FACTORS AFFECTING THE SUBJECTIVE FINANCIAL WELL-BEING OF EMERGING ADULTS IN MALAYSIA

BY

EMILY LOH LI YENG
JOANNE EAN ZI EN
KIM HUI MAY
LOO MIN WEN
WONG SHIN YI

A final year project submitted in partial fulfilment of the
requirement for the degree of

BACHELOR OF FINANCE (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE
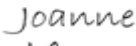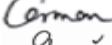DEPARTMENT OF FINANCE

OCTOBER 2021

DECLARATION

We hereby declare that:

(1) This undergraduate FYP is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this FYP has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the FYP.

(4) The word count of this research report is __17328__.

Name of Student:	Student ID:	Signature:
1. Emily Loh Li Yeng	18ABB06421	
2. Joanne Ean Zi En	17ABB04070	
3. Kim Hui May	18ABB06665	
4. Loo Min Wen	18ABB06586	
5. Wong Shin Yi	18ABB06081	

Date: 02/09/2021

ACKNOWLEDGEMENT

We would like to express our sincerest appreciation to whose have lent us a hand during the research process. This research project would not be successful without their support and assistance.

Foremost, we would like to express our deepest gratitude to our beloved research supervisor, Miss Liew Feng Mei, for her countless and unfailing support throughout the research process. Miss Liew is professional and generous in sharing her experiences and insights during the entire research progress so that we can enhance our work quality. We are truly grateful for her time spent and assistance during and beyond her consultation hours.

Moreover, we would like to show our appreciation to the 384 respondents who contributed precious data to our survey. We would also like to express our respect to past and current researchers that contribute to the field of financial well-being. Without their hard work and dedication, we may not be able to access precious literature, and this research will not be conducted so smoothly.

Last but not least, we would like to thank each of our group members for completing this research project. This research project would not be accomplished so successfully without cooperation and endeavours from each of the group members.

DEDICATION

First and foremost, we would like to dedicate this research to all our group members, Emily Loh Li Yeng, Joanne Ean Zi En, Kim Hui May, Loo Min Wen, and Wong Shin Yi, for putting so much effort into contributing to this research project.

Second, we would like to dedicate this research project to our beloved research supervisor, Miss Liew Feng Mei. She had provided countless support and guidance to us throughout the project. Without Miss Liew, our research project will not be completed so smoothly.

Third, we would like to dedicate this research project to our examiner, Puan Wan Rozima Binti Mior Ahmed Shahimi, for giving us precious feedback so that we can improve the quality of this project. Without her feedbacks, we may not see the blind spot of this research project.

Finally, we would like to dedicate this research project to all our friends and family who always support and encourage us since the beginning. We would also like to express our appreciation to the 384 respondents who had participated in this survey and provided valuable data for this research study.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AKPK	Agensi Kaunseling dan Pengurusan Kredit
BHPS	British Household Panel Survey
CFPB	Consumer Financial Protection Bureau
COVID-19	Coronavirus Disease
DOSM	Department of Statistics Malaysia
EPF	Employees' Provident Fund
FOMCA	Federation of Malaysian Consumers Associations
FWB	Financial Well-Being
LOC	Locus of Control
MyWI	Malaysian Well-being Index
OECD	Organisation for Economic Co-operation and Development
OFWB	Objective Financial Well-Being
PTPTN	Perbadanan Tabung Pendidikan Tinggi Nasional
SFWB	Subjective Financial Well-Being
SPSS	Statistical Package for Science Social
TPB	Theory of Planned Behaviour
WHO	World Health Organization

LIST OF APPENDICES

Page

PREFACE

Financial well-being is important for everyone because it creates a financial satisfaction and bring a positive emotion to individual. However, everyone will have different level of subjective financial well-being, aren't we? Subjective financial well-being is difference for every individual based on their values and perspective. It is less likely they are two individuals will carry the exact same perceptions in life. In Malaysia, even the overall well-being is high, but the subjective financial well-being of emerging adults is low due to several reasons.

Emerging adult is the foundation of a country. If their well-being not being taken care, it will lead to many negative issues. In long run, social and economy issues will arise which can bring negative consequences to Malaysia. Government should give concern to the well-being of emerging adult even they are still young. It raises our curiosity in studying the factors that will affect the subjective financial wellbeing of emerging adult in Malaysia. Hence, this research project is done to investigate the factors and subjective financial well-being of emerging adults in Klang Valley because it is a fastest growth among other places in Malaysia.

ABSTRACT

Emerging adults in Malaysia are facing financial stress which can lead to a low subjective financial well-being. The subjective financial well-being is very personal and difference for each individual. The subjective financial well-being is usually lower for emerging adulthood because they are experiencing a change of life stage from dependent to independent. Many uncertainties make them worry about their financial conditions. The purpose of this research is to investigate the factors that affect subjective financial well-being of emerging adults in Malaysia. The independent variable including financial stress, financial attitude, internal locus of control and financial knowledge.

In order to conduct informative research during this Covid-19 pandemic, questionnaire is constructed online through Google Form and distributed electronically to 364 emerging adults in Klang Valley. The data are then collected and reclassify in order for the analysis can be done. The analysis that done by using SPSS software including the consistency, significance and relationship between variables.

The results from SPSS show financial stress, financial attitude and internal locus of control have a significant relationship with subjective financial well-being. However, financial knowledge shows an insignificant relationship on subjective financial well-being. The research findings contribute to academia, government and society.

CHAPTER 1: RESEARCH OVERVIEW

1.0   Research Background

Financial well-being ("FWB" thereafter), as defined by Consumer Financial Protection Bureau (CFPB) (2017), indicates one's confidence to satisfy their financial commitments, be financially secured, and capable to make financial choices without restraint. Specifically, CFPB (2017) shed light on four essential elements in order to achieve high FWB: having control over daily finances, being capable of absorbing financial stress, keeping on track to accomplish personal financial goals, and having financial freedom. Meanwhile, FWB can view in the form of objective and subjective aspects (Vosloo et al., 2014).

Objective financial well-being ("OFWB" thereafter) is often measured in quantitative aspects, which represents material resources such as income, debts, and assets (Vosloo et al., 2014). In general, people would evaluate their life positively when their income increases since high income indicate a better standard of living and greater life enjoyment. However, Kahneman and Deaton (2010) claimed that high income is not necessarily brought along with satisfaction and happiness. Instead, individuals would still perceive a low level of FWB even though they possess a good financial status (Brüggen et al., 2017).

Indeed, individuals may experience different levels of satisfaction despite of similar income or financial conditions (Iannello et al., 2020), while it is due to different personal characteristics (Brüggen et al., 2017). However, by using solely objective approach in examining FWB, it captures only the objective economic variables like income and debt (Iannello et al., 2020). Hence, it indicates that personal factors other than the objective method, such as sociodemographic factors and personality traits, cannot be captured in the objective approach. Consequently, OFWB may lead to an inaccurate result in which it illustrates the shortcoming of the objective method while it also indicates the necessity of a subjective measurement on FWB.

SFWB, on the other hand, identifies and takes a wide range of personal factors into account (Brüggen et al., 2017). Hence, it can be said that the subjective approach provides a more accurate interpretation of one's personal FWB since it analyses extensive and incorporates non-financial elements that the objective approach cannot examine (Brüggen et al., 2017). As such, Brüggen et al. (2017) stated that subjective measurement of FWB is preferable to an objective approach, while Sorgente and Lanz (2017) have also claimed that solely objective measurement is insufficient in examining one's FWB since it considers only objective economic resources. Therefore, this study will primarily be exploring the subjective aspect of FWB.

In contrast to the objective method, the subjective approach incorporates cognitive (Brüggen et al., 2017) and psychological assessment (Liang et al., 2020) that might affect one's judgment. Precisely, with a subjective lens, individuals may perceive their FWB at different levels since they do not necessarily possess similar preferences and values. Hence, it demonstrates why, despite having similar financial circumstances, people may perceive their FWB differently, while it results from individual differences (Brüggen et al., 2017; Iannello et al., 2020).

Brüggen et al. (2017) claimed that individual differences such as sociodemographic background, traits, skills, financial habits, and life experiences lead people to possess diverse perspectives and values. Individual perceptions, in particular, are merely personal and subjective (Iannello et al., 2020). These varied personal characteristics thereby make individuals feel and think differently (Das et al., 2020), which subsequently carry out different judgments on SFWB. As such, it can be said that no one can evaluate SFWB on behalf of others due to individual differences.

Among the individual characteristics, Brüggen et al. (2017) claimed that personality traits substantially influence one's subjective evaluation of FWB. Personality traits, for example, impulsivity, locus of control, and optimism, would influence how people feel or consider their financial affairs (Sorgente & Lanz, 2017). Hence, differences in personality traits would subsequently predispose individuals to differ in their perceived FWB.

Added to this, Brüggen et al. (2017) has proposed that personality traits would intervene in one's financial behaviour, and thereby SFWB. In fact, based on the study conducted by Lea (2021), individuals who possess impulsive dispositions are more likely to carry out inappropriate financial decisions such as overspending, low savings, and late payments of bills, which represent poor financial behaviours.

The study aims to explore the contributions of SFWB among emerging adults in Malaysia. Hence, in this study, the relationship between SFWB and financial stress, financial attitude, financial knowledge, and internal locus of control would be discussed in the following chapters.

1.1   Problem Statement

Malaysian Well-being Index (MyWI) measures Malaysians' evaluation of their life qualities and living standards from economic and social perspectives (Department of Statistics Malaysia [DOSM], 2020a). It was reported that overall well-being among Malaysians increased by 2.3 % in 2019, indicating that Malaysians were satisfied with their current life situation in social and economic well-being (DOSM, 2020a). However, Agensi Kaunseling dan Pengerusan Kredit (AKPK) (2019) has reported that adults aged between 18 and 25 have lower FWB due to lower savings, have no emergency funds, and high indebtedness.

There are 47% young Malaysians commit more than one-third of their income for debt (Adzis et al., 2017). The main debt commitment for emerging adults including car loan, student loan, and personal loan (AKPK, 2019). Due to the high education cost, most of the tertiary students will borrow PTPTN for their tertiary education. It causes them to face a debt commitment even before they able to get a job with stable income after graduate. They faced low or unstable income as they just started with employment at the bottom of the wage scale or still under company's probation (Lowe & Amett, 2020).

The high debt commitment with low-income available affect emerging adults saving capability. High spending and less saving cause them to have no extra money that can save for emergency funds (AKPK, 2019). When there is emergency money needed, credit card is the most common alternative used which will substantially increase their debt because of the high interest rate (Barrington, 2019). However, not only those with low-income level facing poor SFWB, but also emerging adults with high income level experience poor SFWB. This is due to lack of financial literacy among emerging adults, leading them to make irrational financial decisions (Zhe, 2020).

According to Yong et al. (2018), sufficient financial knowledge leads to positive financial behaviour, while individuals' attitudes will also become either a stepstone or obstacle while making financial decisions (Yong et al., 2018). That is, even though they intend to perform good financial behaviour, however, inappropriate financial attitudes like purchase or spend beyond their affordability will lastly hinder them from performing a good financial practice (Yong et al., 2018). It will then result a high indulgence level where people just spend money as they wish without any planning (Adzis et al., 2017).

Based on the Maslow's Theory of Needs, home considered as a basic psychological need (Idris, et al., 2018). To fulfil their needs, those young adults who are unaffordable will choose to purchase a house that is away from "hot" areas and away from the place they work (Bujang et al., 2017). They might need to purchase a car or choose public transport as their transportation to work. However, owning a car is costly which including expenses like road tax, car petrol, insurance or toll and it burdened their financial. Traffic jam also will used up more time and energy, hence reducing a person's productivity in work.

Lower productivity will affect individual performance in work, exposing to the risk of getting discharged from work. Poor financial condition causes them unable to focus and give their full commitment to work (Nadzri & Yaacob, 2020). This affects their work performance and face job insecurity. Youth unemployment rate for age 15 to 24 increases by 2.2% in 10 years to 12% in 2020 (Hirschmann, 2020) because of skills mismatch, education quality deficiencies or low-quality jobs performance

(Lee, 2020). They might have unstable income to cover their daily expenditures and become financially vulnerable (AKPK, 2019).

It has also been reported that increasing living costs and low starting salaries for emerging adults forced them to save less or borrow more (Noordin, 2020). There is a chance for them to get discharged from their job due to underperformance and worsen the financial conditions. They may trap into a negative emotional cycle which causes stress because they are anxious and fearful of experiencing financial hardship in future (Downward et al., 2020). Low SFWB leads individuals to suffer from mental illness as they tend to worry more about their finances, thus leading to low overall well-being (Downward et al., 2020).

Based on Islam et al. (2018), the depression in emerging adulthood is significant due to the lower socioeconomic status, post traumatic disorder and life stressors. Total of 2.3% of adults in Malaysia are having depression in 2019 which can lead to suicide. WHO reported that suicide is the second cause of death in range of 15 to 29 years' old (Ministry of Health Malaysia, 2019). When individuals are unable to have satisfactory SFWB, society well-being also will be affected especially in families (Jain et al., 2019).

Family issues may arise with an increased financial stress especially when people fail to find a way to release their stress. Economic hardship makes them more vulnerable to abuse and violence in families including partner violence or child violence (Friedline et al., 2020; Lucero et al., 2016; Showalter, 2016). The DOSM (2020b) recorded a 12% increase of divorce rate in 2019 from 50,862 to 56,975 in Malaysia and is due to family financial issues. The children that grown up in this kind of family will also face emotional distress or learn the bullying behaviours from their parent (Government of New South Wales, 2019).

This is why many studies are carried out to identify the factor that affect individual SFWB. However, studies that focus on this topic using the Malaysian and emerging adult sample are limited. Therefore, this study has analysed the relationship between factors including financial stress, financial attitude, financial knowledge and

internal locus of control with SFWB of emerging adults in Malaysia by modifying the conceptual framework of Mahdzan et al. (2019).

1.2   Research Objective

1. To determine the relationship between financial stress and SFWB of emerging adults in Malaysia.
2. To determine the relationship between financial attitude and SFWB of emerging adults in Malaysia.
3. To determine the relationship between financial knowledge and SFWB of emerging adults in Malaysia.
4. To determine the relationship between internal locus of control and SFWB of emerging adults in Malaysia.

1.3   Research Question

1. Is financial stress significantly related to SFWB of emerging adults in Malaysia?
2. Is financial attitude significantly related to SFWB of emerging adults in Malaysia?
3. Is financial knowledge significantly related to SFWB of emerging adults in Malaysia?
4. Is internal locus of control significantly related to SFWB of emerging adults in Malaysia?

1.4   Significance of Study

Researches that focus in the area of the factors that affect the well-being and FWB of people are available in many countries. However, there are limited number of studies that are focusing on the factors that affect the SFWB, specifically for

emerging adults from age 18 to 25 in Malaysia. Hence, it has been seen as a research gap in this study. This research modified the model from the past researcher which suggest to include financial attitude as one of the factors that affect the well-being as a new variable.

This study also could be used as a reference for emerging adults to improve their SFWB. It can as a reminder for the undergraduate or young working adults what factors will significance affect their SFWB. This helps them to make a wise decision, hence increase their SFWB. This is important as SFWB would consequently cause an individual to be depressed, having strained personal or family relationships and the possibility of facing bankruptcy. Through this study, they would have a deeper understanding of what contributes to or what is affecting one's SFWB. Emerging adult is a development stage and it as a foundation of country. Once emerging adults has a better SFWB, it will create a high reproductive success society.

Moreover, there has been a worrying surge in bankruptcy cases and high debt levels which resulted from obtaining loans for vehicle purposes, mortgage loan, personal loans and credit cards among emerging adults in Malaysia. Malaysian government could refer to this study as a guideline to propose and implement suitable policies for the purpose of assisting to improve the SFWB of emerging adults in Malaysia. The need for emerging adults to have a clearer perception towards their SFWB is crucial and the government plays a crucial role in educating them through legitimate practices.

1.5   Scope of Study

This research aims to acknowledge how SFWB of emerging adults in Malaysia affected by financial stress, financial attitude, financial knowledge, and internal locus of control. Precisely, the scope of study in this research paper is the people who stay in Klang Valley which represents the main economic centre in Malaysia (Cai et al., 2020). Target population in this study is emerging adults aged between

18 to 25 years old (Arnett & Mitra, 2020). Detailed information of the chosen location will be justified further in the Chapter 3.

1.6 Conclusion

Knowing FWB including both subjective and objective. This research highlighted the important of SFWB and why should it be discussed among the emerging adults in Malaysia. It will not only lead to an individual problem, but also social and economy problem in future. Emerging adult is the foundation of country. So, only when they have better SFWB, it will create a high reproductive success society.

CHAPTER 2 LITERATURE REVIEW

2.0   Introduction

The study comprises financial stress, financial attitude, financial knowledge and internal locus of control as the independent variables. The relationship between SFWB and the independent variables mentioned will be discussed in this chapter. Definitions and findings in regards to the independent variables have been studied from past researches. Moreover, the research overview not only discussed based on Theory of Planned Behaviour (TPB), but also Transactional Theory of Stress and Coping. Conceptual framework and hypothesis testing are also included in the latter part of this chapter.

2.1   Definition   of   Subjective   Financial   Well-Being (SFWB)

Initially, FWB was usually related to material and objective resources such as income and was mostly evaluated at the country level, without taking an individual's perception into account (Sorgente & Lanz, 2017). Anyhow, Easterlin (1974, as cited in Sorgente & Lanz, 2017) acknowledged the significance of subjective perception of FWB and since then, this has been mainly measured at the individual level (p. 255).

Many scholars agreed that FWB has both objective and subjective sides. The OFWB involves monetised or countable measurements like debts and incomes level, savings, spending and asset allocation (Mahdzan et al., 2019). In contrast, SFWB focuses on one's perception, emotional evaluation of their financial condition and financial satisfaction (Mahdzan et al., 2019; Sorgente & Lanz, 2017). SFWB applies self-perceptions concerning on individual happiness and satisfaction towards their financial situation.

There are few studies that apply single-response question to evaluate individual SFWB and this may appear oversimplified. For instance, British Household Panel Survey (BHPS) used a retrospective question to assess the responses of respondents whether they are financially better off, worse off or about the same as compared to the previous year (Pudney, 2011, as cited in Mahdzan et al., 2019, p. 702). Therefore, some researchers have started to measure SFWB by using multiple determinants. Kim et al. (2003, as cited in Mahdzan et al., 2019) measured SFWB based on four determinants which are financial behaviours, individual characteristics, financial stressor events and credit counselling (p. 702).

Numerous types of measurements could be applied to evaluate SFWB. Mahdzan et al. (2019) suggested that future studies regarding the SFWB in Malaysia could take on exploring the significance of other components of financial literacy on SFWB as the existing studies mostly focused on financial behaviour and financial knowledge only. In this study, SFWB will be assessed based on multiple determinants, which was modified from the conceptual framework of the study by Mahdzan et al. (2019).

2.2 Relationship between Variables

2.2.1 Financial Stress

Financial inadequacies in fulfilling the necessary financial needs to sustain individual certain standard of living can be known as financial stress (Friedline et al., 2020; Ismail & Zaki, 2019). It happens when an individual fails to fulfil his or her financial responsibilities. An increasing amount of debt, unemployment and spending beyond ability can cause financial stress. Research by Friedline et al. (2020) suggested the four categories of life that can affect well-being including income, wealth and debt; economic hardship; financial stress; and coping strategies. Economic hardship is also known as material hardship which indicates families are having unstable financial

conditions where they are unable to fulfil the basic necessities including food, housing, healthcare and clothing.

Economic hardship can cause stress in family relationships which can increase the chance of abuse and violence in a family. Financial stress where the families experience financial-related psychological stress when they are facing difficulties in paying bills, meeting daily needs and leftover money for a month (Friedline et al., 2020). They worry if they have enough savings for emergencies or default their loan payment due to lack of money (Osman et al., 2019). Families who do not have enough savings will need to borrow more, increasing the family debt level. They will face a struggle in repaying their debt which will reduce their FWB.

It is important for an individual to create ways like preparing a budget or creating an emergency fund that enables them to deal with the financial stress. However, individual financial stress can be different with families (Friedline et al., 2020). Women are reported to experience higher financial stress due to poor physical and mental health. They are also more anxious than men in managing a household's finances because most women are responsible for a household's financial decisions, hence experiencing higher financial stress. They feel worried and anxious for being unable to have a proper budget allocation on family expenses which will cause financial struggle in their family.

Financial stress can bring both psychological and physical effects (Ismail & Zaki, 2019). For instance, the health of an individual can be affected due to stress by having drinking problems or depression. Research that examined how financial stress affects FWB among employees concluded that financial stress can affect overall personal satisfaction and work satisfaction (Osman et al., 2019). Financial stress among employees can result in low productivity at work because they are being upset about their financial condition, hence negatively affecting their work performance. Financial stress increases absenteeism and increases the cost of employees' health care (Ismail & Zaki, 2019).

However, the finding of Osman et al. (2019) also showed that financial stress can be positively related to SFWB. Even individuals have a lot of debts, but they are still satisfied with their financial condition (Ismail & Zaki, 2019). Financial stress can become a motivation to boost productivity and income, thus solving the financial problem facing. Research by Ismail and Zaki (2019) also resulted in a strong positive relationship between financial stress and financial wellness among low-medium income earners. Even if they are having financial stress due to the low income, the thinking on managing personal finance or the notion of what and how to improve the current financial situation can affect the FWB of a person.

2.2.2 Financial Attitude

Financial attitude can be defined as a person's natural tendency towards financial matters (Rai et al., 2019). It is about the capability to plan and maintain or improve one's financial situation. Individuals with different interpretations of financial wellness are the key that cause them to have different financial attitudes and behaviours (Ismail & Zaki, 2019). Research conducted by Rai et al. (2019) suggested that financial literacy able to give confidence to individuals in personal financial decision making which can leads to an increase of the standard of living. The research suggested that financial attitude, financial behaviour and financial knowledge are the components that affect financial literacy.

The financial behaviour and development of individuals are most likely affected by their parents who are known as the main influencers of children's financial self-sufficiency and FWB especially in the stage of adolescence and the transition to adulthood (Osman et al., 2019). Financial attitude can contribute to financial satisfaction, hence overall well-being. An individual attitude toward finances will indirectly affect individual financial behaviour and his or her decision making. Education programs are the key policy to

improve individual financial attitude, for instance, reduce the reliability on credit cards which will tend to cause overspend.

Past research concludes that a positive attitude can enhance financial literacy, hence SFWB, while a negative attitude will cause poor financial decision making especially among youth which can lead to financial stress (Rai et al., 2019; Osman et al., 2019). Findings from Osman et al. (2019) describe financial attitude as individual attitude towards the control of their financial planning, including investment and savings decisions. Individuals who fail to plan have poor financial literacy and poor choice of life. A good attitude can reduce financial problems and encourage them to be responsible for their own financing decisions.

Financial literacy is about individual ability in managing their money which not only develops individuals' financial management attitude, but also about their general life attitude (Osman et al., 2019). It explains how individuals can utilize the financial information on hand and manage their finances well. For instance, it can describe how individuals manage their current income to generate more income by using fixed savings or investments (Ismail & Zaki, 2019). If individuals are unable to practice the knowledge that they have, their financial attitude will be affected as well.

2.2.3 Financial Knowledge

Organisation for Economic Co-operation and Development (OECD) (2020) defined financial knowledge as one dimension of financial literacy, and it should not be served as an alternative to financial literacy. Financial literacy comprises financial awareness, knowledge, skill, attitude, and behaviour that could be applied in the actual financial decision-making process. Financial knowledge, on the other hand, has been found to represent a dominant component in financial literacy and play a critical part in shaping one's financial behaviour (Mahdzan et al., 2019; OECD, 2020; Philippas & Avdoulas, 2020).

Indeed, past works of literature have claimed that financial knowledge reinforces financial behaviour (Çera et al., 2020; Nadzri & Yaacob, 2020; Yong et al., 2018), indicating that individuals who equipped with adequate financial knowledge are more likely to execute sound financial behaviour such as rational investing. That is, being financially knowledgeable empowers individuals to better comprehend and analyse financial choices (Mahdzan et al., 2019), thereby enabling them to make well-informed financial decisions. Added to this, sound financial behaviour is found to associate with a higher level of FWB (Kempson & Poppe, 2018; Ponchio et al., 2019) and SFWB (Mahdzan et al., 2019) since it eliminates the exposure to financial problems.

Apart from this, the relationship between financial knowledge and FWB has been determined (Kempson & Poppe, 2018; Ponchio et al. 2019; Riitsalu & Murakas, 2019; Zhao & Zhang, 2020). Askar et al. (2020) acknowledged that a lack of financial knowledge leads to a bulk of financial problems, resulting from poor financial decisions and investment choices. It is because people are easily getting into financial fallacies if they do not obtain adequate financial knowledge. On the contrary, individuals who are equipped with superior financial knowledge are more capable and confident to cope with financial issues and crises (Mahdzan et al., 2019).

Financial knowledge will indeed increase one's capability and build confidence while making financial decisions (Kempson & Poppe, 2018). Nevertheless, it does not indicate superior financial knowledge is associated with high FWB at all the time. For example, the research conducted by Mahdzan et al. (2019) has revealed an adverse relationship between financial knowledge and FWB among middle and high-income households. According to Mahdzan et al. (2019), this group of individuals are mostly financially knowledgeable, however, they are found to experience more financial stresses.

Ponchio et al. (2019) showed a similar result with Mahdzan et al. (2019), indicating that a high level of financial knowledge will result in higher financial stress. That is, individuals with greater financial knowledge are more concerned about not achieving their financial goals, therefore, they tend to worry more about their financial affairs. In contrast, for low-income earners who are comparatively less financially knowledgeable, Mahdzan et al. (2019) found a weak role between financial knowledge and FWB.

Indeed, past literature has also discovered a weak relationship between financial knowledge and FWB (Ponchio et al., 2019). It has been found that inappropriate financial education is the root cause that contributes to the weak role between financial knowledge and FWB (Kempson & Poppe, 2018; Mahdzan et al., 2019; Ponchio et al., 2019). Iannello et al. (2020) claimed that financial education nowadays is far from enough in order to promote healthy financial behaviour. It is because financial education nowadays imparts only the fundamental factual knowledge about how personal finances work, but it does not foster individuals to maintain healthy financial habits (Ponchio et al., 2019). As such, financial knowledge is no longer be able to facilitate FWB.

2.2.4 Internal Locus of Control

According to Rotter (1966, as cited in Frankham et al., 2020, p. 405), the psychological factor that represents one's belief whether he or she could control over his or her own life is known as locus of control ("LOC" thereafter). Specifically, LOC describes the source that individuals feel their lives are determined (Frankham et al., 2020), while it has been classified into two dimensions: internal LOC and external LOC.

Fundamentally, internal perspective of LOC indicates individuals tend to believe they could manage their lives (Bucciol & Trucchi, 2020) thereby possessing high demand on individual self-control (Adiputra et al., 2021).

In contrast, externally oriented individuals believe in chances, fate, and luck whereby their lives are beyond their control (Bucciol & Trucchi, 2020).

Most literature has revealed a strong correlation between LOC and FWB (Frankham et al., 2020; Kempson & Poppe, 2018; Mahdzan et al., 2019). That is, internal LOC promotes financial satisfaction (Adiputra, 2021; Kempson & Poppe, 2018) and financial confidence (Kempson & Poppe, 2018). Indeed, internally oriented individuals tend to be more confident and capable to deal with challenges in their lives since they are able to improve their faith in regulating personal finance (Adiputra, 2021). As such, it can be said it is less probably for those people with internal LOC experiencing financial difficulty. They tend to enjoy more positive emotions which subsequently promotes FWB.

Indeed, internalized-oriented individuals are found to be happier and more satisfied with their lives, thereby enjoying a greater level of FWB (Mahdzan et al., 2019). The research conducted by Frankham et al. (2020) has also shown the consistent result, indicating that individuals with high internal LOC tend to experience lesser negative emotions than external LOC. In other words, decreasing in internal LOC would lead to an increase in negative emotions such as anxiety, depression, stress, and a sense of low well-being (Arifin et al., 2018).

Besides, internalized oriented individuals are found more likely to execute healthy financial behaviours (Arifin et al., 2018). That is, since internalized oriented individuals believe they are the ones to determine their lives (Arifin et al., 2018), hence, they are willing to explore the resources needed to alleviate their own FWB (Arifin et al., 2018; Kempson & Poppe, 2018), such as enhancing their financial knowledge and to work harder.

Indeed, it has been proven that internal LOC is linked to sound financial behaviour (Abbas et al., 2020; Adiputra et al., 2021; Arifin et al., 2018; Kempson & Poppe, 2018). Since this group of individuals is generally more confident and responsible for their financial decisions (Arifin et al., 2018),

therefore, they tend to perform sound financial behaviour, for example, more savings (Bucciol & Trucchi, 2020), assess the risks that arise and make decisions to achieve self-satisfaction (Adiputra, 2021).

Hence, they are less likely to encounter financial distress, thereby encouraging greater FWB (Kempson & Poppe, 2018; Ponchio et al., 2019; Nadzri & Yaacob, 2020). In contrast, individuals with external LOC are more likely to seek and engage in risky situations (Arifin et al., 2018), representing destructive financial behaviour that would lead them to suffer from financial distress and thus low FWB (Nadzri & Yaacob, 2020).

2.3   Theories

2.3.1 Theory of Planned Behaviour (TPB)

According to this theory, behavioural intention is influenced by three main factors which are the positive and negative valence of attitudes towards the target behaviour, subjective norms and perceived behavioural controls (Ajzen, 1991, as cited in Gudmunson et al., 2016, p. 6). The theory of planned behaviour (TPB) emphasizes factors that control individuals' actual behavioural choices (Gudmunson et al., 2016). This theory is individually-based and proposes the link between beliefs, intention and behaviour (Danes & Yang, 2014). TPB is appropriate to explain the relationship between financial attitude, financial knowledge and internal LOC with one's SFWB.

The attitude towards a specific behaviour indicates one's positive or negative judgement of a relevant behaviour (Gudmunson et al., 2016). Subjective norms mention the belief that a significant person or a group of people will approve or disapprove of a specific behaviour. Usually, this is determined by the perceived social pressure for a person to behave in certain ways to comply with the majority of people (Ham et al., 2015). The perceived behavioural control describes the perception of a person about

their abilities and a sense of control over a situation. It is also interpreted that perceived behavioural control is a combination of LOC and self-efficacy.

LOC is about the belief of the amount of control someone has over life events and outcomes while self-efficacy refers to the perceived ability to accomplish a task (Ajzen, 2002, as cited in Ham et al., 2015, p. 741). The more favourable the financial attitude towards performing a behaviour, the easier the performance of the behaviour is perceived to be and the stronger the behaviour intention (Danes & Yang, 2014). When an individual has a positive financial attitude, his or her FWB can be said to be high (Gutter & Copur, 2011, as cited in Setiyati & Solichatun, 2019, p. 455).

A positive financial attitude towards financial management and future financial capabilities indicates that an individual is concerned with finances and can control the finances so that financial goals could be achieved optimally (Setiyani & Solichatun, 2019). TPB also includes the idea of perceived control over skills, knowledge and resources necessary to perform financial behaviour. Behavioural beliefs in TPB refers to financial messages developed that could persuade people to make the right financial decisions. Behavioural beliefs are a combination of personal beliefs in regard to the outcomes of a defined financial behaviour and one's evaluation of possible outcomes.

Therefore, behavioural beliefs could affect one's FWB through financial behaviour change (Ozmete & Hira, 2011). In addition to the original factors in the TPB, Ajzen (2020) posited that it is possible for additional factors or determinants to be included in TPB in the future with the condition of meeting the additional criteria. The additional determinant should be conceptually independent of the existing determinants in TPB and it should be plausible that the determinants could be causal factors in actual behaviour. Financial literacy fulfils all of the criteria stated by Ajzen (2020) and is suitable to be added as a determinant.

Meanwhile, financial knowledge is one of the components of financial literacy and is considered the most important component as it explicitly affects one's process of making a financial decision (Mahdzan et al., 2019). Financial knowledge is also independent of what the original TPB determinants could measure. Individuals that possess a high level of financial knowledge are more likely to comprehend and analyse various financial plans, options for their financial future. It is suggested that individuals with applicable financial knowledge tend to achieve their financial goals, hence better SFWB (Howlett et al., 2008, as cited in Mahdzan et al., 2019, p. 704).

2.3.2 The Transactional Theory of Stress and Coping

In this transactional theory of stress and coping, it is said that "psychological stress is a particular relationship between the person and the environment that is appraised by the person as exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, as cited in Berjot & Gillet, 2011, p.2). This relationship refers to two phases which are cognitive appraisal and coping. This theory highlighted the importance of subjective factors in the stress process and posited that the effects of potential stressors on well-being were mostly directed by how they were cognitively appraised by an individual.

Caplan and Schooler (2007, as cited in Witherspoon, 2017) posited that financial stress could lead to an individual feeling little or no personal control towards their financial situation, which may worsen the impact of financial stress (p. 23). The appraisal could be classified into primary and secondary appraisals. The primary appraisal determines if a potential stressor could be viewed as threatening and challenging while the secondary appraisal focuses on what actions might be taken by an individual to manage the stressful transaction (Bliese et al., 2017).

On the other hand, coping has been classified into emotional-focused coping and problem-focused coping. Emotion-focused coping means the regulation of emotions that come along with stressful events while the latter refers to the management of a problem that is causing the stress by directly affecting the elements of the stressful events. Both forms of coping were usually used in most encounters (Lazarus & Folkman, 1984, as cited in Witherspoon, 2017, p. 27).

However, people tend to practise more problem-focused strategies when the situation was considered as adjustable and more emotion-focused strategies when the situation was considered as not or less adjustable (Folkman & Lazarus, 1980, as cited in Berjot & Gillet, 2011, p. 2). Coping involves managing a stressful event, it may include attempts to avoid, minimise or accept a stressful event (Lyon, 2000, as cited in Witherspoon, 2017, p. 26). One's ability to cope with a stressful situation is closely associated with its well-being, this applies to every kind of stress that arises from different stressful situations and financial stress is no exception.

Moreover, it is proposed that problem-focused strategies are positively related to well-being and emotion-focused strategies are negatively related to well-being (Westman, 2001, as cited in Witherspoon, 2017, p. 27). This is because problem-focused strategies incorporate identifying the problem that has caused the stress and comes up with possible solutions. Conversely, emotion-focused strategies engage in avoiding problems, ranting and blaming others for the problems faced (Witherspoon, 2017). Individuals with greater SFWB were more likely to apply problem-focused strategies as compared to emotion-focused strategies (Caplan & Schooler, 2007, as cited in Witherspoon, 2017, p. 27).

2.4   Conceptual Framework

In this research project, the relationship between financial stress, financial attitude, financial knowledge and internal LOC with the SFWB of emerging adults in Malaysia will be examined. The conceptual framework of this study is shown below and this was adapted from Mahdzan et al. (2019).
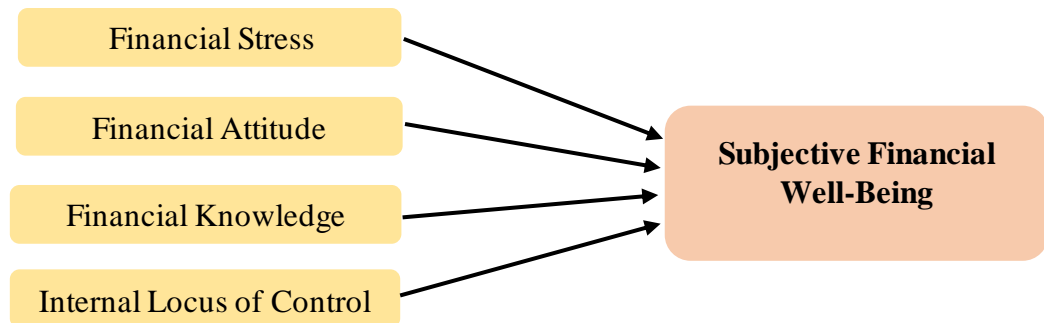
Figure 2.4.1. Conceptual Framework

2.5 Hypothesis Testing

This study with purpose to examine how financial stress, financial attitude, financial knowledge and internal LOC related to SFWB. Thus, four hypotheses were developed in this study, as shown below.

Hypothesis 1:
Ho: There is no significant relationship between financial stress and SFWB.
H1: There is a significant relationship between financial stress and SFWB.
Financial stress is expected to have a negative relationship with the SFWB of Malaysian emerging adults. Malaysian face stresses about their personal finances and worries about their ability to meet their monthly expenses and this could worsen work performance (Mahdzan et al., 2020).

Hypothesis 2:
Ho: There is no significant relationship between financial attitude and SFWB.
H1: There is a significant relationship between financial attitude and SFWB.

Financial attitude is predicted to be positively related to SFWB of Malaysian emerging adults. A healthy financial attitude contributes to better SFWB as a positive financial attitude results in healthy financial management practices (Yong et al., 2018).

Hypothesis 3:

Ho: There is no significant relationship between financial knowledge and SFWB.

H1: There is a significant relationship between financial knowledge and SFWB.

There is predicted financial knowledge and SFWB of Malaysian emerging adults is positively related. A person with a high level of financial knowledge most likely would be able to analyse and respond to the financial issue and apply their personal financial knowledge to make appropriate financial decisions (Mahdzan et al, 2019).

Hypothesis 4:

Ho: There is no significant relationship between internal LOC and SFWB.

H1: There is a significant relationship between internal LOC and SFWB.

Internal LOC is expected to have a positive relationship with SFWB of Malaysian emerging adults. It is found that people with a greater internal LOC are probably going to have greater financial satisfaction because they appreciate their financial success more deeply which enables them to conduct better financial management (Arifin et al., 2018).

2.6   Conclusion

Overall, Chapter 2 has discussed the relationships between SFWB with financial stress, financial attitude, financial knowledge and internal LOC. The overview of the theories applied has clearly explained the underlying relationships between the variables. The constructed conceptual framework has also illustrated the relationships between the SFWB and the personal factors. Lastly, hypotheses are developed for relevant analyses in the subsequent Chapter 4.

CHAPTER 3: METHODOLOGY

3.0　Introduction

The previous chapter has discussed what variables should be included that will affect the SFWB of emerging adults in Malaysia. This chapter aims to introduce how the research will be carried out and what are the method will be used in this study that examine the effects of financial stress, financial attitude, financial knowledge and internal locus of control on SFWB of emerging adults in Malaysia. Besides, this chapter will explain every step of the study process, including the how is the research design, how to collect the data and how is the sampling design. The best mode of analysis also will be selected. Finally, scale of measurement and data gathering method will be further explained.

3.1　Research Design

Generally, a research could be either qualitative or quantitative (Boaduo, 2011). According to Flick (2014), the quantitative method is more about numerical and statistical data, leading to results in the actual sense of the word by giving scientific explanations of facts. On the other hand, the qualitative method is more focus on verbal and visual information (Flick, 2014). This study aims to look over the how individual personal factors such as financial stress, financial attitude, financial knowledge, and internal LOC affecting ones SFWB.

Hence, a quantitative method is applied in this study whereby it could describe the characteristics of the sample population in a quantifiable manner (Mertler, 2016). Besides, quantitative methods can also explain the causality effects accurately, thus it enables researchers to have a clearer understanding regarding their relationships (Mertler, 2016). The questions are constructed followed the 5-point Likert scale for SFWB, financial stress, financial attitude and internal LOC. For financial knowledge, the mark scoring in percentage form will be computed based on the

number of questions that the respondent is correctly answered out of total 5 questions.

3.1.1 Data Collection

In this procedure, data is collected, measured, and evaluated using established approved procedures for research is referred as data collection. On the basis of the facts gathered, a researcher might evaluate their hypothesis. Regardless of the subject of study, data collecting is usually the first and most significant phase in the research process. Researchers usually involve both primary (first-hand data) and secondary (published) data to conduct their research.

Primary data collection method is applied in this research study. Questionnaire will be distributed and the raw data are gathered from targeted respondents. Malaysia's population as of March 2021 was estimated at 32.66 million meanwhile the population aged between 18 and 25 was estimated at 4.51 million (World Population Review, 2021) representing the target population in this research study. Hence, based on The Researcher Advisors (2006), the minimum response in this research study is determined as 384.

A set of survey questionnaires is designed and will be disseminated via the internet. The survey questionnaire is created using "Google Form", which comprises three sections including respondent demographic profile, self-rating of perceived FWB and personality traits, and multiple choices questions. The fixed-response questioning method is applied to ensure the respondents align with this study's target population. A five-point Likert scale is designed for respondents to rank their perceptions toward SFWB, financial stress, financial attitude, and internal LOC. On the other hand, the financial knowledge of respondents is tested via multiple-choice questions.

3.2 Sampling Design

By knowing the research method and data collection method, every study must determine the sampling design before the survey conducted. Sampling design is a mathematical function which calculates the probability of drawing any given sample from a population. Because sampling is the cornerstone of practically every research endeavour, a one- or two-semester course in sampling design is a necessary aspect of statistics (Stephanie, n.d.). It entails not only understanding how to derive the probability functions that define a given sampling method, but also how to construct the best-fit sampling method for a given case (Stephanie, n.d.).

3.2.1   Target Population

DOSM (2021) reported that the whole population in Klang Valley is about 8.21 million in 2021. Klang Valley is recognized as the fastest population growth for the past two decades (Rashid et al., 2014). Klang Valley is now a well-developed city, and it is chosen as the area with most shopping centres, and there are new projects that are progressing continuously. As such, foreign investors may find the profitableness in Klang Valley, thereby carrying out business investments in Klang Valley (Deng, 2012). When more leisure facilities and shopping malls are established in this region, it creates more job opportunities for local people, and even attracts workers from other states.

Since there are many leisure facilities and shopping malls that can be found at Klang Valley, it may lure emerging adults to spend a lot and even conduct unconscious spending. Meanwhile, the living expenses in Klang Valley is far expensive than in other areas (The World Bank, 2020). For example, it has been reported the shortage of affordable housings in urban cities such as Kuala Lumpur has become the primary factor that causes goods and services to be more costly than other regions (The World Bank, 2020). Therefore, emerging adults in Klang Valley spend more compared to those in other regions.

As emerging adults are found to spend more in Klang Valley, it is crucial for them to possess healthy financial behaviours to pursue good SFWB. For example, it has been reported that credit cards to be the most common alternative used when individuals are short of funds (Barrington, 2019). However, it would cause them to experience overindebtedness, thereby suffering financial distress.

Financial attitude and financial stress of emerging adults in this kind of living surrounding with so many temptations are what this study is interested, whether these personal factors will affect individual SFWB. Most of the workers and more job opportunities are found in this conglomerate area (Kadir et al., 2020). Besides, about 40% of the national gross domestic product can be related to Klang Valley (Kimiyagahlam et al., 2019). According to Lim & Ayamany (2021), the low earnings for Malaysia fresh graduates has been a long-standing issue. They also claimed that for at least the past 10 years, a minimum of 10 percent of fresh graduates with degrees have been earning between RM 1,001 to RM 1,500.

Furthermore, Lim & Ayamany (2021) has also claimed that a single person who stayed in Klang Valley has a car needs at least RM 2,500 per month to survive. However, if a person who lives in Klang Valley without a car, needs at least RM 1,900 per month to survive (Lim & Ayamany, 2021). Therefore, this study has gathered respondents come from age 18 to 25 who stayed in Klang Valley to enrich the understanding of SFWB among individuals that worked and stayed in such developing city.

3.2.2   Sampling Frame and Sampling Location

The elements deduced from a population that the research interested in is listed on the sampling frame. It is a comprehensive list of everyone or anything the researchers would like to learn about. A population differs from a sample frame in that the former is more general and the latter is more specialised. The sampling frame will be emerging adults with ages between

18 and 25 years old. Sampling location is the selected location where the sample is obtained. The sampling location for our study is Klang Valley which included all Kuala Lumpur and Selangor area.

3.2.3   Sampling Element

In a population being measured, a sampling element is the unit of analysis or case. Element sampling, also known as direct element sampling, is a sampling method in which every unit (such as a person, organisation, group, or firm) has an equal chance of being chosen for inclusion in the study sample (Bickman & Rog, 2009). This is only achievable if we can identify and contact every single person in a target population, which is sometimes impossible owing to cost or practicality (Bickman & Rog, 2009).

The designed questionnaires are distributed to emerging adults with ages between 18 and 25 years old to obtain the data required for this study. Population with ages between 18 and 25 years old in Klang Valley are the target respondents as there are representing the emerging adults (Arnett & Mitra, 2020). The respondents aged in this range are facing more financial issues because they are experiencing a change of their life stage from financial dependence to financial independence (Shim et al., 2009).

3.2.4   Sampling Technique

Sampling techniques involves probability sampling and non-probability sampling. A researcher can specify the chance of an element (participant) being included in the sample using probability sampling (Singh, 2018). There is no way to estimate the likelihood of an element being included in a sample with non-probability sampling (Singh, 2018). Random sampling and representative sampling are other terms for probability sampling. The technique for selecting elements (participants, cars, test objects) from a population is referred to be random (Singh, 2018).

Snowball sampling is referred as chain-referral sampling. It is a non-probability sampling approach in which the samples have hard-to-find characteristics (Stephanie, n.d.). This is a technique for recruiting samples for a research project in which existing individuals refer new subjects (Stephanie, n.d.). Hence, this research uses snowball sampling techniques which is a non-probability sampling method to approach the respondents which enables the age group of respondents to be within the range.

The questionnaires designed in "Google Form". Google Forms is a tool that allows researcher to collect data from users through a personalised survey or quiz. It's simple to manage event registrations or build a fast opinion poll with Google Forms (Gavin, 2019). Google Forms allows researcher to create and analyse surveys using smartphone or computer browser. This task does not necessitate the use of any special software (Gavin, 2019). Through the advancement of technology, the questionnaire will be distributed out to the target respondents to collect primary data needed in this study in the form of Google Form.

3.2.5 Sampling Size

The sample size measures how many individual samples needed. A correct sample size is critical for any study because they will represent the whole population and conduct the inferential analysis. In practice, the outcomes will be unbiased and representative of the entire population if the sample size is large. Malaysia's population as of March 2021 was estimated at 32.66 million meanwhile the population aged between 18 and 25 was estimated at 4.51 million (World Population Review, 2021) representing the target population in this research study. Hence, based on The Researcher Advisors (2006), the minimum response in this research study is determined as 384.

3.3   Data Collection Method

A set of survey questionnaires is created and will be disseminated via the internet since it is a cost-effective approach. This method enables researchers to gather data needed from a large population using shorter time through efficient method (Mertler, 2016). The survey questionnaire is created using "Google Form", which comprises three sections including respondent demographic profile, self-rating of perceived FWB and personality traits, and multiple choices questions. The purpose of collecting this survey is to find out is how financial stress, financial attitude, financial knowledge and internal LOC are significantly related to SFWB. Besides, by using questionnaire it is easy to analyse the results (Stefan, 2019).

3.3.1 Questionnaire Construction

According to past research, questionnaire will be separated into few sections and each of the section are relevant and related to the variables of the study. In this research, the apparatus used is a self-administered questionnaire consisting of three (3) sections, section A to section C. Respondent's Demographic profile will be covered in Section A. Section B covers the perceived FWB and personality traits of the respondents while Section C covers the literacy in finance of respondents.

In section A, 6 items are constructed to derive the status and demographic information of the respondents like gender, age, employment status, highest educational level, marital status and individual income. In section B, it comprises 4 variables with 8 statements each. The statements regarding the SFWB are adopted from Mahdzan et al. (2019) and Stromback et al. (2020).

For financial stress, the statements are adopted from Heo et al. (2019), followed by statements adopted from Mandell and Klein (2009) and ThuyDung (2014) to determine one's financial attitude. The following statements regarding internal LOC are adapted from Kesavayuth et al. (2018) and Mahdzan et al. (2019). In section C, there are 8 statements adopted from Ranyard et al. (2020) to measure the financial knowledge of the respondents.

3.4   Scale of Measurement

In this method, sophisticated data will be converted into a more understandable and explainable statistical analysis using different measurement scales (Walliman, 2017). The measurement scales that are most commonly used such as nominal, ordinal, interval and ratio scale method. Each measurement will have their own properties, features and it is important the differences between the variables and measurements so that the most suitable scale of measurement can apply on data analysis. In this study, only nominal and interval scale are used. There are some questions under the questionnaires had used these two measurements.

Nominal scale is also called categorical scale, used for identification purposes. It forms attributes from numbers for easy identity. Normally, only percentage and frequency count can be performed on a nominal scale ("7 Types of Data Measurement Scales in Research," 2019). This could be the simplest scale of measurement as compared to others four variable measurement scales measurement.

Interval scales are in levels of ordered and each numerically are equal distances on the scale ("7 Types of Data Measurement Scales in Research," 2019). It is the combination of nominal and ordinal scale, where it offers more measurement like mean and evaluation the differences between variables. However, there is no true zero value which mean that there is some value that is much lower than the zero such as negative value and carry out some meaning. For the common example, temperature and time.

Demographic profile that under Section A that asks about respondents' age, gender, employment status, educational level and marital status. Moreover, true false questions under Section C multiple choice questions of literacy in finance were asking the questions related to financial knowledge. Those questions are all categories under nominal scale of measurement.

There are few types of interval scale Likert scale, Net Promoter Score, Semantic Differential Scale, Bipolar Matrix Table, etc. In this research, only Likert scale is applied. It used to collect respondents' attitudes and opinions, and often been used this psychometric scale to know perspectives by providing a range of options (Nominal, Ordinal, Interval, Ratio scales with Examples, n.d.).

For example:

1- Strongly Disagree

2- Somehow Disagree

3- Average

4- Somehow Agree

5- Strongly Agree

By referring the questionnaires, this scale of measurement has been used for the question of SFWB, financial attitude, financial stress, and internal LOC under section B by rating ability self-budgeting control, financial satisfaction, debt management, saving decisions and etc.

3.5   Data Analysis Technique

Classification of data based on the themes and sub-themes to make comparable is done after all data is gathered and collected (Langkos, 2014). This step is known as data analysis. In short, data analysis is use to analyse the data that gathered from questionnaires or interviews. It gives the ability to researchers to restructure the qualitative data collected in a way that satisfies the accomplishment of research objectives. By suing SPSS version 28, it can generate different kind of analysis for the study including reliability, descriptive analysis and inferential analysis. With inferential analysis, the conclusion that tried to draw will not be limited to current data.

3.5.1 Descriptive Analysis

In this analysis, it describes the basic features in the study. For example, to evaluate the demographic factors. A simple summary and measures from the sample can come out easily. Descriptive statistics help to simplify fast and accurate based on the huge data collected. Each descriptive statistic will narrow the input to become a simple conclusion and brings meaningful information like distribution (percentage), central tendency (mean, median, mode) and dispersion (standard deviation) (Trochim, n.d.-a). Mean or average, is the average value derived from the total value of data while median stands the middle number when the data set is arranging on sequences.

In this study, Statistical Package for Science Social (SPSS) software is applied. Statistical Package for Science Social software is the popular software choose to use by researchers as it can make complex data manipulation and analysis with simple instructions (Importance and benefits of SPSS in research, 2017). For instance, researchers from finance, marketing, economics and healthcare used SPSS as it can summarize all the data collected to reports, charts, graphs, plots of distributions and etc.

3.5.2 Inferential Analysis

Inferential statistics try to draw the overall possible ideas from the sample data to represent the population point of view and their opinion in this issue (Trochim, n.d.-b). One of the inferential analysis included reliability test that include pilot test and the Cronbach's Alpha. Another is through multiple linear regression that examine the variables significance. The last analysis is the Pearson's correlation that is under parametric test. In this study, the significant level applied is 5% and 10%.

3.5.2.1 Reliability Test

Reliability test defined that scale should accurate or consistent when interpreting the construct measurement (Reliability Analysis, n.d.). Cronbach's alpha test has introduced in this research to solve the problem where there are several causes can lead the data set divided into two parts and this would make the outcome be numerous (Reliability Analysis, n.d.).

The Cronbach's alpha range is 0.0000 to 1.0000 (Confusing Stats Terms Explained: Internal Consistency, n.d.)**.** When coefficient 0, meaning that no reliability. Cronbach alpha 0.00 to 0.69 (poor), 0.70 to 0.79 (fair), 0.80 to 0.89 (good) and 0.90 to 0.99 (excellent/ strong). As some mistakes, the reliability coefficient has low or no probability to reach 1.0.

Pilot test is one of the reliability tests used in this study, 30 out of 384 questionnaires is selected to run the test. Next, used all 384 questionnaires to run Cronbach alpha. Only the value that is higher than or equal to 0.60, it considered as reliable. This is to confirm and ensure that respondent understand the questions and can give correct answer.

3.5.2.2 Multiple Linear Regression

When more than one explanatory variable that can influence the response variable in the model, it known as multiple linear regression. There are 8 assumptions needed to fulfil when using multiple linear regression to ensure the results of the hypothesis testing given is not bias. The multiple linear regression model will be written as below:

$Y_i = B_1 X_{1i} + B_2 X_{2i} + \ldots + B X + i$

Where:

Y = Dependent Variable

B = Beta Coefficient

X = Independent Variables

ε = Error Term

i = Cross Sectional Data

3.5.2.3 Pearson's Correlation Analysis

In this research, the correlation measures how strong the relationship between SFWB and other personal factors. It has the range of value (r) between -1 to +1 (Pearson Product-Moment Correlation, 2018). The value of 0 means that the two variables are not related with each other. However, if the value is greater than 0 meaning that it is having positive relationship (increase value in the variable lead to increase value to another variable) and negative relationship (decrease value in the variable lead to decrease value to another variable if value is less than 0).

When the 2 variables are strongly associated the range of value will be closed to -1 or +1, meaning that there is no data point out of the line. Besides, high positive relationships (r = 0.70 to 0.89), moderate positive correlation (r= 0.50 to 0.69), low positive correlation (r= 0.30 to 0.49), negligible correlation (r= 0.00 to 0.29), same goes for negative relationship (Tan et al., 2019). For those value of range stated between -0.80 to +0.80, it stands that the data point the around the line. So, p-value that is less than its significant level will resulting in a rejection of null hypothesis. The correlation between variables can be captured by using SPSS (Garth, 2008).

3.6 Conclusion

As the conclude, this chapter is mainly discussed on the data collection (method), sampling design (frame, location, element, techniques and size) and also some techniques used to run data collected (descriptive and inferential analysis). Methodology plays an important role for researchers to transform data collection becomes useful information. Besides, research methodology can help researchers to determine whether the result same as what theory said or the finding on past research.

CHAPTER 4 DATA ANALYSIS

4.0   Introduction

Different analyses were carried out in this chapter based on the collected data through questionnaires to determine the results and findings for this study. Descriptive analysis is carried out based on the demographic profile collected from questionnaire. It also analyses the central tendencies measurement of SFWB, financial stress, financial attitude, internal LOC and financial knowledge. Then, the interpretation of the pilot test using Cronbach's Alpha to examine how reliable the variables included are in this chapter. Lastly, the interpretation for respective inferential analyses in this study have also been included.

4.1 Descriptive Analysis

4.1.1 Respondent Demographic Profile

As shown in Table 4.1, it summarises the respondents' status that are included in the questionnaire including gender, age, employment status, highest education, marital status and individual income. There are a total of 384 respondents in this study.

Table 4.1 Demographic profile of respondents

Variables	Frequency (n=384)	Percent (%)
Gender		
Female	173	45.1
Male	211	54.9
Age		
18-21 years old	107	27.9

22-25 years old	277	72.1
Employment Status		
Government sector	29	7.6
Private sector	101	26.3
Self-employed	18	4.7
Unemployed	22	5.7
Student	214	55.7
Highest Education		
High school	80	20.8
Certificate holders & Diploma	66	17.3
Bachelor degree	221	57.6
Master & PhD	16	4.2
Others	1	0.3
Marital Status		
Single	357	93.0
Married	27	7.0
Divorced/ Widowed	0	0.0
Individual Income		
Less than RM 2000	233	60.7
RM 2000 – RM 3999	99	25.8
RM 4000 – RM 5999	33	8.6
RM 6000 – RM 7999	13	3.4
RM 8000 – RM 9999	5	1.3
RM 10000 and above	1	0.3

Source: SPSS Statistics (Version 28)

It is clearly shown in Table 4.1 that the distribution of the sample was quite balanced as there are 173 female respondents (45.1%) and 211 male respondents (54.9%) that have participated in this study. Majority

respondents are aged from 22 to 25 years old has total 277 respondents (72.1%), meanwhile, there are 107 respondents (27.9%) aged between 18 to 21 years old.

In terms of employment status, approximately 55.7%, which is 214 respondents in this study are students. Next, 26.3% (101 respondents) of them are currently working in the private sector. There are 29 respondents, which made up 7.6% of the total respondents, who are employed in the government sector. The remaining 18 respondents (4.7%) are self-employed and 22 respondents (5.7%) are unemployed.

For highest education, a majority of the respondents in this study, 221 respondents (57.6%) are currently pursuing or held a bachelor's degree. There are 80 respondents, around 20.8% who are still high school students and 66 of them (17.3%) have chosen 'certificate holders and diploma' as their highest education. The remaining ones are Masters or PhD holders and others with 16 respondents (4.2%) and 1 respondent (0.3%) respectively.

Next, most of the respondents in this study, a total of 357 respondents (93.0%) are single while 27 out of the 384 respondents (7.0%) are married. Regarding the individual income of the respondents, it is observed that about 60.7% of the respondents, indicating 233 respondents has a monthly individual income of less than RM 2,000. Then, 99 respondents (25.8%) have a monthly income that ranging between RM 2,000 to RM 3,999.

Approximately 8.6% of the respondents, which is a total of 33 respondents, fall under the income range of RM 4,000 to RM 5,999. Subsequently, the number of respondents that fall into other income ranges including RM 6,000 to RM 7,999, RM 8,000 to RM 9,999 and RM 10,000 and above are 13 respondents (3.4%), 5 respondents (1.3%) and a respondent (0.3%) respectively.

4.1.2 Central Tendencies Measurement of Constructs

Table 4.2 Subjective Financial Well-Being

Items	Strongly disagree	Somehow disagree	Average	Somehow agree	Strongly agree	Mean
1. I am confident about being able to meet my monthly living expenses.	11 (2.9%)	40 (10.4%)	78 (20.3%)	134 (34.9%)	121 (31.5%)	3.82
2. I am confident about being able to meet all my future living expenses.	19 (4.9%)	53 (13.8%)	102 (26.6%)	140 (36.5%)	70 (18.2%)	3.49
3. I am confident with every financial decision that I need to make.	4 (1.0%)	43 (11.2%)	85 (22.1%)	160 (41.7%)	92 (24.0%)	3.76
4. I am satisfied with my personal finances.	31 (8.1%)	82 (21.4%)	74 (19.3%)	124 (32.3%)	73 (19.0%)	3.33

5. I feel secure with my income sources which can support me financially till the end of my life.	56 (14.6%)	86 (22.4%)	74 (19.3%)	104 (27.1%)	64 (16.7%)	3.09
6. I feel secure with my current financial situation.	34 (8.9%)	79 (20.6%)	67 (17.4%)	144 (37.5%)	60 (15.6%)	3.30
7. I feel secure with my retirement plan.	52 (13.5%)	113 (29.4%)	73 (19.0%)	85 (22.1%)	61 (15.9%)	2.97
8. I feel that I can afford my desires and wants based on my financial situation.	32 (8.3%)	64 (16.7%)	87 (22.7%)	130 (33.9%)	71 (18.5%)	3.38

Source: SPSS Statistics (Version 28)

Table 4.2 shown the mean for each item that evaluates the SFWB of the respondents which is the response variable in this research. The item "I am confident about being able to meet my monthly living expenses," shows the highest mean value which is 3.82 amongst other items. Most of them, about 134 respondents (24.9%) 'somehow agree' on this item, 121 respondents (31.5%) 'strongly agree' on this. The remaining 129 respondents (33.6%) have chosen either 'strongly disagree', 'somehow disagree' or 'average' on this item.

In contrast, the item that has the lowest mean is "I feel secure with my retirement plan," with a mean value of 2.97. There are only 38%, equivalent

to 146 respondents in overall that feel secured with their retirement plan. Around 238 respondents (61.9%) that involved in this study have been feeling insecure about their retirement plan. The mean value of other items ranges between 3.09 to 3.76 as a majority of the respondents has strongly or somehow agreed to the items in regards to their ability in meeting future living expenses, confidence in making financial decisions, satisfaction with their personal finances, feeling secure with their current financial situation and their capability to afford their desires and wants.

Table 4.3 Financial Stress

Items	Strongly disagree	Somehow disagree	Average	Somehow agree	Strongly agree	Mean
1. I have money left over at the end of the month.	11 (2.9%)	39 (10.2%)	70 (18.2%)	151 (39.3%)	113 (29.4%)	3.82
2. I have enough money to pay for a financial emergency.	37 (9.6%)	65 (16.9%)	75 (19.5%)	128 (33.3%)	79 (20.6%)	3.38
3. I am able to continue my daily activities even though I feel stressed about my financial situation.	3 (0.8%)	22 (5.7%)	68 (17.7%)	184 (47.9%)	107 (27.9%)	3.96

4. I work harder to improve my work performance and financial situation.	1 (0.3%)	20 (5.2%)	52 (13.5%)	187 (48.7%)	124 (32.3%)	4.08
5. I am active in attending family and friend events even my financial situation is bad.	18 (4.7%)	65 (16.9%)	84 (21.9%)	124 (32.3%)	93 (24.2%)	3.54

Source: SPSS Statistics (Version 28)

The responses of the respondents regarding financial stress are clearly shown in Table 4.3. The item "I work harder to improve my work performance and financial situation," shows the highest mean value of 4.08, Among the respondents, there are 311 respondents (81%) in general that have agreed to this, only a minority of them, around 55 respondents (19%) that strongly disagreed, somehow disagreed or were neutral towards the item mentioned. Meanwhile, "I have enough money to pay for a financial emergency," is the item that has the lowest mean value of 3.38 with 207 respondents (53.9%) agreed to this and the number of respondents for 'strongly disagree', 'somehow disagree' and 'average' are 37 respondents (9.6%), 65 respondents (16.9%) and 75 respondents (19.5%) respectively. The mean for other items is relatively high as well, it ranged between 3.54 to 3.96.

Table 4.4 Financial Attitude

Items	Strongly disagree	Somehow disagree	Average	Somehow agree	Strongly agree	Mean
1. I never worry about debts.	19 (4.9%)	54 (14.1%)	66 (17.2%)	115 (29.9%)	130 (33.9%)	3.74
2. I make an effort to increase financial knowledge.	3 (0.8%)	10 (2.6%)	66 (17.2%)	160 (41.7%)	145 (37.8%)	4.13
3. I think it's important to save up for things I want.	1 (0.3%)	2 (0.5%)	30 (7.8%)	148 (38.5%)	203 (52.9%)	4.43
4. I will reduce my expenditure in order to save money.	0 (0.0%)	7 (1.8%)	40 (10.4%)	174 (45.3%)	163 (42.4%)	4.28
5. I adjust the amount of money I spend on non-essentials when my financial changes.	1 (0.3%)	4 (1.0%)	37 (9.6%)	174 (45.3%)	168 (43.8%)	4.31

Source: SPSS Statistics (Version 28)

Referring to Table 4.4, it is noticed that most of the respondents think that it is important to save up for things that they wanted to purchase as this item has the highest mean value as compared to other items, which is 4.43. A total of 351 respondents (91.4%) have agreed to this. The item "I never worry about debts" has the lowest mean value at 3.74. Nevertheless, it is considered as above the average value since there are more respondents, roughly 245 respondents (63.8%), that have agreed to this item than those who disagreed, around 73 respondents (19.3%). The remaining 66 respondents (17.2%) have a neutral opinion towards this item. The other items also have a mean value that is relatively high, ranged between 4.13 to 4.31.

Table 4.5 Internal Locus of Control

Items	Strongly disagree	Somehow disagree	Average	Somehow agree	Strongly agree	Mean
1. I am financially independent.	62 (16.1%)	69 (18.0%)	60 (15.6%)	101 (26.3%)	92 (24.0%)	3.24
2. My current financial situation is mostly supported by myself.	62 (16.1%)	64 (16.7%)	55 (14.3%)	116 (30.2%)	87 (22.7%)	3.27
3. I have absolute control over my financial decisions.	9 (2.3%)	14 (3.6%)	80 (20.8%)	180 (46.9%)	101 (26.3%)	3.91

4. I am certain about my future financial condition because it is within my control.	5 (1.3%)	29 (7.6%)	73 (19.0%)	173 (45.1%)	104 (27.1%)	3.89
5. I can improve my financial status as long as I am determined.	7 (1.8%)	38 (9.9%)	109 (28.4%)	139 (36.2%)	91 (23.7%)	3.70
6. There is always a way for me to solve my financial problems.	11 (2.9%)	38 (9.9%)	78 (20.3%)	163 (42.4%)	94 (24.5%)	3.76
7. I feel confident while dealing with the financial problems in my life.	8 (2.1%)	31 (8.1%)	90 (23.4%)	158 (41.1%)	97 (25.3%)	3.79
8. I am capable of upgrading my financial situation.	6 (1.6%)	44 (11.5%)	103 (26.8%)	130 (33.9%)	101 (26.3%)	3.72

Source: SPSS Statistics (Version 28)

In the matter of internal LOC, it is evident that the item "I have absolute control over my financial decisions," has the highest mean value at 3.91. About 281 respondents (73.2%) agreed to this item while the rest of the respondents, 103 respondents (26.7%) either disagreed or had a neutral opinion towards this. The item "I am financially independent," shows the smallest mean value of 3.24. 193 respondents (50.3%) agreed to this item and a total of 131 respondents (34.1%) have disagreed with the item, meanwhile, 15.6% of the respondents, which is equivalent to 60 respondents have a neutral opinion on whether they are financially independent. Simultaneously, the mean value of the remaining items made in the questionnaire has fallen into the range of between 3.27 to 3.89.

<div align="center">Table 4.6 Financial Knowledge</div>

Items	True	False	Do not know
1. It is possible to use a credit card to withdraw cash from an ATM for free.	188 (49.0%)	83 (21.6%)	113 (29.4%)
2. The premium of the medical insurance paid by a regular smoker is the same with a non-smoker.	166 (43.2%)	87 (22.7%)	131 (34.1%)
3. The risk of investing in a company's stock is lower than investing in a stock mutual fund.	169 (44.0%)	47 (12.2%)	168 (43.8%)
4. The purchasing power will be lower when the inflation rate is higher than the interest rate.	228 (59.4%)	27 (7.0%)	129 (33.6%)
5. You have RM 100 in a savings account with interest rate at 2% per annum, your bank account balance will be more than RM 102 after five years.	222 (57.8%)	63 (16.4%)	99 (25.8%)

Source: SPSS Statistics (Version 28)

For financial knowledge, based on Table 4.6, it is shown that the item that most of the respondents answered correctly is "The purchasing power will be lower when the inflation rate is higher than the interest rate," with 228 respondents, which is equivalent to 59.4% of the respondents. The item with the lowest number of correct answers from respondents is "The premium of the medical insurance paid by a regular smoker is the same with a non-smoker," with only 166 respondents (43.2%) who got this correctly. Moreover, the item that has obtained the most responses of 'do not know' from the respondents is "The risk of investing in a company's stock is lower than investing in a stock mutual fund," about 168 respondents (43.8%) were unsure about this item.

Table 4.7 Financial Knowledge

	0	1	2	3	4	5	Mean
Sum of scores of respondents	67 (17.4 %)	40 (10.4 %)	64 (16.7 %)	98 (25.5 %)	64 (16.7 %)	51 (13.3 %)	2.53

Source: SPSS Statistics (Version 28)

In terms of financial knowledge, the number of respondents that falls into the different categories of total is as shown in Table 4.7. The sum of scores of the respondents that participated in this study has a mean value of 2.53. Most of them, approximately 98 respondents (25.5%) scored a 3 out of 5. There are 115 respondents (30%) that have scored above 3 out of 5 and a total of 171 respondents, equivalent to 44.5% of the respondents, have scored below 3 out of 5 for the section in the questionnaire where the financial knowledge of each respondent is being tested and evaluated.

Table 4.8 The Mean of Constructs (overall)

	N	Mean
SFWB	8	3.3925
Financial Stress	5	3.7560

Financial Attitude	5	4.1780
Internal LOC	8	3.6600
Financial Knowledge	384	50.6771%

Source: SPSS Statistics (Version 28)

Table 4.8 has shown the sample size and the mean of each construct after taking the means of each item within the construct into account. It is noticeable that financial attitude has recorded the highest mean (4.1780) amongst the independent variables. This is because there are more than half of the sample size, which means more than 192 respondents, who actually either 'somehow agree' or 'strongly agree' on each item made under this construct in general.

The mean of financial knowledge is computed based on the total scores obtained by the respondents in this study, thus, is interpreted in percentage form. Financial knowledge has a mean of 50.6771% as a majority of the respondents, approximately 25.50% of the overall sample size, scored 3 out of 5. On top of that, there are 67 respondents out of 384 respondents, which is approximately 17.40% of the overall sample size, has scored 0 out of 5 under the section of financial knowledge in the questionnaire. The overall mean of the SFWB, financial stress and internal LOC are 3.3925, 3.7560 and 3.6600 respectively.

4.2   Scale Measurement

4.2.1 Reliability Test (Cronbach's Alpha)

The pilot test is conducted based on a sample size of 30 respondents out of the overall 384 respondents. Table below shows Cronbach's Alpha of the constructs which is indicating the reliability of each respective construct. The table also summarizes the results of the reliability test based on the data from 384 respondents using Cronbach's Alpha.

Table 4.9 Reliability Test (Cronbach's Alpha)

Items	Cronbach's Alpha	
	30 respondents (Pilot Test)	**384 respondents**
Subjective Financial Well-Being 1. I am confident about being able to meet my monthly living expenses. 2. I am confident about being able to meet all my future living expenses. 3. I am confident with every financial decision that I need to make. 4. I am satisfied with my personal finances. 5. I feel secure with my income sources which can support me financially till the end of my life. 6. I feel secure with my current financial situation. 7. I feel secure with my retirement plan. 8. I feel that I can afford my desires and wants based on my financial situation.	0.838	0.926
Financial Stress 1. I have money left over at the end of the month. 2. I have enough money to pay for a financial emergency. 3. I am able to continue my daily activities even though I feel stressed about my financial situation. 4. I work harder to improve my work performance and financial situation. 5. I am active in attending family and friend events even my financial situation is bad.	0.723	0.782
Financial Attitude 1. I never worry about debts.		

2. I make an effort to increase financial knowledge. 3. I think it's important to save up for things I want. 4. I will reduce my expenditure in order to save money. 5. I adjust the amount of money I spend on non-essentials when my financial changes.	0.681	0.674
Internal Locus of Control 1. I am financially independent. 2. My current financial situation is mostly supported by myself. 3. I have absolute control over my financial decisions. 4. I am certain about my future financial condition because it is within my control. 5. I can improve my financial status as long as I am determined. 6. There is always a way for me to solve my financial problems. 7. I feel confident while dealing with the financial problems in my life. 8. I am capable of upgrading my financial situation.	0.889	0.901

Financial Knowledge		
1. It is possible to use a credit card to withdraw cash from an ATM for free. 2. The premium of the medical insurance paid by a regular smoker is the same with a non-smoker. 3. The risk of investing in a company's stock is lower than investing in a stock mutual fund. 4. The purchasing power will be lower when the inflation rate is higher than the interest rate. 5. You have RM 100 in a savings account with interest rate at 2% per annum, your bank account balance will be more than RM 102 after five years.	0.681	0.668

Source: SPSS Statistics (Version 28)

For a pilot test, it is recommended that the reliability result shown need to be higher than or equal 0.60 (Straub et al., 2004, as cited in Taherdoost & Group, 2016, p.6). It is also suggested that there are four cut-off points for reliability. If its reliability value that is (> 0.90) considered as excellent reliability, (0.70-0.90) considered as high reliability, (0.50-0.70) considered as moderate reliability while (<0.50) considered as low reliability (Hinton et al., 2004, as cited in Taherdoost & Group, 2016, p.6). It can be seen from the table that SFWB, financial stress, financial attitude, internal LOC and financial knowledge have Cronbach's Alpha of 0.838, 0.723, 0.681, 0.889 and 0.681 respectively.

The results have proved that SFWB, financial stress and internal LOC are the variables in this study that have high reliability, meanwhile, financial attitude and financial knowledge have moderate reliability. Based on the Cronbach's Alpha inclusive of 384 respondents in total, it is clearly shown in Table 4.9 that SFWB, financial stress, financial attitude, internal LOC and financial knowledge have Cronbach's Alpha of 0.926, 0.782, 0.674, 0.901 and 0.668 separately. Overall, it is revealed that SFWB and internal LOC have excellent reliability, financial stress has high reliability and

financial attitude and financial knowledge are the variables that exhibit moderate reliability.

4.3 Inferential Analysis

4.3.1 Pearson's Correlation Analysis

Table 4.10 Pearson's Correlation Analysis

Dependent Variable	Independent Variables	N	Pearson's Correlation
Subjective Financial Well-Being	Financial Stress	384	0.702
	Financial Attitude	384	0.242
	Internal Locus of Control	384	0.742
	Financial Knowledge	384	-0.229

Source: SPSS Statistics (Version 28)

Based on Table 4.10, it is shown that the Pearson's correlation coefficient between SFWB and financial stress is +0.702. This indicates that financial stress is positively related with SFWB. This result has matched with the previous findings made by Osman et al. (2019) and Ismail and Zaki (2019) in Chapter 2. The result show high positive correlation between SFWB and financial stress since the correlation coefficient of +0.702 falls between +0.70 to +0.89.

Next, SFWB and financial attitude have resulted in a correlation coefficient of +0.242, indicating a positive relationship between the variables. This is parallel to the findings of past researches as mentioned in Chapter 2 (Rai et al., 2019; Osman et al., 2019; Ismail & Zaki, 2019). However, the correlation between SFWB and financial attitude is classified as a negligible correlation as the coefficient of +0.242 falls between 0.00 to +0.29.

The correlation between SFWB and internal LOC portrayed a high positive correlation as the coefficient between these variables is +0.742. The positive relationship between SFWB and internal LOC is just as expected since past studies have also found these variables positively related to each other (Arifin et al., 2018; Kempson & Poppe, 2018; Mahdzan et al., 2019; Frankham et al., 2020).

Then, Pearson's correlation coefficient between SFWB and financial knowledge is -0.229. It is observed that they are negatively related between the variables. It matched with the minority of the findings in the existing literature, Mahdzan et al. (2019) found that SFWB is negatively related to financial knowledge as well. Even so, majority of the researches suggested that SFWB and financial knowledge are positive correlated (Kempson & Poppe, 2018; Riitsalu & Murakas, 2019; Zhao & Zhang, 2020). The correlation between SFWB and financial knowledge is also classified as negligible correlation as the coefficient of -0.229 falls between 0.00 to -0.29.

4.3.2 Multiple Linear Regression Analysis

Table 4.11 Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Std. Error			
(Constant)	-0.688	0.267		-2.577	0.010
Financial Stress (FS)	0.458	0.051	0.365	8.968	<0.001
Financial Attitude (FA)	0.098	0.054	0.058	1.809	0.071
Internal Locus of Control (ILOC)	0.553	0.045	0.488	12.180	<0.001
Financial Knowledge (FK)	-0.143	0.094	-0.048	-1.523	0.129

Source: SPSS Statistics (Version 28)

Multiple Linear Regression Equation

According to Table 4.11:

Expected SFWB$_i$ = -0.688 + 0.458 FS$_i$ + 0.098 FA$_i$ + 0.553 ILOC$_i$ - 0.143FK$_i$

It can be seen from Table 4.11 that this study is 95% confident to conclude that financial stress and internal LOC is significant related with SFWB since their p-values (<0.001) are lower than the alpha (0.05), thus reject H$_0$. In addition, this study is 90% confident to conclude that financial attitude is significantly related to SFWB as the p-value (0.071) is smaller than the alpha (0.10), thus reject H$_0$. As for financial knowledge, the p-value (0.129) is higher than the value of alpha (0.05 or 0.10), so should not reject H$_0$. This research shows no significant relationship between financial knowledge and SFWB.

Table 4.12 Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.802	0.644	0.640	0.57515

Source: SPSS Statistics (Version 28)

Based on Table 4.12, the model summary has described the relationship between SFWB with financial stress, financial attitude, internal LOC and financial knowledge. The value of R at 0.802 indicates the correlation coefficient, the dependent variable, SFWB is highly correlated to the independent variables in the model generally. Meanwhile, R^2 refers to the coefficient of determination and interprets how well the multiple linear regression model fits or matches with the data of this study.

The value of R^2 at 0.644 implies that about 64.40% of the variation in SFWB could be explained by financial stress, financial attitude, internal LOC and

financial knowledge. As a matter of fact, the independent variables in this study would not be able to explain approximately 35.60% of the variation in SFWB. Adjusted R^2 of 0.640 represents that 64.00% of the variation in SFWB able to explained by the explanatory variables after considering the degree of freedom. The standard error of the estimate indicates the accuracy of estimations and the average distance between an observed value and the regression line, the overall model in this study has a standard error of estimate at 0.57515.

4.4   Conclusion

On the whole, 384 sets of questionnaires in total that have been shared among the emerging adults in Malaysia. The data collected from the questionnaires were processed using SPSS. Descriptive analysis describes the status of respondents and the central tendency of the factors collected from questionnaires. Reliability test is done to ensure the dependency and consistency of the results. Besides, Pearson's correlation analysis also has been analysed to examine the relationship between SFWB and personal factors. Multiple linear regression helps to identify the significance of the factors included with SFWB. The findings of the analysis have been interpreted accordingly and the discussion on the findings will be further justified in Chapter 5.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0   Introduction

Past section has analysed the data and results that derived from the questionnaires collected. In this last chapter, discussion will be done to provide information that is meaningful to Malaysia. It consists of the summary on the research results in Chapter 4 and suggestions of the study. The limitations that found out throughout the research will be identified. Besides, some guidance and recommendation also will be provided for future research. At last, conclusion will be made to summarize the entire project.

5.1   Summary of Statistical Analysis

5.1.1 Discussion on Demographic

Table 5.1: Summary of the Demographic Profile

Demographic Factors	Distribution	
Gender	Male (54.9%)	Female (45.1%)
Age	22-25 years old (72.1%)	18-21 years old (27.9%)
Employment Status	Student (55.7%)	Non-student (46.3%)
Highest Education	With Bachelor Degree (61.8%)	Without Bachelor Degree (38.1%)
Marital Status	Single (93%)	Married (7%)
Individual Income	Less than RM 2,000 (60.7%)	RM 2,000 and above (39.3%)

Six demographic variables are collected and analysed for 384 respondents in Klang Valley. The age range is one of the most interesting findings where most of the respondents are aged 22-25. Those people in this age range are mostly students or just started to work and the respondents in this age range are majority single with monthly personal income less than RM 2,000. Students are considered as respondents for this study even they have no income because they still do spending using pocket money. They are still depending financially on their families as their sources of income, but some will have earned some income from their part-time job.

Although students do not have financial obligation now, but they need to payback PTPTN which is one of their debt commitments when they enter into workplace. Hence, it is important for them to start utilize their money wisely when they are still students. They need to learn how to invest, save and spend wisely to prepare for their future, otherwise they will experience low SFWB in long run. If they spend a lot now and not managing their expenses and liabilities well, their spending behaviour will cause them unable to meet their financial obligations in the future.

Another interesting finding is the education status. From the results, majority are holding a Bachelor Degree or above, which indicates that they will tend to have higher literacy (Lantara & Kartini, 2015). This means that their learning ability is higher. They can acquire the financial knowledge through self-learning like reading online resources, learning from online channels and attending seminars. Hence, it is easier for them to absorb financial knowledge even they are not holding Bachelor Degree related to Finance. They able to learn and analyse faster than those who are not holding tertiary qualification, hence a better financial decision and resulting relatively better FWB (OECD, 2019). However, the research results show a different finding and the reasons will be further discussed in Section 5.2.

5.1.2 Discussion on Construct

Pilot test was done based on the 30 responses and some of the items had been excluded to make sure Cronbach's alpha is higher than 0.6 to ensure the reliability. There is total 31 questions in this questionnaire, where subjective financial well-being (8 questions), financial attitude (5 questions), financial stress (5 question), internal locus of control (8 questions) and financial knowledge (5 questions).

Table 5.2: Summary of the Ranking for the Construct Measurement

Construct	Item	Ranking	Mean
Subjective Financial Well-Being (SFWB)	I am confident about being able to meet my monthly living expenses.	Highest	3.82
	I feel secure with my retirement plan.	Lowest	2.97
Financial Stress	I work harder to improve my work performance and financial situation.	Highest	4.08
	I have enough money to pay for a financial emergency.	Lowest	3.38
Financial Attitude	I think it's important to save up for things I want.	Highest	4.43
	I never worry about debts.	Lowest	3.74
Internal Locus Of Control	I have absolute control over my financial decisions.	Highest	3.91
	I am financially independent.	Lowest	3.24
Financial Knowledge	The purchasing power will be lower when the inflation rate is higher than the interest rate.	Highest	59.4%
	The premium of the medical insurance paid by a regular smoker is the same with a non-smoker.	Lowest	43.2%

From Table 5.2, the findings concludes that most of the respondents focus more on short-term planning than long-term planning as shown in the subjective financial well-being construct. This is because this research is

focusing on emerging adults. They are still young and just in their stage to start their own financial planning. From the financial planning process, the short-term planning like preparing emergency fund normally will be done before any long-term planning like retirement planning.

Emerging adults highly depends their living on income because most of their stress source comes from work as shown in the financial stress construct. They will try their best to perform well to secure for a job. It also concludes that emerging adults will fulfil their wants where they willing to save for their wants which can affect their financial attitude especially in the area of saving and spending. Emerging adults are less concern on debt because their responsibilities are still little and most of them are still single.

From the findings, most of the respondents are in control with their financial decision, but they are yet to be financially independent. This indicate that emerging adults still under the transition to adulthood where they are still depending on their families in the aspect of financial, but they able to make their own financial decision with money that they have. As for the financial knowledge aspect, most of them can understand the concept for inflation better than the concept of insurance. This is because most of the students are less educate with the concept insurance or they are yet to experience or possess an insurance plan. However, inflation is an economic concept where always apply in most of the courses.

5.2 Discussion on Major Findings

Table 5.3: Summary of the Result of Hypothesis Testing and its Consistency of Expectation

	Pearson Correlation	Significance of Construct	Consistency with expectation

Subjective Financial Well-being (SFWB) & Financial Stress	0.702	Significant at 0.05	Inconsistent with expectation
Subjective Financial Well-being (SFWB) & Financial Attitude	0.242	Significant at 0.10	Consistent with expectation
Subjective Financial Well-being (SFWB) & Internal Locus of Control	0.742	Significant at 0.05	Consistent with expectation
Subjective Financial Well-being (SFWB) & Financial Knowledge	-0.229	Not Significant	Inconsistent with expectation

Inferential analysis show that the financial stress, financial attitude and internal LOC are strongly correlated with SFWB. However, financial knowledge is known as negligible correlation because of its insignificance relationship with SFWB. Although financial knowledge is not significant influence the SFWB of emerging adults, but individual still need financial knowledge to manage their financial. The possible explanation of the research finding is that the female respondents are more than male respondents and Rai et al. (2019) research concludes that woman has less financial knowledge, hence it does not significant affect their financial literacy, hence not significantly affect their SFWB.

Even SFWB and financial stress shown inconsistent result with the hypothesis, but there are minority researchers concluded that financial stress does positively affect SFWB, which consistent with this study results. Based on Table 5.3, it shows that financial stress and SFWB are significant and positive related with each other. Finding from Osman et al. (2019) claimed that financial stress and SFWB are positively related because stress can motivate an individual to improve his productivity and income to strive the financial issues he faced. It consistent with the construct findings where most of the stress source for emerging adults is from work, but they still have high SFWB.

Ismail and Zaki (2019) conclude that low incomes individual facing high financial stress, but their attitude on managing financial can improve their financial condition, hence increase their well-being. Even most of the emerging adults has income lower than RM 2,000 as shown in the demographic profile of respondents, they still satisfy with their well-being. The positive relationship between financial stress and SFWB among emerging adults in Malaysia is concluded.

Besides, financial attitude shows significant but weak positive correlation with SFWB and the relationship is consistent with the research result from Rai et al. (2019) and Osman et al. (2019). Majority of the respondents are students based on the demographic profile and Shim et al. (2009) research support that students' financial attitudes have a favourable impact on their FWB. Financial attitude gives confidence to individual to make wise decision in their personal finance and help to improve their standard of living, hence improving the SFWB (Rai et al., 2019).

Research from Chavali et al. (2021) also conclude a positive impact on individuals' financial from individual behavioural elements including future security, savings and investments, credit discipline, and financial consciousness. Besides, the finding from Osman et al. (2019) concluded that individual that can analyse and utilize the financial information available to manage their finance able to perform a favourable financial attitude, resulting a financial satisfaction, hence improve SFWB. In conclusion, this proved that financial attitude is significant and positive related to SFWB.

The outcome of the study confirmed the hypothesis 4 which states internal LOC is positively related with SFWB. It shows the highest Pearson's Correlation which indicate it has strongest relationship with SFWB among other variables. With high internal LOC, emerging adults will have more confidents in dealing with the challenges and difficulties in lives, hence SFWB is higher (Kempson & Poppe, 2018). This also consistent with this research results that emerging adult are happier when they able to make their own financial decision and have absolute control over their finance.

A study that evaluates the role of psychological components on the association between financial hardship and mental health shows that individuals with high internal LOC tend to experience lesser negative emotions (Frankham et al., 2020). According to Adiputra et al. (2021), self-control and wisdom is important to affect individual financial satisfaction which consistent with the findings of Alsemgeest (2015). Individuals with a good internal LOC is able to assess the risks that arise and make a wise decision to achieve self-satisfaction. In conclusion, hypothesis testing 4 that stated that internal LOC is positive and significant related to SFWB is proven.

Generally, most of the research findings show they are positively related because financial knowledge is the basic for individual to perform a good financial behaviour (Nadzri & Yaacob, 2020; Sorgente & Lanz, 2017; Yong et al., 2018). The research expects that emerging adults with higher education level has higher literacy which lead to better financial knowledge, hence high SFWB. However, this study finding is contradicting with those findings where it shows a negative relationship between SFWB and financial knowledge.

This research result is alikewith Mahdzan et al. (2019) and Ponchio et al. (2019) researches which show negative relationship between financial knowledge and SFWB. People with high financial knowledge will be more concern in achieving financial goal, but not enjoying the process, hence lower SFWB. Financial knowledge that individual process and the way they utilize the available information in the market affect people mind subjectively, hence lead them to perform different financial behaviour and financial decision decisions (Ameliawati & Setiyani, 2018).

Alsemgeest (2015) support the results that explained that even individual obtains financial knowledge, but the external factors will affect their well-being as well. Emerging adults those lack of experience, lack of personal experiences and lower economic socialization in managing financial issues will be easily affected by external factor especially their family. This will make them doubt the decision that they make with the knowledge that they possess, hence reduce the SFWB.

Even though most of them are holding bachelor degree, but the financial knowledge acquired could not be reflected by their educational level solely. Financial knowledge that is educated throughout the university level or whole study life, including primary school may not be enough to prepare emerging adults enter into society. Dholakia et al. (2016) stated that the financial knowledges that taught in university may not be enough for them to face current challenging financial conditions. Most of the learning is based on theory basis where it does not give chance for emerging adults to apply in their real life. Hence, this causes the financial knowledge shows an insignificance relationship with SFWB.

5.3 Implication of study

The findings from this research contributes to academic and give guidance to academia. The research gap where only limited studies regarding the factors that affect emerging adults' SFWB in Malaysia has been filled through this study. Emerging adults are known as the foundation of a country that contribute to a country economic growth. In future, they will become someone's parents. If their SFWB is not satisfied since now, the financial condition will worsen after marriage and have children. Since the parent has low SFWB, there is a high chance that the children will also have low SFWB. Hence, acknowledging their SFWB is essential to avoid or reduce the social or economic issues that may arise due to the low SFWB.

Four factors that affect the SFWB of emerging adults in Malaysia have been investigated in this research. It thereby providing guidelines for emerging adults to enhance and improve their SFWB by acknowledging the possible factors that affect their SFWB. By adding financial attitude as a new variable to the Mahdzan et al. (2019) model, a significant relationship between financial attitude and SFWB has been found. An individual who is financially confident to make a wise decision is able to improve the standard of living, hence improving their life satisfaction and SFWB. Besides, this research concludes that the source of happiness of Malaysia's emerging adult is meeting their short-term goals rather than long-term goals.

Nevertheless, emerging adults should not focus solely on short-term financial planning. As mentioned in the preceding section, emerging adults nowadays are unsecured with their retirement plans, showing that they are unprepared for long-term financial planning. Long-term financial planning, such as retirement planning, is crucial because it could prevent individuals from encountering financial hardship upon retiring. Notably, it has been reported that 89.2% of the retirees claimed that Employees' Provident Fund (EPF) savings are insufficient for them to live (Yong, 2020), indicating individuals should not solely relying on EPF money upon retiring. Therefore, it is critical for emerging adults to start planning for their retirement now in order to secure long-term SFWB.

Besides, emerging adults are found to be unconfident to deal with a financial emergency. Therefore, emerging adults are urged to build up an emergency fund. That is, emergency funds held a crucial role in dealing with unforeseen circumstances and avoiding financial hardships. For example, COVID-19 has caused people to suffer from financial difficulties, while many of them choose to commit suicide (Hassan, 2021). Indeed, it is uncertain whether there is another financial crisis to be happened in the future, indicating they will encounter financial difficulty if they do not prepare for an emergency. It once again illustrates the importance for emerging adults to plan for the long-term as to secure a long-lasting SFWB.

Besides, this research can be served as a sign to the Malaysian government to implement policies as to enhance the SFWB of emerging adults in Malaysia. By improving and having a better SFWB, the standard of living in Malaysia will be upgraded, thereby enhance the economic growth in future. Emerging adults in Malaysia, especially in city like Klang Valley, seem to experience more stressful life because of the high living cost and overworked jobs. For example, Kuala Lumpur has been listed as a city that has the most hours spent in working and commuting among the cities (Cho, 2021).

Besides, AIA Vitality (2019) has claimed that the skewed work-life balance has affected 51% of the Malaysians to suffer from work-related stress. If emerging adults are in a moderate degree of financial stress, they may slide into a low or high

level of financial stress if they do not solve their problems. It impacts their personal finances and affects their job productivity because they will be unable to focus on their work. As a result, the government may take the initiative to provide financial counselling and education, especially for young employees.

Furthermore, the government should establish programmes that are to promote the financial knowledge of Malaysians. In fact, financial literacy enhancement programmes had been introduced by the Federation of Malaysian Consumers Associations (FOMCA), which aim to assist individuals to gain and attain financial knowledge, financial planning, financial matter, and money management (Need for Financial Literacy", 2019). During the pandemic season, the government can launch some online financial programs and promote through social media, school or other social platforms. More real-life experiences and examples also can be shared to give insight to emerging adults. By this initiative, it can improve the financial knowledge from both theory and practical to improve the SFWB among Malaysia emerging adults.

5.4 Limitations of Study

In the research progress, multiple limitations are identified and determined. Foremost, this study targeted Klang Valley as the only targeted location. Hence, this result may not be able to represent all the emerging adults in Malaysia. In fact, different locations may have different levels of economic growth. For instance, the living expenses in Klang Valley are far different as compared to in Perlis. Therefore, by considering only Klang Valley, which possesses the highest economic growth rate in Malaysia, it may show a biased outcome in which it may reduce the reliability and accuracy of this study.

This research is conducted in the first half of 2021, during the COVID-19 pandemic outbreak. However, the COVID-19 incident is not included as one of the variables in this study. It is because COVID-19 has been reported to be ended if there is a rollout of vaccines (Powell, 2021). Since Malaysia launched the COVID-19

inoculation programme in February 2021 (Sipalan, 2021), COVID-19 in Malaysia has been expected to end shortly. Meanwhile, the result may be biased if this study includes COVID-19, a short-term event, because SFWB is measured in the long term. Unexpectedly, Malaysia recorded the first COVID-19 variant patient in June 2021 (Singh, 2021). As such, the Malaysian government has imposed a stricter lockdown policy in order to deal with the highly infectious COVID-19 variant (Latif & Sipalan, 2021). Ultimately, it would cause Malaysians to be more financially vulnerable (Nambiar, 2021), which would subsequently affect their SFWB in the long run. Hence, the impact of COVID-19 on SFWB is worth to be observed.

Apart from that, this study applies emerging adulthood theory that defines emerging adults are those between 18-25. However, this age range in fact involves more students who are pursuing their tertiary educations, proven by 55.7% of respondents in this study are students. Indeed, according to Hillman (2020), the COVID-19 pandemic has caused underemployment and unemployment, which subsequently leads secondary school leavers to enrol in colleges instead of joining the workforce. Therefore, the result of this study may be biased and not be representing all the emerging adults in Malaysia due to a lack of workforce participation. It is notable that the financial behaviour of working adults and students may be different. For example, working adults would have to serve their debt commitments such as car loans and PTPTN loans (AKPK, 2019). Hence, working adults may be more prudent in managing their finances compared to students who are mostly financially dependent.

5.5 Recommendations for Future Study

In response to the limited scope of the targeted location, it is recommended to broaden the targeted area throughout Malaysia, including both East and West Malaysia. By incorporating the other locations in Malaysia, it would take geographical factors as well as respective economic conditions into considerations, whereby these factors would probably influence one's financial behaviours,

perceived SFWB, and others. As such, the analysis may be able to represent all the emerging adults in Malaysia.

Due to the severeness of COVID-19 nowadays, it has caused people to change their financial behaviours. For example, Pfordten (2020) stated that Malaysians tend to save more and spend more prudently than before the COVID-19 crisis. This behavioural change would persist until the COVID-19 fears dissipate and a more optimistic economic outlook prevails (Pfordten, 2020). Therefore, the behavioural change would remain permanently, which may subsequently affect one's SFWB in the long run. Therefore, future researchers are encouraged to conduct comparative studies on SFWB pre- and post- COVID-19 crisis in order to examine the effects of the COVID-19 crisis on SFWB.

Future researchers are suggested to expand the emerging adulthood age range into 18-29. Nevertheless, owing to the findings of Arnett and Mitra (2020) which stated 18-25 fits more to the characteristics of emerging adults, this study thereby defines 18-25 ages as emerging adults. In fact, there has been a long-running dispute regarding the age range of emerging adulthood. For example, Meier (2020) claimed that young adults nowadays grow slower to become full-fledged adults, whereby the upper age range of emerging adulthood may be prolonged. Hence, it is suggested to apply the emerging adulthood theory developed by Arnett (2014), which conceptualized 18-29 as emerging adults, in which it will include a fair number of student and working adult respondents.

5.6 Conclusion

The primary purpose of this paper is to determine the relationships between personal factors (financial stress, financial attitude, financial knowledge, and internal LOC) and SFWB, has been accomplished. Financial stress, financial attitude, and internal LOC are found to affect SFWB significantly. Interestingly, financial knowledge is insignificant related to SFWB.

Future research can use this research as a reference and understand the subjective measurement of FWB through this research. However, since this research consists of several limitations, hence, future researchers are advised to take note of the caveats mentioned earlier, thereby modifying future research according to the recommendations discussed in the preceding section in order to produce a high-quality study.

REFERENCES

7 types of data measurement scales in research. (2019, December 4). Retrieved from https://www.formpl.us/blog/measurement-scale-type

Abbas, D., Ali, M., Nohong, M., & Sobarsyah, M. (2020). Predicting the Financial Behavior of the Religious Organization Board in Indonesia. *The Journal of Asian Finance, Economics, and Business, 7(12),* 1159-1166. doi:10.13106/jafeb.2020

Adiputra, I. G., Suprastha, N., & Tania, L. (2021). The Influence Of Financial Knowledge, Financial Attitude Dan Locus Of Control On Financial Behavior Of E-Wallet Users In Jakarta. *Journal of Contemporary Issues in Business and Government, 27(1),* 3318-3332.

Adzis, A. A., Bakar, J. A. & Shahar, H. K. (2017, October). Factors Influencing Young Adults' Debt In Malaysia. *Journal of Business and Retail Management Research, 12(1),* 76-85. doi:10.24052/JBRMR/V12IS01/FIYADIM

Agensi Kaunseling dan Pengerusan Kredit (AKPK). (2019). *Financial Behaviour and State of Financial Well-Being of Malaysian Working Adults*. Retrieved from https://www.akpk.org.my/sites/default/files/AKPK_Financial%20Behaviour%20and%20State%20of%20Finanical%20Well-being%20of%20Malaysian%20Working%20Adult.pdf

AIA Vitality. (2019). *Malaysian Workforce: Sleepless and Overworked?* Retrieved from https://www.aia.com.my/en/about-aia/media-centre/press-releases/2019/malaysian-workforce-sleepless-and-overworked.html

Ajzen, I. (2020). The theory of planned behavior. Frequently asked questions. *Human Behavior and Emerging Technologies, 2(4),* 314-324. doi: 10.1002/hbe2.195

Alsemgeest, L. (2015, March). Arguments for and against financial literacy education: Where to go from here? *International Journal of Consumer Studies.* doi: 10.1111/ijcs.12163

Ameliawati, M. & Setiyani, R. (2018, October 22). The Influence of Financial Attitude, Financial Socialization, and Financial Experience to Financial Management Behavior with Financial Literacy as the Mediation Variable. *International Conference on Economics, Business and Economic Education 2018, KnE Social Sciences*, pages 811–832. DOI 10.18502/kss.v3i10.3174

Arifin, A. Z., & Anastasia, I., Siswanto, H. P., & Henry (2018). *The Effects of Financial Attitude, Locus of Control, and Income on Financial Behavior*. In Proceedings of the 7th International Conference on Entrepreneurship and Business Management (pp. 59-66). Science and Technology Publications, Lda. doi: 10.5220/0008488200590066

Arnett, J. J. & Mitra, D. (2020). Are the features of emerging adulthood developmentally distinctive? A comparison of ages 18–60 in the United States. *Emerging Adulthood*, 8(5), 412-419. doi: 10.1177/2167696818810073

Arnett, J.J. (2014). *Emerging Adulthood: The Winding Road from the Late Teens Through the Twenties*, Second Edition. Oxford University Press.

Askar, M. W., Ouattara, B., & Zhang, Y. F. (2020). *Financial Literacy and Poverty Reduction: The Case of Indonesia. [ADBI Working Paper 1097]. Tokyo: Asian Development Bank Institute. https://www.adb.org/sites/default/files/publication/574816/adbi-wp1097.pdf*

Barrington, R. (2019, February 8). Consequences of Not Having an Emergency Fund. https://www.moneyrates.com/personal-finance/consequences-of-not-having-emergency-fund.htm

Berjot, S., & Gillet, N. (2011). Stress and coping with discrimination and stigmatization. *Front Psychol, 2(33).* doi: 10.3389%2Ffpsyg.2011.00033

Bickman, L. & Rog, D. J. (2009). *The Sage handbook of applied social research methods* (2nd ed.). Los Angeles. Sage.

Bliese, P.D., Sonnentag, S., & Edwards, J.R. (2017). Stress and well-being at work: A century of empirical trends reflecting theoretical and societal influences. *Journal of Applied Psychology, 102(3),* 389-402. doi: 10.1037/apl0000109

Boaduo, N. A. P. (2011). Systematic analysis and interpretation of collected data for a research study: A practical methodological framework for writing research report. *Educational Research and Reviews, 6(2)*, 140-146.

Brüggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research 79 (2017)*, 228-237. doi: 10.1016/j.jbusres.2017.03.013

Bucciol, A., & Trucchi, S. (2020). *Locus of Control, Saving and Propensity to Save [Working Paper No.6]. Università die Verona, Department of Economics.* http://dse.univr.it/home/workingpapers/wp2020n6.pdf

Bujang A. A., Shapee N. A. S., Abu Zarin, H. & Ismail. A. (2017). Factor Influencing The Housing Affordability Stress Among Bumiputera. *International Journal of Real Estate Studies, 11 (4)*.

Cai, Y., Yusof, S. A., Amin, R. M., & Arshad, M. N. M. (2020). Household Debt and Household Spending Behavior: Evidence from Malaysia. *Jurnal Ekonomi Malaysia, 54(1)*, 111-120. doi: 10.17576/JEM-2020-5401-8

Çera, G., Khan, K. A., Mlouk, A., & Brabenec, T. (2020). Improving financial capability: the mediating role of financial behaviour. *Economic Research-Ekonomska Istraživanja*, 1-18. doi: 10.1080/1331677X.2020.1820362

Chavali, K., Ahmed, R, & Mohanraj, P. (2021). Does Financial Behavior Influence Financial Well-being? *Journal of Asian Finance Economics and Business. 8.* 273-0280. 10.13106/jafeb.2021.vol8.no2.027.

Cho, J. (2021, June 17). KL Ranks 4th Most Overworked City In Global Survey. *The Smart Local Malaysia - Travel, Lifestyle, Culture & Language Guide*. https://thesmartlocal.com/malaysia/kl-work-life-balance/.

Confusing Stats Terms Explained: Internal Consistency. (n.d.). Retrieved from Sqquarespace: http://www.statsmakemecry.com/smmctheblog/confusing-stats-terms-explained-internal-consistency.html

Consumer Financial Protection Bureau. (2017, May 26). *CFPB Financial Well-Being Scale: Scale development technical report*. Retrieved from https://www.consumerfinance.gov/data-research/research reports/financial-well-being-technical-report/

Danes, S. M., & Yang, Y. (2014). Assessment of the use of theories within the Journal of Financial Counseling and Planning and the contribution of the family financial socialization conceptual model. *Journal of Financial Counseling and Planning*, *25(1)*.

Das, K. V., Jones-Harrell, C., Fan, Y., Ramaswami, A., Orlove, B., & Botchwey, N. (2020). Understanding subjective well-being: perspectives from psychology and public health. *Public Health Reviews*, *41(25)*, 1-32. doi: 10.1186/s40985-020-00142-5

Deng, E. (2012, September 24). *Multinationals choose Greater Kuala Lumpur and Klang Valley as Asia base*. Retrieved from https://www.scmp.com/article/1046182/multinationals-choose-greater-kuala-lumpur-and-klang-valley-asia-base

Department of Statistics Malaysia. (2020a). *Malaysian Well-Being Index 2019*. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=477&bul_id=TWE5V0ErbEVndFh6QXJjS3ZPQnJSQT09&menu_id=U3VPMldoYUxzVzFaYmNkWXZteGduZz09

Department of Statistics Malaysia. (2020b). *Marriage and Divorce Statistics, Malaysia, 2020*. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=453&bul_id=QmZ1cE4xRFAvYWQ0R05hTk1rWm5KQT09&menu_id=L0pheU43NWJwRWVSZklWdzQ4TlhUUT09

Department of Statistics Malaysia. (2021). *Demographic Statistics Fourth Quarter 2020, Malaysia*. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=430&bul_id=

Szk0WjBlWHVTV2V1cGxqQ1hyVlpppZz09&menu_id=L0pheU43NWJw
RWVSZklWdzQ4TlhUUT09

Dholakia, U., Tam, L., Yoon, S., & Wong, N. (2016). The ant and the grasshopper: understanding personal saving orientation of consumers. *Journal of Consumer Research, 43(1),* 134-155. doi: 10.1093/jcr/ucw004

Downward, P., Rasciute, S. & Kumar, H. (2020). Health, subjective financial situation and well-being: a longitudinal observational study. *Health and Quality of Life Outcomes (2020) 18:203*. doi: 10.1186/s12955-020-01456-3

Flick, U. (2014). *An introduction to qualitative research* (5th ed.). London: Sage Publications Ltd.

Frankham, C., Richardson, T., & Maguire, N. (2020). Do Locus of Control, Self-esteem, Hope and Shame Mediate the Relationship Between Financial Hardship and Mental Health? *Community Mental Health Journal (2020), 56*, 404–415. doi: 10.1007/s10597-019-00467-9

Friedline, T., Chen, Z. & Morrow, S. (2020). Families' Financial Stress & Well-Being: The Importance of the Economy and Economic Environments. *Journal of Family and Economic Issues, 42 (1)*, 34-51. doi: 10.1007/s10834-020-09694-9

Garth, A. (2008). *Analysing data using SPSS.* Sheffield Hallam University, 94. https://students.shu.ac.uk/lits/it/documents/pdf/analysing_data_using_spss.pdf

Gavin, B. (2019, August 6). *The Beginner's Guide to Google Forms*. Retrieved from https://www.howtogeek.com/434570/the-beginners-guide-to-google-forms/

Government of New South Wales (2019, October 21). *The Effects Of Domestic And Family Violence On Children And Young People.* Retrieved from https://www.facs.nsw.gov.au/domestic-violence/about/effects-of-dv-on-children

Gudmunson, C., Ray, S. K., & Xiao, J. J. (2016). Financial socialization. In J. J. Xiao (Ed.), Handbook of Consumer Finance Research (2nd ed., pp. 61-72). doi: 10.1007/978-3-319-28887-1_5

Ham, M., Jeger, M., & Ivković, A. F. (2015). The role of subjective norms in forming the intention to purchase green food. *Economic Research-Ekonomska Istraživanja, 28(1)*, 738-748. doi: 10.1080/1331677X.2015.1083875

Hassan, H. (2021, July 12). Malaysia sees rise in suicides and calls to helplines amid Covid-19 pandemic. *The Straits Times*. Retrieved from https://www.straitstimes.com/asia/se-asia/malaysia-sees-rise-in-suicides-and-calls-to-helplines-amid-covid-19-pandemic

Heo, W., Cho, S., & Lee, P. (2020). APR Financial Stress Scale: Development and Validation of a Multidimensional Measurement. *Journal of Financial Therapy, 11 (1) 2*. doi: 10.4148/ 1944-9771.1216

Hillman, N. (2020, April 2). Covid-19 could be a curse for graduates but a boon for universities. *Times Higher Education*. Retrieved from https://www.timeshighereducation.com/opinion/covid-19-could-be-curse-graduates-boon-universities

Hirschmann, R. (2020, September 22). Youth unemployment rate in Malaysia 2010-2020. *Statista*. Retrieved from https://www.statista.com/statistics/708315/malaysia-youth-unemployment-rate/

Iannello, P., Sorgente, A., Lanz, M., & Antonietti, A. (2020). Financial well-being and its relationship with subjective and psychological well-being among emerging adults: testing the moderating effect of individual differences. *Journal of Happiness Studies*, *22*, 1385-1411. doi: 10.1007/s10902-020-00277-x

IBM Corp. (2017). IBM SPSS Statistics for Windows, Version 28.0. Armonk, NY: IBM Corp. [Computer software].

Idris, N. H., Yazid, Z. A., Faique, F. A., Daud, S., Ismail, S., Bakri, M. H., & Tai, N. M. (2018). Financial Literacy and Debt Burden Among Malay Youth Workers in Malaysia. *Advanced Science Letters, 22 (12),* 4288-4292. doi:10.1166/asl.2016.8130

Importance and benefits of SPSS in research. (2017, July 5). Retrieved from https://www.writeneed.com/post/2017/07/05/importance-and-benefits-of-spss-in-research

Islam, M. A., Low, W. Y., Tong, W. T., Choo, C. W. Y. & Abdullah, A. (2018, May). *Factors Associated with Depression among University Students in Malaysia: A Cross-sectional Study.* The 2nd International Meeting of Public Health 2016 with theme "Public Health Perspective of Sustainable Development Goals: The Challenges and Opportunities in Asia-Pacific Region", KnE Life Sciences (pp. 415–427). doi: 10.18502/kls.v4i4.2302

Ismail, N., & Zaki, N. D. A. (2019). Does Financial Literacy and Financial Stress Effect the Financial Wellness? *International Journal of Modern Trends in Social Sciences, 2(8),* 1-11. doi: 10.35631/IJMTSS.28001

Jain, M., Sharma, G. D. & Mahendru, M. (2019). Can I Sustain My Happiness? A Review, Critique and Research Agenda for Economics of Happiness. *Sustainability 11(22).* doi: 10.3390/su11226375

Kadir, J. M. A., Zainon, S., Ismail, R. F., Aziz, S. N. A. & Amran, A. A. I (2020). Retirement Planning and its Impact on Working Individuals. *European Journal of Molecular & Clinical Medicine, 7 (6).*

Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the national academy of sciences, 107(38),* 16489-16493. doi: 10.1073/pnas.1011492107

Kempson, E., & Poppe, C. (2018). *Understanding financial well-being and capability. A revised model and comprehensive analysis.* Oslo: Consumption Research Norway (SIFO), Oslo Metropolitan University, 3. Retrieved from https://oda.oslomet.no/oda-xmlui/bitstream/handle/20.500.12199/5357/OR%2032018%20Understandi

ng%20Financial%20Well-
Being%20and%20Capability.pdf?sequence=1&isAllowed=y

Kesavayuth, D., Ko, K.M., & Zikos, V. (2018). Locus of control and financial risk attitudes. *Economic Modelling, 72,* 122-131. doi: 10.1016/j.econmod.2018.01.010

Kimiyagahlam, F., Safari, M. & Mansori, S. (2019). Influential Behavioral Factors on Retirement Planning Behavior: The Case of Malaysia. *Journal of Financial Counseling and Planning, 30 (2,* 244-261. doi: 10.1891/1053-3073.30.2.244

Langkos, S. (2014). Chapter 3 – Research Methodology: Data Collection Method and Research Tools. doi: 10.13140/2.1.3023.1369.

Lantara, I. W. N. & Kartini, N. K. R. (September, 2015). Financial Literacy Among University Students: Empirical Evidence From Indonesia. *Journal of Indonesian Economy and Business, Volume 30, Number 3,* 247–256.

Latiff, R. & Sipalan, J. (2021, July 14). Malaysia seeks to beef up health system as Delta variant rages. *Reuters.* Retrieved from https://www.reuters.com/world/asia-pacific/malaysia-shuts-vaccination-centre-after-200-workers-infected-2021-07-13/

Lea, S. E. G. (2021). Debt and overindebtedness: Psychological evidence and its policy implications. *Social Issues and Policy Review, 15(1)*, 146–179. doi: 10.1111/sipr.12074

Lee, H. A. (2020). Unemployment among Malaysia's Youth: Structural Trends and Current Challenges. *ISEAS Yusof Ishak Institute, 65.*

Liang, Z., Luo, H., & Liu, C. (2020). The concept of subjective well-being: its origins an application in tourism research: a critical review with reference to China. *Tourism Critiques: Practice and Theory, 2 (1)*, 2-19. doi: 10.1108/TRC-04-2020-0009

Lim, A. & Ayamany, K. (2021, April 15). Experts: Fresh grads' pay as low as RM1,000 a systemic problem, can't just blame Covid-19 pandemic. *Malay Mail.* Retrieved from

https://www.malaymail.com/news/malaysia/2021/04/15/experts-fresh-grads-pay-as-low-as-rm1000-a-systemic-problem-cant-just-blame/1966545

Lowe, K., & Arnett, J. (2020). Failure to Grow Up, Failure to Pay? Parents' Views of Conflict Over Money With Their Emerging Adults. *Journal of Family Issues, 41(3)*, 4. doi: 10.1177/0192513X19876061

Lucero, J., Lim, S., & Santiago, A. M. (2016). Changes in economic hardship and intimate partner violence: A family stress framework. *Journal of Family and Economic Issues, 37,* 395–406. doi: 10.1007/s10834-016-9488-1.

Mahdzan, N. S., Zainudin, R, Sukor, M. E. A., Zainir, F., & Ahmad, W. M. W. (2019). Determinants of Subjective Financial Well-Being Across Three Different Household Income Groups in Malaysia. *Social Indicators Research,* 146:699–726. doi: 10.1007/s11205-019-02138-4

Mahdzan, N. S., Zainudin, R., Sukor, M. E. A., Zainir, F. & Ahmad, W. M. W. (2020). An exploratory study of financial well-being among Malaysian households. *Journal of Asian Business and Economic Studies, 27 (3),* 285-302. doi: 10.1108/JABES-12-2019-0120

Mandell, L., & Klein, L. S. (2009). The impact of financial literacy education on subsequent financial behavior. *Journal of Financial Counseling and Planning, 20(1).*

Meier, D. (2020). Emerging adulthood and its effect on adult education. *Australian Journal of Adult Learning, 60 (2),* 213-224.

Mertler, C. A. (2016). *Introduction to Educational Research*. California: Sage Publications Inc.

Ministry of Health Malaysia. (2019). *National Health and Morbidity Survey 2019.* Retrieved from https://iptk.moh.gov.my/images/technical_report/2020/4_Infographic_Booklet_NHMS_2019_-_English.pdf

Nambiar, S. (2021, July 28). Fiscal distress exacerbates Malaysia's growing COVID-19 crisis. *East Asia Forum.* Retrieved from

https://www.eastasiaforum.org/2021/07/28/fiscal-distress-exacerbates-malaysias-growing-covid-19-crisis/

Nadzri, E. N., & Yaacob, Z. (2020). The Factors Of Subjective Financial Well-Being Of Public Health Servants. *Labuan e-Journal of Muamalat and Society (LJMS), 14*, 23-33.

Need for financial literacy. (2019, March 16). *The Star*. Retrieved from https://www.thestar.com.my/opinion/letters/2019/03/16/need-for-financial-literacy

Nominal, Ordinal, Interval, Ratio Scales with Examples. (n.d.). Retrieved from https://www.questionpro.com/blog/nominal-ordinal-interval-ratio/

Noordin, M. N. (2020, February 18). The economic reality for Malaysia's youth. *The Malaysian Reserve*. Retrieved from https://themalaysianreserve.com/2020/02/18/the-economic-reality-for-malaysias-youth/

OECD. (2019, April). Pisa 2021 Financial Literacy Analytical and Assessment Framework. Retrieved from https://www.oecd.org/pisa/sitedocument/PISA-2021-Financial-Literacy-Framework.pdf

Organisation for Economic Co-operation and Development. (2020). *OECD/INFE 2020 International Survey of Adult Financial Literacy*. Retrieved from www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialliteracysurveyreport.htm

Osman, Z., Madzlan, E. M., & Phang, I. (2019, June 30). In Pursuit of Financial Well-being: The Effects of Financial Literacy, Financial Behaviour and Financial Stress on Employees in Labuan. *International Journal of Service Management and Sustainability, 3 (1)*.

Ozmete, E., & Hira, T. (2011). Conceptual analysis of behavioural theories/models: Application to financial behaviour. *European Journal of Social Sciences, 18(3),* 386-404.

Pearson Product-Moment Correlation. (2018). Retrieved fromhttps://statistics.laerd.com/statistical-guides/pearson-correlation-coefficient-statistical-guide.php

Pfordten, D. (2020, June 26). Interactive: Prudent M'sians drive jump in bank deposits amid Covid-19 uncertainties. *The Star*. Retrieved from https://www.thestar.com.my/news/nation/2020/06/26/interactive-prudent-m039sians-drive-jump-in-bank-deposits-amid-covid-19-uncertainties

Philippas, N. D., & Avdoulas, C. (2020). Financial literacy and financial well-being among generation-Z university students: Evidence from Greece. *The European Journal of Finance*. doi: 10.1080/1351847X.2019.1701512

Ponchio, M. C., Cordeiro, R. A., & Gonçalves, V. N. (2019). Personal factors as antecedents of perceived financial well-being: evidence from Brazil. *International Journal of Bank Marketing*, 34 (4), 1004-1024. doi: 10.1108/IJBM-03-2018-0077

Powell, A. (2021, February 25). Vaccines can get us to herd immunity, despite the variants. Retrieved from https://news.harvard.edu/gazette/story/2021/02/vaccines-should-end-the-pandemic-despite-the-variants-say-experts/

Rai, K., Dua, S., & Yadav, M. (2019). Association of Financial Attitude, Financial Behaviour and Financial Knowledge Towards Financial Literacy: A Structural Equation Modeling Approach. *FIIB Business Review, 8(1), 51-60.* doi: 10.1177%2F2319714519826651

Ranyard, R., McNair, S., Nicolini, G., & Duxbury, D. (2020). An item response theory approach to constructing and evaluating brief and in-depth financial literacy scales. *Journal of Consumer Affairs*, *54*(3), 1121-1156. doi: 10.1111/joca.12322

Rashid, M. F. A., Ghani, I., Ngah, I. & Yasin, S. M. (2014). Evaluation Of Migration Decision-Selectivity Factors In Metropolitan Area: A Case Of Klang Valley Region, Malaysia. *Journal of Social Sciences and Humanities, 9 (1)*, 034-044

Reliability Analysis. (n.d.). Retrieved from https://www.statisticssolutions.com/reliability-analysis/?__cf_chl_jschl_tk__=c9546d1673530d0fd4710e12076098e6f55d4598-1625123578-0-AdHog1LzuARB_iG-Op-qhogvt1HPGqrG6yrjrfABmTi_IhuDxUkASkLl7KZtLS55lUEtINLvgp2XNrdQ3zjNtbilv6QqGvUX3ui_DAEH-jdu02IDvU-brSb-5zo

Riitsalu, L., & Murakas, R. (2019). Subjective financial knowledge, prudent behaviour and income. *International Journal of Bank Marketing, 37 (4),* 934-950. doi: 10.1108/IJBM-03-2018-0071

Setiyani, R., & Solichatun, I. (2019, March 24). *Financial well-being of college students: An empirical study on mediation effect of financial behaviour* [Paper presentation]. 3rd ICEEBA, International Conference on Economics, Education, Business and Accounting. doi: 10.18502/kss.v3i11.4026

Shim, S., Xiao, J. J., Barber, B. L. & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology, 30 (6),* 708–723. doi: 10.1016/j.appdev.2009.02.003

Showalter, K. (2016, July). Women's Employment and Domestic Violence: A Review Of The Literature. *Aggression and Violent Behavior 31,* 37–47. doi: 10.1016/j.avb.2016.06.017

Singh, M. (2021, July 26). Variants Prolong the Coronavirus Pandemic. Retrieved from https://kpcnotebook.scholastic.com/post/variants-prolong-coronavirus-pandemic

Singh, S. (2018, December 25). *Sampling Techniques*. Retrieved from https://towardsdatascience.com/sampling-techniques-a4e34111d808.

Sipalan, J. (2021, February 24). Malaysia launches COVID-19 vaccination drive as PM gets first shot. *Reuters*. Retrieved from https://www.reuters.com/article/us-health-coronavirus-malaysia-idUSKBN2AO0RX

Sorgente, A., & Lanz, M. (2017). Emerging adults' financial well-being: A scoping review. *Adolescent research review, 2(4),* 255-292. doi: 10.1007/s40894-016-0052-x

Stefan, D. (2019, March 8). 10 Advantages And Disadvantages Of Questionnaires. Retrieved from Survey Anyplace: https://surveyanyplace.com/blog/questionnaire-   pros-and-cons/

Stephanie, G. (n.d.). *Snowball Sampling: Definition, Advantages and Disadvantages.* Retrieved from https://www.statisticshowto.com/probability-and-statistics/statistics-definitions/snowball-sampling/.

Stromback, C., Skagerlund, K., Vastfjall, D. & Tinghog, G. (2020, May 26). Subjective Self-   Control But Not Objective Measures Of Executive Functions Predicts Financial Behaviour And Well-Being. *Journal of Behavioral and Experimental Finance 27.*   doi: 10.1016/j.jbef.2020.100339

Taherdoost, H., & Group, H. (2016). Validity and reliability of the research instrument: How to test the validation of a questionnaire/ survey in a research. *International Journal of Academic Research in Management, 5(3),* 28-36. doi: 10.2139/ssrn.3205040

Tan, A. C. X, Cheong, W. L., Chong, C. J., Lee, R., & Liou, Y. H. (2019). *The Individual   Savings Behaviour in Malaysian New Villages.* Final Year Project, Universiti Tunku Abdul Rahman. Retrieved from http://eprints.utar.edu.my/3927/1/fyp_FN_2019_TACX_-_1502845.pdf

The Researcher Advisors. (2006). *Sample Size Table.* Retrieved from https://www.research-advisors.com/tools/SampleSize.htm

The World Bank. (2020, October 29). Aspirations Unfulfilled: Malaysia's Cost of Living Challenges. Retrieved from https://www.worldbank.org/en/country/malaysia/publication/aspirations-unfulfilled-malaysias-cost-of-living-challenges

ThuyDung, V. (2014, May 17). *Saving behaviours among Chinese students.* [Dissertation]. https://www.slideshare.net/vuthuydung5076/141-dissertation-saving-behavior-among-chinese-students

Trochim, W. M. K. (n.d.-a). *Descriptive Statistics*. Retrieved from Conjointly: https://conjointly.com/kb/descriptive-statistics/

Trochim, W. M. K. (n.d.-b). *Inferential Statistics*. Retrieved from Conjointly: https://conjointly.com/kb/inferential-statistics/

Vosloo, W., Fouche, J., & Barnard, J. (2014). The relationship between financial efficacy, satisfaction with remuneration and personal financial well-being. *International Business and Economics Research Journal, 13(6)*, 1455–1470. doi: 10.19030/iber.v13i6.8934

Walliman, N. (2017). *Research Methods: The Basics*. Routledge.

Witherspoon, D.R. (2017). *The effects of financial strain on health, morale, and social functioning* (Doctoral dissertation, Saginaw Valley State University, Central Michigan University). Retrieved from https://core.ac.uk/download/pdf/132492062.pdf

World Population Review. (2021). *Malaysia Population 2021*. Retrieved from https://worldpopulationreview.com/countries/malaysia-population

Yong, C. C, Yew, S. Y. & Wee, C. K. (2018). Financial Knowledge, Attitude and Behaviour of Young Working Adults in Malaysia. *Institutions and Economies, 10 (4),* 21-48.

Yong, Y. H. (2020, January 22). A better safety net for senior citizens. *New Straits Times*. Retrieved from https://www.nst.com.my/opinion/columnists/2020/01/558585/better-safety-net-senior-citizens

Zhao, H., & Zhang, L. (2020). Talking money at home: the value of family financial socialization. *International Journal of Bank Marketing, 38 (7),* 1617-1634. doi: 10.1108/IJBM-04-2020-0174

Zhe, K. S. K. (2020, December 8). The Wall: Almost half of Malaysian wage earners in debt spiral. *The Edge Malaysia*. Retrieved from

https://www.theedgemarkets.com/article/thewall-almost-half-malaysian-wage-earners-debt-spiral

Appendix A: Research Survey Questionnaire

Dear respondents,

We are the final year undergraduate students from Universiti Tunku Abdul Rahman (UTAR) who doing a project related to the topic mentioned above. The purpose of this survey is to study the effects of personal factors on the perceived financial well-being.

This questionnaire consists of THREE (3) sections:

Section A: Respondent's demographic profile

Section B: Self-rating on perceived financial well-being and personality traits

Section C: Multiple choice questions for literacy in finance

Your voluntary participation will greatly contribute to the completion of our study. We appreciate your assistance and kind response to this survey. All information obtained regards with this study will be remained private and confidential. This information is solely for academic research purposes.

If you have any questions regarding this study, please drop us an email at hmay18@1utar.my. Thank you for your contribution and participation in this study.

Yours sincerely,

Emily Loh Li Yeng

Joanne Ean Zi En

Kim Hui May

Loo Min Wen

Wong Shin Yi

Section A: Demographic Profile

A1: Gender

( ) Male

( ) Female

A2: Age

( ) 18 – 21

( ) 22 – 25

A3: Employment status

( ) Government sector

( ) Private sector

( ) Self-employed

( ) Unemployed

( ) Student

A4: Highest Education Level

( ) High school

( ) Certificate holders & Diploma

( ) Bachelor Degree

( ) Master & PhD

( ) Others

A5: Marital Status

( ) Single

( ) Married

( ) Divorced/Widowed

A6: Individual Income

( ) Less than RM2000

( ) RM2000 – RM3999

( ) RM4000 – RM5999

( ) RM6000 – RM7999

( ) RM8000 – RM9999

( ) RM10000 and above

Section B: Self-Rating on Perceived Financial Well-Being and Personality Traits

(Please circle the number that is the best to describe your perceptions/ situations.)

Subjective Financial Well-Being

No.	Statement	Strongly Disagree ⟶ Strongly Agree				
B1	I am confident about being able to meet my monthly living expenses.	1	2	3	4	5
B2	I am confident about being able to meet all my future living expenses.	1	2	3	4	5
B3	I am confident with every financial decision that I need to make.	1	2	3	4	5
B4	I am satisfied with my personal finances.	1	2	3	4	5
B5	I feel secure with my income sources which can support me financially till the end of my life.	1	2	3	4	5
B6	I feel secure with my current financial situation.	1	2	3	4	5
B7	I feel secure with my retirement plan.	1	2	3	4	5
B8	I feel that I can afford my desires and wants based on my financial situation.	1	2	3	4	5

Financial Stress

No.	Statement	Strongly Disagree ⟶ Strongly Agree				
B9	I have money left over at the end of the month.	1	2	3	4	5
B10	I have enough money to pay for a financial emergency.	1	2	3	4	5
B11	I am able to continue my daily activities even though I feel stressed about my financial situation.	1	2	3	4	5

B12	I work harder to improve my work performance and financial situation.	1	2	3	4	5
B13	I am active in attending family and friend events even my financial situation is bad.	1	2	3	4	5

Financial Attitude

No.	Statement	Strongly Disagree ⟶			Strongly Agree	
B14	I never worry about debts.	1	2	3	4	5
B15	I make an effort to increase financial knowledge.	1	2	3	4	5
B16	I think it's important to save up for things I want.	1	2	3	4	5
B17	I will reduce my expenditure in order to save money.	1	2	3	4	5
B18	I adjust the amount of money I spend on non-essentials when my financial changes.	1	2	3	4	5

Internal Locus of Control

No.	Statement	Strongly Disagree ⟶			Strongly Agree	
B19	I am financially independent.	1	2	3	4	5
B20	My current financial situation is mostly supported by myself.	1	2	3	4	5
B21	I have absolute control over my financial decisions.	1	2	3	4	5
B22	I am certain about my future financial condition because it is within my control.	1	2	3	4	5
B23	I can improve my financial status as long as I am determined.	1	2	3	4	5
B24	There is always a way for me to solve my financial problems.	1	2	3	4	5

B25	I feel confident while dealing with the financial problems in my life.	1	2	3	4	5
B26	I am capable of upgrading my financial situation.	1	2	3	4	5

Section C: Multiple Choice Questions of literacy in finance

Financial Knowledge

(Please circle the correct answer.)

C1: It is possible to use a credit card to withdraw cash from an ATM for free.

      ( ) True

      ( ) False

      ( ) Do not know

C2: The premium of the medical insurance paid by a regular smoker is the same with a non-smoker.

      ( ) True

      ( ) False

      ( ) Do not know

C3: The risk of investing in a company's stock is lower than investing in a stock mutual fund.

      ( ) True

      ( ) False

      ( ) Do not know

C4: The purchasing power will be lower when the inflation rate is higher than the interest rate.

      ( ) True

      ( ) False

      ( ) Do not know

C8: You have RM 100 in a savings account with interest rate at 2% per annum, your bank account balance will be more than RM 102 after five years.

      ( ) True

      ( ) False

      ( ) Do not know

Appendix B: Frequencies of Demographic Profile

1. Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	173	45.1	45.1	45.1
	Male	211	54.9	54.9	100.0
	Total	384	100.0	100.0	

2. Age

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-21	107	27.9	27.9	27.9
	22-25	277	72.1	72.1	100.0
	Total	384	100.0	100.0	

3. Employment Status

Employment Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government sector	29	7.6	7.6	7.6
	Private Sector	101	26.3	26.3	33.9
	Self-employed	18	4.7	4.7	38.5
	Unemployed	22	5.7	5.7	44.3
	Student	214	55.7	55.7	100.0
	Total	384	100.0	100.0	

4. Highest Education

Highest Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School	80	20.8	20.8	20.8
	Certificate Holders & Diploma	66	17.2	17.2	38.0
	Bachelor Degree	221	57.6	57.6	95.6
	Master & PhD	16	4.2	4.2	99.7

	Frequency	Percent	Valid Percent	Cumulative Percent
Others	1	.3	.3	100.0
Total	384	100.0	100.0	

5. Marital Status

Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	357	93.0	93.0	93.0
	Married	27	7.0	7.0	100.0
	Total	384	100.0	100.0	

6. Individual Income

Individual Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than RM2000	233	60.7	60.7	60.7
	RM2000-RM3999	99	25.8	25.8	86.5
	RM4000-RM5999	33	8.6	8.6	95.1
	RM6000-RM7999	13	3.4	3.4	98.4
	RM8000-RM9999	5	1.3	1.3	99.7
	RM10000 and above	1	.3	.3	100.0
	Total	384	100.0	100.0	

Appendix C: Frequencies of Items and Constructs

1. Mean of items

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
B1. I am confident about being able to meet my monthly living expenses.	384	1	5	3.82	1.078
B2. I am confident about being able to meet all my future living expenses.	384	1	5	3.49	1.091
B3. I am confident with every financial decision that I need to make.	384	1	5	3.76	.974
B4. I am satisfied with my personal finances.	384	1	5	3.33	1.231
B5. I feel secure with my income sources which can support me financially till the end of my life.	384	1	5	3.09	1.320
B6. I feel secure with my current financial situation.	384	1	5	3.30	1.213
B7. I feel secure with my retirement plan.	384	1	5	2.97	1.302
B8. I feel that I can afford my desires and wants based on my financial situation.	384	1	5	3.37	1.201
B10. I have money left over at the end of the month.	384	1	5	3.82	1.055
B11. I have enough money to pay for a financial emergency.	384	1	5	3.38	1.252
B12. I am able to continue my daily activities even though I feel stressed about my financial situation.	384	1	5	3.96	.869
B13. I work harder to improve my work performance and financial situation.	384	1	5	4.08	.828

B15. I am active in attending family and friend events even my financial situation is bad.	384	1	5	3.54	1.164
B18. I never worry about debts.	384	1	5	3.74	1.205
B19. I make an effort to increase financial knowledge.	384	1	5	4.13	.842
B21. I think it's important to save up for things I want.	384	1	5	4.43	.682
B22. I will reduce my expenditure in order to save money.	384	2	5	4.28	.723
B23. I adjust the amount of money I spend on non-essentials when my financial changes.	384	1	5	4.31	.709
B25. I am financially independent.	384	1	5	3.24	1.412
B26. My current financial situation is mostly supported by myself.	384	1	5	3.27	1.398
B27. I have absolute control over my financial decisions.	384	1	5	3.91	.907
B28. I am certain about my future financial condition because it is within my control.	384	1	5	3.89	.933
B29. I can improve my financial status as long as I am determined.	384	1	5	3.70	.997
B30. There is always a way for me to solve my financial problems.	384	1	5	3.76	1.023
B31. I feel confident while dealing with the financial problems in my life.	384	1	5	3.79	.979
B32. I am capable of upgrading my financial situation.	384	1	5	3.72	1.027

C1. It is possible to use a credit card to withdraw cash from an ATM for free.	384	0	1	.49	.501
C3. The premium of the medical insurance paid by a regular smoker is the same with a non-smoker.	384	0	1	.43	.496
C5. The risk of investing in a company's stock is lower than investing in a stock mutual fund.	384	0	1	.44	.497
C7. he purchasing power will be lower when the inflation rate is higher than the interest rate.	384	0	1	.59	.492
C8. You have RM 100 in a savings account with interest rate at 2% per annum, your bank account balance will be more than RM 102 after five years.	384	0	1	.58	.495
FK_Sum	384	0	5	2.53	1.625
Valid N (listwise)	384				

2. Subjective Financial Well-Being

B1. I am confident about being able to meet my monthly living expenses.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	2.9	2.9	2.9
	Somehow Disagree	40	10.4	10.4	13.3
	Average	78	20.3	20.3	33.6
	Somehow Agree	134	34.9	34.9	68.5
	Strongly Agree	121	31.5	31.5	100.0
	Total	384	100.0	100.0	

B2. I am confident about being able to meet all my future living expenses.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	19	4.9	4.9	4.9
	Somehow Disagree	53	13.8	13.8	18.8
	Average	102	26.6	26.6	45.3

	Frequency	Percent	Valid Percent	Cumulative Percent
Somehow Agree	140	36.5	36.5	81.8
Strongly Agree	70	18.2	18.2	100.0
Total	384	100.0	100.0	

B3. I am confident with every financial decision that I need to make.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	1.0	1.0	1.0
	Somehow Disagree	43	11.2	11.2	12.2
	Average	85	22.1	22.1	34.4
	Somehow Agree	160	41.7	41.7	76.0
	Strongly Agree	92	24.0	24.0	100.0
	Total	384	100.0	100.0	

B4. I am satisfied with my personal finances.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	31	8.1	8.1	8.1
	Somehow Disagree	82	21.4	21.4	29.4
	Average	74	19.3	19.3	48.7
	Somehow Agree	124	32.3	32.3	81.0
	Strongly Agree	73	19.0	19.0	100.0
	Total	384	100.0	100.0	

B5. I feel secure with my income sources which can support me financially till the end of my life.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	56	14.6	14.6	14.6
	Somehow Disagree	86	22.4	22.4	37.0
	Average	74	19.3	19.3	56.3
	Somehow Agree	104	27.1	27.1	83.3
	Strongly Agree	64	16.7	16.7	100.0
	Total	384	100.0	100.0	

B6. I feel secure with my current financial situation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	34	8.9	8.9	8.9
	Somehow Disagree	79	20.6	20.6	29.4

		Frequency	Percent	Valid Percent	Cumulative Percent
	Average	67	17.4	17.4	46.9
	Somehow Agree	144	37.5	37.5	84.4
	Strongly Agree	60	15.6	15.6	100.0
	Total	384	100.0	100.0	

B7. I feel secure with my retirement plan.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	52	13.5	13.5	13.5
	Somehow Disagree	113	29.4	29.4	43.0
	Average	73	19.0	19.0	62.0
	Somehow Agree	85	22.1	22.1	84.1
	Strongly Agree	61	15.9	15.9	100.0
	Total	384	100.0	100.0	

B8. I feel that I can afford my desires and wants based on my financial situation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	32	8.3	8.3	8.3
	Somehow Disagree	64	16.7	16.7	25.0
	Average	87	22.7	22.7	47.7
	Somehow Agree	130	33.9	33.9	81.5
	Strongly Agree	71	18.5	18.5	100.0
	Total	384	100.0	100.0	

3. Financial Stress

B10. I have money left over at the end of the month.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	2.9	2.9	2.9
	Somehow Disagree	39	10.2	10.2	13.0
	Average	70	18.2	18.2	31.3
	Somehow Agree	151	39.3	39.3	70.6
	Strongly Agree	113	29.4	29.4	100.0
	Total	384	100.0	100.0	

B11. I have enough money to pay for a financial emergency.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	37	9.6	9.6	9.6
	Somehow Disagree	65	16.9	16.9	26.6
	Average	75	19.5	19.5	46.1
	Somehow Agree	128	33.3	33.3	79.4
	Strongly Agree	79	20.6	20.6	100.0
	Total	384	100.0	100.0	

B12. I am able to continue my daily activities even though I feel stressed about my financial situation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	.8	.8	.8
	Somehow Disagree	22	5.7	5.7	6.5
	Average	68	17.7	17.7	24.2
	Somehow Agree	184	47.9	47.9	72.1
	Strongly Agree	107	27.9	27.9	100.0
	Total	384	100.0	100.0	

B13. I work harder to improve my work performance and financial situation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.3	.3
	Somehow Disagree	20	5.2	5.2	5.5
	Average	52	13.5	13.5	19.0
	Somehow Agree	187	48.7	48.7	67.7
	Strongly Agree	124	32.3	32.3	100.0
	Total	384	100.0	100.0	

B15. I am active in attending family and friend events even my financial situation is bad.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	18	4.7	4.7	4.7
	Somehow Disagree	65	16.9	16.9	21.6
	Average	84	21.9	21.9	43.5
	Somehow Agree	124	32.3	32.3	75.8
	Strongly Agree	93	24.2	24.2	100.0

		Frequency	Percent	Valid Percent	Cumulative Percent
	Total	384	100.0	100.0	

4. Financial Attitude

B18. I never worry about debts.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	19	4.9	4.9	4.9
	Somehow Disagree	54	14.1	14.1	19.0
	Average	66	17.2	17.2	36.2
	Somehow Agree	115	29.9	29.9	66.1
	Strongly Agree	130	33.9	33.9	100.0
	Total	384	100.0	100.0	

B19. I make an effort to increase financial knowledge.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	.8	.8	.8
	Somehow Disagree	10	2.6	2.6	3.4
	Average	66	17.2	17.2	20.6
	Somehow Agree	160	41.7	41.7	62.2
	Strongly Agree	145	37.8	37.8	100.0
	Total	384	100.0	100.0	

B21. I think it's important to save up for things I want.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.3	.3
	Somehow Disagree	2	.5	.5	.8
	Average	30	7.8	7.8	8.6
	Somehow Agree	148	38.5	38.5	47.1
	Strongly Agree	203	52.9	52.9	100.0
	Total	384	100.0	100.0	

B22. I will reduce my expenditure in order to save money.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somehow Disagree	7	1.8	1.8	1.8
	Average	40	10.4	10.4	12.2
	Somehow Agree	174	45.3	45.3	57.6

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Agree	163	42.4	42.4	100.0
	Total	384	100.0	100.0	

B23. I adjust the amount of money I spend on non-essentials when my financial changes.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.3	.3
	Somehow Disagree	4	1.0	1.0	1.3
	Average	37	9.6	9.6	10.9
	Somehow Agree	174	45.3	45.3	56.3
	Strongly Agree	168	43.8	43.8	100.0
	Total	384	100.0	100.0	

5. Internal Locus of Control

B25. I am financially independent.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	62	16.1	16.1	16.1
	Somehow Disagree	69	18.0	18.0	34.1
	Average	60	15.6	15.6	49.7
	Somehow Agree	101	26.3	26.3	76.0
	Strongly Agree	92	24.0	24.0	100.0
	Total	384	100.0	100.0	

B26. My current financial situation is mostly supported by myself.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	62	16.1	16.1	16.1
	Somehow Disagree	64	16.7	16.7	32.8
	Average	55	14.3	14.3	47.1
	Somehow Agree	116	30.2	30.2	77.3
	Strongly Agree	87	22.7	22.7	100.0
	Total	384	100.0	100.0	

B27. I have absolute control over my financial decisions.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	9	2.3	2.3	2.3

		Frequency	Percent	Valid Percent	Cumulative Percent
	Somehow Disagree	14	3.6	3.6	6.0
	Average	80	20.8	20.8	26.8
	Somehow Agree	180	46.9	46.9	73.7
	Strongly Agree	101	26.3	26.3	100.0
	Total	384	100.0	100.0	

B28. I am certain about my future financial condition because it is within my control.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	1.3	1.3	1.3
	Somehow Disagree	29	7.6	7.6	8.9
	Average	73	19.0	19.0	27.9
	Somehow Agree	173	45.1	45.1	72.9
	Strongly Agree	104	27.1	27.1	100.0
	Total	384	100.0	100.0	

B29. I can improve my financial status as long as I am determined.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	1.8	1.8	1.8
	Somehow Disagree	38	9.9	9.9	11.7
	Average	109	28.4	28.4	40.1
	Somehow Agree	139	36.2	36.2	76.3
	Strongly Agree	91	23.7	23.7	100.0
	Total	384	100.0	100.0	

B30. There is always a way for me to solve my financial problems.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	2.9	2.9	2.9
	Somehow Disagree	38	9.9	9.9	12.8
	Average	78	20.3	20.3	33.1
	Somehow Agree	163	42.4	42.4	75.5
	Strongly Agree	94	24.5	24.5	100.0
	Total	384	100.0	100.0	

B31. I feel confident while dealing with the financial problems in my life.

		Frequency	Percent	Valid Percent	Cumulative Percent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	2.1	2.1	2.1
	Somehow Disagree	31	8.1	8.1	10.2
	Average	90	23.4	23.4	33.6
	Somehow Agree	158	41.1	41.1	74.7
	Strongly Agree	97	25.3	25.3	100.0
	Total	384	100.0	100.0	

B32. I am capable of upgrading my financial situation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	1.6	1.6	1.6
	Somehow Disagree	44	11.5	11.5	13.0
	Average	103	26.8	26.8	39.8
	Somehow Agree	130	33.9	33.9	73.7
	Strongly Agree	101	26.3	26.3	100.0
	Total	384	100.0	100.0	

6. Financial Knowledge

Where A= True; B= False; C= Do Not Know

It is possible to use a credit card to withdraw cash from an ATM for free.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	188	49.0	49.0	49.0
	B	83	21.6	21.6	70.6
	C	113	29.4	29.4	100.0
	Total	384	100.0	100.0	

The premium of the medical insurance paid by a regular smoker is the same with a non-smoker.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	166	43.2	43.2	43.2
	B	87	22.7	22.7	65.9
	C	131	34.1	34.1	100.0
	Total	384	100.0	100.0	

The risk of investing in a company's stock is lower than investing in a stock mutual fund.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	169	44.0	44.0	44.0
	B	47	12.2	12.2	56.3
	C	168	43.8	43.8	100.0
	Total	384	100.0	100.0	

The purchasing power will be lower when the inflation rate is higher than the interest rate.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	228	59.4	59.4	59.4
	B	27	7.0	7.0	66.4
	C	129	33.6	33.6	100.0
	Total	384	100.0	100.0	

You have RM 100 in a savings account with interest rate at 2% per annum, your bank account balance will be more than RM 102 after five years.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	222	57.8	57.8	57.8
	B	63	16.4	16.4	74.2
	C	99	25.8	25.8	100.0
	Total	384	100.0	100.0	

FK_Sum

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	67	17.4	17.4	17.4
	1	40	10.4	10.4	27.9
	2	64	16.7	16.7	44.5
	3	98	25.5	25.5	70.1
	4	64	16.7	16.7	86.7
	5	51	13.3	13.3	100.0
	Total	384	100.0	100.0	

7. The Mean of Constructs (overall)

Descriptive Statistics

	N	Minimum	Maximum	Mean
SFWB	8	2.97	3.82	3.3925
Fin.Stress	5	3.38	4.08	3.7560
Fin. Attitude	5	3.74	4.43	4.1780
Internal LOC	8	3.24	3.91	3.6600
Fin.Knowledge	384	0.00%	100.00%	50.6771%
Valid N (listwise)	5			

Appendix D: Reliability Test- Cronbach's Alpha

Reliability Test (Cronbach's Alpha)- Pilot Test

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the

procedure.

1. Subjective Financial Well-Being

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.838	.836	8

2. Financial Stress

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.723	.734	5

3. Financial Attitude

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.681	.713	5

4. Internal Locus of Control

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.889	.894	8

5. Financial Knowledge

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.681	.679	5

Reliability Test (Cronbach's Alpha)

Case Processing Summary

		N	%
Cases	Valid	384	100.0
	Excluded[a]	0	.0
	Total	384	100.0

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

1. Subjective Financial Well-Being

Reliability Statistics

Cronbach's Alpha	N of Items
.926	8

2. Financial Stress

Reliability Statistics

Cronbach's Alpha	N of Items
.782	5

3. Financial Attitude

Reliability Statistics

Cronbach's Alpha	N of Items
.674	5

4. Internal Locus of Control

Reliability Statistics

Cronbach's Alpha	N of Items
.901	8

5. Financial Knowledge

Reliability Statistics

Cronbach's Alpha	N of Items
.668	5

Appendix E: Pearson's Correlation Analysis

Correlations

		SFWB	Fin.stress	Fin.attitude	Internal_LOC	Fin.knowledge
SFWB	Pearson Correlation	1	.702**	.242**	.742**	-.229**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001
	N	384	384	384	384	384
Fin.stress	Pearson Correlation	.702**	1	.223**	.642**	-.228**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001
	N	384	384	384	384	384
Fin.attitude	Pearson Correlation	.242**	.223**	1	.192**	-.187**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001
	N	384	384	384	384	384
Internal_LOC	Pearson Correlation	.742**	.642**	.192**	1	-.177**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001
	N	384	384	384	384	384
Fin.knowledge	Pearson Correlation	-.229**	-.228**	-.187**	-.177**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	
	N	384	384	384	384	384

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

Appendix F: Multiple Linear Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.688	.267		-2.577	.010
	Fin.stress	.458	.051	.365	8.968	<.001
	Fin.attitude	.098	.054	.058	1.809	.071
	Internal_LOC	.553	.045	.488	12.180	<.001
	Fin.knowledge	-.143	.094	-.048	-1.523	.129

a. Dependent Variable: SFWB

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802[a]	.644	.640	.57515

a. Predictors: (Constant), Fin.knowledge, Internal_LOC, Fin.attitude, Fin.stress