FACTORS INFLUENCING THE INTENTION TO USE FITNESS APPS AMONG GENERATION Z

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LIST OF SYMBOLS & ABBREVIATIONS

CFA	Confirmatory Factor Analysis
CI	Continuance Intention
DC	Dietary Culture
DV	Dependent Variable
HC	Health Consciousness
HMNA	Health Malaysia National Agenda
IM	Investment Model
IV	Independent Variable
KMO	Kaiser-Mayer-Olkin
MCO	Movement Control Order
ML	Maximum Likelihood
NCD	Non-Communicable Diseases
NHMS	National Health Morbidity Survey
PEN	Perceived Enjoyment
PEOU	Perceived Ease of Use
PLS	Partial Least Squares
PLS-SEM	Partial Least Square Structural Equation Modelling
PU	Perceived Usefulness
SEM	Structural Equation Modelling
TAM	Technology Acceptance Model
TR	Technology Readiness
TRAM	Technology Readiness and Acceptance Model
WHO	World Health Organization

ABSTRACT

This study aims to examine the factors Influencing the Intention to Use Fitness Apps among Generation Z. The study employs the non-probability selection approach of purposive sampling to survey a total of 130 respondents who use different types of Fitness Apps. The data collected was analyses using frequency, descriptive statistics, Cronbach's alpha, and Pearson correlation analysis with the aid of IBM SPSS Statistics version 25 software. The findings of this study reveal that perceived usefulness, perceived ease of use, health consciousness, and dietary culture have significant associations with intention to use fitness apps among generation Z. In conclusion, the findings of this study can be used as a guide for Fitness Apps companies and academics looking to understand further the influence of intention to use fitness apps among Generation Z.

Keywords: Fitness apps, perceived usefulness, perceived ease of use, health consciousness, dietary culture

CHAPTER 1

INTRODUCTION

1.1   BACKGROUND OF THE STUDY

Physical activity describes an effective way to improve physical and mental health, lower the risk of chronic diseases, and manage weight. However, according to the World Health Organization (WHO), four out of five teenagers and one out of every four adults do not get enough exercise.

In Malaysia, despite a slight increase in awareness of the benefits of physical activity, many people suffer from chronic diseases and are in poor health. The younger generation, particularly those between the ages of eight (8) and twenty-three (23), is experiencing an increase in the prevalence of high blood pressure and other cardiovascular diseases. Generation Z is the name given to this generation. In light of this, the Malaysian government places a high priority on the general public's health. Several official documents were made available by the State Council between July and September 2019. These documents reaffirmed that physical activity may play an important role in preventing disease and enhancing the health and wellbeing of people. To give individuals easy ways to physical exercise, you also need to promote the creation of "Internet & Sports" and e-commerce platforms, which could lead to the development of physical and fitness applications.

Fitness applications have grown in popularity in Malaysia because of "Internet & sports". Fitness Apps primarily direct users to engage in physical exercise and enhance their level of

health via electronic devices. There has illustrated the effectiveness of using fitness applications to improve physical fitness (Oyibo & Vassileva, 2020). The increasing level of cardiovascular diseases, high blood pressure and other poor health conditions among generation Z requires further studies into the contextual issues affecting the intention to use fitness Apps.

Fitness apps are increasingly being used as a tool by people who wish to work out and lose weight or among people who intend to monitor and manage their health status. This study looks at the elements that determine users' intentions to use exercise programmes and how their health states affect those intentions. The way people work and interact with one another has fundamentally altered due to the recent developments in mobile technology, such as smartphones. Consequently, the fast development of smartphone programs (apps) has provided customers with a variety of services, which were made possible by mobile devices. The significance has been underlined in terms of managing one's own health, and ongoing management is made feasible via mobile smartphone apps. Particularly, these studies frequently failed to account for user preferences for fitness applications, such as health status.

Although it is crucial for fitness app designers and researchers to comprehend users' intentions and individual variances including contextual problems, past studies have not sufficiently covered these topics. Research on users' intentions for fitness applications may also have a big impact on public health policies in the near future. Because users' perceptions of mobile fitness applications can have a big impact on the public healthcare sector, this study investigates the factors that influence users' intentions to use a fitness app in generation Z.

1.2   PROBLEM STATEMENT

1.2.1   Contextual Problem

This study addresses four major research problems. Firstly, there is a bad nutrition culture in Malaysia. According to one of the Malaysia dailies, The Star Online (2020), there is a significant change in the eating patterns and lifestyle of the people in Malaysia. This has resulted in a large part of the population suffering from non-communicable diseases (NCDs) related to excessive nutrition, as obesity, high blood pressure, heart problems, and cancers. These changes have caused the community to often suffer from NCDs. The authorities are unable to stop the rise of diseases linked to these bad eating habits due to the deteriorating eating style of Malaysians. According to data from the National Health Morbidity Survey (NHMS) in 2019 announced by the Ministry of Health, being overweight and obese is more common than just past the 50% threshold (Stopa et al., 2020). This means that every other adult Malaysian is either obese or overweight. The prevalence of diabetes among adults is 18.3% while high blood cholesterol affects 38.1% of adults. Following the nutrition problem, this study is motivated to examine whether dietary culture would influence the intentions of people using fitness apps.

Secondly, health care awareness is still low in Malaysia. According to Bernama (2021) in the New Straits Times, there is a highly concerning condition because Malaysia has long been regarded as an unhealthy country due to the high prevalence of heart disease and obesity. This is because people's understanding of health-related issues is still minimal. Furthermore, Malaysia has become one of the countries with the highest rates of obesity and cardiovascular illness. However, i to realize the Healthy Malaysia National Agenda (HMNA, 2021-2030), Malaysians must alter themselves and their behavior in order to promote awareness and voluntarily develop a healthy nation and people. This is because the feature of behavior modification is highly

significant in raising awareness about the importance of doing a self-health check-up, which is the essence of HMNA. Based on the problem, this study is motivated to explore whether health consciousness would influence the intentions of people using fitness apps.

Thirdly, almost one-third of people do not exercise. According to The Star Newspaper (2014), a Star Online poll on exercise or not, out of 1,742 respondents, 1,243 (71%) said they exercise while 499 (29%) said they don't. A total of 198 respondents (41%) out of 481 people stated that they were too lazy to exercise while 162 people stated that they did not have time because they were too busy with daily affairs. In addition, a total of 36 respondents stated that they could not afford a gym membership while 25 respondents stated that they did not like to exercise. According to Lee (2014) citing the Oxfam International Report of 2001, Malaysia is the sixth-fattest nation in the Asia-Pacific region and the fattest in Southeast Asia. This is because Malaysia has been ranked 44th out of a list of 125 countries. Malaysians are said to often adopt unhealthy eating practices and neglect exercise. There are various reasons given for avoiding exercise. Following the problem, this research is motivated to examine whether perceived usefulness of fitness applications will be able to influences the intentions of people using fitness apps in facilitating exercise.

Lastly, a healthy lifestyle is a challenge for most Malaysians. According to the Yeong (2022) in the Malay Mail, there is a Stanford University survey that states that Malaysians are the third laziest people in the world to exercise. This has indirectly resulted in a high level of obesity among the Malaysian population. In addition to a lack of access to increased daily physical activity, many people and their families face challenges when it comes to eating healthier. This is because most parents want to provide their children with healthy food, but it is easier and cheaper for them to give their children processed fast foods that will only cause them

to become obese just by eating it but are too lazy to exercise to burn the fat. Following the lifestyle problem, this research was motivated to assess whether perceived ease of use helping to workout would influences the intentions of people using fitness apps.

1.2.2 Research Gap

A research gap means a problem that has not happen forward or solved in prior studies or research. In this research, the conceptual framework includes four independent variables (IVs) which are Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Health Consciousness (HC), and Dietary Culture (DC). By reviewing past studies which are Zhang et al, (2020), García-Fernández et al. (2020), Beldad et al. (2018), Yang and Koenigstorfer (2021), and the last one is Chiu and Cho (2020), all five research papers from the past studies had mentioned Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) only. The rest of the independent variables that these previous studies examined are level of Satisfaction, Entertainment from using fitness apps, Social Influence, and Perceived Enjoyment.

Hence, from all the independent variables from previous studies, none of them had mentioned about Health Consciousness (HC) and Dietary Culture (DC). This is the main reason why we conduct our current research of study to include other independent variables which are Health Consciousness and Dietary Culture that form parts of the contextual problems of this study. For this current research, we determined to study about the two additional independent variables which have not been mentioned by the previous studies and wanted to continue to further study about Perceived Usefulness and Perceived Ease of Use for generation Z.

1.3 RESEARCH OBJECTIVES

Based on the contextual problems of this study and research gaps in past studies, the objectives of this study are as follows.

1. To examine the relationship between Perceived Usefulness and Intention to use Fitness Apps

2. To investigate the relationship between Perceived Ease of Use and Intention to use Fitness Apps

3. To explore the relationship between Health Consciousness and Intention to use Fitness Apps

4. To assess the relationship between Dietary Culture and Intention to use Fitness Apps

1.4 RESEARCH QUESTIONS

To achieve the research objectives, the following research questions were developed to establish the factors influencing the intention to use fitness apps.

1. What is a relationship between Perceived Usefulness and Intention to Use Fitness Apps?

2. What is a relationship between Perceived Ease of Use and Intention to Use Fitness Apps?

3. What is a relationship between Health Consciousness and Intention to Use Fitness Apps?

4. What is a relationship between Dietary Culture and Intention to Use Fitness Apps?

1.5 RESEARCH HYPOTHESES

Based on the research questions, the following are the developed research hypotheses.

H1: There is a positive relationship between Perceived Usefulness and Intention to Use Fitness Apps.

H2: There is a positive relationship between Perceived Ease of Use and Intention to Use Fitness Apps.

H3: There is a positive relationship between Health Consciousness and Intention to Use Fitness Apps.

H4: There is a positive relationship between Dietary Culture and Intention to Use Fitness Apps.

1.6   SIGNIFICANCE OF THE STUDY

The significance of this research is to inspect factors influencing the intention to use fitness apps among generation Z. Based on this study, the researcher will examine the factors proposed that influence the choice to use fitness apps, which consists of four such as perceived usefulness, perceived ease of use, health consciousness, and dietary culture. The outcomes of the study could help us further understand and comprehend more factors influencing intention to use fitness apps among generation Z.

Users are confident and believe that the perceived usefulness of fitness apps can help them live healthier lifestyles. Fitness apps can provide a push in the right direction when it comes to health by referring to multiple verified sources. This motivates and influences a person on changing their lifestyle and daily habits until they reach their desired level of fitness. Additionally, users receive new ideas for exercise regimes. Fitness apps have diversified new fitness regimes to intrigue users who do not have time to go to the gymnasium to practice them in order to get the best health results. For instance, the body fitness and jefit applications now include new resistance training recommendations that focus on specific body muscles. Also, fitness apps are regarded as useful because they can keep track of health performance data. Most fitness apps keep detailed records of a person's health over time, such as weight, calories burned, height and calories gained. As a result, users can assess exercise performance accordingly.

On the other hand, fitness apps have features that are simple to use even if the user is connecting with the app for the first time. Smartphone and smartwatch application developers make an effort to create simple user interfaces to understand and make it easy for people to get started. Using a fitness application is a very simple and quick process that involves simply entering health-related questions such as gender, age, weight and questions about various individual health goals. In addition, it's simple to track fitness and health accomplishments with fitness apps at any time. The majority of features found in fitness applications provide exercise guidance, easy-to-follow exercise regime steps, heart rate training, and tracking.

Moreover, the use of fitness apps can boost motivation to exercise, encouraging Malaysians to use this technology because it can help track daily activities. As a result, the use of fitness apps has the potential to disseminate health knowledge, allowing the community to monitor their own health levels. According to the Malaysian Ministry of Health (KKM) in year 2020, a study on Malaysians' health consciousness found that only 6.6 percent more aware compared to the percentage of awareness of the people of the United States which is 12 percent. The study considered knowledge of healthy eating habits such as calorie intake, serving size, and fat intake. However, following the spread of COVID-19, Malaysians have begun to be more conscious of their health status since more people expressed interest in improving their health during the Movement Control Order (MCO) period, such as exercising more frequently and eating nutritious food. Besides, society is always busy, and hectic daily schedules make it difficult to find time to care for your health. Thus, the reminder and notification features of this fitness software assist in sending messages like "Keep it up!" and "You're doing fantastic!". The purpose is to indirectly remind the user of their health goals, ensuring that they are always motivated to exercise. In the smartphone and smartwatch application, badges can be shared with

peers and family on social media profiles, contributing to inspiring and motivating others to take care of their health and physical fitness.

In addition, fitness apps can help users control their eating habits and make wise food choices. A healthy food selection is essential during an exercise regimen to help maintain body weight and fitness. Malaysia is a country rich in food resources and various types of food premises such as restaurants and food stalls run by various ethnic groups. The food establishments are always busy and full of customers, indicating that people enjoy eating outside if the prices displayed are reasonable. Additionally, great food is frequently promoted on television as the state's favourite dish, giving Malaysians an urge to explore local cuisine. The wide range of cuisine that is readily accessible has influenced Malaysians' way of life, culture, and customs. Nasi lemak and roti canai are some of the example well-known and adored dishes in Malaysia. However, consuming these foods consistently throughout the day may be harmful to one's health. This demonstrates how unhealthy eating contributes a rise in the quantity of calories consumed every day, resulting in obesity and overweight. According to the Ministry of Health (KKM) in year 2022, Malaysia has the highest obesity rate in Southeast Asia, at 15.6 percent. Thus, fitness apps like Calories Counter and Diet Tracker can help to save a food culture that contributes to a variety of chronic disease risks. This fitness apps can aid in recommending the best form of exercise and help direct or regulate dietary choices. Besides, keeping track of calories consumed after meals and calories burnt during activity. It also will recommend which food groups to eat based on the proper calorie intake.

1.7 DEFINITION OF TERMS

1.7.1 Perceived Usefulness

Perceived usefulness can be clarified as the subjective viewpoint of users who believe that using certain technology will improve their work performance (Davis, 1986). The term "usefulness" can also relate to a technological advancement's usefulness, utility, usability, or benefit. According to Venkatesh and David (2000), usability is defined from the perspective of users who believe that certain technologies have an immediate impact on their performance.

1.7.2 Perceived Ease of Use

Perceived ease of use refers to the extent to which users believe that using a specific system will be effortless (David, 1986). Furthermore, ease of use can be defined as a concept that describes how simple it is for users to use a product from the standpoint of software design. The user's perspective on the features used in technology necessitates less effort when using the system or technology (Davis, 1989).

1.7.3 Health Consciousness

Health awareness is the psychological tendency that motivates and makes individuals willing to take actions to become healthier (Becker et al. 1997). Health-conscious consumers act because they care about their health and want to enhance or maintain their level of health and quality of life in order to avoid illness by taking part in healthy and health-conscious behaviours (Newsom et al. 2005; Kraft & Goodell, 1993; Plank & Gould, 1990; Gould, 1998). Since more people are aware of numerous ailments, there is a growing sense of concern among consumers about their

state of health. These people are more probably to be interested in and knowledgeable about diet and physical fitness (Kraft & Goodell, 1993).

1.7.4 Dietary Culture

According to Teng (2009; p 68), dietary culture is defined as " involving the lifestyle of a group of people, including past and current cultural heritage, as well as integrating physical and spiritual aspects". Each country's food culture has differences and diversities that define the national culture. Some countries consider dietary customs to be fundamental, so they are incorporated into an ethnic group's culture as a symbolic sign that is sent and passed down to unite group members internally (Wang, 2007).

1.7.5 Intention to Use

According to Technology Acceptance Model research, the intention to use can be defined as a basic requirement for a person's real action when implementing a system and employing new technology (Alalwan et al., 2018; Marakarkandy et al., 2017). Furthermore, intention to use refers to a person's desire to continue participating in a specific system. According to Law (2020), it is also closely concerning the user's desire to continue using the technology or system after attempting to use it for the first time.

1.8 SUMMARY

This study aims to explore the factors that influence intention to using fitness apps based on four independent variables (IV) which are Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Health Consciousness (HC), and Dietary Culture (DC). For overall, this chapter discusses the

reasons of the research by presenting some research objectives, research questions, and problem statement that would be addressed in the findings and discussion chapter. This study's goal is to assess the effects of the four independent variables (Perceived Ease of Use, Perceived Usefulness, Health Consciousness, and Dietary Culture) in using the Fitness Apps. The next chapter will explain more about the exiting literature review on the factors that affect influencing purpose using Fitness Apps among Generation Z.

CHAPTER 2

LITERATURE REVIEW

2.1   INTRODUCTION

Fitness apps are increasingly being used as a tool by people who wish to work out and lose weight. This chapter reviews the factors influencing the intention to use fitness apps among generation Z such as perceived ease of use, perceived usefulness, health consciousness, and dietary culture.

Perceived usefulness is defined as extent the degree that a user believes that either a fitness app might help him in maintaining his physique and dietary habits. Perceived ease of use describes the degree to which users believe a certain fitness app can be used easily without assistance. While some studies suggest that simply perceived usefulness alone can predict a person's intention to use health technology, the majority of research indicates that both perceived ease of use and perceived usefulness have a substantial influence a people's intention to use a fitness app.

Perceived ease of use and perceived usefulness, along with health consciousness, are expected for users' intentions to keep using a certain fitness application. Fitness application should obviously focus on functionality. Therefore, the fundamental is that perceived ease of use and perceived usefulness influence usage intention of Fitness App.

Dietary culture is one of the elements that contribute to food care and body health. So, nutrition care applications can be useful at adjusting dietary habits and risk factors for health. Although there have been efforts to reduce the increasing rates of overweight and obesity,

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prevalent use of Fitness App has not been successfully accomplished. Therefore, in-depth understanding of the factors that drive and inhibit the use of fitness apps (long-term) is essential to develop designs that support the adoption and prolonged use of diet apps. Our choice of independent variables is based on the research gaps in previous studies on fitness apps. Table 2.1 presents a few studies on the factors that determine the intention to use Fitness Apps. It can be observed that health consciousness and dietary culture have not been examined by these studies on Fitness Apps' usage intention.

Table 2.1

Independent Variables from Previous Research and research gaps

No.	Author/s	Independent Variables
1.	Zhang et al, (2020)	Perceived Usefulness, Perceived Ease of Use, Level of Satisfaction, Entertainment from Using Fitness Apps, Social Connection, Fitness Achievement
2.	García-Fernández et al. (2020)	E-lifestyle, Perceived Usefulness, Perceived Ease of Use, The Attitude
3.	Beldad et al. (2018)	Perceived Usefulness, Perceived Ease of Use, Users' Trust in Fitness App, Users' Valuation of Their Health, Social Norm
4.	Yang et al. (2021)	Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, Habit
5.	Chiu et al. (2020)	Perceived Ease of Use, Perceived Usefulness, Perceived Enjoyment

2.2   TECHNOLOGY ACCEPTANCE MODEL

The theoretical model of this research is based on original Technology Acceptance Model (TAM).
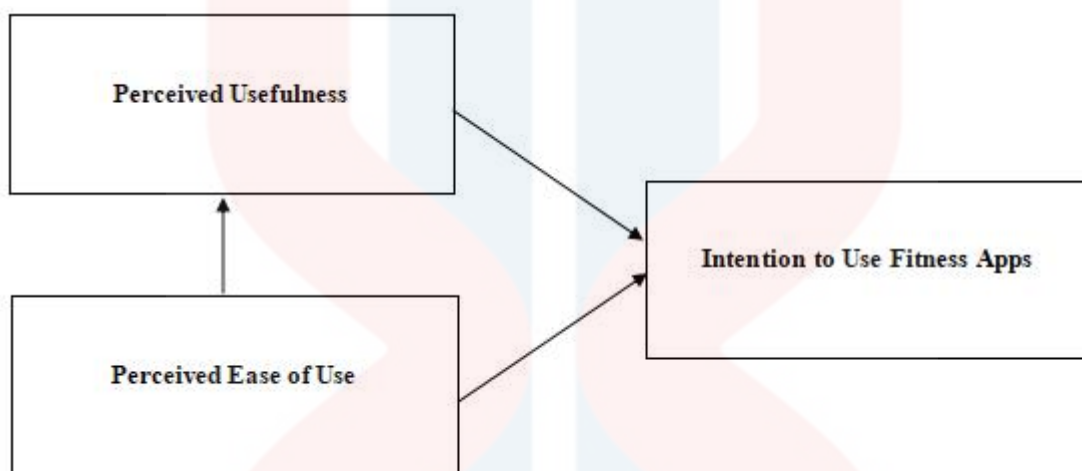
Figure 1: Perceived Usefulness and Perceived Ease of Use are related to Intention to Use Fitness Apps (Beldad et al, 2018; Chiu et al., 2020)

Chiu et al, (2020) stated TAM theory (Davis, 1989) initially TAM aims to explain computer use behavior which is often widely used to study the technology-related use behavior of individuals across the population and various innovative technologies. TAM is a system-unique model made up of two main comprehensions components, namely perceived usefulness (PU) and ease of use (PEOU). It determines people's attitude both intended practical use of modern technology. PEOU characterized as "the degree to which a person believes that using a particular system will be free of effort" (Davis, 1989, p. 320). Meanwhile, PU is "the degree to which a person believes that using a particular system will improve his work performance" (Davis, 1989, p. 320). In other words, PEOU emphasizes the role of technology in reducing user effort, while PU focusing on the extent to which technology can improve user performance. Thus, TAM argues that PEOU influences PU because the technology is easier to employ, more helpful, and both PEOU and PU perceptions play an important role while influencing people's choices to

use technology. TAM is often used by some scholars to study individual consumption and behavior in the context of fitness applications and health. Therefore, several studies have found TAM to be a very good theoretical framework for describing the intentions of individuals using health and fitness applications.

Beldad et al, (2018) stated that research on the use of technology has relied heavily recognising the significance of Davis's TAM effects of two related technologies rules, namely the perception of ease of use and perceived usefulness, on people's willingness to adopt certain technologies. This is because, according to (Davis 1989, p. 320) acceptance of ease of use is 'the degree to which a person believes that using certain systems will be free of effort. Then he also defines perceived usefulness as 'a person's degree of belief that using a certain system will improve his work performance. Hence, the diversity of goals targeted by mobile health apps achieve and various features embedded in applications to meet their various objectives, one might expect that an individual's decision to use a particular health application will give the benefits offered by the application and the level of complexity or simplicity in using it. Both support the usefulness of TAM in determining people's propensity to use or keep using a specific application. In research on the use of mobile health applications, it uses TAM as a theoretical basis is in its initial phase and several studies have demonstrated the model's applicability in the context of mobile health applications by emphasizing the effects of both per- feel the usefulness and feel the ease of use on real people their use of health apps and their intention to continue using health apps.

Based on past study by García-Fernández et al. (2020) about using Technology Acceptance Model (TAM) on their study. Based on TAM theory, Davis created this theory in an effort to explain how users and adopters of new information technologies will behave. The TAM

on this research paper relates two factors which is perceived ease of use (PEOU) and perceived usefulness (PU) with the resulting intent of behaviour and the subsequent real behaviour of the individual. PEOU is the level of thought and consideration necessary for someone to learn how to use technology. Meanwhile, the degree to which people believe a particular system will aid in the completion of a specific task is referred to as PU. The importance of using the TAM model is the positive relationship between its variables and how its impact on attitudes towards technology and intention to use. Due to its excellent resilience and application, the TAM model has historically one of the most used models, with a focus on the technology's practical applications and understanding consumer intent to use fitness apps. Hence, in the sports industry a few studies have examined these factors and discovered there is a connection between PEOU and PU (Ahn et al, 2014; Angosto et al, 2020). In this way, research using TAM has shown that PEOU and PU are influenced by different factors such as social norms, sociodemographic and health awareness. Therefore, this study includes health consciousness and dietary culture to the TAM theory to examine Fitness Apps' Usage intention.

2.3 HYPOTHESES DEVELOPMENT

2.3.1 Relationship Between Perceived Usefulness and Intention to Use Fitness Apps

Many studies show the link between Perceived Usefulness and Intention to Use Fitness Apps. Zhang et al. (2020) examined the study's objective related to the mental mechanism that decides whether college students will continue to use fitness applications. The study sampled 379 Chinese college students who completed a questionnaire to determine their user experience. The authors used data analysis techniques such as structural equation modelling (SEM), which was assisted by AMOS 21.0 software. The study discovered that the continuous intention of

college students to use fitness apps has significantly and positively impacted on confirmed usefulness. During the interview, the college students stated that, while they did not receive pleasure from the fitness app, they were still motivated to use it because they had a clear goal to achieve fitness and health.

Chiu et al. (2020) examined the study's objectives related to individuals' choices to utilize health and fitness apps by employing some theory or model, namely the extended technology readiness and acceptance model (TRAM, that merge three other model technology such as readiness (TR), technology acceptance model (TAM), and perceived enjoyment (PEN). Their study investigated the variation in intention to use health and fitness apps linking users and non-users. Chiu et al. (2020) employed a sample of 206 students selected from four major universities in South Korea, and directly facing interviews were transported accompanying four trained survey administrators to strengthen the study. In their study, the researcher used data analysis techniques like partial least squares structural equation modeling (PLS-SEM) with SmartPLS 3.0 in their study. Chiu et al. (2020) found that TR absolutely effects perceived usefulness (PU), perceived ease of use (PEOU), and perceived enjoyment (PEN). Furthermore, multigroup analysis demonstrates that app users have a greater association between PU and behavioral intention.

Cho et al. (2020) examined the study's objectives related to the health and decision-making process of users using fitness applications by combining the theory of the Technology Acceptance Model (TAM) and the Investment Model (IM). This study engages a sample of 346 reactions composed of fitness and appropriateness app consumers in China. The authors used descriptive statistics to perform a preliminary test to determine the data assumptions' normality. The authors used structural equation modeling analysis (SEM) to test the proposed hypothesis.

Thus, the study employs standardized factor loadings and t-values of path coefficients to decide the path's strength and significance level of the latent variable. To summarize, the study found that perceived ease of use positively impacts perceived usefulness, which in turn affect influences users to persist in using the apps.

Yu et al. (2021) explored the antecedents of university students' fitness application usage behaviors combined with the theory of planned behavior and the technology model acceptance. The study contained 634 students from six universities in Zhanjiang City the one achieved an online survey to decide the appropriateness of app habit behavior. Using SPSS 18.0 and SmartPLS 3.0 to analyse the data collected, the authors found that perceived usefulness has a significant and positive effect that influences students' attitudes toward fitness apps and increased usage intentions.

Dong et al. (2022) examined the intrinsic and extrinsic factors that explain the intention of Chinese citizens to use fitness applications following the expansion of Technology Acceptance Model. The study sampled 224 Chinese citizens and used data analysis techniques such as Cronbach's alpha coefficient to determine the reliability of the questionnaire and the Kaiser-Mayer-Olkin (KMO) test to determine whether the variables fit the analysis factors through examining their correlation and bias correlation. The authors use the structural equation model with AMOS 24 software and analyzed the path coefficient for the structural equation using the maximum likelihood estimation method to obtain the standardized path coefficient. Dong et al. (2022) discovered that perceived usefulness has a significant and positive effect on people's willingness to use fitness applications. Hence, we hypothesize that:

H1: There is a positive relationship between Perceived Usefulness and Intention to Use Fitness Apps

2.3.2 Relationship Between Perceived Ease of Use and Intention to Use Fitness Apps

Many studies show the connection between Perceived Ease of Use and Intention to use Fitness Apps. García-Fernández et al. (2020) examined study's objective related to analyze the association between e-lifestyle of Boutique Fitness centers and influence different relationships with perceived ease of use and intention to use fitness apps. The study the sampled 591 Boutique Fitness customers (378 female, 213 male). The selection criteria for participation in the survey is that the participants had to download a fitness app. The authors used data analysis technique involves confirmatory factor analysis (CFA) and structural equation model (SEM). The study contributed to understanding how e-lifestyle are associated to technology in relation to fitness apps, and which may make it easier to predict fitness consumption behaviors.

Beldad et al. (2018) examined study's objective related to analyzing the relationship between German users' willingness to   continue to use fitness apps and influence relationship of perceived ease of use and perceived usefulness. The data collected through self-administered online surveys and here are 476 responses. Beldad et al. (2018) used data analysis involves confirmatory factor analysis (CFA) and structural equation modeling (SEM) technique. The authors found that the intention of respondents to keep up using a fitness app is originally believed to be influenced by including perceived usefulness and perceived ease of use. Hence, results showed user perception of the fitness app is related to the perceived ease of use.

Gómez-Ruiz et al. (2022) examined study's objective related to analyze the aspects that can influence consumers intents to use fitness apps based on how appealing the fitness apps are. The authors used the technology acceptance model (TAM), structural equation modelling (SEM)

exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). An online questionnaire was distributed to 200 sports consumers of a fitness centre (117 women and 83 men) to determine user's viewpoint of the attractiveness, perceived usefulness, perceived ease of use, enjoyment, trust, and intention to use of the fitness center's fitness app. The study found that the variables studied have a positive influence on the intention to use fitness apps, with attractiveness and usefulness, as well as perceived ease of use and intention to use are having the strongest associated. These results highlight how crucial these factors are when using fitness applications in fitness facilities.

H2: There is a positive relationship between Perceived Ease of Use and Intention to Use Fitness Apps

2.3.3 Relationship Between Health Consciousness and Intention to Use Fitness Apps

Many studies show the relationship between Health Consciousness and Intention to use Fitness Apps. Damberg et al. (2021) examined study's objective related to the role of fitness app users in the United Kingdom in determining future use intention of Health Consciousness. The study sampled 500 respondents was solicited using an online panel through Harris Interactive. The authors used data analysis techniques such as partial least squares structural equation modeling (PLS-SEM) to test and analyze the relationship in the model. The study found the role that health consciousness plays as a motivator of future consumption intentions. Therefore, the desire to use a product in the future is primarily impacted not only by routines and a sense of amusement, but also by health consciousness and application performance. This suggests that users of fitness health consciousness applications are another key factor to consider when forecasting future use intentions for fitness apps.

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Chen and Lin (2018) examined the objectives of the study is to enhance the model's capacity to forecast a person's attitude and intention to download and utilise nutrition and fitness applications by expanding the technology readiness and acceptance model (TRAM) to take into account the person's health consciousness (HC). The study sampled 994 people who completed the online self-report questionnaire. The authors used data analysis techniques such as structural equation modelling (SEM) to statistically test hypothesized models and determine the model's consistency with the sample data. The study found that HC has a favourable impact on how simple and practical diet and exercise applications are judged to be. The suggested HC-TRAM offers a greater predictive potential than the TRAM, according to two distinct test findings.

Yan et al. (2021) examined the mobile applications for healthy living with affecting variables Plans to keep using health apps. Previous studies have looked into the variables that affect a health app's adoption. However, very few research for mobile health apps have taken into account Continuance Intention (CI). The study sampled 397 users of a health app in China to validate the model. The authors used data analysis technique such as Partial Least Squares (PLS). The study found that factors such as perceived usefulness, perceived ease significant determinants of CI and satisfaction are frequency of usage, flow experience, and behavioural modification techniques acts as a mediator between these factors and their effects. The influence of health consciousness on the relationship between perceived usefulness and satisfaction is moderated in a positive way, whereas the effect of health consciousness on the relationship between perceived ease of use and contentment is moderated in a negative way. Hence, we hypothesis that:

H3: There is a positive relationship between Health Consciousness and Intention to Use Fitness Apps

2.3.4 Relationship Between Dietary Culture and Intention to Use Fitness Apps

Koo at el. (2016) examined that this study aimed to assess consumption patterns of dietary culture and intention to use fitness apps among generation Z. Regardless of socioeconomic situation, follow the remaining six food groups recommended by the Malaysian Dietary Guidelines. It is important to try to promote balanced, healthy eating, especially for foods that don't meet the recommended intake levels. Generation Z's ideal growth rates are encouraged by appropriate nutrition, which is essential for good health and will directly affect their adult health. According to the Food and Agriculture Organization (FAO) and the World Health Organization, each nation should create fundamental food-based dietary guidelines based on their public health issues and suitable for people of different cultures, lifestyles, and ages (WHO). The Malaysian SEANUTS, a cross-sectional survey of Malaysian children that is nationally representative, provided the data for this study. Using stratified multistage selection, Generation Z members of all ethnicities (Malay, Chinese, Indian, bumiputra Sabah, bumiputra Sarawak, and other bumiputra) were randomly selected from six Malaysian regions. The structure and operations of SEANUTS Malaysia have been fully described elsewhere. To the best of our knowledge, this study is the first to undertake a dietary culture-based analysis on a sample of Malaysian Generation Z from various socioeconomic backgrounds that is nationally representative. By detailing the consumption patterns of the seven food categories in accordance with the Malaysian Dietary Guidelines, which covered Generation Z from all six regions of Malaysia, this research considerably contributes to the literature. The results of the current study show that the mean intake of all food categories did not match MDG requirements, with the exception of meat and poultry. The differences in eating habits between young people from

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urban and rural areas in Malaysia can be explained by the nutritional transition from a traditional to a modern or Western lifestyle. The results of this study suggest that with current technology, fitness apps can inspire generation Z to maintain a healthy lifestyle and improve the efficacy of dietary culture.

Many studies show the relationship between dietary culture and intention to use fitness apps. Suzuki and Tachihara (2014) examined the study's objective related to aims at the preservation of the region's historic nutritional culture, although with a modern perspective, by identifying key designing-a-living components and outlining future goals. Since they are the driving force behind change and the important players in completing this crucial mission for the benefit of future generations, Generation Z is one of the major target groups. Family and community bonds have been severely disrupted as a result of globalisation, media social loss of traditional culinary culture, and has led to a disdain for natural resources. The study of constructing a lifestyle in Ngiwal State, Republic of Palau, tries to highlight the significant problems associated with this continuous societal transition and to provide answers that will help communities and people manage them. From May 2010 to April 2011, a study team from Chiba University made three trips to the research location to conduct in-depth interviews and gather information on the local traditional food culture and public opinion. The team draws the following conclusions after analysing the data. The locals are aware of the value of traditional food culture; however, this is not reflected in reality or in their behaviour. Implementing the "designing-a-living" idea should incorporate key design components including communication, cooperation, social media, and others in order to transmit the social ideals embodied in this food culture to future generations. In order for people in deeper regions to keep a healthy lifestyle

with apps for their food culture, they need be made aware of the advantages and benefits of utilising fitness applications. Hence, we hypothesize that:

H4: There is a positive relationship between Dietary Culture and Intention to Use Fitness Apps

2.4   CONCEPTUAL FRAMEWORK/MODEL

Based on the research, the researcher has proposed a research diagram to evaluate the Factors Influencing Intention to Use Fitness Apps Among Generation Z. Thus, the research framework as shown below.
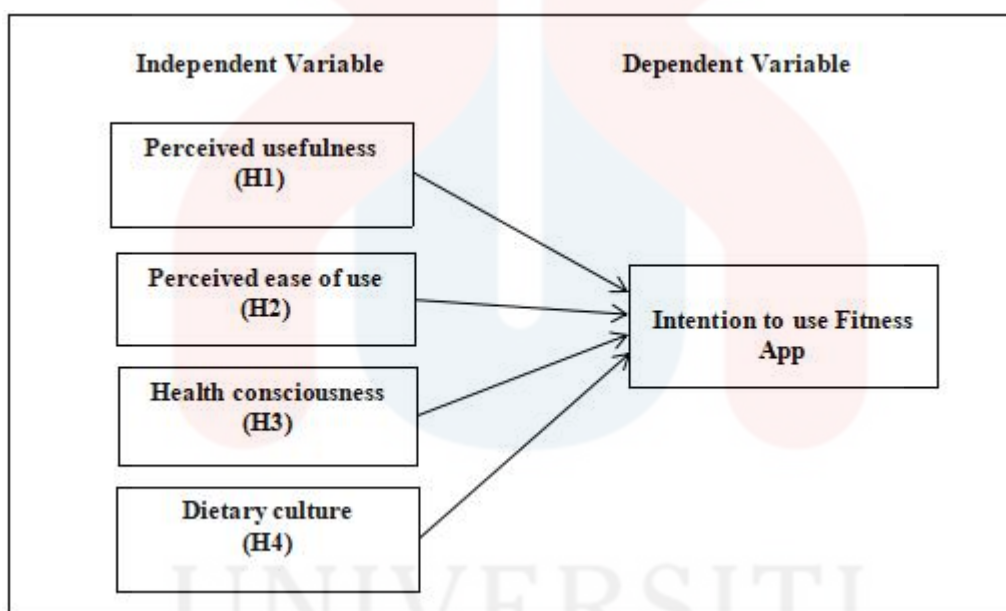
Figure 2: Conceptual framework of the study

Figure 2 shows that the research framework and it contains two variable which is the dependent variable (DV) and the independent variable (IV). The intention to use a fitness app is the dependent variable, and the four independent variables are perceived usefulness, perceived ease of use, health consciousness, and dietary culture. This framework explains the relationship between the independent variables, which are perceived usefulness, perceived ease of use, health

consciousness, and dietary culture, and whether it shows a positive or negative effect on the dependent variable, which is intention to use fitness apps.

The findings from previous research established that perceived usefulness and perceived ease of use are related to a user's intention to use technology, with both having a positive effect on fitness applications. This is due to the numerous advantages of using fitness apps, such as saving time, having simple features to use, being user-friendly, and so on. Following that, health consciousness and dietary culture are important factors in the user's intention to use fitness applications, with giving an approach to boost motivation to exercise, control eating habits, and make wise food choices being an important element that results in the user's decision to use fitness applications among generations Z.

2.5   SUMMARY

To sum up, the main objective of this chapter 2 is to pinpoint the most crucial information that can be acquired from each secondary source, which includes journals and related articles regarding the objectives of this study. The researcher supports the research using a fundamental theory known as the Technology Adoption Model (TAM) in order to explain the impact of variables on user behaviour and intentions as well as their acceptance of information technology (Davis, 1989). Furthermore, the researcher presents a conceptual framework that shown that the independent variables have positive relationships with the dependent variable as established in past studies. This chapter's output may make it easier for the researchers to investigate further and provide effectiveness information that influences users' intentions to be more confident in using fitness applications. Therefore, it also gives benefits for development or

production of fitness applications and industry services to improve these application performances.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

The strategy utilized to accomplish the objectives of this study is described in this chapter. The research design, study population, sampling procedure and technique, research instrument, data analysis techniques, and summary are the seven sections that make up this chapter.

3.2 RESEARCH DESIGN

According to Saunders, et al. (2012), a research design is a strategy for answering the study's questions. It entails proper research data management as well as the collection of various components, strategies, and methods for data collection and analysis. Meanwhile, according to McCombes (2019) research design is also known as a research strategy is a strategy to answer a series of inquiries. It is a framework that incorporates techniques for gathering data, analysing it, and interpreting it. To put it another way, the research design describes the method through which the main problem of the study will be investigated.

Researchers will use quantitative research in this study. According to Creswell (2002), quantitative research is the process of collecting, analyzing, interpreting, and documenting research findings. The quantitative research process has the advantage of being tested and checked. Quantitative research necessitates careful ability to repeat the test and the outcomes, as well as an experimental design. This improves the accuracy of the data gathered and lessens the likelihood of disagreement. Furthermore, the analysis is straightforward. When gathering quantitative data, the type of results will influence the statistical test to be used. As a result, quantitative research makes it simpler and less sensitive to subjectivity and error to interpret data and report results.

In this study, the researchers also focused on a correlative study design. A correlational study is a form of research design that explores the link between two or more variables (Leech et al., 2022). Since no variables are altered or under the experimenter's control in correlational investigations, they are not experimental.

3.3   POPULATION OF THE STUDY

The target population of the study is the large group of people that researchers examine in their study. A whole community is the definition of the population where some knowledge is required to be sure. However, the scope of population for this research are all of generation Z. In Malaysia, generation Z is the largest age group, comprising 29% of the total population between ages of 8 years and 23 years (Tjiptono et al., 2020).

3.4   SAMPLING TECHNIQUE AND SAMPLE SIZE

3.4.1   SAMPLING TECHNIQUE

Sampling is a method of choosing an adequate number of components from a population for researchers to examine a sample and comprehend their features to generalize those properties or characteristics to the elements of the population. There are two different kinds of sampling techniques which are probability and non-probability sampling techniques. The probability sampling technique is one, where every member of the population is likely to be chosen as a sample, whereas a non-probability sampling technique does not give every member of the population the same opportunity to participate in a study. For this study, the respondents who will be chosen is generation Z.

Purposive sampling is the method of sampling that is employed in the study, which is under the group of non-probability sampling techniques. This method relies on the researcher's judgment and criteria when selecting members from the population to take part in the survey. For instance, people who meet the qualifications for the required characteristics can assist the researchers in answering the research question.

Aside from that, the use of the purposive sampling technique in this study has the advantage of being the most cost-effective and saving time. Purposive sampling is the most appropriate sampling method available to contribute to this study if there are fewer than a few primary data sources and is suitable for studies that require some selection criteria i.e., only respondents who qualify under the age group of generation Z can participate in this study. Also, only respondents from generation Z who use Fitness Apps will also take part in this research.

3.4.2 SAMPLE SIZE

A sample is a smaller and manageable element than a larger group. A sample is a subset that represents the size of the entire population. Sample members are known as subjects, whereas the number of subjects in the sample is known as sample size. Usually, a sample size can be determined by the population because when the number of the population increases, the simple size will also increase. The sample size can be determined by 10 times the number of predictors or independent variables (Hair et al., 2019).

In this study, researchers intend to choose 170 respondents in total from generation Z users of fitness applications in Malaysia to serve as the study sample. This is due to the fact that the sample size cannot be less than 30 respondents or greater than 500 respondents. The best sample size for quantitative investigations, according to Sekaran and Bougie (2016), is between 30 and 500 participants.

The sample size chosen by the researcher is very appropriate and sufficient because the generation Z population in Malaysia is large, necessitating a smaller sample size for this study. Because generation Z is exposed to the increasing use of technology, researchers can easily access the accessibility of participants. As a result, a sample size of 170 can determine the accuracy and effectiveness of the sample size, increasing confidence that it will comprehensively address the existing gap

3.5   RESEARCH INSTRUMENT

A research instrument is one of the measurement tools that can assist the researcher in collecting data and all of the information required to complete the research (Sathiyaseelan, 2015). In this study, data will be gathered by the researchers using a questionnaire. Thus, the technique

for gathering data is the questionnaire for researchers that requires respondents to answer questions or items based on their experience, attitude, or opinion.

In this study, the questionnaire has four sections. Section 1 displays a cover letter which introduces the topic and states the purpose of the study. Section 2 describes the demographic information which include the age group, the gender, income group, race, and marital status. Section 3 presents the variable items of the IVs and DV. The variables items are sourced from different studies comprising five sections which are Section A, Section B, Section C, Section D, and Section E. Section A focuses on the dependent variable (DV) which is Intention to Use Fitness Apps. The items on Intention to Use Fitness Apps was sourced from Acikgoz et al. (2022) and García-Fernández et al. (2020). Section B, C, D and E consists of independent variable (IV) which are health consciousness, dietary culture, perceived ease of use and perceived usefulness. Variable items in the health consciousness were sourced from Acikgoz et al., (2022), Iqbal et al., (2021) and Park et al. (2017). Variable items on dietary culture were sourced from Sanusi (2020). Variable items on perceived ease of use and perceived usefulness were sourced from Acikgoz et al., (2022), Zhang et al., (2020), and García-Fernández et al., (2020). The questionnaire items as shown below:

PART 2 - DEMOGRAPHIC INFORMATION

This section presents the demographics information of respondents. You are kindly to select the appropriate answer.

GENDER
Female ☐
Male ☐
AGE GROUP

10 - 18 years old ☐
19 - 22 years old ☐
23 - 25 years old ☐

RACE

Malay ☐

Chinese ☐

Indian ☐

Others ☐

MARITAL STATUS

Married ☐

Single ☐

INCOME GROUP

Less than RM 1000 ☐

RM1001 - RM 1500 ☐

PART 3 – VARIABLES

Based on the following statements, please tick (/) the most appropriate answer on a scale of 1 to

5.

Scale:

1 = Strong Agree
2 = Agree
3 = Neutral
4 = Disagree
5 = Strong Disagree

SECTION A: INTENTION TO USE FITNESS APPS (Acikgoz et al., 2022; Garcia-Fernandez et al., 2020**)**

Dear Respondent,

We are third-year students from the Faculty of Hospitality, Tourism, and Wellness (FHPK) at

the University of Malaysia, Kelantan, running a Bachelor of Entrepreneurship (WELLNESS)

degree. We are conducting a research on **"Factors Influencing Intention to Use Fitness Apps among Generation Z"**. We request your help to complete the survey voluntarily. Thus, we expect you to answer ALL the questions that we have provided. Your answers are very important to complete this research. All the information you provided will be kept confidential and the data collected is would be used only for research purposes.

Table 3.1

Items to measure intention to use Fitness Apps

Variable items	1	2	3	4	5
1. I know how to judge the quality of a fitness apps.					
2. I do not feel very knowledgeable about fitness apps.					
3. I intend to use fitness apps within the next three month.					
4. I intend to use fitness apps for my training.					
5. I intend to use fitness apps as often as possible.					
6. I will use fitness apps on a regular basis in the future.					
7. I will frequently use fitness apps in the future.					
8. Assuming I have access to fitness Apps, I intend to use them.					
9. Given that I have access to fitness Apps, I predict that I would use them.					

SECTION B: HEALTH CONSCIOUSNESS (Acikgoz et al., 2022; Iqbal et al., 2021; Park et al., 2017**)**

Table 3.2

Items to measure health consciousness

Variable items	1	2	3	4	5
1. I am self-conscious about my health.					
2. I take responsibility for the state of my health.					
3. I reflect on my health a lot.					

4. I am alerted to changes in my health.

5. I am aware of the state of my health as I go through the day.

6. Good health requires active participation on my part.

7. I am worried about my health when I get sick.

8. Living life without disease and illness is very important to me.

9. My health depends on how well I take care of my self

10. Living life in the best possible health is very important to me.

11. I do worry about harmful chemicals in my food.

12. I am concerned about the quality of my drinking water.

13. I usually read the ingredients on my food labels.

14. I read more health-related articles than I did 3 years ago.

15. I am interested in information about my health.

SECTION C: DIETARY CULTURE (Sanusi, 2020**)**

Table 3.3

Items to measure dietary culture

Variable items	1	2	3	4	5
1. I eat a variety of foods within my recommended intake.					
2. I maintain body weight in a healthy range.					
3. I am physically active every day.					
4. I eat an adequate amount of rice, others cereal products (preferably whole grain) and tubers.					
5. I eat plenty of fruits and vegetables every day.					
6. I consume a moderate number of fish, meat, poultry, egg, legumes, and nuts.					
7. I consume adequate amounts of milk and milk products.					
8. I limit intake of foods high in fats					

9. I minimise fats and oils during food preparation.

10. I choose and prepare foods with less salt and sauces.

11. I consume foods and beverages with low sugar.

12. I drink plenty of water daily.

13. I practice exclusive breastfeeding from birth until six months and continue to breastfeed until the child is two years of age.

14. I consume safe and clean foods and beverages.

15. I make effective use of nutrition information on food labels

SECTION D: PERCEIVED USEFULNESS (Acikgoz et al., 2022; Garcia-Fernandez et al., 2020; Zhang & Xu, 2020**)**

Table 3.4

Items to measure perceived usefulness

Variable items	1	2	3	4	5
1. I use fitness apps to improve the quality of my exercising.					
2. Fitness apps save me time.					
3. I use fitness apps to improve my training/ workout performance.					
4. Fitness apps are useful for doing exercise.					
5. I use fitness apps to enhance my effectiveness in doing exercise.					
6. I use fitness apps to increase my productivity in doing exercise.					

SECTION E: PERCEIVED EASE OF USE (Acikgoz et al., 2022; Garcia-Fernandez et al., 2020; Zhang & Xu, 2020**)**

Table 3.5

Items to measure perceived ease of use

Variable items	1	2	3	4	5
1. Overall, I find fitness apps easy to use.					
2. It is easy for me to remember how to perform tasks using fitness apps.					
3. Learning to use fitness apps is easy.					
4. Interaction with fitness apps is clear and understandable.					
5. It is easy to interact with fitness apps.					

3.6 DATA ANALYSIS

A data analysis technique is a method used by researchers to convert data into a narrative and then analyze it to make closure. The data analysis method assists in breaking down a large amount of data into smaller fragments. Data analysis is mainly used to obtain any relevant information from data and then apply that knowledge to make a decision. This study will perform the correlation analysis to analyze the association between the independent variables and dependent variable and establishes the strengths of the association between each IV and DV. The data analysis of this study will be analyzed using descriptive statistics and Pearson's correlation.

3.6.1 Descriptive Statistics

Descriptive statistics are specific methods used to measure, characterize, and outline research info in a reasonable, important, and effective way. Descriptive statistics assist in

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detailing and comprehending the traits of a specific data set by providing brief analyses of the sample and data measures. Descriptive statistic includes frequency, central tendency, dispersion and distribution measures. This study uses descriptive statistics because it simplifies the data's interpretation while simultaneously providing the researchers with the knowledge to conduct further analysis.

3.6.2   Pearson's correlation

Correlation analysis refers to a method that describe the linear association between two different variables. With correlation analysis, researcher could see the patterns and define how linear it is. There are types of correlation analysis which are Pearson correlation and Spearman correlation. Thus, there are two relationships of correlation analysis which are positive correlation and negative correlation. Positive correlation is an association between two variables which means the increase of one variable can causes an increase for another variable. Meanwhile, negative correlation means the increase of one variable cause a decrease in another variable. The perfect correlation positive is in between two values at all if the result is the between -1. Perfect positive correlation between two values indicates 1. When, the result is shown 0, this means that there is no relation between the IVs and DV. Overall, a perfect correlation generates a straight line on a graph. The correlation is perfect positive if two variables point in a direction that is a constant positive or negative direction. Whereas the correlation is perfect negative if both variables change in the opposite direction which is one increases while the other lowers or vice versa.

Correlation Coefficient Scale

+ r values	Positive	− r values	Negative
1.0	Perfect +	−1.0	Perfect −
.8 to .99	Very strong+	−.8 to −.99	Very strong−
.6 to .8	Strong +	−.6 to −.8	Strong −
.4 to .6	Moderate +	−.4 to −.6	Moderate −
.2 to .4	Weak +	−.2 to −.4	Weak −
0 to .2	Very weak +	0 to −.2	Very weak −

Figure 3.1: Correlation Coefficient Scale

3.7   SUMMARY

The research approach for this study has been described in detail in this chapter. The target population, sampling procedure, data collecting, research instrument, and data analysis method are further components of the research design that the researchers have discussed. In this chapter, it was described how the questionnaire was developed. Each question's purpose and the information it contains have also been explained. Hopefully, all of the research's components can be utilized in subsequent studies after this chapter.

CHAPTER 4

DATA ANALYSIS

4.1   INTRODUCTION

This chapter comprised demographic profile of the sampled respondents, descriptive analysis, reliability test, and Pearson's Correlation analysis. Overall, the study collects data from 173 respondents, but only 130 of them used Fitness Apps. About 43 respondents were not considered in the data analysis because they do not use any fitness apps. Therefore, the result of the analysis was generated using data from 130 respondents. Researchers use the IBM SPSS Statistics version 25 software to analyse the data.

4.2   DESCRIPTIVE STATISTICS

4.2.1   Demographic Information

This section presents the frequency of demographic profiles of the respondents surveyed in the study. The demographic profiles include gender, age group, race, marital status and income group.

4.2.1.1 Gender

The table 4.1 below presents the gender distribution of a total of 173 respondents collected from the data collection through questionnaire. About 20 (representing 15.4%) of the respondents are males while 110 (representing 84.6%) of the respondents are females. The result implies that more females use fitness apps than males because females focus more on health care and body shape, therefore they use fitness apps more.

Table 4.1

Gender

Gender	Frequency	Percentage (%)	Cumulative Percentage (%)
Male	20	15.4	15.4
Female	110	84.6	100.0
Total	**130**	**100.0**	

GENERER

GENDER

130 responses

○ Male
○ Female

79.2%

20.8%
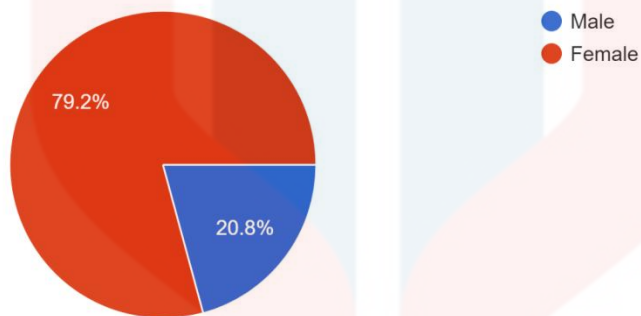
Figure 4.1 Gender of Respondent

4.2.1.2 Age Group

Table 4.2 presents the age group of the sampled 130 respondents. The age group 10-18 years

represents 2.3% (N=3) of the total respondents that use fitness apps.

Table 4.2

Age group of the respondents

Age	Frequency	Percentage (%)	Cumulative Percentage (%)
10-18 years old	3	2.3	2.3
19-22 years old	44	33.8	36.1
23-25 years old	83	63.9	100
Total	**130**	**100.0**	

AGE GROUP
130 responses

- 10 - 18 years old
- 19 - 22 years old
- 23 - 25 years old

63.8%

33.8%
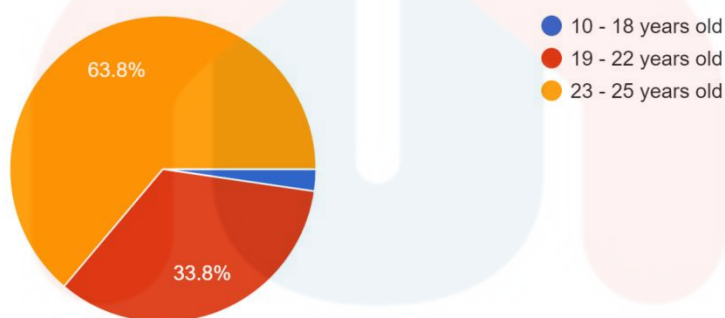
Figure 4.2 Age of Respondent

4.2.1.3 Race

The table 4.3 below presents the race of the sampled 130 respondents. About 115 (representing 88.5%) of the respondents are Malay while 2 (representing 1.5%) of the respondents are Indian. The others respondent was about 13 (representing 10.0%). The result implies that more Malay use fitness apps than others race.

Table 4.3

The race of the respondents

Race	Frequency	Percentage (%)	Cumulative Percentage (%)
Malay	115	88.5	88.5
Indian	2	1.5	90.0
Other	13	10.0	100.0
Total	**130**	**100.0**	

RACE
130 responses

- Malay
- Chinese
- Indian
- Bidayuh
- Africa
- Dusun
- Iban
- Native Sabahan

88.5%

▲ 1/2 ▼
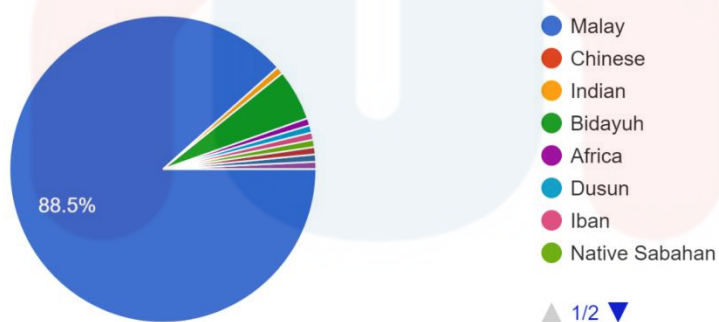
Figure 4.3 Race of Respondent

4.2.1.4 Marital Status

The table 4.4 below presents the martial status of the sampled 130 respondents. About 121 (representing 93.1%) of the respondents are single while 9 (representing 6.9%) of the respondents are married. The result implies that more single use fitness apps than married because single have more time to make some exercise using fitness apps while married life was spent their time with family.

Table 4.4

The martial status of respondents

Martial Status	Frequency	Percentage (%)	Cumulative Percentage (%)
Single	121	93.1	93.1
Married	9	6.9	100.0
Total	**130**	**100**	

MARITAL STATUS
130 responses
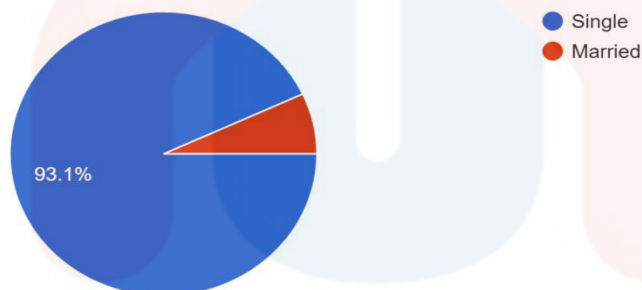
Figure 4.4 Marital Status of Respondent

4.2.1.5 Income Group

The table 4.5 below presents the income group of the sampled 130 respondents. About 96 (representing 73.8%) of the respondents are getting income less than RM1000 while 34 (representing 26.2%) of the respondents are getting income from RM1001 to RM1500. This is because maybe people with income group RM1001 to RM1500 can afford to go and get training fitness at gym while people with income group less than RM1000 used fitness apps.

Table 4.5

The income group of respondents

Income Group	Frequency	Percentage (%)	Cumulative Percentage (%)
< RM 1000	96	73.8	73.8
RM 1001 - RM 1500	34	26.2	100.0
Total	**130**	**100**	

INCOME GROUP
130 responses

● < RM 1000
● RM 1001 - RM 1500

26.2%

73.8%
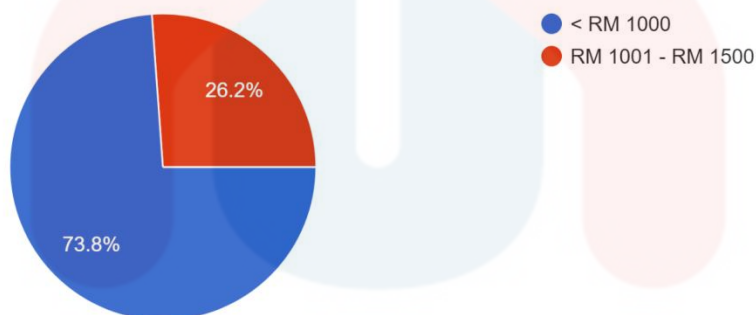
Figure 4.5 Income Group of Respondent

4.2.2   Mean and Standard Deviation of Independent Variable and Dependent Variable

Descriptive statistical analysis is performed by establishing the mean and standard deviations of each statement in independent and dependent variables. Mean and standard deviations is used to identify the level of agreement among the sampled respondents. Starting with table 4.6 until table 4.9 shows the mean and standard deviation of independent variable. Table 4.10 which present the

mean and standard deviation of the dependent variable and table 4.11 show total Mean Score and

Standard Deviation of Variables.

Table 4.6

Descriptive Statistics (Health Consciousness)

No	Variable items	N	Mean	Standard Deviation
1	I am self-conscious about my health.	130	4.22	.892
2	I take responsibility for the state of my health.	130	4.41	.754
3	I reflect on my health a lot.	130	4.19	.881
4	I am alerted to changes in my health.	130	4.28	.788
5	I am aware of the state of my health as I go through the day.	130	4.22	.760
6	Good health requires active participation on my part.	130	4.36	.682
7	I am worried about my health when I	130	4.38	.801

get sick.

8	Living life without disease and illness is very important to me.	130	4.42	.756
9	My health depends on how well I take care of myself.	130	4.51	.662
10	Living life in the best possible health is very important to me.	130	4.40	.689
11	I do worry about harmful chemicals in my food.	130	4.16	.922
12	I am concerned about the quality of my drinking water.	130	4.38	.819
13	I usually read the ingredients on my food labels.	130	4.07	.942
14	I read more health-related articles than I did 3 years ago.	130	3.93	.974
15	I am interested in	130	4.35	.796

information about my health.

Table 4.6 shows the mean and standard deviation analysis of Health Consciousness of Intention to use Fitness Apps. Based on the table, the highest mean value is item 9 which is 4.51 with the respondents agreeing that "My Health depends on how well I take care of myself". The second higher mean value is 4.42 in item 8 with the "Living life without disease and illness is very important to me". Next, the mean value is 4.41 which is item 2 with the "I take responsibility for the state of my health". Besides, the item 10 with a mean value 4.40 which is "Living life is the best possible health is very important to me". Followed by the question "I am worried about my health when I get sick" and the question "I am concerned about the quality of my drinking water" which is item 7 and 12 have the same mean value which is 4.38. Apart from that, the item 6 with mean value 4.36 which is "Good health requires active participation on my part". Then, the question "I am interested in information about my health" in item 15 has a mean value of 4.35. In addition, the mean value with 4.28 in the item 4 which is "I am alerted to changes in my health". Furthermore, items 1 and 5 with the question "I am self-conscious about my health" and the question "I am aware of the state of my health as I go through the day" have the same mean value which is 4.22. Followed by the question "I reflect on my health a lot" in the item 3 have a mean value with 4.19. Last but not least, the mean value which is 4.16 with the question "I do worry about harmful chemicals in my food" in item 11. The question "I usually read the ingredients on my food labels" in item 13 which the mean value is 4.07. Lastly, the lowest mean value is 3.93 for item 14 which is "I read more health-related articles than I did 3 years ago".To

summarize, the most of the standard deviation values were less than one, indicating that the values on the 130-respondent data set were close to the mean.

Table 4.7

Descriptive Statistics (Dietary Culture)

No	Variable Items	N	Mean	Standard Deviation
1	I eat a variety of foods within my recommended intake.	130	3.98	.826
2	I maintain body weight in a healthy range.	130	3.91	.902
3	I am physically active everyday.	130	3.82	.968
4	I eat an adequate amount of rice, others cereal products (preferably whole grain) and tubers.	130	3.87	.839
5	I eat plenty of fruits and	130	3.87	.968

	vegetables every day.			
6	I consume a moderate amount of fish, meat, poultry, egg, legumes and nuts.	130	3.95	.947
7	I consume adequate amounts of milk and milk products.	130	3.78	1.044
8	I limit intake of foods high in fats.	130	3.82	1.040
9	I minimise fats and oils during food preparation.	130	3.79	1.017
10	I choose and prepare foods with less salt and sauces.	130	3.85	.992
11	I consume foods and beverages with low sugar.	130	3.97	.980
12	I drink plenty of water daily.	130	4.42	.785
13	I practice exclusive breastfeeding from birth until six months, and continue to breastfeed until the child is two years of age.	130	3.53	1.215
14	I consume safe	130	4.28	.770

15	I make effective use of nutrition information on food labels	130	4.17	.818
	and clean foods and beverages.			

Table 4.7 presents the mean and standard deviation analysis of respondents on the independent variable item which were Dietary Culture. As stand in the table, item 12 scores the highest mean, which was 4.42, where the respondent agreed that "I drink plenty of water daily". Meanwhile, the second higher mean value is 4.28 in item 14 with the " I consume safe and clean foods and beverages". Next, follow up to the third higher mean value is 4.17 in item 15 with the" I make effective use of nutrition information on food labels". After that move to fourth higher which is in item 1 which stated 3.98 with where the respondents agreed to the "I eat a variety of foods within my recommended intake". Follow up with mean value of 3.97 in item 11 with the "I consume foods and beverages with low sugar". Next, the mean value is 3.95 in item 6 where the question was "I consume a moderate amount of fish, meat, poultry, egg, legumes and nuts". Besides that, the mean value is 3.91 in item 2 with the "I maintain body weight in a healthy range". Followed by the question " I eat an adequate amount of rice, others cereal products (preferably whole grain and tubers) and the question "I eat plenty of fruits and vegetables every day" which is item 4 and item 5 have the same mean value which is 3.87. Apart from that, the item in 10 which the mean value 3.85 with the question "I choose and prepare foods with less salt and sugar". Then, item 3 and 8 also have the same mean value which is 3.82 with the question "I am physically active everyday" and the question "I limit intake of foods high in fats". Followed by the item 9 which mean value 3.79 with the question "I minimise fats and oils during

food preparation". Besides, with the mean value 3.78 in item 7 with the question "I consume adequate amounts of milk and milk products". Lastly, the lowest mean value is 3.53 in item 13 which was "I practice exclusive breastfeeding from birth until six months, and continue to breastfeed until the child is two years of age". To summarize, the items (1,2,3,4,5,6,10,11,12,14,15) of the standard deviation were less than one, indicating that the values on the data set were close to the mean, whereas, the items (7,8,9,13) of the standard deviation were highest than 1 indicate that the values on the 130-respondent data set were above to the mean.

Table 4.8

Descriptive Statistics (Perceived Usefulness)

No	Item description	N	Mean	Standard Deviation
1	I use fitness apps to improve the quality of exercising.	130	4.14	.904
2	Fitness apps save me time.	130	4.18	.833
3	I use fitness apps to improve my	130	4.18	.885

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training/ workout performance.

4	Fitness apps are useful for doing exercise.	130	4.27	.843
5	I use fitness apps to enhance my effectiveness in doing exercise.	130	4.24	.833
6	I use fitness apps to increase my productivity in doing exercise.	130	4.19	.872

Table 4.8 presents the mean and standard deviation analysis of respondents on the independent variable items which were perceived usefulness. As stated in the table, item 4 scores the highest mean, which was 4.27, where the respondents agreed that "Fitness apps are useful for doing exercise". Meanwhile, the second highest value is in item 5, which has a value of 4.24, indicating that respondents use fitness apps to enhance their exercise effectiveness. Following that, item 6 displays the item with the third highest mean value, 4.19 which is the respondent's use of fitness applications to increase their productivity in exercising. Next, the mean score for the questions "Fitness apps save me time" and "I use fitness apps to improve my training/ workout performance" have the same mean value which is 4.18. Lastly, question item one had the lowest mean value, 4.14, where respondents just slightly agreed that using fitness apps improves the

quality of exercising. To summarize, the most of the standard deviation values were less than one, indicating that the values on the 130-respondent data set were close to the mean.

Table 4.9

Descriptive Statistics (Perceived Ease of Use)

No	Variable items	N	Mean	Standard Deviation
1.	Overall, I find fitness apps easy to use.	130	4.25	.817
2.	It is easy for me to remember how to perform tasks using fitness apps.	130	4.19	.817
3.	Learning to use fitness apps is easy.	130	4.12	.898

4.	Interaction with fitness apps is clear and understandable.	130	4.18	.830
5	It is easy to interact with fitness apps.	130	4.18	.805

Table 4.9 presents the mean and standard deviation analysis of respondents on the independent variable items which were perceived ease of use. Based on the table, the highest mean was question number 1, which was 4.25, where the respondents agreed that they find fitness apps easy to use. While, the lowest mean was question number 3 which the mean was 4.12, where the respondents slightly agreed that learning to use fitness apps is easy. To summarize, the most of the standard deviation values were less than one, indicating that the values on the 130-respondent data set were close to the mean.

Table 4.10

Descriptive Statistics (Intention to Use Fitness Apps)

No	Item description	N	Mean	Standard Deviation
1	I know how to judge the quality of a fitness apps.	130	3.93	.837
2	I do not feel very knowledgeable about fitness apps.	130	2.96	1.216
3	I intend to use fitness apps within the next three month.	130	3.72	.924

4	I intend to use fitness apps for my training.	130	3.92	.929
5	I intend to use fitness apps as often as possible.	130	3.85	.927
6	I will use fitness apps on a regular basis in the future.	130	3.98	.853
7	I will frequently use fitness apps in the future.	130	4.05	.892

8	Assuming I have access to fitness Apps, I intend to use them.	130	4.03	.835
9	Given that I have access to fitness Apps, I predict that I would use them.	130	4.11	.780

Table 4.10 presents the mean and standard deviation analysis of respondents on the dependent variable items which were intention to use fitness apps. Based on the table, the highest mean was question number 9, which was 4.11, where the respondents agreed that they given that I have access to fitness apps, I predict that I would use them. Besides, the lowest mean that refers from the table was question number 2, which was 2.96 where the respondents slightly agree that I do

not feel very knowledgeable about fitness apps. To summarize, the items (1,3,4,5,6,7,8,9) of the standard deviation were less than one, indicating that the values on the data set were close to the mean, whereas, the items 2 of the standard deviation were highest than 1 indicate that the values on the 130-respondent data set were above to the mean.

Table 4.11

Total Mean Score and Standard Deviation of Variables

No	Variables	N	Mean	Standard Deviation
1	Health Consciousness	130	4.2862	.59155
2	Dietary Culture	130	3.9338	.66296
3	Perceived Usefulness	130	4.2000	.76119
4	Perceived Ease of Use	130	4.1846	.74568

5	Intention to Use Fitness Apps	130	3.8402	.59651

Table 4.11 shows the total respondent, mean score, and standard deviation of independent and dependent variables. According to the table above, this study comprised 130 respondents who used Fitness Apps to examine the mean and standard deviation for the five variables. For the independent variable, health consciousness was the highest mean, which is a mean of 4.286 with a standard deviation of 0.59155, second highest followed by perceived usefulness score (mean=4.2000, SD=0.76119), followed by the third score is perceived ease of use which was (mean=4.1846, SD=0.74568), and dietary culture has the lowest score (mean=3.9338, SD=0.66296). Meanwhile, the mean for the dependent variable which is the intention to use Fitness Apps was (mean= 3.8402, SD= 0.59651). To conclude, the independent variable of health consciousness was the most influential on the intention to use Fitness Apps among Generation Z.

4.3   RESULT OF RELIABILITY TEST

Test reliability is defined as an activity being conducted in the same way on the same sample from time to time as a method of measuring a result that yields the same result (Middleton, 2019). A reliability test is used when the researchers measures something that the researcher expects the sample to remain. In this study, the researchers employed Cronbach's alpha to determine whether or not the multi-question Likert scale is dependable. Usually, the

results from a study are considered reliable if it's higher than 0.7 (Hair et al., 2019). Internal consistency is measured using this method and is represented as a number between 0 and 1. Therefore, this form of measurement can determine the questionnaire's dependability.

Table 4.12

Reliability Statistics for Independent variables and dependent variable

Variables	Number of items	Cronbach's Alpha
Health Consciousness	15	0.936
Dietary Culture	15	0.925
Perceived Usefulness	6	0.943
Perceives Ease of Use	5	0.937
Intention to Use Fitness Apps	9	0.829

Table 4.12 shows the overall results of the analysis's reliability value using Cronbach's alpha for the independent and dependent variables. According to the table, all variables have a value larger than 0.7. Therefore, the results obtained are reliable and acceptable. In this study, there are four independent variables namely health consciousness, dietary culture, perceived usefulness, and perceived ease of use as well as one dependent variable namely intention to use fitness apps.

In measuring the independent variable of health consciousness, there are 15 items were used. For this section, Cronbach's alpha was 0.936, which is excellent in terms of internal

consistency, according to Table 4.12. Consequently, the coefficient obtained for these items in the health consciousness variable demonstrated a high level of trustworthiness.

Following that, the independent variable of dietary culture also has the same items with health consciousness which is 15. In this section, Cronbach's alpha coefficient is 0.925, which indicates that is excellent. As a result, the coefficient obtained for these items in the dietary culture variable demonstrated a high level of trustworthiness.

Next, six questions were used to measure the value of the independent variable which is perceived usefulness. For this section, Cronbach's alpha result was 0.943, indicating an excellent outcome. Consequently, the coefficient obtained for these items in the perceived usefulness variable demonstrated a high level of trustworthiness.

Furthermore, five questions were used to assess the perceived ease of use. In this section, Cronbach's alpha coefficient is 0.937, which indicates that is excellent. As a result, the coefficient obtained for these items in the perceived ease of use variable demonstrated a high level of trustworthiness.

Lastly, nine questions were used to measure the value of a dependent variable which is the intention to use Fitness Apps. The Cronbach's alpha result for this section's questions was 0.829, which resulted in very good. Consequently, the coefficient obtained for the questions in the intention to use Fitness Apps was trustworthy. Since all variables have Cronbach's alpha values between 0.8 and 0.95, this implies that the questionnaire is very reliable as well as respondents understood the questions well.

4.4 RESULT OF CORRELATION ANALYSIS

Pearson's correlation analysis is the most important analysis that investigated the linear connection between the two variables. This study aims to examine whether there are any relationships between the Independent Variables (IV) which is Perceived Usefulness, Perceived Ease of Use, Health Consciousness and Dietary Culture and Dependent Variable (DV) which is Intention to use Fitness Apps:

HYPOTHESIS 1: PERCEIVED USEFULNESS AND INTENTION TO USE FITNESS APPS

H1: There is a relationship between Perceived Usefulness and Intention to use Fitness Apps.

Table 4.13

Correlation coefficient for Perceived Usefulness and Intention to use Fitness Apps

		Perceived Usefulness	Intention to Use Fitness Apps
Perceived Usefulness	Pearson Correlation	1	.565**
	Sig. (2-tailed)		.000
	N	130	130
Intention to Use Fitness Apps	Pearson Correlation	.565**	1
	Sig. (2-tailed)	.000	
	N	130	130

Asterisk ** indicates that it is significant at 1% while asterisk * indicates that it is significant at 5%.

The table 4.13 shows the Pearson correlation coefficient, the significant value, and the total number of responses (130). The p-value is 0.01 which is the correlation level of significant. The correlation value of 0.565 indicated a high positive correlation between perceived usefulness and intention to use fitness apps, which is significant at 1% level. Therefore, H1 is accepted and supported.

HYPOTHESIS 2: PERCEIVED EASE OF USE AND INTENTION TO USE FITNESS APPS

H2: There is a relationship between Perceived Ease of Use and Intention to use Fitness Apps.

Table 4.14

Correlation coefficient for Perceived Ease of Use and Intention to use Fitness Apps

		Perceived Ease of Use	Intention to Use Fitness Apps
Perceived Ease of Use	Pearson Correlation	1	.462**
	Sig. (2-tailed)		.000
	N	130	130
Intention to Use Fitness Apps	Pearson Correlation	.462**	1
	Sig. (2-tailed)	.000	
	N	130	130

Asterisk ** indicates that it is significant at 1% while asterisk * indicates that it is significant at 5%.

The Pearson correlation coefficient, the significant value, and the total number of responses (130) are shown in the above table 4.14. The p-value is 0.01 which is the correlation level of significant. The correlation value of 0.462 indicated a positive correlation between perceived usefulness and intention to use fitness apps, which is significant at 1% level. Therefore, H2 is accepted and supported.

HYPOTHESIS 3: HEALTH CONSCIOUSNESS AND INTENTION TO USE FITNESS APPS

H3: There is a relationship between Health Consciousness and Intention to use Fitness Apps.

Table 4.15

Correlation coefficient for Health Consciousness and Intention to use Fitness Apps

		Health Consciousness	Intention to Use Fitness Apps
Health Consciousness	Pearson Correlation	1	.466**
	Sig. (2-tailed)		.000
	N	130	130
Intention to Use Fitness Apps	Pearson Correlation	.466**	1
	Sig. (2-tailed)	.000	
	N	130	130

Asterisk ** indicates that it is significant at 1% while asterisk * indicates that it is significant at 5%.

The table 4.15 displays the Pearson correlation coefficient, significant value, and total number of responses (130). The p-value is 0.01 which is the correlation level of significant. The correlation value of 0.466 indicated a positive correlation between health consciousness and intention to use fitness apps, which is significant at 1% level. Therefore, H3 is accepted and supported.

HYPOTHESIS 4: DIETARY CULTURE AND INTENTION TO USE FITNESS APPS

H4: There is a relationship between Dietary Culture and Intention to use Fitness Apps.

Table 4.16

Correlation coefficient for Dietary Culture and Intention to use Fitness Apps

		Dietary Culture	Intention to Use Fitness Apps
Dietary Culture	Pearson Correlation	1	.399**
	Sig. (2-tailed)		.000
	N	130	130
Intention to Use Fitness Apps	Pearson Correlation	.399**	1
	Sig. (2-tailed)	.000	
	N	130	130

Asterisk ** indicates that it is significant at 1% while asterisk * indicates that it is significant at 5%.

The table 4.16 presents the Pearson correlation coefficient, significant value and number of responses (130). The p-value is 0.01 which is the correlation level of significant. The correlation value of 0.399 indicated a positive correlation between perceived usefulness and intention to use fitness apps, which is significant at 1% level. Therefore, H4 is accepted and supported.

4.5   DISCUSSION BASED ON RESEARCH FINDINGS

Pearson's correlation analysis was applied to analyze the hypotheses on the significant relationship between independent variable (IVs) which are Dietary Culture (DC), Health Consciousness (HC), Perceived Ease of Use (PEOU), Perceived Usefulness (PU) and the dependent variable (DV) which is Intention to use Fitness Apps. All the hypotheses were accepted at 0.01 level.

4.5.1   DISCUSSION ON HYPOTHESIS 1

The study finds that perceived usefulness has a significant positive correlation with intention to use fitness apps. This is due to the following factors (i) Quality of exercise, (ii) time saving, and (iii) training/workout performance. Fitness Apps are able to ensure that individuals and users have productive exercises and also make them to have quality trainings outside work, as such, it ensures that users have work-life-balance in their daily activities. Following these reasons, users would have high intention to use different types of fitness Apps due to their usefulness and functionalities.

4.5.2   DISCUSSION ON HYPOTHESIS 2

The study finds that perceived ease of use has a significant positive correlation with intention to use fitness apps. This is due to the following factors (i) Easy to use, (ii) easy to remember how to perform tasks (iii) clear and understandable. Perceived ease of use is able to ensure that users could learning the fitness apps easily as all the following instructions on how to use the fitness apps are comprehensible and uncomplicated to learn. As a result, this will make all range of ages could learn effortlessly about the fitness apps. Following these reasons, users could also have a high intention to use fitness apps due to their easily accessible as the apps are understandable.

4.5.3 DISCUSSION ON HYPOTHESIS 3

The study finds that health consciousness has a significant positive correlation with the intention to use fitness apps. This is due to the following factors (i) Individuals are responsible for the state of their health (ii) Living life without disease and illness are important (iii) Individuals health are depends on how well they take care of themselves. Health consciousness are able to help the individuals and users to reminding them about their health state. Having a health consciousness will teach people to have a self-discipline because people are pay attention about their health which make them do the activities that could help them to keep fit and they can use fitness apps to track their fitness activities. Following these reasons, using fitness apps within having a health consciousness could contribute in giving awareness to people as living a healthy lifestyle could prevent from having a chronic illness.

4.5.4 DISCUSSION ON HYPOTHESIS 4

The study finds that dietary culture has a significant positive correlation with the intention to use fitness apps. This is due to the following factors (i) Eat variety of foods within recommended intake (ii) Physically active everyday (iii) Maintain body weight. Fitness apps are able to ensure that individual and users have a well-balanced of doing a physical activities and balance food intake. Fitness apps could track and advice about the amount intake of foods that people consume and would recommend to help users to have a proper balanced diet and balanced nutrition. Following these reasons, users who have use a Fitness Apps could have a better planning intake of food consumption and consistent to do it.

4.6   SUMMARY

In this chapter, descriptive statistics, mean and standard deviation, reliability test and Pearson correlation test are carried out to fulfill the analysis. For the frequency part, it includes the age, gender, income, race, and marital status. The highest frequency for age is 23 – 25 years old (83, 48.0%), for the gender is female (110, 63.6%), for the income is below RM1000 (96, 55.5%), for the race majority is Malay (115, 66.5%) and the last one is marital status is single (121, 69.9%). For the reliability test, the value of Cronbach's Alpha for all variables is .829. All of the value indicates good internal consistency. Lastly, Pearson correlation test, as the result Pearson's correlation analysis was used in evaluate the hypothesis on the significant relationship between the independent variable (IV) which are Dietary Culture (DC), Health Consciousness (HC), Perceived Ease of Use (PEOU), Perceived Usefulness (PU) and the dependent variable (DV) which is Intention to use Fitness Apps. All the hypotheses were accepted at 0.01 level.

CHAPTER 5

SUMMARY AND CONCLUSION

5.1   INTRODUCTION

This chapter presents the details and overall of this research. In this study. In this chapter comprised summary of the study. Then, about discussion for all hypotheses. It also presents the limitations of the study and suggestions for future study that can be used in future about this research.

5.2   SUMMARY OF THE STUDY

This study aims to proffer solutions and problems. First problem that has been found, there is a bad nutrition culture in Malaysia. Secondly which is health care awareness is still low in Malaysia. Thirdly, about one-third of Malaysians do not exercise and lastly, a healthy lifestyle is a challenge for most Malaysians. Based on these research problems, four objectives and four questions were developed.

Motivated by the TAM theory, this study includes health consciousness and dietary culture into the established model along with perceived usefulness and perceived ease of use. Four hypotheses were formulated. Hypotheses 1 which is Perceived Usefulness and Intention to Use Fitness Apps. Hypotheses 2 was Perceived Ease of Use and Intention to Use Fitness Apps.

Hypotheses 3 was Health Consciousness and Intention to Use Fitness Apps. Lastly, hypotheses 4 was Dietary Culture and Intention to use Fitness Apps.

Purposive sampling was utilised as the approach. It is the sample approach used in the study, which falls under the category of non-probability sampling techniques. When selecting people of the population to participate in the survey, this technique relies on the researcher's judgement and criteria. Aside from that, using the purposive sample strategy in this study has the benefit of being the most cost-effective and time-saving. Purposive sampling is the most appropriate sampling method available to contribute to this study if there are fewer than a few primary data sources and is appropriate for studies that require some selection criteria, such as only respondents who fall within the age group of generation Z being eligible to participate in this study. In addition, only respondents from Generation Z who use Fitness Apps will be included in this study. In this study, researchers intend to choose 170 respondents among Malaysian Generation Z users of fitness apps to serve as the study sample. This is owing to the fact that the sample size cannot be fewer than 30 or higher than 500 people. According to Sekaran and Bougie (2016), the ideal sample size for quantitative studies is between 30 and 500 individuals.

The data analysis method assists in the division of huge quantities of data into smaller fragments. Data analysis is mostly used to extract useful information from data and then apply that knowledge to make a decision. This study will use correlation analysis to examine the relationship between the independent variables and the dependent variable and determine the strength of the relationship between each IV and DV. This study's data will be analyzed using descriptive statistics and Pearson's correlation.

The findings of this study show that perceived usefulness, perceived ease of use, health consciousness, and dietary culture have significant associations with intention to use fitness apps among generation Z.

5.3   DISCUSSION

The outcomes of the research findings of this study have provided insight into discussion for the positive relationship between independent variables (IVs) which are Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Health Consciousness (HC), Dietary Culture (DC) and the dependent variable (DV) which is Intention to use Fitness Apps.

5.3.1 Hypothesis 1

Hypothesis 1 shows that there is a significant positive association between Perceived Usefulness and Intention to Use Fitness Apps. This finding is due to the following reasons:

i) Quality of exercise

Fitness apps are able to make the exercise of the users become more quality. This is because fitness apps offer variety of workouts and explain well the proper way to do physical activity in accordance with the wishes of the users. As a result, users could get benefits from the use of fitness apps to improve their quality of exercise which also contribute in the quality of life. Thus, perceived usefulness of fitness apps could influence Gen Z people's intention to use them.

ii) Time saving

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Individuals who use fitness apps are the ones who save more time than the people who do not used to it. This is because Fitness Apps have been input time feature which helps users to set the schedule of their exercise and assign on how many sets/repetitions each of the exercises they need to do. As a result, fitness can help user to have a regular workout routine.

iii) Training/workout performance

Fitness apps are designed to help users to get the proper and right exercise as this fitness app has multiple fitness features such as providing a variety of exercise, monitor and track the fitness activity and even advanced personal trainers. As a result, this definitely helps users to a better training or workout performance which also can enhance productivity.

5.3.2 Hypothesis 2

Hypothesis 2 shows that there is a significant positive association between Perceived Ease of Use and Intention to Use Fitness Apps. This finding is due to the following reasons:

i) Easy to use

Most fitness apps are easy to use because all the illustrations, design and features are in well placed. In addition, all the layout arrangements in the app are straightforward and simple, helping users to easily find what they need without confusion. As a result, users from a variety of ages could easily download the fitness and all the procedures from sign in until getting in the app are effortless easy because the apps had provided easy

instructions. Hence, perceived ease of use of fitness apps could influence Gen Z people's intention to use them.

ii) Easy to remember how to perform tasks

Majority of the fitness apps are often paired with wearable devices such as smartwatches or fitness bands. These wearable devices have provided real time data on metrics such as steps taken, calories burn and reminder to do daily exercise. As a result, this sync connection between the fitness apps and wearable devices allows users to easily track their fitness activity and remind them to perform their workout routine.

iii) Clear and understandable

All the guidelines or instructions that have been provided in fitness apps are clear and written with easy-to-understands instructions. The majority of fitness apps offer comprehensive instructions and guidance on how to carry out exercises, monitor progress and use the different features. To illustrate proper methods, fitness apps frequently included pictures, videos and step by step explanations.

5.3.3 Hypothesis 3

Hypothesis 3 shows that there is a significant positive association between Health Consciousness and Intention to Use Fitness Apps. This finding is due to the following reasons:

i) Individuals are responsible for the state of their health

All people have the ability to make choices that affect their state of health. Individuals have options whether to do physical activity, taking care of themselves, and eat a

balanced diet. Therefore, for those who are conscious of taking responsibility for their health, fitness apps are one of the initiatives individuals could take to make a better healthy lifestyle such as helping the users to manage and track their exercise activity, schedule exercise and control the intake of food they consume via the apps. As a result, individuals' general health and wellbeing are significantly impacted by their own decisions.

ii) Living life without disease and illness are important

Living a life free of disease and illness is important because it allows people to experience to have best possible physical health and gives people freedom to carry out their daily activities without limitations. Therefore, Fitness apps are a desirable choice for those who place a high priority on their health due to their ability to create personalised fitness plans, goals setting, track progress and many more. As a result, by keeping and maintaining health conditions individuals can save more money on the healthcare costs and reduce the risk of developing chronic illness.

iii) Individuals health consciousness

Individuals are in charge of managing their own health including taking initiative to be productive to stay fit and prevent chronic illness. In connection with that, fitness apps can help by providing accessibility by allowing users to access physical activity routines and health information anytime, even anywhere by proactively managing their own health,

individuals could have lower chances to be diagnosed with chronic illness and also enhance their general healthiness.

5.3.4 Hypothesis 4

Hypothesis 4 shows that there is a significant positive association between Dietary Culture and Intention to Use Fitness Apps. This finding is due to the following reasons:

i) Eat variety of foods within recommended intake

Eating a variety of food within the recommended amounts is important to keep a healthy and balanced diet. Different foods contain different nutrients such as proteins, carbohydrates, vitamins and minerals. By eating a variety of foods an individual can get all the nutrients that the body needs to function at its best. Fitness apps frequently concentrate on helping users to achieving their fitness goals such as losing weight, increasing muscle and decreasing body fat. Users can achieve their goals by consuming the necessary nutrients within recommended intake by the fitness apps.

ii) Physically active everyday

Being physically active every day is important for individual general wellbeing and health and fitness apps can be very helpful in motivating and monitoring users' physical activities. Fitness apps come out with a way to tracking people's daily physical activity and setting goals. Fitness apps frequently provide features such as progress tracking, notifications and reminders to help users to stay liable and motivated. Overall, utilising fitness apps allows users to track their workout levels, set goals and help to stick to a regular exercise physical routine.

iii) Maintain body weight

Being overweight can make people easily feel exhausted and have less energy. By maintaining a body weight, the body are able to function properly which can boost energy levels and overall vitality. Fitness apps can be helpful tools in maintaining the body by providing guidance, monitoring progress and encouraging motivation. Therefore, fitness apps can help users to maintain their ideal weight and healthy weight.

5.4   LIMITATIONS OF THE STUDY

As with other studies, this study has a few limitations. The primary limitations in this study is that researchers solely focus on Generation Z. Therefore, the data collected to obtain information and opinions from respondents via the 5-point likert scaling questionnaire becomes limited and weak. It is probably because the degree of response in relation to the intention to use fitness applications is relatively low, and the health condition of generation Z is not very high compared to other generations, such as baby boomers, generation X or millennials who face serious health risks. However, there are limitations to other generations that do not meet the specific characteristics required by the researchers to fill out the questionnaire. Furthermore, not all respondents between the ages of 10 and 25 are capable to utilize the fitness applications to track their health status. As a result, they employ physical exercise programs that do not require purchase or merely charge an entrance fee of RM 20.00, similar to a gymnasium service.

The next limitation of the study is the data collection method. In this study, the researchers used an online survey consisting of more than 5 question items for each independent variable and dependent variable. So, it is possible that the respondents did not read the questions

completely and simply put the scale at random because it took a long time to answer the questionnaire. Thus, leading to possible sampling bias. Furthermore, when using quantitative research methods, it involves a structured questionnaire with closed-ended questions. As a result, when answering the questionnaire, the options for responses are limited due to the selection of answers based on the 5-point likert scaling. Future studies can perform both quantitative and qualitative methods to give room for additional factors that could influence intention to use fitness apps among generation Z other than the factors examined in this study.

5.5   SUGGESTIONS FOR FUTURE STUDIES

The findings of this study have been able to provide significant information and valuable insights to influence the intention to use fitness apps among generation Z. However, there is lots of potential to develop future studies that can be made based on these findings. Because respondents in this study were all members of generation Z using fitness apps and their ages ranged from 10 to 25, it would be beneficial in expanding the scope of this research to include the respondents from different age groups and demographics. Future studies can be extended to other generations such as generation X, generation Y, and generation W.

To expand on this study, future studies should focus on other types of fitness apps. It can focus on Health Monitoring Technology. This is because such technology is able to monitor a person's health factors. For example, fitness trackers that work in tracking people's daily activities. It is able to monitor heart rate, blood oxygen and so on. In addition, it also serves as a medication reminder which is very important in health management. It helps in remembering to take medicine on time. For example, the Mango Health app which is an application in helping to set medicine reminders at the right time. Besides, health monitoring technology also serves as a

continuous surveillance monitor for fall detection capable of tracking patients and alerting healthcare professionals to incidents such as falls.

Furthermore, Emergency Monitoring Technology can also be focused on in future studies. This type of technology is a medical alert system that provides emergency monitoring inside and outside the home. It helps ensure personal safety to stay safe. This technology works to provide an immediate emergency signal in calling emergency medical personnel. For example, an emergency wristband which serves to protect a person during an emergency by providing accurate health information. The bracelet can help someone who is incapacitated or unable to explain all the medical details during an emergency. It's a silicone wristband with a button that connects to a home or mobile medical alert system. The middle button is called the help button. The bracelet uses sensors known as accelerometers, which can detect movement, to know when someone has fallen. It then notifies the monitoring centre for medical alerts that the individual needs help.

Lastly, future studies can also focus on other types of fitness applications such as Security Monitoring Technology. This technology works to track security related activities. With cyber security alerts, it allows individuals to act quickly and protect themselves from harm. It includes warning and alarm technology which is a security alarm that can detect an intrusion, such as unauthorized entry into a building or home. Security alarms protect against theft or property damage. For example, a smart alarm that works as an intruder detection system in monitoring and security is easier. This system can monitor a person's home remotely and provide instant alerts if something happens.

5.6 CONCLUSION

This study was aimed to discover the factors influencing the intention to use Fitness Apps among Generation Z. The study employs the non-probability selection approach of purposive sampling to survey a total of 130 respondents who use different types of Fitness Apps. The data collected was analysed using frequency, descriptive statistics, Cronbach's alpha, and Pearson correlation analysis with the aid of IBM SPSS Statistics version 25 software. The findings of this study reveal that perceived usefulness, perceived ease of use, health consciousness, and dietary culture have significant associations with intention to use fitness apps among generation Z. In conclusion, the findings of this study can be used as a guide for Fitness Apps companies and academics looking to understand further the influence of intention to use fitness apps among Generation Z.

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