions: peer pressure and family support. Social pressure will influence young adults' decisions regarding weight loss dietary supplements. The stronger the social pressure in approval or encouragement, the more likely young adults will use weight loss supplements.

Regarding socio-cultural variables, only one dimension has been found, which is appearance norms. Appearance norms refer to how society or the

surrounding community perceives the standard of attractiveness. The stronger the cultural influence, the easier it is for individuals to become dissatisfied with their body image, leading them to consider weight loss supplements as a countermeasure.

#### 3.5.1 Scale of measurement

The scale of measurement is a classification system used to categorize and define different types of variables based on their properties and characteristics. There are four commonly recognized scales of measurement: nominal, ordinal, interval, and ratio. Understanding the scale of measurement is important because it decides what kinds of statistical analysis can be performed on the data and the types of conclusions that can be drawn from the results. This research study has measured the variables in Section A by using the nominal and ordinal scale, while interval scale is from Section B to Section E.

#### 3.5.1.1 Nominal scale

Nominal data is a type of data used in statistics to identify variables without providing any numerical values. It is used for labeling variables without any quantitative value. For instance, gender (male or female) and ethnicity (Malay, Chinese and Indian, etc.). Nominal data is the lowest level of measurement and cannot be used for calculations such as addition, subtraction, or multiplication. Instead, nominal data is typically analyzed using frequency counts or percentages. Our questionnaire has 3 nominal scale questions which are questions 1, 3, 4, 6 and 8 in Section A.

 Gender Ethnicity Male Malay/Bumiputera o Female Chinese Indian 3. Which state are you from? Other Johor Kedah Employment status Kelantan Working Kuala Lumpur Unemployed o Labuan Retired Student Malacca Negeri Sembilan Pahang Do you plan or currently using any weight loss supplements? Perak o Yes o Penang o No Perlis Selangor Sabah Sarawak o Terengganu

Figure 3.5.1.1.1 Demographic (Nominal Scale)

#### 3.5.1.2 Ordinal Scale

Ordinal scale is a type of categorical variable measurement scale in which data is ordered or ranked based on some criteria, but the differences between values are not necessarily uniform or equal. In this questionnaire, there are two questions with an ordinal scale in section A which are question 2 (age), question 5 (level of education) and question 7 (income). The ranking of question 2 is from the lowest (18 - 20 years old) to the highest (27 years old) old and above), while the ranking of question 4 is from the lowest (primary education) to the highest (other).

2. Age
5. Level of education
7. Your current income
8 - 20 years old
9 21 - 23 years old
9 24 - 26 years old
9 27 years old and above

5. Level of education
9 Primary Education
9 Secondary Education
9 Tertiary Education
9 Tertiary Education
9 More than RM5000

Figure 3.5.1.2.1 Demographic (Ordinal Scale)

#### 3.5.1.3 Interval scale

Interval scale is a method of measurement using numerical values with equal intervals. It included both nominal and ordinal elements to capture quantity variations. It is used for variables with meaningful and consistent intervals but 'zero' does not indicate the absence of the attribute being measured. Five Point Likert Scale is one of the measurements that consists of interval scale elements. This approach is demonstrated by the Five Point Likert Scale, which is used in Sections B to E of our questionnaire and rates respondents' agreement from 1 (strongly disagree) to 5 (strongly agree).



Figure 3.5.1.3.1 Demographic (Interval Scale)

# 3.6 Data processing

#### 3.6.1 Data checking

We checked the questionnaire's language and grammar to ensure that there are no grammatical errors and is easy to understand and match all the dimensions and concepts for all independent and dependent variables. We checked the result for any omissions, irrational answers, illegal codes, or inconsistent responses. Our questionnaire is in Google Form format, ensuring all questions must be answered to proceed to the next section thus preventing inconsistent responses in our results.

#### 3.6.2 Data editing

Illogical responses will be ignored, and we will use computer to create frequency distribution to control the illegal codes. If omissions are not more than 25%, we will help the participants to fill in the question based on their answering pattern and will discard the questionnaire if omissions exceed 25%. For inconsistent responses, we will try to make some corrections on the related questions according to the participants' answers. However, the data need no amendment as omissions, illogical answers, illegal code, and inconsistent answers did not occur.

#### 3.6.3 Data Coding

We have allocated a number to every response and entered into SPSS. In section A, we code the first option equal to "1", second option equal to "2", and so on. For instance, Question 1 (gender), option "Male" was key-in as "1" and option "Female" was key-in as "2".

1. Gender

o Male

o Female

Figure 3.6.3.1 Data Coding for Section A

In Section B, to Section E, we allocate "1" for strongly disagree, "2" for disagree, "3" for neutral, "4" for agree and "5" for strongly agree.



Figure 3.6.3.2 Data Coding for Section B-E

#### 3.6.4 Data transcribing

We code all the responses after receiving from the respondents. After that, we enter all the coded data into SPSS database and analyses all the data entered.

## 3.7 Data analysis

#### 3.7.1 Descriptive analysis

Descriptive analysis is a process of describing or summarizing a set of data using statistical techniques (Bush, T., 2020). We will analyze data collected via Google Forms, including nominal and ordinal scale responses about gender, age, ethnicity, education level and supplements intake in Section A. This data will be presented in tables to show frequency and percentage distributions, aiding in visualizing the distribution of observations within various ranges.

We will analyze nominal variables (gender, ethnicity and supplements intake) from the Google Form data. They'll create a frequency distribution table with categories, frequencies, and total amount. We use pie charts to show percentages for both nominal and ordinal variables to display the percentage of distributions.

#### 3.7.2 Reliability Analysis

To determine a measure's dependability, it is critical to evaluate both consistency and stability. Reliability analysis may be applied to examine the characteristics of measuring scales and the complements that make up the scales. Several commonly used scale reliability measures are computed throughout the reliability analysis process, along with information on the

relationships between specific scale items. Internal consistency is evaluated using popular metrics like Cronbach's alpha ( $\alpha$ ) by using SPSS. Higher values suggest more reliability and more positive results for the scale. Cronbach's alpha runs from 0 (no relationship between items) to 1 (full association).

The standard is as follows:

α	Reliability
0.80 - 0.95	Very good reliability
0.70 - 0.80	Good reliability
0.60 - 0.70	Fair reliability
< 0.60	Poor reliability

Table 3.7.2.1 Cronbach's Alpha Range

The outcomes of reliability test generated in SPSS are as follow:

Types of Variables	Variables	Items	Alpha Value (α)	Reliability
	Social media	6	0.923	Very good reliability
Independent Variable	Perceived social pressure	6	0.739	Good reliability
	Socio-cultural	6	0.840	Very good reliability
Dependent Variable	Weight loss supplements intake	6	0.917	Very good reliability

Table 3.7.2.2 Reliability Test of Pilot Study

For the **first independent variable, social media**, the reliability test's findings indicate that Cronbach's alpha is **0.923**. Since  $\alpha = 0.923$  is in between the scale of 0.80 to 0.95, the six items reliability scales are very good reliability.

For the **second independent variable, perceived social pressure**, the reliability test's findings show Cronbach's alpha is **0.739**. Since  $\alpha = 0.739$  is in between the scale of 0.70 to 0.80, the six items reliability scales are good reliability.

For the **third independent variable, socio-cultural**, the reliability test's findings indicate that Cronbach's alpha is 0.840. Since  $\alpha = 0.840$  is in between the scale of 0.80 to 0.95, the six items reliability scales are very good reliability.

For the **first dependent variable, weight loss supplements intake**, the reliability test's findings indicate that Cronbach's alpha is 0.917. Since  $\alpha = 0.917$  is in between the scale of 0.80 to 0.95, the six items reliability scales are very good reliability.

#### 3.7.3 Inferential analysis

To test the theory, we conducted multiple regression analysis. Multiple regression is a more complex form of linear regression used to predict the value of the dependent variable given the values of two or more independent variables. It helps us to find out the forecasted value of the dependent variable of our study by using the independent variables. According to the aforementioned statements, we must test their hypothesis using multiple regression analysis.

# 3.8 Chapter Summary

Throughout the research, it mostly analyzes research methodology. According to research design, we utilize causal and quantitative research. We adopted the questionnaire approach to collect primary data from the target population and provided explanations for the sample data. Each

variable in our questionnaire has a scale of measurement that has been identified. Also, we have discussed the steps involved in getting ready data for analysis. We described how to use the reliability test feature in SPSS to finish the data analysis. Finally, we provided an overview and description of their descriptive, reliability, and inferential analyses.

#### **CHAPTER 4: DATA ANALYSIS**

#### 4.0 Introduction

Chapter 4 analyzes the actual research conducted in the previous chapter and explains the results of the data collected for 497 respondents. It covers the descriptive analysis, which explain the respondents' demographic characteristics and the central tendencies measurement which related to the frequency and percentage of occurrence, scale measurement, which referring to the reliability of results, and inferential analysis, to generate hypotheses related to the characteristics of the population and to study the connection between independent variables and dependent variable. Lastly, chapter 4 concludes with a summary of its findings.

# 4.1 Descriptive Analysis

### 4.1.1 Respondents Demographic Profile

Gender	Frequency	Percent (%)	Cumulative Percent (%)
Male	223	44.9	44.9
Female	274	55.1	100
Total	497	100.0	

Table 4.1.1.1 Respondent's gender

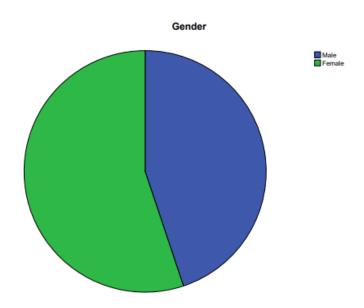


Figure 4.1.1.1 Respondent's gender (Pie chart)

Table 4.1.1.1 shows the respondent's gender. Out of the 497 respondents, there are 223 male respondents and 274 female respondents. Computed into percentages, male respondents occupied 44.9%, while female respondents occupied 55.1%. This shows that in this survey, most respondents are female.

Age	Frequency	Percent (%)	Cumulative Percent (%)
18 – 20 years old	150	30.2	30.2
21 – 23 years old	233	46.9	77.1
24 – 26 years old	114	22.9	100.0
Total	497	100.0	

Table 4.1.1.2 Respondent's age

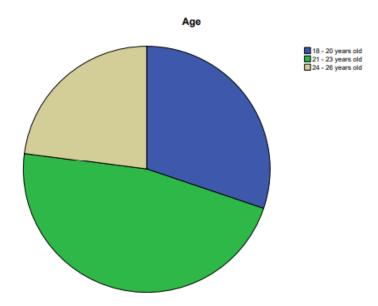


Figure 4.1.1.2 Respondent's age (Pie chart)

Table 4.1.1.2 shows the respondent's ages. There are 150 respondents (30.2%) under 18-20 years old, 233 respondents (46.9%) under 21-23 years old, 114 respondents (22.9%) under 24-26 years old. This shows that most of the respondents are under 21-23 years old as the percentage of this age group occupied the most compared to other age groups.

State	Frequency	Percent (%)	Cumulative Percent (%)
Johor	89	17.9	17.9
Kedah	23	4.6	22.5
Kelantan	3	0.6	23.1
Kuala Lumpur	18	3.6	26.8
Malacca	13	2.6	29.4
Negeri Sembilan	11	2.2	31.6
Pahang	9	1.8	33.4
Perak	73	14.7	48.1
Penang	131	26.4	74.4

Perlis	6	1.2	75.7
Selangor	93	18.7	94.4
Sabah	13	2.6	97.0
Sarawak	12	2.4	99.4
Terengganu	3	0.6	100.0
Total	497	100.0	

Table 4.1.1.3 Respondent's State

#### State

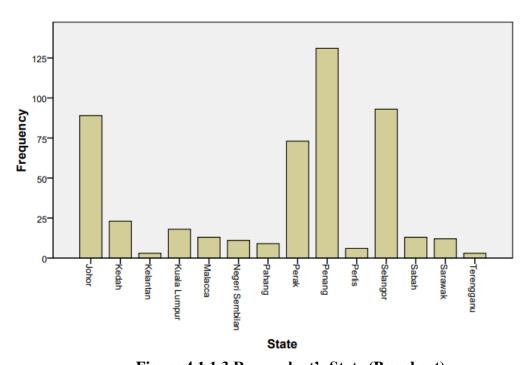


Figure 4.1.1.3 Respondent's State (Bar chart)

Table 4.1.1.3 shows the respondent's State. Out of 497 respondents, 89 respondents (17.9%) are from Johor, 23 respondents (4.6%) are from Kedah, 3 respondents (0.6%) are from Kelantan, 18 respondents (3.6%) are from Kuala Lumpur, 13 respondents (2.6%) are from Melacca, 11 respondents (2.2%) are from Negeri Sembilan, 9 respondents (1.8%) are from Pahang, 73 respondents (14.7%) are from Perak, 131 respondents (26.4%) are from Penang, 6 respondents (1.2%) are from Perlis, 93 respondents (18.7%) are

from Selangor, 13 respondents (2.6%) are from Sabah, 12 respondents (2.4%) are from Sarawak and 3 respondents (0.6%) are from Terengganu. NO data collected from Labuan.

Ethnicity	Frequency	Percent (%)	Cumulative Percent (%)
Malay/Bumiputera	11	2.2	2.2
Chinese	404	81.3	83.5
Indian	82	16.5	100.0
Total	497	100.0	

Table 4.1.1.4 Ethnic group

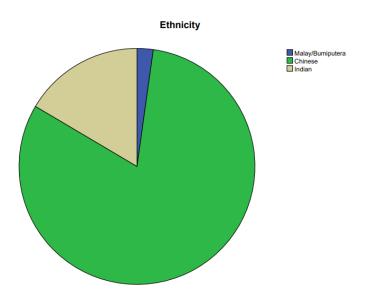


Figure 4.1.1.4 Ethnic group (Pie chart)

Table 4.1.1.4 shows the ethnic group. Out of 497 respondents, 11 respondents (2.2%) are Malay/Bumiputera, 404 respondents (81.3%) are Chinese and 82 respondents (16.5%) are Indians. This indicates that most of the respondents are Chinese, and the least is Malay/Bumiputera.

<b>Education level</b>	Frequency	Percent (%)	Cumulative Percent (%)
Primary education	2	0.4	0.4
Secondary education	19	3.8	4.2
Tertiary education	475	95.6	99.8
Other	1	0.2	100.0
Total	497	100.0	

**Table 4.1.1.5 Level of education** 

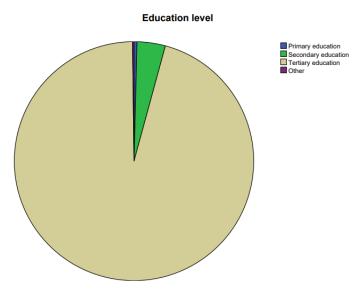


Figure 4.1.1.5 Level of education (Pie chart)

Table 4.1.1.5 shows the respondent's level of education. In the table, 2 respondents (0.4%) with primary education, 19 respondents (3.8%) with secondary education, 475 respondents (95.6%) with tertiary education, and 1 respondent with other education level.

<b>Employment status</b>	Frequency Percent (%)		Cumulative Percent (%)
Working	174	35.0	35.0
Unemployed	7	1.4	36.4
Student	316	63.6	100.0
Total	497	100.0	

**Table 4.1.1.6 Employment status** 

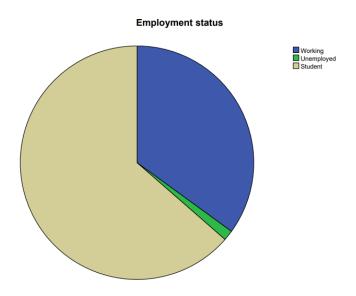


Figure 4.1.1.6 Employment status (Pie chart)

Table 4.1.1.5 shows the employment status. Out of 497 respondents, 174 respondents (35.0%) are working, 7 respondents (1.4%) are unemployed, and 316 respondents (63.6%) are student.

Level of Income	Frequency	Percent (%)	Cumulative Percent (%)
Less than RM1,000	216	43.5	43.5
RM1,000 – RM5,000	201	40.4	83.9
More than RM5,000	80	16.1	100.0
Total	497	100.0	

Table 4.1.1.7 Level of income

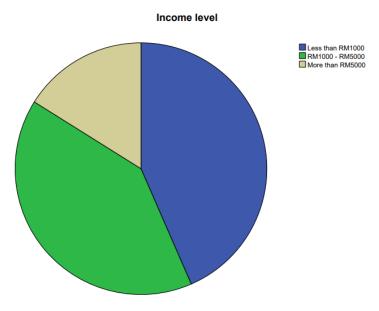


Figure 4.1.1.7 Level of income (Pie chart)

Table 4.1.1.7 shows the level of income. Out of 497 respondents, 216 respondents (43.5%) with income less than RM1000, 201 respondents (40.4%) with income between RM1000-RM5000 and 80 respondents (16.1%) with income more than RM5000.

Plan or currently using weight loss supplements	Frequency	Percent (%)	Cumulative Percent (%)
Yes	23	4.6	4.6
No	474	95.4	100.0
Total	497	100.0	

Table 4.1.1.8 Plan or currently using weight loss supplements

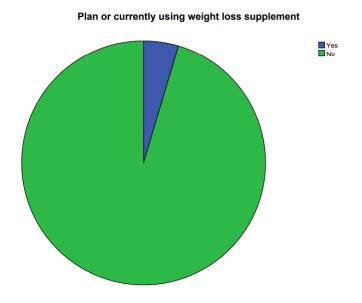


Figure 4.1.1.8 Plan or currently using weight loss supplements (Pie chart)

Table 4.1.1.8 shows the respondent plan or currently using weight loss supplements. Out of 497 respondents, 23 respondents (4.6%) are planning or using weight loss supplements, and 474 respondents (95.4%) are not planning or using weight loss supplements.

# **4.1.2** Central Tendencies Measurement of Constructs (comparison as indicator)

Variables	Sample size, N	Mean	Standard
			Deviation
Social media AVE	497	3.6610	1.03777
Perceived social Pressure AVE	497	3.5275	1.06247
Socio-cultural AVE	497	4.0302	0.73231
Intake AVE	497	3.5111	1.26485

**Table 4.1.2.1 Central Tendencies Measurement** 

Table 4.1.2.1 shows the variables' mean and their standard deviation. Mean is the average value and standard deviation is an indicator to determine the variability of the data. From the table, Socio-cultural Average has the highest mean scoring with 4.0302 and Supplements Intake Average with least mean scoring of 3.5111. For standard deviation, Intake Average has the highest scoring with 1.26485, and Socio-cultural with the lowest scoring 0.73231. This result shows that Intake Average's standard deviation demonstrated that the data points are dispersed throughout a wide range of deviations from the mean. Compared Socio-cultural Average, it has the least standard deviation scoring, which means the value is close to the mean value.

#### 4.2 Scale Measurement

α	Reliability
0.80 - 0.95	Very good reliability
0.70 - 0.80	Good reliability
0.60 - 0.70	Fair reliability
< 0.60	Poor reliability

Table 4.2.1 Cronbach's Alpha Range

Alpha Value (α)	No of items
0.904	6

Table 4.2.2 Reliability test on social media

The result of the reliability test on **social media** displays Cronbach's Alpha is 0.904. Since Cronbach's Alpha value is 0.904 which under the range of 0.80 to 0.95, the six items measuring trust are very good reliability.

Alpha Value (α)	No of items
0.883	6

Table 4.2.3 Reliability test on perceived social pressure

The result of the reliability test on **perceived social pressure** displays Cronbach's Alpha is 0.883. Since Cronbach's Alpha value is 0.883 which under the range of 0.80 to 0.95, the six items measuring trust are very good reliability.

Alpha Value (α)	No of items
0.797	6

Table 4.2.4 Reliability test on socio-cultural

The result of the reliability test on **socio-cultural** displays Cronbach's Alpha is 0.797. Since Cronbach's Alpha value is 0.797 which falls the range of 0.70 to 0.80, the six items measuring trust are good reliability.

Alpha Value (α)	No of items
0.939	6

Table 4.2.5 Reliability test on weight loss supplements intake

The result of the reliability test on **weight loss supplements intake** displays Cronbach's Alpha is 0.939. Since Cronbach's Alpha value is 0.939 which falls the range of 0.80 to 0.95, the six items measuring trust are very good reliability.

Types of Variables	Variables	Items	Alpha Value (α)	Reliability
	Social media	6	0.904	Very good reliability
Independent Variable	Perceived social pressure	6	0.883	Very good reliability
	Socio-cultural	6	0.797	Good reliability
Dependent Variable	Weight loss supplements intake	6	0.939	Very good reliability

**Table 4.2.6 Reliability Test Result** 

Cronbach's alpha coefficient was utilized to evaluate the reliability of the scale measurement in this study. A Cronbach's alpha score of at least 0.60 indicates fair dependability. In the study, all variables, both independent and dependent variables obtained alpha values more than 0.60 indicating satisfactory reliability. Table 4.2.6 also displays the original reliability analysis findings without any corrective action toward the low alpha values variable.

# **4.3 Inferential Analyses**

Model Summary				
Model R R Square Adjusted R Square Std. Error of the Estimate				
1	.871ª	.758	.757	.62360

a. Predictors: (Constant), Cultural average, Media Average, Pressure Average

**Table 4.3.1 Model Summary** 

#### Dependent variable: Weight loss supplements intake

The correlation coefficient (R-value) between the dependent and independent variables is 0.871, as shown in diagram 4.3.1. As a result, it implies that there is a connection between the dependent and independent variables. Furthermore, the R Square value reveals the connection between the independent and dependent variables. Diagram 4.3.1 shows that, the R-square result is 0.758. Which mean the independent factors are able to explain 75.8% of the dependent variable. Nonetheless, 24.2% of the research is unexplained. In other words, the study did not take into consideration other critical criteria for understanding weight loss supplements intake.

Anova								
Model	Sum of Squares	df	Mean Squares	F	Sig.			
Regression	601.803	3	2001.601	515.839	.000ª			
Residual	191.719	493	.389					
Total	793.522	496						

a. Predictors: (Constant), Cultural Average, Media Average, Pressure Average

Table 4.3.2 ANOVA

b. Dependent Variable: Intake Average

b. Dependent Variable: Intake Average

H1: Exposure to social media advertisements has a significant impact on weight loss supplements consumption and intentions to take among young adults in Malaysia.

#### Is H1 (alternative hypothesis) supported?

According to Table 4.3.2, the p-value (sig. 0.000) is less than Alpha value (0.05) which indicate the result is significance. The F statistic indicates statistical significance. The model used in this research accurately depicts the connection between the dependent and predictor variables. As a result, the predictor variables have a significant impact on dependent variable. As a result, the alternative explanation is **supported**.

Coefficients									
Model	Unstandardized coefficients		Standardized coefficients	t	Sig.				
	В	Std. Error	Beta	-	8				
(Constant)	726	.158		-4.608	.000				
Media Average	.443	.048	.350	8.206	.000				
Pressure Average	.623	.046	.523	13.627	.000				
Cultural Average	.104	.051	.060	2.025	.034				

**Table 4.3.3 Coefficients Results** 

#### H1: Is social media significant to weight loss supplements intake?

In this research, social media has a positive beta value of 0.350. The social media advertisements are **significant** to weight loss supplements consumption and intentions to take because the p-value is 0.000, which is less than the 0.05.

#### H2: Is perceived social pressure significant to weight loss supplements intake?

In this research, perceived social pressure has a positive beta value of 0.523 and it is **significant** to weight loss supplements consumption and intentions to take because the p-value is 0.000, which is less than the 0.05.

#### H3: Is socio-cultural significant to weight loss supplements intake?

In this research, socio-cultural has a positive beta value of 0.060 and it is significant to weight loss supplements consumption and intentions to take because the p-value is 0.043, which is less than the 0.05.

Regression equations are:

 $y = a + b_1(x_1) + b_2(x_2) + b_3(x_3)$ 

y = Weight loss supplements intake

a = Unstandardized coefficients B (constant) value

 $b_1$  = Unstandardized coefficients B social media advertisements average

b<sub>2</sub> = Unstandardized coefficients B perceived social pressure average

b<sub>3</sub> = Unstandardized coefficients B socio-cultural average

 $X_1$  = Social media advertisements

 $X_2$  = Social pressure

 $X_3 = Socio-cultural$ 

Weight loss supplements intake = -0.726 + 0.443 (Social media advertisements) + 0.623 (Perceived social pressure) + 0.104 (Socio-cultural)

#### **Highest contribution**

Perceived social pressure is the predictor variable that most strongly contributes to the variation in the dependent variable. This is since, relative to other predictor variables, this predictor variable has the highest Beta value (under standardized coefficients) which is 0.523. After accounting for the variance described by each of the model's other predictor variables, perceived social pressure had the greatest individual contribution in describing the variation in the dependent variable.

#### Lowest contribution

Social cultural is the predictor variable that has the lowest variation of the dependent variable. It is because, when compared to other predictor variables, the

smallest Beta value (under standardized coefficients) for this predictor variable is 0.60. Social cultural makes up the smallest portion of the variance in the dependent variable that is explained by the other predictor components in the model.

# **4.4 Chapter Summary**

To conclude, this research chapter presents the result of data analysis by using statistics and related findings. It explains how SPSS was used to analyze respondents' demographic characteristics and variables, as well as their relationships. Moreover, the connections between the independent variables and dependent variable were also examined using multiple regression analysis, which will be discussed and concluded in the next chapter.

# CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

#### 5.0 Introduction

Chapter 5 gather, review and summarizes past statistical studies of data. It will highlight significant findings that support out aims and hypothesis. This chapter will summarize statistical analyses, discuss major findings, limitations of the study, recommendations to future research, and conclusion.

# **5.1 Summary of Statistical Analyses**

Based on the data gathered, there are more female respondents (55.1%) than male respondents (44.9%). Among all the ages, 21-23 years old had the most respondents at 233 out of 497 respondents. A total of 14 states participated in this study where Penang had the most at 26.4% out of all respondents, followed by Selangor (18.7%) and Johor (17.9%). These three states have collectively represented most of the participants from Malaysia. Furthermore, out of 497 respondents, Chinese participants are more than half of the respondents, followed by Indian and Malay/Bumiputera. In terms of education level, indicated by table 4.1.1.5, most of our respondents are pursuing or finished tertiary education. The percentage number of respondents who are employed and working represents 35.0% while only 1.4% of unemployed respondents. The income level group of less than RM 1000 had the most representation at 43.5%, followed by groups of more than RM 5000 and RM 1000- RM 5000. Lastly, for the plan or currently using weight loss supplements, only a small number of respondents (4.6%) selected Yes while others did not plan or take weight loss supplements.

By using Cronbach's alpha coefficient, Cronbach's alpha value of at least 0.60 represents fair reliability, with at least 0.70 representing good reliability and

with at least 0.80 represents very good reliability. Based on our study, all the variables including independent variables and dependent variables achieved alpha values above 0.7 to 0.9, which indicates that variables are good reliability and very good reliability. It is noteworthy that most of the variables have scored P-value less than 0.05 and are confirmed to be associated with dependable variables.

To summarize, based on Table 4.3.3, all variables showcase significant relationships between independent variables and dependent variables, which are social media variables, perceived social pressures variables and socio-cultural variables that exemplifies the impact on weight loss supplements consumption.

### **5.2 Discussions of Major Findings**

Based on our study, it was found that the majority of respondents (43.5%) have income less than RM1000, followed by 40.4% with income between RM1000-5000. This might be due to their current status as university students (63.6% are students). Given this result, it can be concluded that income level still can act as a demographic determinant influencing weight loss supplements intention among young adults in Malaysia. Although there are 474 out of a total of 497 of our respondents stated that they did not plan or currently using weight loss supplements, they still perceived that certain societal factors such as social media advertisements, perceived social pressure, as well as sociocultural factors have a combined effect on their intention to uptake weight loss supplements, as shown by the study results where all these three variables were found to have significant influence on weight loss supplements consumption and consumption intention among young adults in Malaysia. Even though a majority of the respondents are made up of those with income levels less than RM1000, indicating a lower income, they are still influenced by weight loss supplement consumption or consumption intention when coming into contact with the three societal variables.

# **5.2.1** Social Media Advertisements and Weight Loss Supplements Consumption

To study the effect of social media advertisements on the consumption and intention to consume weight loss supplements, a specific research question has been established in Chapter 1, that is how does social media advertisements influence the consumption and intentions to take weight loss supplements among young adults in Malaysia? According to the inferential analysis conducted in the previous chapter, the result indicated that social media advertisements could significantly influence weight loss supplements consumption and intention to take since the p-value (0.00) is less than the alpha value (0.05). Hence, H1 is accepted. This research outcome is supported by other researchers such as He et al. (2017), Nasiruddin (2018) and Ragupathi and Fogel (2014). Despite the lack of empirical evidence showing a direct relationship between social media advertisements and weight loss supplement consumption, one of the studies indicated a direct significant relationship between social media advertisement and weight loss supplement intake, yet most of the mentioned studies concluded that social media advertising could significantly impact weight loss and weight management behaviours, which suggested a higher possibility of them intend to consume weight loss supplements to improve their body image. In line with this, it is proven that the behaviour of weight loss supplements consumption intention among Malaysian young adults could be increased through social media advertisements. Putting this into our research context, social media advertisement is an important factor in determining weight loss supplements consumption and intention to uptake among young adults in Malaysia. This happens because young adults dedicate considerable time scrolling through their social media newsfeeds, where they come across various health-related content through friends, news outlets, or advertisements (Lim et al., 2022). Since they are targeted for the weight loss industry and frequently exposed to weight loss contents and products yet are less equipped to critically analyse an advertisement, they are more prone to the influence of weight-loss products, which include weight loss supplements (Cormier, 2018).

# 5.2.2 Perceived Social Pressure and Weight Loss Supplements Consumption

To study the effect of perceived social pressure on the consumption and intention to take weight loss supplements, a specific research question "How does perceived social pressure influence the consumption and intentions to take weight loss supplements among young adults in Malaysia?" has been established in Chapter 1. According to the inferential analysis conducted in the previous chapter, it is concluded that perceived social pressure could significantly influence weight loss supplements consumption and intention to take since the p-value (0.00) is less than the alpha value (0.05). Therefore, H2 is accepted. The research outcome is in line with other researchers such as Bharadwaj (2022) whose findings indicated that impulse purchase intention of weight loss dietary supplements is significantly influenced by subjective norms, Noor et al. (2014) who found a significant positive relationship between normative influence and consumer attitude towards dietary supplements consumption, as well as Spadine and Patterson (2022) who investigated the relationship between social influence and fad diet use that includes diet pills. In our study, it has been proven true that weight loss supplement consumption and consumption intention are influenced by perceived social pressure among young adults in Malaysia. This could be explained in a way that when younger consumers who consume dietary supplements for the purpose of losing weight have been strongly influenced by their parents and family members, friends, physicians, and Internet sources to do so, and the lack of access to accurate, precise, and objective information about which dietary supplements is one of the reasons they will obtain information from other people such as family members and friends who possess health-related information (Al-Naggar & Chen, 2011).

# **5.2.3** Socio-cultural and Weight Loss Supplements Consumption

To study the effect of socio-cultural on the consumption and intention to consume weight loss supplements, a specific research question "How does socio-cultural influence affect the consumption and intentions to take weight loss supplements among young adults in Malaysia?" has been established in Chapter 1. According to the inferential analysis conducted in Chapter 4, it is concluded that socio-cultural factors are significant to weight loss supplements consumption and intention to consume since the p-value (0.043) is less than the alpha value (0.05). Therefore, H3 is accepted. Our research outcome is in line with that of other researchers such as Lubowiecki-Vikuk et al. (2019) and Jairoun et al. (2023), which concluded that socio-cultural factors could significantly influence the use of weight loss supplements. In our study, it is proven true that weight loss supplements consumption and consumption intention among Malaysian young adults can be influenced by social-cultural factors. This might be due to Malaysian culture that prioritises slimness as a beauty standard, supported by the increased number of slimming clinics operated in Malaysia and their advertisements on social media (Ragu, 2023). Besides, experts asserted that when young girls observe others with slim body receiving compliments, wearing stylish clothes, or getting attention, they also desire the same outcomes, and that they are flooded with images that praise slim individuals on media (Murugesan, 2023). Therefore, this cultural norm can exert pressure on young adults to conform to these standards, resulting in the desire to lose weight and might be consuming or turning to weight loss supplements.

## 5.3 Implication of the Study

#### **5.3.1** Theoretical implication

Health Belief Model (HBM) was implemented in this study, a model that was developed in the 1950s by social psychologists to understand and predict health behaviors based on individuals' attitudes and beliefs (Kirscht, 1974). HBM offers insight into how social factors influence adolescents' perspectives on weight loss supplement consumption. Specifically, the HBM considers how young adults evaluate the threat of a health issue, perceive the benefits and barriers associated with taking action, respond to cues to action, and assess their self-efficacy in relation to using weight loss supplements.

Based on our study, young adults perceive benefits in terms of fitting in with peer groups or achieving a desired appearance. In this case, the significance rate of social media variable and perceived social pressure variable showed us that social norms indeed will impact on their choices on consuming weight loss supplement. Besides, social media algorithms are predicting the best content to attract user consumption (Sang, A.K., 2020) and might be hinting regarding weight loss supplements in their social media whereby subconsciously individuals are reminded of the benefit of taking weight loss supplements. For barriers may include concerns about potential health risks and conflicting societal norms, Pajor et al. (2017b) mentioned that concerns were raised by both users and non-users over product features, including high-dosage tablets, component uncertainty, and insufficient evidence of safety which in this case respondents are taking mainly branded supplement such as Herbalife and Nutrilife shows us the awareness and their sceptical about the consequences of weight loss supplement consumption especially towards unlicensed products.

Cues to action, such as peer pressure, can encourage individuals to consider weight loss supplement consumption. They tend to conform to their group's standards, a process called peer socialization (Andrews et al., 2020). As mentioned, social media might be the main prompt affecting individuals in their weight loss supplement consumption but friends or peers still play their part in convincing individuals for their supplement consumption. Additionally, self-efficacy, reflecting an individual's belief in their ability to successfully carry out a behaviour, can be influenced by social factors such as peer support and positive role models. A supportive environment will promote self-belief and determination that can empower individuals to overcome obstacles and pursue their desires.

By comprehensively examining all facets of the HBM within the context of our study, it becomes evident that the social dimension plays a pivotal role in shaping individuals' perspectives toward weight loss supplements. This nuanced understanding not only enhances our comprehension of young adults' behaviour but also suggests the necessity of multifaceted interventions between individual beliefs, societal norms, and peer influences in promoting the consumption of weight loss supplements.

### **5.3.2** Managerial implications

Based on the study, we are more focused on how the social factors played their role in affecting the perception of individuals to assist their decision-making in weight loss supplement consumption. We found that social media and perceived social pressure were contributing heavily towards the intake of supplements among young adults. Since health concern, regulatory issues and marketing strategy are the few considerations to be focused on to make sure the reduction of stereotypes, marketers should go for the directions of those to provide marketing strategies to attract more consumers and help them to remove their concerns regarding to the issues by building consumer base and awareness through social media, and slowly forming a social culture towards healthy lifestyle and image.

Traditionally, dietary supplementation has been met with scepticism within societal discourse, often characterized by a perception of redundancy or casual indifference. However, contemporary shifts in societal attitudes towards health and wellness have precipitated a notable transformation. Individuals are increasingly proactive in their pursuit of well-being, prompting a re-evaluation of the role of supplements as integral components of preventive healthcare and adjunctive therapeutic interventions (Hwang & Cranage, 2010). This evolving perspective is underpinned by a recognition of the vital nutrients, such as iron and Vitamin D, that supplements offer (Maughan et al., 2018; Garthe & Maughan, 2018). To get broader acceptance and understanding of supplementation, it is incumbent upon marketers to strategically articulate the capacity of these products to fortify immune resilience and foster holistic wellness, thereby instilling confidence in their utility (Rawson et al., 2018). Furthermore, to counter prevailing stereotypes, particularly surrounding weight loss supplements, a paradigm shift in marketing strategies is imperative. Leveraging the expansive reach of social media platforms in tandem with influencer collaborations presents a compelling opportunity to disseminate informative content and engage diverse consumer demographics (Nordqvist, 2018). Through such approaches, marketers can effectively foster informed discourse and cultivate a more positive perception towards the role of dietary supplementation in health promotion.

Regulatory oversight is a critical factor influencing individual attitudes toward weight loss supplements. Consumers often rely on product labels to identify any potential health risks before making a purchase. Policymakers should, therefore, enforce strict regulations, requiring thorough inspection of supplement ingredients to ensure they are correctly listed in the supplementary data system (Crawford et al., 2020). For example, certain ergogenic supplements may contain harmful substances, such as nitrates found in beetroot juice, which pose health risks (Garthe & Maughan, 2018).

Our research indicates that brand reputation significantly affects consumer trust. Products that are licensed and approved by recognized bodies, such as NSF International, are trusted more by consumers. This trust is based on the belief that these products adhere to rigorous regulatory standards, including proper manufacturing processes and accurate labelling (Tagliaferro, 2023). To enhance consumer trust, businesses in the supplement industry must prioritize transparency and credibility. They should also actively collaborate with healthcare professionals to ensure the dissemination of reliable information. By adopting these practices, companies not only improve their brand equity but also demonstrate a commitment to consumer safety and satisfaction. Ultimately, this approach underlines the industry's dedication to supporting public health and well-being.

Lastly, our study highlights the socio-cultural influences on individuals' perceptions of their appearance, particularly concerning weight loss supplements consumption. Marketing strategies play a crucial role in linking these perceptions to product benefits, effectively integrating the supplement into consumers' socio-cultural narratives. Through storytelling and content marketing, marketers can educate consumers, appealing to their emotions and fostering engagement with the product. How the story convinces consumers to relate themselves to the product provides an additional insight into how engagement evolves dynamically among consumers (Covà & Paranque, 2016) as the perceived benefits element in HBM. Furthermore, our research underscores the significance of brand image in shaping consumer perceptions and purchasing decisions, as highlighted by Rindell & Iglesias (2014). For instance, Herbalife strategically aligns its brand with a healthy lifestyle, showcasing the benefits of its supplements alongside exercise (Live Your Best Life with Herbalife F1 Shake). This approach resonates particularly well with young adults, who often lead busy lifestyles and may prioritize convenience over traditional weight loss methods. Overall, by understanding and leveraging the sociocultural dynamics at play, marketers can effectively position weight loss supplements within the consumer psyche, driving engagement and

influencing purchasing behaviour.

To sum up, our findings offer a strategic blueprint for creating marketing campaigns that resonate with consumers and support the development of a healthier society. Our extensive analysis also can enhance future studies between social influence, media consumption and supplements usage. The implications of this study can be served as a foundation for further investigation into the evolving relationship between consumer behavior and the weight loss supplement industry as this is one of the pioneering research projects for this field of study.

# 5.4 Limitations of the Study

Despite our study could bring a positive impact for future studies in supplements consumption patterns, there are plenty of limitations that shall not be ignored. One of the first limitations is the data collection method. Questionnaire survey approach has been the only method to gain the data due to the large scale of respondents required. This method does not bring out the maximum value of information as we might miss some opportunities to gain valuable insights by acquiring detailed information and opinion from the respondents. Since different respondents might interpret the questions differently, there are chances that the questionnaire being misunderstood and difficult of understanding the question.

Our study also faces the challenge of limited past research, as we are pioneering the exploration of this topic in Malaysia. This scarcity of prior studies heightens the difficulty in obtaining data. Furthermore, our studies may have different names and some research may have been overlooked that should have been included (Thunberg & Arnell, 2021). We have adapted questionnaires from research conducted in other countries, which may not accurately reflect the Malaysian context.

Lastly, limitation that has been encountered during research is sampling bias. Selection bias may result in an unrepresentative sample or results that are overstated or misrepresented (Berndt, 2020). The barrier is getting the young adults who consume weight loss supplements in such a large scale which results in underrepresentation of supplements users within the sample, which may not accurately reflect the behaviours, attitudes, and factors influencing supplements consumption among the demographic. However, the study can still provide valuable insights into the perspectives and behaviours of young adults who do not consume supplements.

In conclusion, despite all of these drawbacks, our research advances knowledge about the supplementation habits of Malaysian young adults. To advance in this field of study, resolving these limitations via methodological improvements and increased research efforts will be crucial.

#### 5.5 Recommendations for Future Research

Recommendations for future research play a pivotal role in ensuring the quality and advancement of scholarly endeavors. Building upon the limitations outlined in the preceding sections, this segment serves to underscore these constraints and furnish comprehensive guidelines and recommendations aimed at enhancing the research framework. By addressing these identified shortcomings and proposing avenues for refinement, researchers can pave the way for more robust and impactful investigations in the field.

Based on the part of the limitation of the study, establishing standardized procedures is a suggested way to improve the study of the limitations caused by the data collection method. According to Bell et al. (2016), establishing standardized procedures for surveying to reduce inconsistencies in how participants understand and answer the questions. Furnish precise guidelines and explanations to guarantee uniform comprehension among all respondents. Moreover, contemplate providing training for survey administrators to adeptly convey the study's objectives and

address any queries or ambiguities participants may encounter throughout the survey administration.

Besides, collaborative research partnerships. As per Kongsted et al. (2020), collaborate with industry stakeholders, academic institutions, or community organizations to expand the scope and reach of the study. For example, collaborate with UTAR institutions to spread the questionnaire form to the university students through UTAR mail. Partnering with relevant stakeholders can facilitate access to diverse participant populations, resources, and expertise, thereby enhancing the quality and relevance of the research outcomes. Additionally, collaborative research partnerships can foster interdisciplinary perspectives and facilitate the implementation of innovative data collection methods and analytical approaches to overcome limitations associated with traditional research methodologies.

Given the second limitations of limited prior research, employing a mixed methods approach stands out as a viable strategy to enhance and address this limitation effectively. Based on McKim (2016) analysis, consider adopting a mixed methods approach that combines quantitative surveys with qualitative methods such as interviews or observations able to allows for a more comprehensive understanding of the topic and provides richer data for analysis. Not only this, Archibald (2015) proposes that mixed methods approach also will enhance validity and triangulation. Adopting a mixed methods approach enhances the validity of research findings through triangulation, which involves comparing data from different sources or methods. Triangulation helps researchers corroborate findings, identify inconsistencies, and develop a more robust understanding of the research topic. For example, if quantitative survey results suggest a certain trend, qualitative interviews can provide insights into why that trend occurs and how it is experienced by individuals. By triangulating data from multiple sources, researchers can strengthen the validity and reliability of their findings, enhancing the overall credibility of the study.

To mitigate the limitations posed by sample bias, it is advisable to adopt methodologies aimed at incentivizing participation among respondents. Based on the journal article by Murdoch et al. (2014), offer some incentives to encourage

participation from a more diverse pool of young adults. This could be in the form of monetary compensation, gift cards, or access to resources related to health and fitness. By offering resources that align with the interests and goals of young adults, it can increase motivation for participation and attract a more diverse sample. Furthermore, collaborate with influencers or advocates also is a suggested way. Partner with influencers or advocates within the young adult community who can help promote the study and encourage participation from their followers. These individuals can help reach segments of the population that may not otherwise be accessible through traditional recruitment methods. Also, work closely with influencers or advocates to create targeted content that resonates with the specific interests and concerns of young adults. Scott (2018) investigation reveals that this content could include informative blog posts, engaging videos, or communicating social media campaigns that address common questions, misconceptions, or trends related to weight loss supplements consumption. By tailoring the messaging to the preferences and communication styles of the target audience, it can effectively capture their attention and encourage participation in the research study.

In summary, implementing these recommendations brings numerous benefits for future research endeavours. Standardized procedures enhance data reliability, collaborative partnerships broaden research scope, and mixed methods approaches deepen understanding. Mitigating sample bias through incentives and influencer collaborations enriches participant diversity. Overall, these measures collectively elevate the quality, relevance, and impact of scholarly investigations, fostering continuous improvement in the field of research and overcome the limitations of this research.

#### **5.6** Conclusion

In conclusion, this chapter employing the Health Belief Model (HBM) reveals the significant impact of social factors on young adults' attitudes toward weight loss supplements. It underscores the need for addressing societal concerns, regulatory issues, and strategic marketing to foster acceptance and understanding.

The findings offer insights for creating effective marketing campaigns and highlight areas for future research in understanding consumer behavior in the weight loss supplement industry. For our study, we specifically focused on young adults in Malaysia, particularly those who have utilized or intents to weight loss supplements. Data were gathered through questionnaire forms, employing a convenient sampling approach for demographic profiles, factors, and intentions, while utilizing judgmental sampling methods for screening questions. A total of 497 responses were utilized in our analysis.

Despite the limitations encountered in our study on supplements consumption patterns among Malaysian young adults, but it still has provided valuable insights. Addressing challenges such as data collection methods, limited prior research, and sampling bias is essential for future investigations. By implementing recommended strategies like standardized procedures, mixed methods approach, and incentivizing participation, we can enhance the quality and relevance of future research in this area. These efforts will contribute to a more comprehensive understanding of supplements consumption behaviors and facilitate the development of effective interventions and policies.

Overall, in this chapter, readers will benefit from the study's insights into the social influences on young adults' perceptions of weight loss supplements consumption. Additionally, the recommendations provided offer practical strategies for overcoming research limitations and advancing scholarly endeavors in this field.

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## **Appendix 2: Questionnaire of the Study**



#### UNIVERSITI TUNKU ABDUL RAHMAN FACULTY OF BUSINESS AND FINANCE (FBF) BACHELOR OF BUSINESS ADMINISTRATION (HONS)

Unveiling Influences: Exploring Societal Factors on Weight Loss Supplement Among Young Adults in Malaysia

Dear respondents,

We are students from Bachelor of Business Administration (Honours) Healthcare Management from Universiti Tunku Abdul Rahman (UTAR). We would like to invite you to participate in our Final Year Project entitled "Unveiling Influences: Exploring Societal Factors on Weight Loss Supplement Among Young Adults in Malaysia" through filling out this questionnaire. There are Five (5) sections in this questionnaire. Section A is on demographic profile. Section B, C, D and E cover all of the variables in this study. Please read the instruction carefully before answering the questions. Please answer ALL sections. Completion of this questionnaires will take you approximately 5 to 10 minutes.

Your participation in this study is entirely voluntary. There will be no disadvantage if you decide not to complete the attached anonymous questionnaire. You can withdraw at any time without any penalty. You can refuse to answer any question at any time if you feel uncomfortable.

Should you have any queries regarding to this questionnaire, you may contact at 012-5088554 or abcde12345@1utar.my

If you decide to complete this attached anonymous questionnaire, this will be taken as you voluntarily agree and formal consent to participate in this study. Thank you very much for your cooperation and willingness to participate in this study.

Yours sincerely, Tong Khay Lok Group 1 - BBHM

## **Personal Data Protection Notice**

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

- 1. Personal data refers to any information which may directly or indirectly identify a person which could include sensitive personal data and expression of opinion.

  Among others it includes:
- a) Name
- b) Identity card
- c) Place of Birth
- d) Address
- e) Education History
- f) Employment History
- g) Medical History
- h) Blood type
- i) Race
- j) Religion
- k) Photo
- 1) Personal Information and Associated Research Data
- 2. The purposes for which your personal data may be used are inclusive but not limited to:
- a) For assessment of any application to UTAR
- b) For processing any benefits and services
- c) For communication purposes
- d) For advertorial and news
- e) For general administration and record purposes
- f) For enhancing the value of education
- g) For educational and related purposes consequential to UTAR
- h) For replying any responds to complaints and enquiries

- i) For the purpose of our corporate governance
- j) For the purposes of conducting research/collaboration
- 3. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.
- 4. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.
- 5. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

#### **Consent:**

- 6. By submitting or providing your personal data to UTAR, you had consented and agreed for your personal data to be used in accordance to the terms and conditions in the Notice and our relevant policy.
- 7. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.
- 8. You may access and update your personal data by writing to us at abcde12345@1utar.my

# **Acknowledgment of Notice**

[	] I have been notified by you and that I hereby understood, consented and
agree	d per UTAR above
	notice.
[	] I disagree, my personal data will not be processed.
Name	»:
Date:	

# FYP Questionnaire

# **Section A: Demographic Profile**

Please select the most appropriate answer for each of the following.

1. Gender:		
[ ] Male	[ ] Female	
2. Age:		
[ ] 18 - 20		
[ ] 21 - 23		
[ ] 24 - 26		
3. Which state are y	ou from?	
[ ] Johor	[ ] Malacca	[ ] Perlis
[ ] Kedah	[ ] Negeri Sembilan	[ ] Selangor
[ ] Kelantan	[ ] Pahang	[ ] Sabah
[ ] Kuala Lumpur	[ ] Perak	[ ] Sarawak
[ ] Labuan	[ ] Penang	[ ] Terengganu
4. Ethnicity:		
[ ] Malay/Bumiputera	[ ] Other:	
[ ] Chinese		
[ ] Indian		

[ ] Primary education [ ] Other:
[ ] Tertiary education  6. Employment Status:  [ ] Working
6. Employment Status:  [ ] Working
[ ] Working
[ ] Working
[ ] Unemployed [ ] Other:
7. Income Level: [ ] Less than RM1000 [ ] RM1000-RM5000 [ ] More than RM5000
7. Income Level: [ ] Less than RM1000 [ ] RM1000-RM5000 [ ] More than RM5000
[ ] Less than RM1000 [ ] RM1000-RM5000 [ ] More than RM5000
[ ] Less than RM1000 [ ] RM1000-RM5000 [ ] More than RM5000
[ ] RM1000-RM5000 [ ] More than RM5000
[ ] More than RM5000
9 Do you plan or augmently using any weight loss supplement
9 Do you plan or augmently using any weight loss supplement
8. Do you plan or currently using any weight loss supplement
[ ] Yes
[ ] No
9. If "Yes", please state the name of supplement(s):
[ ]
10. Which social media platforms do you use most often?
For example: Facebook, YouTube, Instagram, Twitter etc.
[]

## Section B: Social Media

In this section you will be asked about the how social media impact on your weight loss supplements consumption. Please select the most appropriate option that best indicate your agreement level with the following statements.

No	Question	Strongly	Disagree	Neutral	Agree	Strongly
		disagree				Agree
		1	2	3	4	5
1.	Social media					
	advertising provides me					
	timely information					
	about the weight loss					
	supplements.					
2.	Social media					
	advertising provides me					
	complete information					
	of the weight loss					
	supplements.					
3.	Social media					
	advertising offered me					
	an extra information					
	that can be benefit to					
	my decision making on					
	purchasing weight loss					
	supplement.					
4.	Advertisements on					
	social media for					
	me about weight loss					
	supplements are					
	reliable and acceptable.					

5.	Advertisements on			
	social media about			
	weight loss			
	supplements are			
	believable and credible			
	information sources.			
6.	Advertisements on			
	social media most			
	likely present facts			
	about valuable			
	information on weight			
	loss supplements which			
	saving time and energy			
	of myself.			

## **Section C: Perceived Social Pressure**

In this section you will be asked about how social pressure has impacted on your weight loss supplements consumption. Please select the most appropriate option that best indicate your agreement level with the following statements.

No	Question	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1.	When buying dietary					
	supplements, I					
	generally purchase					
	those brands that I think					
	my friends or peers will					
	approve of.					
2.	My friends or peers					
	would think I should					
	take dietary					
	supplements.					
3.	My friends/peers would					
	approve of my taking					
	dietary supplements.					
4.	My family have given					
	me support or praise for					
	taking dietary tablets					
	regularly.					
5.	My family have given					
	me advice on any					
	complaints I have had					
	about taking dietary					
	supplements.					
6.	My family have					
	provided me with funds					
	for nutritional food.					

## **Section D: Socio-Cultural**

In this section, you will be asked about how social cultural affects your weight loss supplements consumption. Please select the most appropriate option that best indicate your agreement level with the following statements.

No	Question	Strongly	Disagree	Neutral	Agree	Strongly
		disagree				Agree
		1	2	3	4	5
1.	People talk about how					
	important it is to					
	always look attractive					
2.	People talk about what					
	they would like their					
	bodies to look like					
3.	People talk about the					
	size and shape of their					
	bodies					
4.	People talk about what					
	they can do to always					
	look the best					
5.	People say I should go					
	on diet					
6.	People say I would					
	look better if I had a					
	more muscular body					

## **Section E: Weight Loss Supplements Intake**

In this section, you will be asked about your opinion towards weight loss supplement intake. Please select the most appropriate option that best indicate your agreement level with the following statements.

No	Question	Strongly	Disagree	Neutral	Agree	Strongly
		disagree				Agree
		1	2	3	4	5
1.	Weight loss					
	supplements are safe					
	and cause no side					
	effects.					
2.	I want to use weight					
	loss supplements that					
	have a good reputation.					
3.	Weight loss					
	supplements can be					
	used concomitantly					
	with medicines.					
4.	Weight loss					
	supplements can					
	prevent diseases.					
5.	Weight loss					
	supplements can					
	compensate for an					
	unbalanced diet.					
6.	I want to use dietary					
	supplements for weight					
	loss or muscle building.			_		

Thank you for your participation.

## **Appendix 3: Reliability Test for Pilot Study**

Independent Variable: Social Media (Advertisements)

## **Case Processing Summary**

		N	%
Cases	Valid	50	100.0
	Excluded <sup>a</sup>	0	.0
	Total	50	100.0

a. Listwise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.923	.925	6

Independent Variable: Perceived Social Pressure

### **Case Processing Summary**

		N	%
Cases	Valid	50	100.0
	Excludeda	0	.0
	Total	50	100.0

a. Listwise deletion based on all variables in the procedure.

### **Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.739	.745	6

Independent Variable: Social Cultural

**Case Processing Summary** 

		N	%
Cases	Valid	50	100.0
	Excludeda	0	.0
	Total	50	100.0

a. Listwise deletion based on all variables in the procedure.

## Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.840	.851	6

Dependent Variable: Weight-loss Supplement Intake

**Case Processing Summary** 

		N	%
Cases	Valid	50	100.0
	Excludeda	0	.0
	Total	50	100.0

a. Listwise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.917	.922	6

## **Appendix 4: Reliability Test for Actual Study**

Independent Variable: Social Media (Advertisements)

### **Case Processing Summary**

		N	%
Cases	Valid	497	100.0
	Excludeda	0	.0
	Total	497	100.0

a. Listwise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.904	.901	6

#### **Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
21.9658	35.952	5.99604	6

Independent Variable: Perceived Social Pressure

### **Case Processing Summary**

		N	%
Cases	Valid	497	100.0
	Excludeda	0	.0
	Total	497	100.0

a. Listwise deletion based on all variables in the procedure.

### **Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.883	.882	6

#### **Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
21.1650	40.638	6.37480	6

## Independent Variable: Social Cultural

## **Case Processing Summary**

		N	%
Cases	Valid	497	100.0
	Excludeda	0	.0
	Total	497	100.0

a. Listwise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.797	.816	6

#### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
24.1811	19.306	4.39384	6

Dependent Variable: Weight-loss Supplement Intake

## **Case Processing Summary**

		N	%
Cases	Valid	497	100.0
	Excludeda	0	.0
	Total	497	100.0

a. Listwise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.939	.939	6

### **Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
21.0664	57.594	7.58910	6

# **Appendix 5: Descriptive Analysis**

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	223	44.9	44.9	44.9
	Female	274	55.1	55.1	100.0
	Total	497	100.0	100.0	

## Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 20 years old	150	30.2	30.2	30.2
	21 - 23 years old	233	46.9	46.9	77.1
	24 - 26 years old	114	22.9	22.9	100.0
	Total	497	100.0	100.0	

## **Ethnicity**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay/Bumiputera	11	2.2	2.2	2.2
	Chinese	404	81.3	81.3	83.5
	Indian	82	16.5	16.5	100.0
	Total	497	100.0	100.0	

### **Education level**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary education	2	.4	.4	.4
	Secondary education	19	3.8	3.8	4.2
	Tertiary education	475	95.6	95.6	99.8
	Other	1	.2	.2	100.0
	Total	497	100.0	100.0	

## **Employment status**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Working	174	35.0	35.0	35.0
	Unemployed	7	1.4	1.4	36.4
	Student	316	63.6	63.6	100.0
	Total	497	100.0	100.0	

### Income level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid Valid	Less than RM1000 RM1000 - RM5000	216 201	43.5 40.4	43.5 40.4	43.5 83.9
	More than RM5000	80	16.1	16.1	100.0
	Total	497	100.0	100.0	

## Plan or currently using weight loss supplement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	23	4.6	4.6	4.6
	No	474	95.4	95.4	100.0
	Total	497	100.0	100.0	

## Appendix 6: Multiple Linear Regression analysis

#### Model Summary<sup>b</sup>

Mode I	R R Square		Adjusted R Square	Std. Error of the Estimate	
1	.871ª	.758	.757	.62360	

a. Predictors: (Constant), Cultural Average, Media Average, Pressure Average

b. Dependent Variable: Intake Average

#### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	601.803	3	200.601	515.839	.000ª
	Residual	191.719	493	.389		
	Total	793.522	496			

a. Predictors: (Constant), Cultural Average, Media Average, Pressure Average

b. Dependent Variable: Intake Average

#### Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	726	.158		-4.608	.000
	Media Average	.443	.048	.350	9.206	.000
	Pressure Average	.623	.046	.523	13.627	.000
	Cultural Average	.104	.051	.060	2.025	.043

a. Dependent Variable: Intake Average