A STUDY ON DEBT BURDEN AMONG GEN Z MALAYSIANS: KEY FACTORS INFLUENCING PERSONAL DEBT ACCUMULATION

ANG ZI XIN

CHEAH RUO YAN

HOR CHIA CHI

YONG DI LIANG

BACHELOR OF FINANCE (HONOURS)

UNIVERSITI TUNKU ABDUL RAHMAN

TEH HONG PIOW FACULTY OF BUSINESS AND FINANCE
DEPARTMENT OF FINANCE

SEPTEMBER 2025

ANG, CHEAH, HOR, YONG   PERSONAL DEBT   FN(HONS)   SEPTEMBER 2025

A STUDY ON DEBT BURDEN AMONG GEN Z MALAYSIANS: KEY FACTORS INFLUENCING PERSONAL DEBT ACCUMULATION

BY

ANG ZI XIN

CHEAH RUO YAN

HOR CHIA CHI

YONG DI LIANG

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

BACHELOR OF FINANCE (HONOURS)

UNIVERSITI TUNKU ABDUL RAHMAN

TEH HONG PIOW FACULTY OF BUSINESS AND FINANCE

DEPARTMENT OF FINANCE

SEPTEMBER 2025

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 20179 words.

Name of Student:	Student ID:	Signature:
1. Ang Zi Xin	21ABB05128	
2. Cheah Ruo Yan	21ABB04769	
3. Hor Chia Chi	21ABB05481	
4. Yong Di Liang	21ABB04723	

Date： 13 September 2025

ACKNOWLEDGEMENT

DEDICATION

This project is offered in honour of Universiti Tunku Abdul Rahman (UTAR), the institution that has shaped our academic growth and given us the opportunity to put our three years of finance studies into meaningful practice.

Our supervisor, Dr Kuah Yoke Chin, deserves special mention for her unwavering patience, timely advice, and encouragement, which kept us on track from the first stage of planning to the final submission. Her dedication made the process far more achievable.

We are equally thankful to our examiner, Mr Woo Kok Hoong, whose thoughtful observations during the review process helped us refine our work. His contributions added depth and clarity to the final outcome.

Lastly, we acknowledge the steadfast presence of our families and friends, whose moral support, encouragement, and practical assistance sustained us during every stage of this project.

PREFACE

In today's consumer-driven world, personal debt has become a pressing financial concern, particularly among young adults who are navigating the transition to independent living. The increasing availability of credit, coupled with lifestyle aspirations and social influences, has made debt management a crucial topic of study. This research focuses on understanding how various factors contribute to the accumulation of personal debt.

This study examines the relationships between peer influence, financial literacy, spending behaviour, social media, psychological factors, and their impact on personal debt accumulation. Data for this research were collected through a structured questionnaire distributed to Generation Z aged 21 to 28 in the Federal Territory, Penang, Selangor, and Johor, Malaysia, with responses gathered from a representative sample of participants. The questionnaire was designed to assess the extent to which each factor shapes personal debt.

The outcomes of this study are intended to provide valuable insights into the determinants of personal debt among Gen Z Malaysians. These findings may serve as a reference for policymakers, educators, and financial institutions in developing targeted financial education programmes and debt management strategies. Furthermore, the results may assist higher education institutions in creating awareness initiatives to equip young adults with the knowledge and skills necessary to manage their personal finances effectively and avoid excessive debt burdens.

ABSTRACT

In recent years, the issue of personal debt accumulation has become increasingly prevalent in Malaysia. This study seeks to examine the influence of peer influence, financial literacy, spending behaviour, social media, and psychological factors on personal debt accumulation among Generation Z aged 21 to 28 in the Federal Territory, Penang, Selangor, and Johor. The proposed framework draws on the theory of planned behaviour, life-cycle hypothesis, impulse buying theory and social learning theory to explain the relationship between these factors and personal debt accumulation. The problem statement addresses the growing concern over high debt levels, driven by rising living costs, stagnant wages, easy access to credit, and weak financial literacy. Surveys show that a large share of Gen Z spend all or more than their income and lack adequate emergency savings, placing them at higher risk of unsustainable debt. A quantitative research approach was adopted, with primary data collected through a structured questionnaire. 400 valid responses were obtained and analysed using SPSS 31.0. The findings revealed that each independent variable significantly impacts personal debt accumulation, with varying levels of influence across the factors examined. The study's results provide valuable insights for policymakers, financial educators, and institutions to develop targeted strategies aimed at improving financial literacy, promoting responsible spending habits, and reducing debt vulnerability among Gen Z. Moreover, the research serves as a reference for future studies related to personal finance and debt management in similar demographic contexts.

Keywords: Personal Debt Accumulation; Peer Influence; Financial Literacy; Spending Behaviou; Social Media; Psychological Factors

Subject Area: HG3691-3769 Credit. Debt. Loan

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

LIST OF ABBREVIATIONS

BNPL   Buy Now, Pay Later

TPB   Theory of Planned Behaviour

SLT   Social Learning Theory

LCH   Life-Cycle Hypothesis

SD   Standard Deviation

VIF   Variance Inflation Factor

LIST OF APPENDICES

CHAPTER 1: RESEARCH OVERVIEW

1.0   Introduction

In this chapter, the study's background will provide a concise outline of the key issues and research environment. Besides, research objective and questions shall be presented accordingly. Furthermore, the study's possible contributions to the reader are highlighted in the section on the study's importance. Lastly, this chapter summarize the conclusion.

1.1   Research Background

Financial landscape in Malaysia has changed dramatically in current years, shaped by rising living costs, economic volatility, and increasing dependence on credit facilities (Bank Negara Malaysia, 2022). Within this context, Generation Z (Gen Z) has emerged as a particularly vulnerable demographic. Despite being the most digitally literate and highly educated generation to date, many young Malaysians face mounting financial pressures that compromise their overall well-being (Tan, 2024). The prevalence of personal debt, coupled with limited financial literacy, underscores the urgency of examining the structural and behavioural factors that contribute to financial vulnerability among Gen Z.

Moreover, debt and bankruptcy are closely related financial concepts. These concepts are often discussed together due to their cause-and-effect relationship. Debt refers to a financial liability incurred through borrowing, whereby an individual or organization is obligated to pay the borrowed principal, often accompanied by interest, within a specified timeframe (Suter, 2014). While bankruptcy can be defined as the legal process through which a debtor is declared bankrupt by a court order, and the Director General of Insolvency distributes their assets to creditors (Malaysia Department of Insolvency, 2025). It is an essential component of modern financial systems, facilitating access to commodities, services, and investment opportunities that exceed immediate income capabilities. However, excessive or inadequate debt management can result in financial distress, reduced quality of life, and long-term socio-economic implications, particularly among vulnerable groups such as young adults (Turunen & Hiilamo, 2014). According to Nor et al. (2019) highlighted that approximately half of all financial distress cases were attributed to inadequate budgeting practices. Other prevalent contributing factors included business failures, healthcare-related costs, and unemployment.

Nowadays, bankruptcy problems are common and can happen in every country, including Malaysia (Selvanathan et al., 2016). Especially when the COVID-19 pandemic occurred in 2020. In 2020, the COVID-19 pandemic brought significant negative impacts on the global supply chain and economy, causing the unemployment rate to increase and linked to a reduction in consumer demand (Chai et al., 2024). According to Irum and Hudgins (2021), a total of 630 United States companies declared bankruptcy, reaching the worst in the current 10 years because of the COVID-19 pandemic. At the same time, the total global debt levels also surged dramatically, reaching 263 percent of global GDP in 2020, the most since at least 1970 (Kose et al., 2021).

As mentioned by Wirz (2024), the global corporate debt defaults reached their highest monthly level since October 2020, reflecting widespread insolvency pressures driven by high interest rates and leveraged loan exposures in 2024. These global trends highlight the importance of examining the structural weaknesses within the corporate and financial systems that were made clear during the COVID-19 pandemic. It is crucial to investigate how the rise in bankruptcies and debt defaults was caused by poor risk management procedures, excessive levels of indebtedness, and a lack of crisis preparedness. Gaining an understanding of these elements can help future company finance strategies and more robust economic policies be developed.

While corporate debt surged during the pandemic, household and personal debt also rose sharply in many countries, adding to the threats to financial stability. According to Dabla-Norris & Furceri (2025), debt accumulation is now higher and rising faster in nearly 80% of the global economy, driven by persistently high interest rates, weak growth, and high fiscal deficits. This shows that the trend is not limited to public or corporate debt but also affects household debt, increasing significantly. One of the examples is Thailand's household debt, which peaked at 95.5 percent of GDP in the first quarter of 2021, making Thailand have one of the highest rates of household debt among emerging markets (Xu, 2025).

In Malaysia, the COVID-19 also had a big effect. For example, the manufacturing of consumer goods was badly affected, and the economy was negatively affected due to business closures and declining consumer incomes (Yusuf & Oyelakin, 2022). These issues emphasize the financial strain that causes increasing insolvency risks. Data from AKPK further illustrates the severity of this issue, reporting that more than 53,000 Malaysians under the age of 30 collectively owe nearly RM1.9 billion, largely from credit cards and personal loans. Notably, those aged 28 to 30 represent the largest share of applicants for debt restructuring, showing that financial strain emerges early in adulthood. These findings point to the urgent need for strong financial management

skills and reflect the risks associated with lifestyle pressures, rising living expenses, and dependence on unsecured credit. With personal debt levels among Gen Z continuing to rise, investigating the underlying factors influencing their borrowing patterns is both timely and essential (Tan, 2024).

These economic challenges have increased Malaysia's household debt on the economy and the individuals in Malaysia (Yahya et al., 2023). At the same time, the problem of household debt has been closely linked to difficulties in repaying the outstanding debt and facing bankruptcy (Zain et al., 2019). According to Table 1.1, the highest number of bankruptcy cases in the past five years is 8351 cases, recorded in 2020. From 2021 to 2023, the number of bankruptcy cases had slightly decreased. However, the pattern reverted in 2024, indicating ongoing financial stress.

In 2025, Malaysia's high household debt will continue to limit consumer spending despite a stable economic outlook. Household debt reached 69.5% of GDP in Q4 2024, increasing concerns about lower discretionary income and borrowing ability (Chua, 2025). According to Malay Mail (2025), household finances are being strained by high loan payment costs, inflation in essentials such as food and fuel, and deteriorating consumer confidence, which averaged only 87.1 in Q1 2024. Global uncertainties, such as supply chain disruptions and trade conflicts, put extra pressure on consumer purchasing power. While moderate spending growth is expected, structural issues related to personal debt accumulation remain considerable and warrant more investigation.

The repayment of PTPTN loans has emerged as a growing concern in Malaysia, with 1.2 million borrowers collectively owing RM10.8 billion in 2023. Many young graduates struggle to service their loans due to low incomes, unemployment, and rising living expenses, while some delay payments because of weak financial discipline or

expectations of government relief. The issue is further compounded by limited financial literacy and inconsistent enforcement. Despite measures such as salary deductions, flexible repayment plans, and temporary deferments, a large number of borrowers have yet to begin repayment. This reflects how education loans, though crucial in providing access to higher education, have also become a major contributor to long-term personal debt among Malaysian youths (Maran, 2025).

Young Malaysians are increasingly vulnerable to financial challenges, with the rising cost of living and economic uncertainty affecting the way they spend, manage, and save their income. Studies indicate that financial literacy, financial behaviour, and psychological traits such as locus of control are critical in determining their financial well-being (Sabri et al., 2023). However, even highly educated youths earning only minimum wages face significant financial stress, highlighting income limitations as a major factor driving reliance on personal debt.

1.2   Problem Statement

Focusing on Generation Z (Gen Z), Table 1.1 shows that approximately 16.61% of individuals below 25 years old and those aged between 25 to 34 years face bankruptcy issues in the current five years. Although the overall bankruptcy rate is considered low compared to older age groups, the financial burden among Gen Z remains a concern. However, existing research on personal debt in Malaysia has predominantly focused on Generation Y (Gen Y), with limited attention paid specifically to Gen Z. For instance, Zainol et al. (2016) investigated the causes of personal debt in young Muslims. People with debt issues between the ages of 25 and 45 make up the study's population. Moreover, Zainudin et al. (2019) highlighted the alarming indebtedness behavior

among working members of Gen Y. Therefore, this study places greater emphasis on Gen Z, as they are a key demographic of interest.

According to the Malaysia Department of Insolvency (2024), Selangor, Federal Territory, Johor, and Penang are the four states with the most bankruptcy cases in 2024. These states reflect economically vibrant, highly urbanized areas with generally higher living expenses and credit availability. This study will concentrate on Gen Z individuals who live in these four states because of the high concentration of bankruptcy cases in these areas. Targeting these states allows for a more meaningful investigation into the debt burden faced by youth in urban environments.

Since personal income can be depleted quickly, many seek alternative funding sources, including online lenders and traditional banks (Daud et al., 2024). Nowadays, many Gen Z rely on various credit options such as buy now, pay later (BNPL) services, personal loans, and credit cards, causing their financial vulnerability to increase. Bank Negara Malaysia (2022) stated that 44% of BNPL users are individuals between the ages of 18 and 30, and more than 80% of those users have a low income, earning below RM3,000 per month. This indicates that most of the users of BNPL services are young and lower-income Malaysians. Hamid (2025) also mentioned that the younger generations are currently facing an increasingly heavy debt burden due to the rise of consumer credit and financial transactions in daily life. Therefore, Gen Z should manage their debt wisely to prevent debt accumulation.

Additionally, the financial independence of Gen Z has been greatly influenced by global pandemics, rapid technological advancements, and changing cultural norms, leading to the accumulation of significant personal debt (Spohn, 2024). Rising higher education costs have driven many individuals in this generation to take on substantial student loans, motivated by the belief that advanced qualifications will enhance career

prospects (Rubin et al., 2024). However, after graduation, they are met with a competitive job market, where high unemployment rates among recent graduates further aggravate their financial challenges, making debt repayment and career stability more difficult to achieve (Malay Today, 2024).

Stagnant wages and increasing living expenses, including costs for housing, automobiles, and healthcare, have intensified financial strain on Gen Z, hindering their ability to manage daily expenses effectively (Spohn, 2024). Over the years, Malaysia has seen a significant rise in living costs, impacting both essential items such as groceries and transportation, as well as major expenditures. However, wage growth has not matched inflation, diminishing purchasing power for many young individuals (The Star, 2023). Additionally, rising production costs have increased indebtedness, threatening young workers' financial well-being (Abdullah et al., 2019). Notably, 42% of young people borrow due to financial constraints, while 22% cite inflation and 21% attribute it to the influence of luxury lifestyles (Abdul Mulup et al., 2024; Muhammad Amnan, 2023).

Moreover, growing financial pressures have significantly impacted the mental well-being of Gen Z. Ongoing concerns about job security, financial stability, and future career opportunities have contributed to heightened levels of stress and anxiety (Turner, 2025). Social influences often contribute to financial dissatisfaction, leading individuals to adopt others' lifestyles through debt (Daud et al., 2024). Furthermore, weak financial literacy among young Malaysians exacerbates the issue of personal debt. Surveys highlight that between 60% and 75% of youths' income is spent on utilities and daily expenses, leaving only 5% to 10% for savings and investments. The Ringgit Plus Malaysian Financial Literacy Survey (2023) revealed that 51% of Gen Z Malaysians spend all or more than what they earn each month, while the Securities Commission's Youth Capital Market Survey found that many young people lack confidence in investment decisions and have limited understanding of financial

concepts. Similarly, the FIMM Investors' Financial Literacy Survey (2021) showed that 80% of non-investors were unaware of basic investment products such as unit trusts and private retirement schemes. These findings underscore a critical gap in financial literacy, which, combined with rising living costs, increases Gen Z's vulnerability to debt accumulation (The Star, 2024).

According to Gontusan (2025), the state of financial literacy in Malaysia is not entirely clear. Only 36% of Malaysians, according to a 2023 study, understood basic financial concepts including inflation, interest rates, and risk diversification, which is less than the 42% global average. While literacy levels have improved since 2016, a 2024 report revealed that 61% of Malaysians were unable to produce RM1,000 in an emergency, and one in four felt overwhelmed by debt. Furthermore, nearly 70% indicated a need for financial literacy support, reflecting ongoing gaps in financial capability. These weaknesses contribute to poor money management and a greater reliance on debt, particularly among younger generations. Supporting this, Fatihah (2024) noted that there are 73% of Malaysian youths already burdened by debt, highlighting their financial vulnerability. Many deal with unemployment, mounting living expenses, excessive student loan debt, and restricted access to financial education, which further increase their dependence on personal loans and credit facilities. Research also indicates that financial attitudes are shaped from early childhood, yet many young Malaysians enter adulthood without sufficient financial literacy or money management skills. This lack of preparedness poses serious challenges for Gen Z, who must navigate mounting financial pressures while remaining ill-equipped to manage debt effectively.

Table 1.1:

Bankruptcy case statistics by age group from the year 2020 to December 2024.

Age Group	Year					Total	Percentage (%)
	2020	2021	2022	2023	2024		

Below 25 Years Old	21	20	11	16	15	83	0.26
25-34 Years Old	1741	1060	759	711	862	5133	16.35
35-44 Years Old	3150	2535	2237	1980	2402	12304	39.20
45-54 Years Old	2211	1802	1630	1322	1695	8660	27.59
55 Years Old and Above	1204	1116	1024	760	926	5030	16.03
No Information Available	24	21	34	21	77	177	0.56
Total	8351	6554	5695	4810	5977	31387	100

Note: From Malaysia Department of Insolvency (2024). *Bankruptcy statistic 2024.*

1.3 Research Objectives

1.3.1 General Research Objective

Examining five variables impacting Gen Z Malaysian's accumulation of personal debt is the main objective of this study.

1.3.2 Specific Research Objective

1. To investigate the relationship between Gen Z Malaysians' personal debt accumulation and peer influence.

2. To investigate the relationship between Gen Z Malaysians' personal debt accumulation and financial literacy.

3. To investigate the relationship between Gen Z Malaysians' personal debt accumulation and spending behaviour.

4. To investigate the relationship between Gen Z Malaysians' personal debt accumulation and social media.

5. To investigate the relationship between Gen Z Malaysians' personal debt accumulation and psychological factors.

1.4   Research Questions

The following questions are the focus of this study:

1. Do Gen Z Malaysians' personal debt accumulation and peer influence have a significant relationship?

2. Do Gen Z Malaysians' personal debt accumulation and financial literacy have a significant relationship?

3. Do Gen Z Malaysians' personal debt accumulation and spending behaviour have a significant relationship?

4. Do Gen Z Malaysians' personal debt accumulation and social media have a significant relationship?

5. Do Gen Z Malaysians' personal debt accumulation and psychological factors have a significant relationship?

1.5   Significance of Study

This study holds substantial value for Gen Z Malaysians, who are navigating a critical phase of financial independence and decision-making. By investigating the effects of peer influence, financial literacy, spending behavior, social media, and psychological factors on personal debt, this research aims to enable young individuals to make well-informed financial decisions. The rising cost of living and the growing popularity of digital financial products make Gen Z more vulnerable to debt accumulation (Rubin et al., 2024). This study aims to give important insights into responsible financial practices by identifying the main causes of personal debt. This will help young Malaysians learn how to handle their money well and reduce excessive borrowing (Sabri et al., 2023).

Secondly, for researchers, this study greatly contributes to the existing body of knowledge on financial behavior and debt management by addressing the unique challenges faced by Gen Z in Malaysia. It provides empirical evidence on how various factors such as social influence and psychological aspects, affect financial decision-making, thereby filling gaps in the literature concerning generational financial behavior (Zainordin et al., 2025). Additionally, this study sets the groundwork for future research, guiding scholars toward a deeper exploration of financial trends, behavioral patterns, and the long-term consequences of early financial decisions on economic stability. By incorporating psychological and socio-economic perspectives, this research encourages interdisciplinary discussions that can enhance financial education frameworks (Girimurugan et al., 2023).

Lastly, financial institutions and policymakers can leverage the findings of this study to create more effective financial literacy programs, debt management strategies, and regulatory policies specifically tailored to young Malaysians (Sabri et al., 2023). Banks and lending institutions can apply these findings to create lending practices that are mindful of Gen Z's spending patterns and financial literacy levels. Concurrently, policymakers can launch targeted initiatives, such as integrating financial education into school curriculums and establishing debt relief programs, to combat the increasing issue of debt (Hamid,2025). By comprehending the impact of family financial responsibilities and psychological factors, institutions can develop policies that address underlying financial challenges, ultimately cultivating a more financially resilient younger generation in Malaysia borrowing.

1.6   Conclusion

The study explores the key factors influencing personal debt accumulation among Malaysians in Generation Z, focusing on five independent variables: spending behaviour, financial literacy, peer influence, social media, and psychological factors. While extensive research has been conducted on household debt, studies on personal debt accumulation, particularly among Gen Z, remain limited. The financial independence of Gen Z has been shaped by economic disruptions, including the COVID-19 pandemic, rising living costs, and wage stagnation. Many young adults rely on credit cards, BNPL services, and personal loans to manage financial pressures, raising concerns about long-term debt sustainability. Despite their growing financial independence, many Gen Z Malaysians continue to struggle with debt due to poor financial literacy, social pressures, and economic challenges. By analyzing both microeconomic and behavioral factors, this study addresses gaps in the current understanding of personal debt accumulation among young Malaysians. The findings

contribute to enhancing financial awareness, enriching academic literature, and supporting financial institutions and policymakers in developing more effective financial literacy programs and debt management strategies.

CHAPTER 2: LITERATURE REVIEW

2.0   Introduction

The beginning part presents the underlying theory that supports this study. The second section explores the relationships between the five independent variables—peer influence, financial literacy, spending behaviour, social media, and psychological factors—and the dependent variable, personal debt accumulation. It then outlines the study's hypotheses. The theoretical framework is then discussed in the third section. Lastly, it concludes with a conclusion highlighting the discussions.

2.1   Underlying Theories

2.1.1 Theory of Planned Behaviour (TPB)
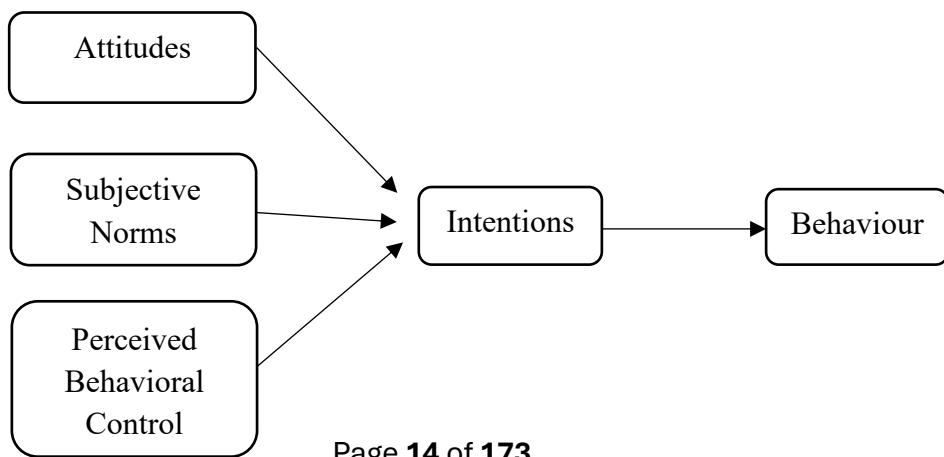
In 1991, Icek Ajzen presented the TPB, builds on Ajzen and Fishbein's earlier Theory of Reasoned Action (TRA) through integrating perceived behavioural control acting as key component (Ajzen, 1991). It has been extensively applied across fields like health, education, and organisational settings to study and forecast human behaviour. Within the TPB framework, attitudes, subjective norms, and perceived behavioral control are identified as the three primary influences on an individual's intention to act, which in turn shapes behavior (Kalaiarasi et al., 2024).

Attitudes refer to a person's positive or negative perception of a certain behavior, influencing their willingness to act if the behaviour is perceived as beneficial. Subjective norms capture the social pressures exerted by family, peers, or society to either engage in or refrain from a behaviour, emphasizing the significance of cultural and societal expectations. Meanwhile, perceived behavioural control shows how confident a person is in their capacity to carry out the behavior, which is influenced by factors such as resources, opportunities, and obstacles (Chen & Slade, 2024).

In the financial domain, TPB has been extensively applied to investigate behaviours such as saving, borrowing, and investing. Studies by Yeo et al. (2023) and She et al. (2023) demonstrate how attitudes, social influences, and perceived behavioural control interact to shape financial decisions. Favourable attitudes and social encouragement promote positive financial behaviours, while perceived behavioural control is important in managing borrowing through emphasizing a person's capacity to repay debt. Additionally, TPB effectively bridges gaps in financial literacy by examining the roles of cultural

norms, family responsibilities, and self-efficacy in influencing financial
decision-making, particularly in culturally diverse environments such as
Malaysia.

2.1.2 Social Learning Theory (SLT)

Attention → Retention → Reproduction → Motivation
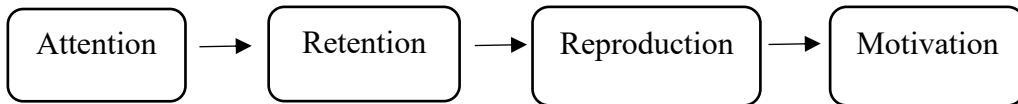
In 1977, Albert Bandura and Richard H. Walters elaborated SLT, which
highlights how individuals learn through observation, imitation, and modelling,
combining behaviourism with cognitive psychology. The framework outlines
four essential processes: attention, where individuals concentrate on the
behaviour of a model; retention which involves storing witnessed behavior in
memory; reproduction, which necessitates the capacity to duplicate the
behavior; and motivation, influenced by anticipated rewards or consequences
(Bandura & Walters, 1977).

In the context of personal debt, SLT highlights how social interactions and
observation shape financial behaviour. Gen Z often mimics the spending,
borrowing, and debt habits of peers, family, or social media influencers, with
normalized practices like conspicuous consumption and credit card use
fostering imitative tendencies (Girimurugan et al., 2023). The pervasive
influence of social media, which frequently glamorizes consumerism and
extravagant lifestyles, further amplifies impulsive spending, contributing to

debt accumulation (Chen et al., 2022). According to Bursztyn et al. (2014), peer networks play a significant role in shaping financial decision-making, such as borrowing and saving, especially within environments where financial behaviours are shared or compared.

Moreover, SLT emphasizes the role of reinforcement in learning, with social approval or recognition acting as positive reinforcements in peer-driven financial behaviours. For instance, receiving compliments for luxury purchases can encourage individuals to seek similar validation, potentially through debt-financed consumption. These dynamics underscore the importance of addressing the underlying causes of learned financial behaviours, such as impulsive spending and social comparison (Sabri et al., 2024).

2.1.3 Life-Cycle Hypothesis (LCH)

In 1954, Richard Brumberg and Franco Modigliani presented LCH, serves as a valuable framework for analysing how Gen Z Malaysians navigate personal debt. This theory suggests that individuals strive to maintain a consistent standard of living by borrowing during their low-income early years, saving during their peak earning periods, and utilizing their savings in later stages of life (Sablik, 2025). For Gen Z, debt often acts as a financial tool to bridge the gap between current limited earnings and anticipated future income (Girimurugan et al., 2024). Based on Chantarat et al. (2020), debt accumulation follows an inverted-U trajectory, peaking during early adulthood before tapering off as individuals enter their prime earning years. This pattern reflects the reliance of Gen Z on loans for purposes such as education, lifestyle expenses,

and family obligations, with the expectation of repayment driven by future income growth.

Furthermore, financial literacy spending behavior significantly influences the practical application of the LCH among Gen Z Malaysians. Yuliani & Adiandari (2020) highlights that individuals with strong financial literacy are better equipped to project future earnings and manage debt effectively. In contrast, those lacking financial knowledge often face difficulties in balancing immediate consumption needs with long-term financial objectives, leading to heightened levels of debt.

Additionally, young adults often engage in spending behaviors that exceed their current wage levels, prompting them to rely on borrowing to sustain their desired lifestyles. This tendency is visible in both developed and emerging nations, including Malaysia, where younger consumers commonly prioritise current spending by using credit alternatives such as personal loans, credit cards, and instalment payment plans. According to Khan et al. (2016), Malaysian teenagers are more vulnerable to debt accumulation due to spending needs that exceed their salaries. Similarly, Yunchao et al. (2020) discovered that household spending behaviour in Malaysia had a considerable impact on debt levels, particularly among working individuals in their early years. These findings imply that spending patterns, determined by expectations of future income growth and lifestyle ambitions, are consistent with life cycle borrowing behaviour, highlighting the importance of LCH in understanding debt dynamics among young consumers.

2.1.4 Impulse Buying Theory

In 1962, Hawkins Stern proposed the Impulse Buying Theory, which suggests that purchasing decisions are not always based on rational consideration (Stern, 1962). Alternatively, impulse buying is more prone to happen when the purchasing environment is favourable (Megat et al., 2024). Based on Frigerio et al. (2020), impulsive behaviour and excessive debt accumulation have a strong positive correlation. Empirical research consistently indicates that individuals with impulsive tendencies are more likely to engage in overspending and accumulate debt (Frigerio et al., 2020; Henegar et al., 2013; Kamleitner, Hoelzi, & Kirchler, 2012; Verplanken & Sato, 2011; Watson, 2009). For instance, Ottaviani and Vandone (2011) demonstrated that an individual's tendency toward impulsive behaviour plays a crucial role in debt-related choices.

Achtziger et al. (2015) highlighted the fact that those who lack self-control are more likely to accrue debt. This vulnerability arises from their inability to resist impulsive purchases driven by immediate desires, as well as their struggle to manage negative emotions, which often lead to compensatory spending behaviours. Meier and Sprenger (2010) discovered that people with a strong preference for instant gratification are more likely to take on debt and maintain higher outstanding balances on their credit cards. Likewise, research conducted by Limerick and Peltier (2014), verified a significant correlation between impulsive behaviour and elevated credit card debt, as well as irresponsible credit card usage among university students.

Social media plays a pivotal role in shaping impulse purchasing behaviour. Social media advertising exerts a significant influence on consumers' impulse-buying tendencies. Companies leverage engaging content, including

multimedia elements such as infographics, imagery, audio content, video clips, and editorial articles, to capture the interest of their target audience. Through these strategies, businesses aim to influence consumer behaviour and trigger impulsive purchasing decisions (Singh et al., 2023). The rise of social media users has driven the evolution of online shopping, particularly through live-streaming marketing on platforms like Instagram and Facebook. This interactive approach enhances engagement between sellers and buyers, enabling real-time product inquiries and immediate feedback. As live-stream shopping gains popularity, it is expected to further stimulate impulse buying behaviour, influenced by dynamic marketing strategies. The ease of using credit cards encourages impulsive online shopping, often resulting in accumulated debt (Zahari et al.,2021).

2.2 Review of Literature

2.2.1 Personal Debt Accumulation

Ibrahim and Alqaydi (2013) stated that personal debt may include loans from financial institutions, funds borrowed from relatives or acquaintances, and credit card debt. Individuals may incur one form of debt due to the lack of other available options. Personal debt is otherwise known as consumer indebtedness. It explores the implications of various forms of debt, including credit card liabilities and mortgage obligations, on financial stability and overall well-being. The study targets individuals facing financial burdens, providing strategic insights into debt management, and suggests that while avoiding debt

entirely is difficult, it is achievable through disciplined planning and education (Fonkem, 2024).

With the rise in personal debt in recent years, researchers have examined the impact on individuals. Studies indicate a strong link between personal debt and overall well-being, showing that higher debt levels are associated with increased negative emotions (Nepomuceno & Laroche, 2015; Brown et al., 2005; Marmot et al., 1997), along with an elevated likelihood of psychological disorders, depressive symptoms, and suicidal tendencies (Nepomuceno & Laroche, 2015; Richardson et al., 2013). A prior review has examined the connection between personal debt and mental health. Existing data suggest that personal indebtedness plays a role in the onset of mental health issues and influences the established links between poverty, low income, and psychological disorders (Fitch et al., 2011).

Over the past two decades, consumer credit has grown significantly. Changes in economic structures, modifications in social policies, evolving consumption behaviours, and shifts in cultural norms have contributed to an increased dependence on borrowing, leading to greater acceptance of personal indebtedness (Frigerio et al., 2020; Ferretti & Vandone, 2019). On the supply side, the growth of personal indebtedness has been driven by innovations in financial products, advancements in technology, digital sales platforms, and intensive marketing and advertising tactics (Frigerio et al., 2020; Zavadil & Messner, 2014; Karacimen, 2014).

An increasing number of individuals rely on personal debt to sustain their livelihoods in a low-wage and unstable job market. The rise of personal debt is driven by neoliberal policies that sustain low-wage labour markets and transfer

financial risks to individuals. The study underscores the need to recognize debt's broader political, economic, and health implications, challenging traditional views that fail to address its systemic roots (Walker, 2011).

2.2.2 Peer Influence

Peer influence is common in daily life. It contains ubiquitous features and will occur anytime and anywhere. Peer influence occurs when individuals adopt knowledge, behaviour, and attitudes from their friends based on what individuals see (Dusia et al., 2023). Depending on the group of friends, the adoption could be positive or negative.

Grohmann and Koch (2022) examined the impact of peer influence on borrowing behaviour, specifically in social comparison and peer information. In their research, they found two findings through their experiments: the students in the sampling are discouraged from debt-taking due to concern about 'social image,' while peer influence encouraged borrowing among the low-performing respondents in the experiment. Their study stated that there is an unexpected result that contradicts their initial hypothesis, the social comparison results in discouragement of debt-taking among the student population. The researchers believe that individuals may be avoiding showing more intelligence or being afraid of getting blamed for the failures of others. In contrast, peer influence had increased debt-taking among the low-performing respondents. This study highlighted the relationship between the complexity of peer influence on debt decisions.

Peer influence plays an important role in changing an individual's debt-borrowing behaviour, especially through social norms. Another research study from Santoso and Sulistyawati (2023) found that social norms have significantly influenced debt behaviour, as an individual is more likely to take on more debt when their social environment is supportive of borrowing. This study highlights that support from family, friends, and community will cause an individual to get stronger in debt. Social norms mean that the perception of a person who is considered significant to an individual will influence his or her decision on whether or not to do something. The authors applied the Theory of Planned Behaviour (TPB) to show that social norms not only affect the intention to take on debt but also lead to actual debt-borrowing decisions.

Moreover, Nurhaliza et al. (2024) also investigate about how the influence of friends will affect the individual's debt habits in Indonesia. The researchers applied a quantitative approach by using surveys and questionnaires to complete their research by targeting respondents in the age range of 18-35 years. In their study, they discovered that peer influence and debt patterns have a positive relationship. It indicates that people who are influenced by their social groups are more inclined to borrowing debt. This study highlights the importance of peer influences and social factors that will affect young adults' financial decisions.

However, a research study of Dusia et al. (2023) has a contrasting result for the effect of peer influence on debt behaviour. They found no significant effect of peer influence on borrowing debt behaviour. It is because the questionnaire lacked specificity, offering only general information. For example, in the statement asking if respondents knew their friends used paylater, it was unclear whether this influenced the respondents' own usage, limiting the ability to capture real behavioural relationships. The study also argues that their

respondents (the millennial generation) can manage their borrowing by using pay later wisely and responsibly to control their finances. This study contrasts with other studies that highlight peer influence as a major factor in debt accumulation. This study was also limited to the millennial generation, and the authors suggested future research on Generation Z, as Generation Z is increasingly interested in the services of buy now pay later when shopping. This recommendation aligns with the focus of our study, which examines the debt among Generation Z. Therefore, the first hypothesis in this study is:

H_0: Gen Z Malaysians' personal debt accumulation and peer influence do not have a significant relationship.

H_1: Gen Z Malaysians' personal debt accumulation and peer influence have a significant relationship.

2.2.3 Financial Literacy

Financial literacy is crucial for everyone. It assists people in achieving their financial goals, whether big or small. In the early years, the research from Marcolin and Abraham (2006) stated claimed that the ability to make well-informed decisions about the use and management of money is the definition of financial literacy. Similarly, Asif (2023) also pointed out that the definition of financial literacy is the knowledge, skills, and confidence needed to make responsible financial decisions for the future. However, Brascoupe et al. (2013), cited by Refera et al. (2016), mentioned that there are more studies conducted on financial literacy, and most of their surveys in different nations show that

low levels of financial literacy will be an obstacle to personal financial decision-making. Therefore, enhancing financial literacy is important for assisting people in making informed financial decisions and reaching their long-term financial stability.

According to Rachman and Dewi (2024), financial literacy has a significant impact on debt increase. They are using quantitative methods and sampling methods to investigate the influence of financial literacy and other important factors and the locus of control on financial management behaviour in Generation Z in Bandung City, Indonesia. After the analysis, the study found that the financial literacy of Bandung City students is considered less literate, as the students only recognise the financial goods and services but do not use them wisely. The authors conclude that financial literacy is positively linked to financial management behaviour. Among Gen Z, lower levels of financial literacy tend to correspond with higher levels of debt.

Another study by Artavanis and Karra (2020) highlighted the impact of financial literacy on student debt. In the study, they used a large sampling of students in Massachusetts, United States, to investigate the relationship between the financial literacy level of those students and how it affects student loan repayment. The findings indicate that students with lower financial literacy are more likely to underestimate their future loan repayments. As a result, students are facing higher debt burdens as they are unable to repay their debt.

However, Rahman et al. (2020) have a different point of view from previous literature. In their study, they discovered that there is no statistically significant relationship between financial literacy and indebtedness. They used the partial least square (SmartPLS) technique to find out the research hypothesis on the

sampling in the Klang Valley area, Malaysia. Rahman et al. (2020) conclude that financial literacy is not the main factor influencing indebtedness. Instead, they argue that behavioural factors play a more important role in causing indebtedness. Therefore, this study introduced the second hypothesis, which is:

H_0: Gen Z Malaysians' personal debt accumulation and financial literacy do not have a significant relationship.

H_2: Gen Z Malaysians' personal debt accumulation and financial literacy have a significant relationship.

2.2.4 Spending Behaviour

Spending behaviour can be defined as the behaviour of consumers to spend available money and money from debit cards and credit cards to satisfy the

ir wants and needs (Kumar et al., 2022). Every individual has a unique spending behaviour that varies depending on their life circumstances (Xiang et al., 2022). It depends on the people's religion, race, background, place of living, and ethics. Spending behaviour consists of different patterns, such as compulsive buying and impulse buying, and it is linked to emotional and psychological states (Cachón-Rodríguez et al., 2024).

Chia et al. (2024) investigated how spending patterns mediate the connection between financial socialization (which includes parental and peer influence), financial awareness, and reaction to indebtedness among tertiary students in

Malaysia. In this study, their findings show that spending behaviour significantly influences how an individual handles their debt. They conclude that positive spending behaviour will be aligned with better management of debt. Furthermore, the study also confirmed that poor spending behaviour, such as impulsive or unplanned expenditures, can cause financial burden among the younger generations. Overall, spending behaviour is a crucial factor influencing personal debt accumulation, especially for young people.

Maccarrone-Eaglen et al. (2020) explored the characteristics of compulsive buying behaviour by using a behavioural segmentation approach. This study takes a quantitative approach to analyzing compulsive behaviour among young consumers, using surveys and questionnaires to approach the respondents. Their respondents are more focused on individuals who are below 34 years old. Through the survey, they found that individuals with higher levels of compulsive buying tendencies use their credit cards more frequently and are more likely to experience negative emotions after post-purchase. These findings show that uncontrolled spending behaviour will significantly contribute to an individual's debt burden, especially in the younger generation.

Moreover, Khandelwal et al. (2021) studied the relationship between compulsive buying behaviour and credit card indebtedness. The study has shown how a type of spending behaviour will affect the consumer and cardholders. They found that individuals who engage in excessive spending are more likely to accumulate higher debt levels. Besides, they also mentioned that individuals who have strong financial knowledge and retention-time money attitudes can manage their debt by lowering their compulsive buying levels. Therefore, this study has provided the third hypothesis:

H_0: Gen Z Malaysians' personal debt accumulation and spending behaviour do not have a significant relationship.

H_3: Gen Z Malaysians' personal debt accumulation and spending behaviour do have a significant relationship.

2.2.5 Social Media

Social media advertising plays a key role in shaping a positive and relaxed attitude towards borrowing, which contributes to significant personal debt. Through persuasive messaging and appealing visuals, advertisements portray debt as a manageable, everyday solution rather than a financial burden. This normalizes borrowing, making it seem easy and even desirable (Czarnecka & Mogaji, 2020). Advertisers use emotional, rational, and informational appeals through various media to normalize debt and present it as an acceptable everyday choice (Arli, 2017).

Buy Now, Pay Later (BNPL) services have evolved from simple credit tools into platforms for managing overall personal finances. With attractive advertisements, easy-to-use apps, and language that downplays debt, they appeal strongly to young people. However, this gamified approach to borrowing has raised concerns about misleading users, promoting overspending and increasing debts (Threadgold et al., 2025). Furthermore, credit card advertisements play a direct role in encouraging consumer spending, which can lead to increased debt. Aggressive marketing strategies often promote easy

access to credit without emphasizing the financial risks, resulting in rising late fees, growing debt levels, and even bankruptcy. These ads are carefully tailored to different audiences, using specific branding techniques to attract potential cardholders (Choi, 2004).

Personal loan advertisements on platforms such as YouTube and Instagram, which emphasize features like instant approval and accessible credit, play a significant role in encouraging impulsive borrowing behaviours and spreading misinformation (Smrithi & Selvi, 2024). These ads, often glamorized and endorsed by influencers, heighten the appeal of borrowing by leveraging emotional triggers and the desire to conform to lifestyle pressures prevalent on social media (Cao, 2024).

Pranata and Salehudin (2024) highlight that individual aged 18 to 27 are especially susceptible to such advertisements due to the perceived convenience and urgency they convey, which intensifies impulsive borrowing tendencies driven by emotional appeals. Additionally, the concept of "money dysmorphia," amplified by social media platforms, exacerbates these issues by distorting Gen Z's perception of financial norms. Constant exposure to idealized lifestyles fosters pressure to replicate such standards, prompting impulsive spending and borrowing to align with curated online imagery, ultimately escalating levels of personal debt (Hegde, 2024). Therefore, this study has provided the fourth hypothesis:

H_0: Gen Z Malaysians' personal debt accumulation and social media do not have a significant relationship.

H_4: Gen Z Malaysians' personal debt accumulation and social media have a significant relationship.

2.2.6 Psychological Factors

Understanding psychological factors is essential when analysing personal debt. While the overall debt level in a society is largely determined by economic inequality and social insecurity, which no psychological intervention can overcome, psychological contributors to debt problems, the mental and emotional impact of debt, and potential psychological strategies for debt relief can be identified and addressed (Lea, 2020).

A study conducted in England revealed that 8.5% of adults were in debt. Among them, 38% were diagnosed with a common mental disorder (CMD), nearly three times the prevalence observed in individuals without debt (13.9%). Socioeconomic and demographic factors, such as being young, female, unmarried, unemployed, or living in rented housing, were associated with a higher likelihood of CMD. Multivariable logistic regression analysis confirmed that debt was the strongest predictor, with an odds ratio of 2.83 (Meltzer et al., 2013).

Maria and Tatiana (2018) highlighted the significant role of psychological factors in debt management. Personality traits influence repayment strategies, ultimately affecting financial outcomes. For instance, individuals with low openness and high impulsivity tend to make poor financial choices, exacerbating their debt burden. Similarly, risk-takers may engage in aggressive financial strategies that contribute to further debt accumulation. Additionally, some repayment strategies prioritize reducing the number of debts over minimizing total debt, leading to inefficiencies. These findings emphasize the importance of integrating psychological considerations into financial education

and debt management initiatives to enhance financial literacy and provide targeted support for vulnerable individuals.

Özşahin et al. (2019) investigated debt repayment behaviour in Turkey, identifying distinct traits among regular and irregular payers. Conscientiousness, long-term orientation, an internal locus of control, and rational decision-making characterized those who consistently met their debt obligations. In contrast, irregular payers displayed traits such as irresponsibility, short-term thinking, an external locus of control, and irrational financial choices. The study also highlighted unique cultural influences, the role of collectivist values, and fear of social sanctions in motivating timely repayment, a pattern that differs from findings in other countries.

A study from Ottaviani and Vandone (2011) examined the role of psychological traits in debt accumulation. Their broader framework included somatic markers and impulsivity, suggesting that these factors influence not only the likelihood of holding debt but also the type of debt, including secured and unsecured. In a more focused analysis, they found that impulsivity was significantly associated with increased unsecured debt, even when controlling for traditional economic variables, highlighting the strong influence of behavioural traits on borrowing behaviour.

Cognitive biases, which are an integral part of psychological factors, significantly contribute to debt accumulation. The convenience of credit cards diminishes the psychological impact of spending, encouraging impulsive purchases and reducing critical financial evaluation, ultimately increasing debt (Mugichkova, 2015). In addition, debt situations tend to heighten risk-taking behaviour due to cognitive distortions such as overconfidence and optimism

bias. Mental accounting further shapes spending patterns, as individuals often separate money into distinct "accounts" rather than considering their overall financial status (Hamid, 2025). Therefore, this study has provided the fifth hypothesis:

H_0: Gen Z Malaysians' personal debt accumulation and psychological factors do not have a significant relationship.

H_5: Gen Z Malaysians' personal debt accumulation and psychological factors have a significant relationship.

2.3   Theoretical Framework

Independent Variables   Dependent Variable
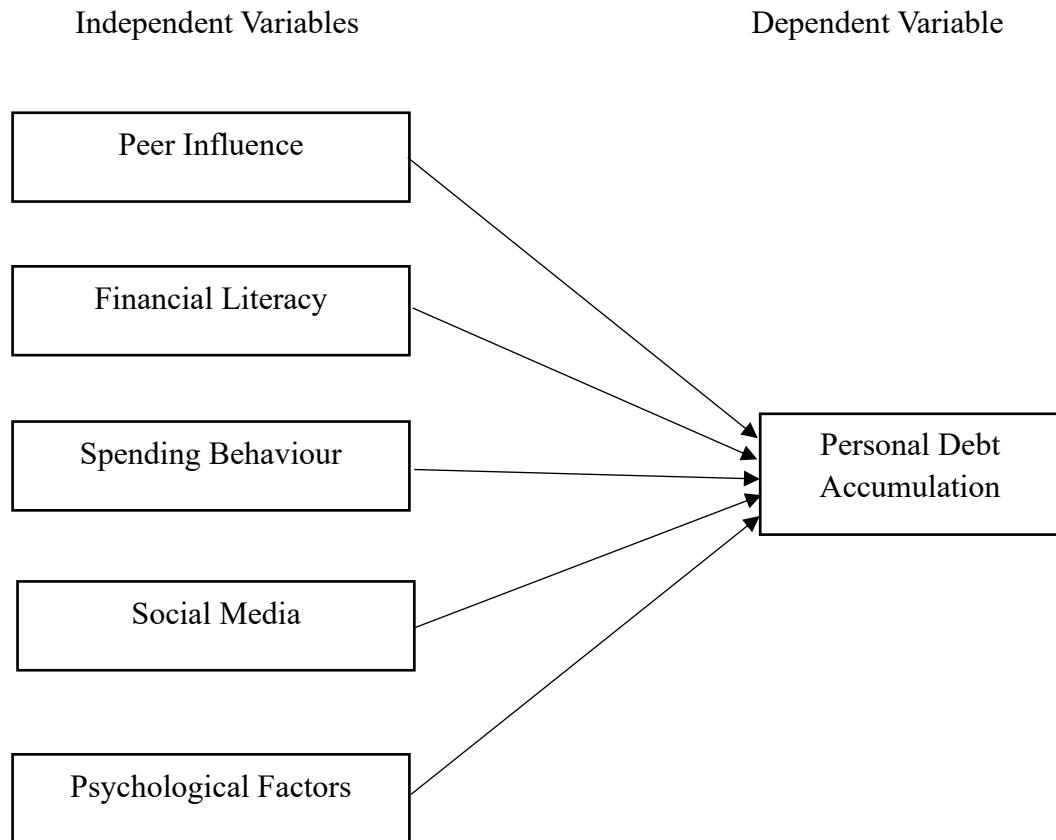
Based on the theoretical framework discussed in the previous section, a theoretical framework is developed to examine the key factors influencing personal debt accumulation among Generation Z in Malaysia. This study focuses on individuals aged 21 to 28, addressing the rising concern of personal debt among young Malaysians. The theoretical framework identifies five independent variables, which are peer influence, financial literacy, spending behaviour, social media, and psychological factors, as potential determinants of personal debt. Previous studies suggest that these factors significantly impact debt accumulation, shaping financial behaviour and decision-making among Generation Z. Accordingly, five hypotheses are formulated based on the theoretical framework to evaluate the relationships between these independent variables and personal debt. These hypotheses will help assess the extent to which each factor contributes to the increasing debt burden among young Malaysians.

2.4 Conclusion

This study has reviewed the key factors influencing personal debt accumulation among Generation Z in Malaysia, focusing on individuals aged 21 to 28. It explores the impact of peer influence, financial literacy, spending behaviour, social media, and psychological factors on debt levels among young Malaysians. Additionally, the study discusses relevant theoretical frameworks from prior research, providing a foundation for understanding the dynamics of personal debt. Furthermore, the theoretical framework and corresponding hypotheses have been developed to guide the study, ensuring a structured approach to analysing the relationships between these factors and personal debt.

CHAPTER 3: METHODOLOGY

3.0   Introduction

The methodology is employed in the study. An outline of the research design is presented first and followed by a description of the methodology used for data collecting. Subsequently, the study's sampling design and data collection methods are discussed. Furthermore, the outline of the suggested data analysis tools is provided.

3.1   Research Design

The framework for organising and carrying out research is known as research design for ensuring a systematic approach to collecting and analysing data (Mohd et al., 2022). Mixed methods, qualitative, and quantitative research designs are the three primary categories. In this study, a quantitative research design using a survey method was employed to get numerical data from respondents. The quantitative approach is appropriate for identifying and analysing the relationships between variables – peer influence, financial literacy, spending behaviour, social media, and psychological factors affecting personal debt accumulation. According to Apuke (2017), quantitative research is effective in testing hypotheses and identifying trends within social science research. Additionally, surveys enable efficient data collection from a large population, thereby enhancing the generalisability of the findings (Rahman, 2016).

3.2   Sampling Design

3.2.1   Target Population

People who can meet the qualifying requirements for participation make up the study's target group. This research examines the factors that contribute to individual debt accumulation, focusing on Gen Z in Malaysia. This demographic is increasingly facing debt burdens and concerns related to bankruptcy.

For the purpose of this study, Gen Z is defined as the individuals who were born between 1997 and 2012 (Wandhe, 2024). However, to narrow the scope, the study will target the respondents between the age of 21 to 28 who were born between 1997 and 2004. This selection excludes younger Gen Z members, as they are still in secondary school and generally do not have significant financial obligations.

3.2.2   Sampling Area

This study will be conducted in Malaysia. The targeted area will include 3 states and the Federal Territory. The states are Johor, Selangor, and Penang.

3.2.3 Sampling Technique

One definition of a sampling technique is the procedure of selecting a sample of a population from an individual or a large group to serve a specific research objective (Makwana et al., 2023). There are two primary categories of sampling techniques: probability sampling and non-probability sampling (Bhardwaj, 2019). Non-probability sampling will be used as the sample method in this investigation. Convenience, purposive, snowball, and quota sampling are examples of non-probability sampling. Considering the scope of the targeted respondents and geographical coverage, purposive sampling will be employed for this study. In purposive sampling, participants are chosen based on the judgment of the researcher, who determines which individuals will be most useful for providing the required data (Ahmed, 2024).

Gen Z is the intended audience for this study, who are currently residing in Selangor, Federal Territory, Johor, and Penang. Before distributing the questionnaire, a screening process will be conducted prior to ensure that only eligible respondents are selected. The screening process will be conducted via direct messaging on social networking sites like Instagram and RedNote (Xiaohongshu). First, the individuals will be asked to ensure their age group and state of residence. Then, an online questionnaire is used as the sampling method to gather the data and responses for this investigation. Considering the challenge of reaching the widespread target respondents across states, an online questionnaire will be used to collect responses from Gen Z individuals.

3.2.4 Sample Size of the Study

The sample size for this study will be determined based on Bukhari (2021), who referenced the Krejcie and Morgan Table for sample size determination. Table 3.1 shows the guidelines for selecting an appropriate sample size to show the population. Since the population of Gen Z in Malaysia exceeds 100000 individuals, this study will use a minimum sample size of 384 respondents as recommended in the Table 3.1.

Table 3.1

Krejcie and Morgan Table

Population Size	Sample Size
15000	375
20000	377
30000	379
40000	380
50000	381
75000	382
100000	384

Note: From Bukhari, S. A. R. (2021). *Sample size determination using Krejcie and Morgan table.* Research Gate.

3.3 Data Collection

The methodical process of obtaining and quantifying information about specific variables to address research questions, test hypotheses, and assess outcomes is known as data collecting. (Kabir, 2016). The choice of data collection methods is crucial as it depends on the methodology and analytical approach used by the researcher, which affects how the data is evaluated and what conclusions can be made (Paradis et al., 2016). This study focuses on Generation Z Malaysians aged 21 to 28, a demographic identified as particularly vulnerable to rising personal debt. Research by Mahmudah et al. (2021) and Husna (2023) highlights Gen Z's strong engagement with digital financial services, such as online loans and "buy now, pay later" options, making them an important group for exploring factors contributing to debt accumulation.

3.3.1 Primary Data

To accomplish the goal of the study, primary data will be employed. Primary data is used because it contains direct, firsthand information from respondents, making it more accurate and relevant to the study. Using questionnaires allows for the collection of specific data relevant to the study's aims (Tran & Khuc, 2021). The main technique for gathering data from respondents was the employment of questionnaires. This approach aligns with the results of Dusia et al. (2023) and Yoon (2012), who conducted similar studies on debt burdens. Research from Ajayi (2023) mentions that data must be collected and organised prior to analysis. Questionnaires are an important approach for collecting 'primary data' because they allow researchers to obtain unique and detailed information directly from respondents. This strategy ensures that the data

matches the research objectives and delivers useful insights. Although the procedure takes time and effort, it provides deeper insights into personal debt, particularly when such information is unavailable from other sources (Tran & Khuc, 2021).

3.3.2 Research Instrument

Research instruments are essential tools used by researchers to collect data, and their selection depends on factors such as structure, purpose, nature, and availability. Selecting an appropriate instrument is a complex process that requires careful consideration, especially in ensuring its validity and reliability before implementation (Sathiyaseelan, 2015).

To support this process, using research instruments serves as a practical companion to The Researcher's Toolkit, offering guidance on designing and applying research tools, particularly for work-based learners and students across academic levels (Birmingham & Wilkinson, 2003).

The 5-point Likert scale is one frequently used instrument. This enables participants to express their level of agreement or disagreement with a message. It has been effectively applied in various contexts, such as evaluating pulmonary congestion and predicting adverse events in heart failure outpatients (Weber et al., 2014). These semantic differences highlight the need for greater clarity in Likert scale design. As Joshi et al. (2015) emphasize, survey instruments must align with the study's objectives and conceptual framework to ensure data quality and appropriate statistical analysis.

3.3.2.1 Questionnaires

In this form of study, the researcher designs the questions, determines their order, and organizes the responses. If participants respond as intended, the researcher maintains full control over both the process and the results. This researcher-led approach includes strategies for improving response rates before introducing web-based questionnaires (Birmingham & Wilkinson, 2003).

With advancements in technology, tools like Google Forms have become valuable for data collection in educational and social research (Ruliyanti et al., 2021). For instance, Astuti and Faturohman (2024) conducted a study on the relationship between Generation Z's demographic profiles in Indonesia and their perceptions and behaviors toward debt using both offline and online Google Forms distributed through individual networks and social media.

The Google Forms survey questionnaire for this study is organised into two sections, accompanied by a cover layout. The questionnaire is structured into three sections, which are demographic data, dependent variables, and independent variables. Section A collects demographic data including gender, age, race, location, education level, and income level. Sec B includes five questions related to the dependent variable, personal debt accumulation. Sec C consists of 20 questions categorized under five key factors influencing personal debt accumulation: peer influence, financial literacy, spending behaviour, social media, and psychological factors.

3.3.2.2 Pre-Test

The questionnaire was reviewed by Mr. Woo Kok Hoong and Puan Noor Azizah binti Shaari, two lecturers at Universiti Tunku Abdul Rahman, prior to being sent to Gen Z Malaysians.

3.3.2.3 Pilot Test

A pilot study is a modest size feasibility investigation to test various parts of the procedures planned for a more thorough and extensive examination (Arain et al., 2010; Lowe, 2019). Its primary goal is to assist researchers in avoiding significant errors in a comprehensive investigation rather than to provide answers to research issues, which could be costly in terms of time and resources (Lowe, 2019).

In the initial phase of this research, a pilot study will be conducted with 30 Malaysian Generation Z individuals aged 21 to 28 to explore the key factors influencing personal debt accumulation. This target group has been selected in response to the growing concern over rising personal debt among young Malaysians. The aim is to evaluate the effectiveness of the research methodology. Data will be gathered using a Google Forms survey that should take around ten minutes to complete.

After data collection, SPSS version 31.0 will be used to check for any inconsistencies and to evaluate the reliability and accuracy of the questionnaire.

Cronbach's Alpha, as recommended by Fatoki (2012), will be used to measure
the internal consistency of the responses.

3.3.3 Construct Measurement

According to Shossain (2020), reviewing developed measures early on allows
researchers to ensure that data gathering procedures are properly linked to the
specific study topics.

3.3.3.1 Scale of Measurement

In this study, ordinal, nominal, and interval scales are applied in the survey
questionnaires, as measurement scales are essential for accurately defining and
collecting variables within a dataset (Shukla, 2023).

3.3.3.2 Measurement Items for Questionnaire

Table 3.1:

Measurement Items for the Dependent Variable's Questionnaire

Dependent Variable	Questions	Source

| Personal Debt Accumulation | • I used credit to purchase the things I want.
• I feel uncomfortable with having debt.
• I regularly monitor and review my debt obligations.
• I compare loan products among different lenders before the final decision to borrow
• I consider borrowing reasonable if I can repay both principal and interest.
• I think that the increase in costs can lead to more debt. | • Maraz et al. (2015)
• Almenberg et al. (2018)
• Fernández-López et al. (2023)
• Abdullah et al. (2022)
• Dusia et al. (2023) |

Table 3.2:

Measurement Items for the Independent Variable's Questionnaire

Independent Variable	Questions	Source
Peer Influence	• I always discuss financial management with my friends. • I am more likely to consider debt when I see my friends doing so successfully. • When I take on debt, my friend's opinion is important to me.	• Dusia et al. (2023) • Javadi et al. (2012)

	• I feel pressured to match the spending habits of my social circle. • I discuss financial decisions with my friends before making significant purchases. • I have purchased items because my peers recommended them.	
Financial Literacy	• I think an increase in food prices will not reduce purchasing power. • I understand that a balance sheet will not show my financial status. • I believe that a credit card holder can spend without limit. • I believe that owing a credit card will increase my purchasing power. • I think that the longer the repayment period, the lower the overall cost of a loan. • I understand that buying goods on credit will not reduce purchasing power in the future.	• Khoong et al. (2022)
Spending Behaviour	• I often make purchases without prior planning. • I never save money for emergencies or future.	• Yunchao et al. (2020)

	• I often buy items I didn't need just because they were in the sale or had a promotion. • I believe my debt is mainly due to lack of financial control. • I never set a monthly budget. • I often borrow to balance my personal budget.	• Abdullah et al. (2022)
Social Media	• I find it attractive in what loan ads promise. • I make impulsive purchases to match the lifestyle portrayed by social media. • I am likely to use 'Buy Now, Pay Later' services after seeing them promoted on social media. • I feel that 'Buy Now, Pay Later' options encourage me to buy things I cannot afford immediately. • I think social media ads make borrowing money easier and more accessible. • I tend to overspend after seeing products or services endorsed on social media.	• Zhao et al. (2022) • Lin (2023). • Soong et al. (2024) • Cao et al. (2024)
Psychological Factors	• I am not confident in managing debt.	• Abdullah et al. (2022)

	- I am not confident that my effectiveness in handling debt situations. - I am not confident that my debt repayment plans will always go as expected. - I tend to purchase non-essential items to reward myself when I am feeling down. - I felt frustrated when I was unable to make a purchase. - I tend to borrow money when I am stressed about my financial situation.	Maraz et al. (2015)

3.3.4 Data Processing

Data processing involves transforming raw data through organization, classification, and adjustment to uncover meaningful insights and detect patterns or connections that support problem-solving (Huang, 2019). To ensure accuracy during the transformation of raw data into meaningful insights, data processing must be conducted with precision and attention to detail. In this study, data analysis is carried out using a specialized software SPSS 31.0, which is widely utilized for processing and analyzing data.

3.3.4.1 Data Checking

It is essential for data checking to prevent instances where certain responses significantly differ from the overall average of a variable or population. In this study, data validation is performed to ensure the accuracy and reliability of all questionnaire responses. Issues such as missing values, incomplete entries, or contradictory answers could compromise the validity of the data (Barchard & Verenikina, 2013).

3.3.4.2 Data Editing

The procedure for reviewing and modifying collected data to ensure accuracy, completeness, and logical consistency before analysis is known as data editing. It helps identify errors such as missing values, incorrect entries, or inconsistencies across responses. The editing process may be conducted manually or facilitated by specialized software tools. As emphasized by Nahler (2009), effective data editing is fundamental to ensuring the validity of a dataset and preparing it for subsequent statistical evaluation and processing.

3.3.4.3 Data Coding

The practice of allocating numbers or symbols to different variable categories in computer analysis is known as data coding. The answers are coded as follows for each question in Section A (Demographic Information):

Table 3.3:

Datta Coding

Q1	Gender	"Male" = 1
		"Female" = 2
Q2	Age	"21" = 1
		"22" = 2
		"23" = 3
		"24" = 4
		"25" = 5
		"26" = 6
		"27" = 7
		"28" = 8
		"Other" = 9
Q3	Location	"Pulau Pinang" = 1
		"Selangor" = 2
		"Wilayah Persekutuan (e.g., Kuala Lumpur, Labuan, and Putrajaya)" = 3
		"Johor" = 4
Q4	Race	"Malay" = 1
		"Chinese" = 2
		"Indian" = 3
		"Other" = 4

Q5	Marital Status	"Single" = 1
		"Married" = 2
		"Other" = 3
Q6	Education Level	"No formal education" = 1
		"Primary school" = 2
		"Secondary school" = 3
		"Diploma/Certificate" = 4
		"Bachelor's degree" = 5
		"Master's degree" = 6
		"Other" = 7
Q7	Current Employment Status	"Employed" = 1
		"Unemployed" = 2
		"Student" = 3
Q8	Income Level	"No income" = 1
		"RM2,000 or below" = 2
		"RM2,001 – RM4,000" = 3
		"RM4,001 – RM6,000" = 4
		"RM6,001 and above" = 5
Q9	How frequently do you accumulate new debt?	"Every week" = 1
		"Every month" = 2
		"Every 6 months" = 3
		"More than once a year" = 4

		"Rarely or only in emergencies" = 5
Q10	Types of Debt	"Housing Loan" = 1 "Car Loan" = 2 "Student Loans (e.g., PTPTN)" = 3 "Credit Cards (e.g., CIMB Credit Card)" = 4 "Buy Now, Pay Later (BNPL) (e.g., SPayLater)" = 5 "Medical Loan" = 6 "Other" = 7
Q11	How do you usually repay your debt?	"Monthly installment payments" = 1 "Lump sum payment (one-time payment)" = 2 "Refinancing or consolidating debts" = 3 "Through credit card balance transfers" = 4 "Paying off when I have sufficient funds" = 5 "Other" = 6

In Section B, the coding system corresponds to the 5-point Likert scale responses, such as "Strongly Disagree (1)," "Disagree (2)," "Neutral (3)," "Agree (4)," and "Strongly Agree (5). This consistent coding approach ensures uniformity in data interpretation across all items.

3.3.4.4 Data Transcribing

The final step in the process is data transcription, which involves converting raw data into structured and meaningful information. Throughout this stage, SPSS version 31.0 is utilized to support the data processing activities.

3.4   Proposed Data Analysis Tool

IBM SPSS Statistics (version 31.0) will be applied to the examination of the study's data. SPSS is well-known for its wide-ranging capabilities in statistical software with descriptive statistics, reliability testing, inferential analysis, multiple linear regression, and normality testing. Its interface is very friendly, and SPSS is a robust program that can take large quantities of data, evaluate data, and conduct numerous in-depth statistical evaluations with great efficiency. It will be applied for coding, data cleaning, data analysis, and results presentation in charts and graphs as well as tables (Tumiran, 2023).

3.4.1 Descriptive Analysis

The massive data this study has generated needs to be organized and interpreted through descriptive analysis. It offers a pathway toward insight through applying statistical measures of mode, standard deviation, variance, range,

median, and mean, which highlight patterns, trends, and general distribution within the data (Mishra et al., 2019). By providing a general trend view, descriptive analysis prepares the ground for detecting relationships within the data that has been previously gathered. Without projecting future possibilities, this technique interprets available data to achieve logical conclusions based on prior evidence (Bush, 2020). Descriptive analysis is a method of data analysis that organizes, summarizes, and presents information in such a way that it outlines patterns and trends consistent with the fundamental characteristics of the dataset (Rawat, 2021).

3.4.2 Reliability Test

Reliability testing evaluates how consistently a research instrument measures a concept across different items or over time. One of the most used techniques for assessing internal consistency is Cronbach's alpha, which helps determine whether the items within a scale are reliably measuring the same underlying construct (Amirrudin et al., 2021). According to Daud et al. (2018), Cronbach's alpha less than 0.6 indicates the reliability level is poor. Schrepp (2020) suggests that a Cronbach's alpha above 0.60 indicates fair and acceptable reliability, showing the instrument is consistent and dependable. Furthermore, the reliability scores, with Cronbach's alpha values ranging from 0.70 to 0.80, are considered good (Taber, 2018). Values between 0.8 and 0.95 indicate high reliability. In summary, the closer Cronbach's Alpha value is to 1.0, the more reliable the measurement instrument (Malhotra et al., 2017).

Table 3.4:

Rule of Thumb on Cronbach's Alpha (α)

α	Reliability Level
Less than 0.60	Poor
Between 0.60 and 0.69	Fair
Between 0.70 and 0.79	Good
Between 0.80 and 0.94	Very Good

Note: From Malhotra, N. K., Nunan, D., & Birks, D. F. (2017). Marketing Research: an applied approach (Fifth edit). *UK: Pearson Education Limited.*

3.4.3 Multicollinearity

High correlation between predictor variables is known as multicollinearity (Shrestha, 2020). This high correlation can interfere with the model's the capacity to determine how each independent variable affects the dependent variable separately (Gujarati, 2021). Furthermore, Shrestha (2020) recommended using VI and Tolerance values to detect multicollinearity between variables. If the values fall within the acceptable range, multicollinearity is not a concern in the analysis. As explained by Kyriazos and Poga-Kyriazou (2023), a VIF value of 1 means there is no multicollinearity, values between 1 and 5 suggest moderate multicollinearity, while values from 5 to 10 reflect a strong correlation among variables. Thompson et al. (2017) explained that a tolerance value close to 1 indicates low multicollinearity among predictor variables. Kim (2019) noted that when the tolerance value falls below 0.1, it signals a serious multicollinearity issue among variables. Thus, the VIF and tolerance levels can be assessed using SPSS to detect multicollinearity

among variables, helping to identify any redundancy among independent variables (Sekaran & Bougie, 2016)

3.4.4 Normality Test

To assess normality, skewness and kurtosis are commonly analyzed. Skewness reflects how much a data set deviates from symmetry, while kurtosis indicates the extent to which data points cluster around the mean. Both are applied to evaluate how the data deviates from a normal distribution (Kim, 2013). In most cases, a normal distribution is presumed when the skewness is between ± 2 and the kurtosis is within the range of ± 7, particularly for sample sizes greater than 300 (Demir, 2022). Moreover, skewness in data can be identified through the use of a Q-Q plot paired with a normality test. Skewed data will show deviations from a straight line, forming a curve, while normally distributed data will closely follow a straight line (Lee, 2020). Furthermore, an alternative method involves using a histogram to examine data distribution. A symmetrical, bell-shaped curve typically reflects a normal distribution, while any irregularities in the shape signal a departure from normality (Pallant, 2020). According to Ghasemi and Zahediasi (2012), many parametric tests, including regression analysis, depend on the presumption that the data is distributed normally.. When this assumption is not met, the accuracy and reliability of the results may be compromised.

3.4.5 Inferential Analysis

Using sample data to test hypotheses, make predictions, and draw conclusions about a larger population is known as inferential analysis (Statistics, 2013). In this study, the associations between the 5 IV and a DV were investigated using the inferential analytic method of multiple linear regression analysis, which shed light on the interrelationships between these variables.

3.4.6 Multiple Regression Analysis

A statistical technique called multiple linear regression is used to look at the relationship between several independent variables and one dependent variable (Etemadi & Khashei, 2021). The Chi-Square test is used to assess the association between variables, which are peer influence (IV1), financial literacy (IV2), spending behaviour (IV3), social media (IV4), psychological factor (IV5), and personal debt accumulation (DV). Regression analysis is applied to identify variables, including peer influence (IV1), financial literacy (IV2), spending behaviour (IV3), social media (IV4), psychological factor (IV5), and forecast or influence personal debt accumulation (DV).

Equation of multiple regression model:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu$

Where:

Y= Personal Debt Accumulation

X1= Peer influence

X2=Financial Literacy

X3=Spending Behaviour

X4= Social Media

X5= Psychological Factor

μ = error term

$\beta 0$ = Intercept

$\beta 1, \beta 2, \beta 3, \beta 4, \beta 5$ = Coefficients of the independent variables

CHAPTER 4: DATA ANALYSIS

4.0   Introduction

This section presents the collected data results, which include descriptive analysis,
preliminary data screening, measurement scales, and inferential statistical analyses.
The data collection for the study was conducted over a period of three months, from
May 2025 to July 2025. A total of 626 responses were initially obtained; however, after
applying the necessary filtering criteria, 400 valid responses remained for analysis. The
Final Year Project questionnaire was distributed through multiple channels, including
online platforms such as WhatsApp, RedNote (Xiaohongshu) and Instagram. All
analyses were performed using SPSS version 31.0. The dataset contained no missing
values, as all questions in the survey were set as compulsory in Google Forms.

4.1   Descriptive Analysis

Demographic details from Section A of the survey are initially analyzed, followed by
descriptive evaluation of the responses from Sections B and C. To summarize the
findings, data tables and circle graphs are utilized in the following sections.

4.1.1 Demographic Profile

4.1.1.1 Gender

Table 4.1

Descriptive Data For Gender

Gender	No. of Respondents	Proportion
Male	195	48.75%
Female	205	51.25%
Total	400	100%
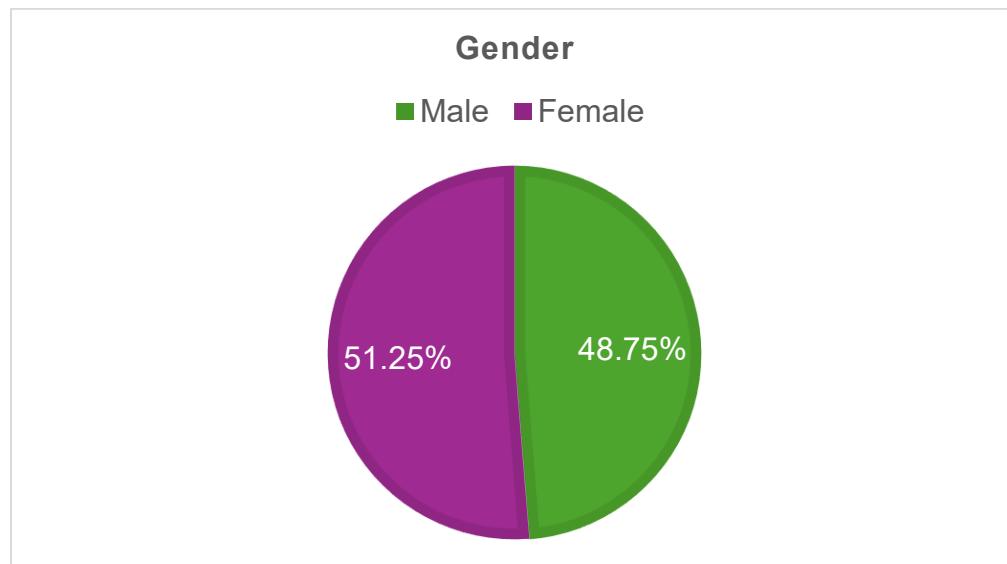
Figure 4.1. Gender descriptive data.

To begin with, respondents were categorized based on gender. As shown in Table 4.1, the survey collected responses from 400 Gen Z Malaysians, comprising 195 males and 205 females. This represents a gender distribution of 48.75% male and 51.25% female. Hence, it recorded a higher number of female individuals compared to male individuals.

4.1.1.2 Age

Table 4.2

Descriptive Data for Age

Age	Respondents Number	Proportion
21	48	12.00%
22	87	21.75%
23	42	10.50%
24	43	10.75%
25	45	11.25%
26	48	12.00%
27	36	9.00%
28	51	12.75%
Total	400	100%
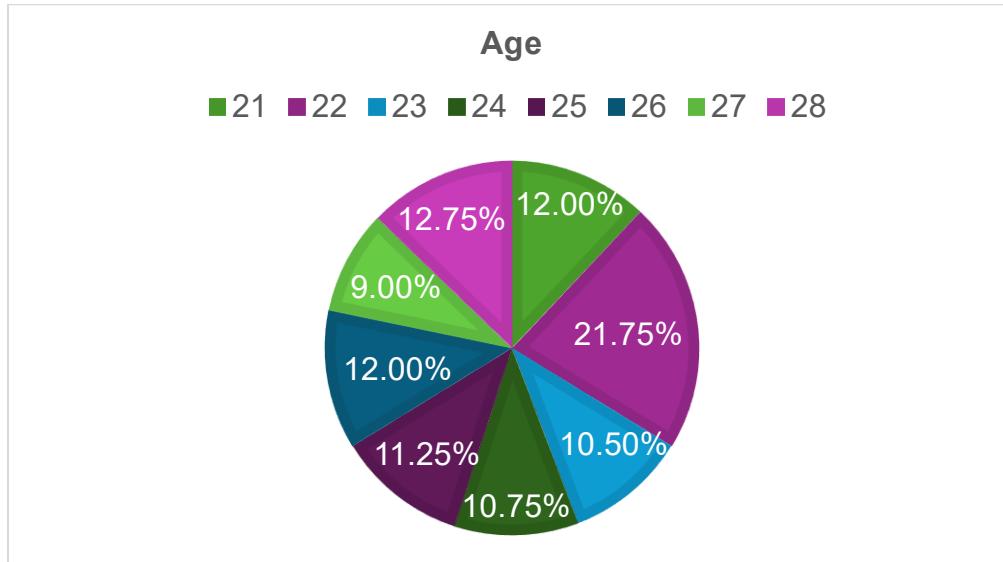
Figure 4.2. Age descriptive data.

Next, respondents were grouped according to their age. As shown in Table 4.2, the highest number of participants was 22 years old, totaling 87 individuals (21.75%), followed by 28-year-olds with 51 respondents (12.75%). Both the 21-year-olds and 26-year-olds groups had 48 participants each (12.00%), while those aged 25 and 24 contributed 45 (11.25%) and 43 (10.75%) respondents, respectively. Additionally, 23-year-olds made up 42 individuals (10.50%), and the smallest group was aged 27, comprising 36 respondents (9.00%). In total, the survey included 400 participants across the listed age groups.

4.1.1.3 Location

Table 4.3

Descriptive Data for Location

Location	No. of Respondents	Proportion
Selangor	109	27.25%
Johor	104	26.00%
Pulau Pinang	103	25.75%
Wilayah Persekutuan	84	21.00%
Total	400	100%
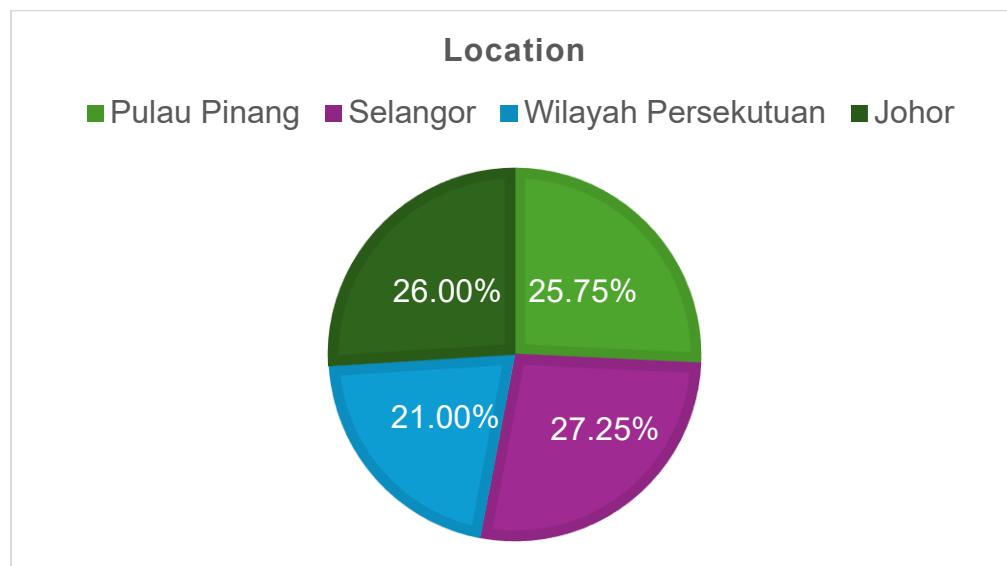
Figure 4.3. Location descriptive data.

Participants were also grouped based on the location. As illustrated in Table 4.3, most of the respondents were from Selangor, accounting for 109 individuals (27.25%). This was followed closely by Johor with 104 respondents (26.00%)

and Pulau Pinang with 103 respondents (25.75%). Meanwhile, 84 participants (21.00%) were from Wilayah Persekutuan.

4.1.1.4 Race

Table 4.4

Race Descriptive Data

Race	No. of Respondents	Proportion
Chinese	200	50.00%
Indian	105	26.25%
Malay	95	23.75%
Total	400	100%
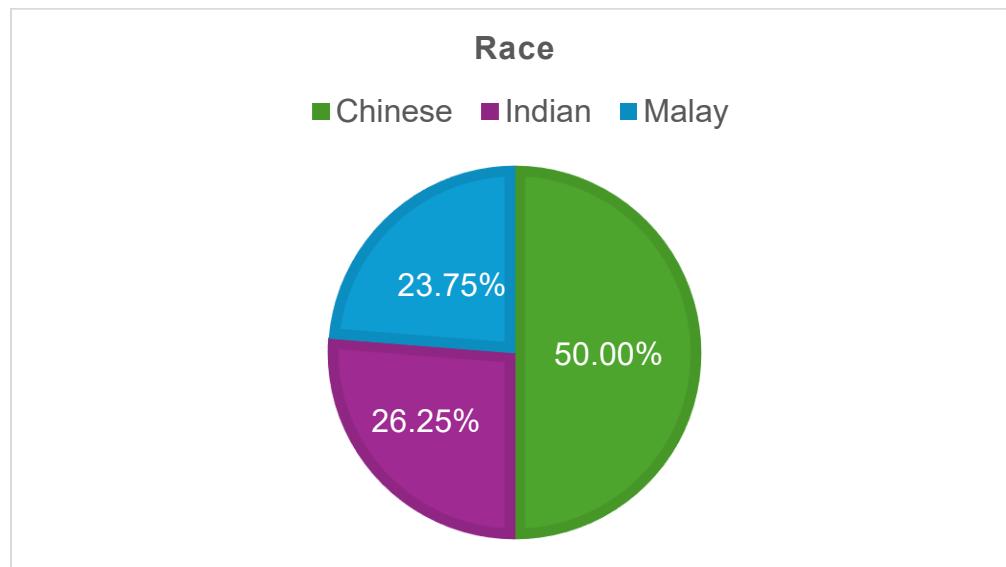
Figure 4.4. Race descriptive data.

Respondents were further classified according to their race. As shown in Table 4.4, half of the participants were Chinese, comprising 200 individuals (50.00%). Indian respondents made up 105 participants (26.25%), while Malay respondents accounted for 95 individuals (23.75%). Collectively, these racial groups represented the entire sample of 400 participants.

4.1.1.5 Marital Status

Table 4.5

Descriptive Data for Marital Status

Marital Status	No. of Respondents	Proportion
Single	263	65.75%

| Married | 137 | 34.25% |
| Total | 400 | 100% |
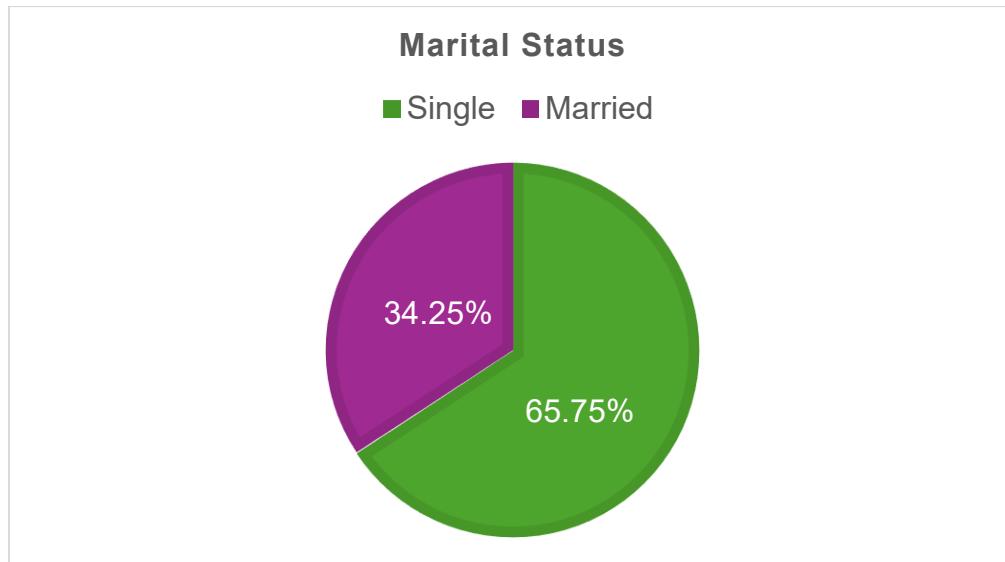
Figure 4.5. Marital Status descriptive data.

The survey also captured the marital status of the participants. As presented in Table 4.5, the majority of respondents were single, totaling 263 individuals (65.75%), while the remaining 137 participants (34.25%) were married. This distribution reflects a greater proportion of single individuals within the sample of 400 respondents.

4.1.1.6 Education Level

Table 4.6

Descriptive Data for Education Level

Education Level	No. of Respondents	Proportion
No formal education	14	3.00%
Primary school	19	5.00%
Secondary school	66	16.00%
Diploma/Certificate	47	12.00%
Bachelor's degree	216	54.00%
Master's degree	38	10.00%
Total	400	100%
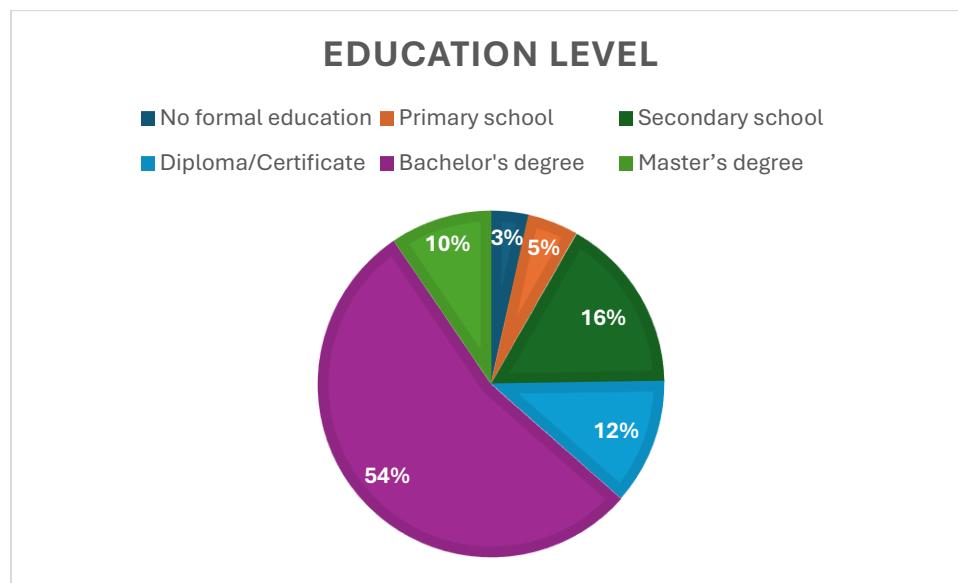
Figure 4.6. Education Level descriptive data.

Respondents were also classified according to their highest level of educational attainment. As illustrated in Table 4.6, the highest group of respondents held the bachelor's degree, accounting for 216 individuals (54.00%). This was followed by 66 respondents (16.00%) with a secondary school qualification, and 47 respondents (12.00%) who possessed a diploma or certificate. In addition, 38 respondents (10.00%) had attained a master's degree. A smaller number of participants reported lower educational levels, with 19 respondents (5.00%) having completed primary school and 14 respondents (3.00%) having no formal education. Altogether, these education levels represented the complete sample of 400 respondents.

4.1.1.7 Current Employment Status

Table 4.7

Current Employment Status Descriptive Data

Current Employment Status	No. of respondents	Proportion
Employed	208	52.00%
Unemployed	10	2.00%
Student	182	46.00%
Total	400	100%
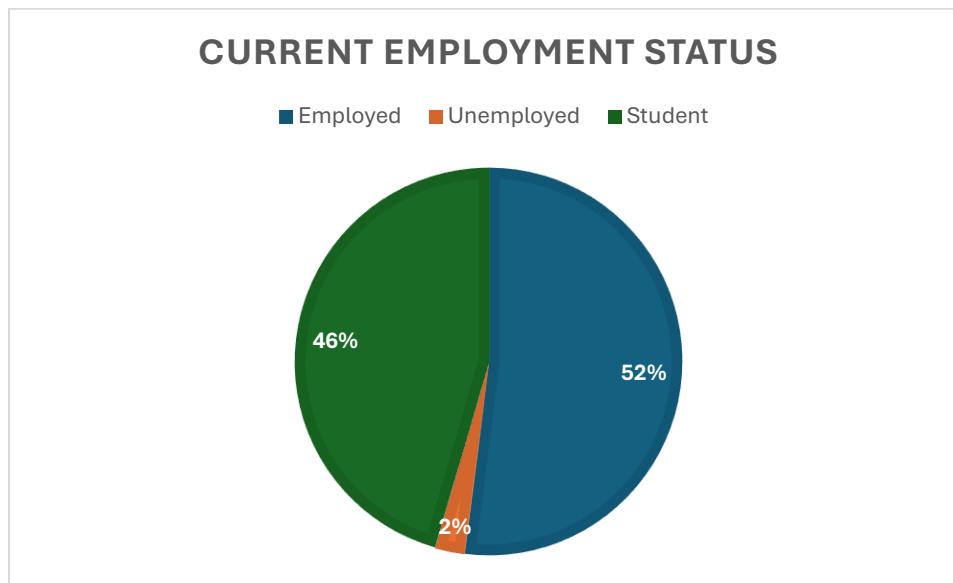
Figure 4.7. Current Employment Status descriptive data.

The respondents were also categorized based on their current employment status. As shown in Table 4.7, more than half of the respondents, totaling 208 individuals (52.00%), were employed at the time of the survey. This was followed closely by students, who made up 182 respondents (46.00%) of the sample. A small minority, comprising 10 respondents (2.00%), reported being unemployed. These employment categories collectively accounted for the entire sample of 400 respondents.

4.1.1.8 Income Level

Table 4.8

Descriptive Data for Income Level

Income Level	No. of respondents	Proportion

No income	128	32.00%
RM2,000 or below	95	24.00%
RM2,001 - RM4,000	114	28.00%
RM4,001 - RM6,000	45	11.00%
RM6,001 and above	18	5.00%
Total	400	100%
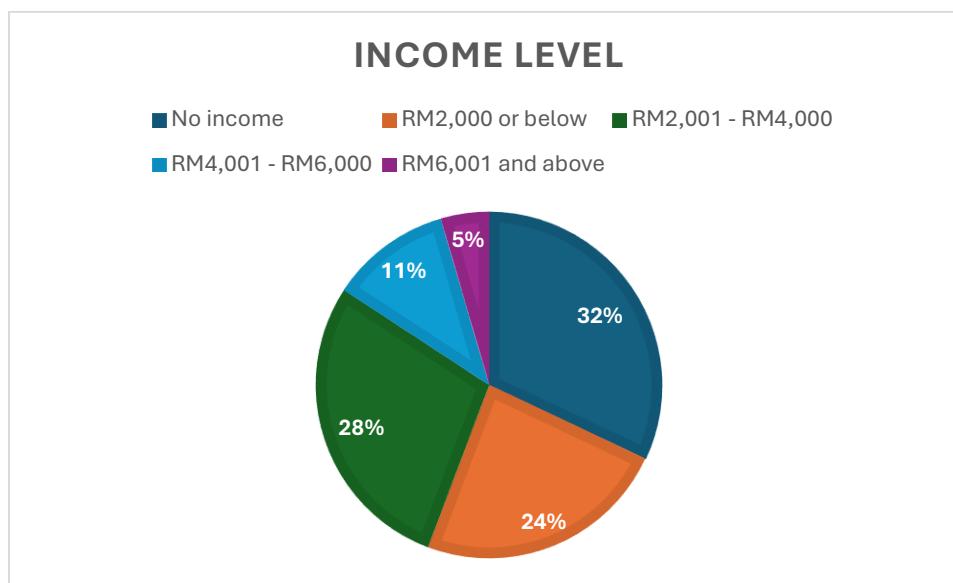
Figure 4.8. Income Level descriptive data.

In addition, the respondents were categorized according to their income levels. As presented in Table 4.8, the majority of respondents, comprising 128 individuals (32.00%), reported having no income. This was followed by 114 respondents (28.00%) who earned between RM2,001 and RM4,000. A total of 95 respondents (24.00%) indicated an income of RM2,000 or below.

Meanwhile, 45 respondents (11.00%) reported an income range of RM4,001 to RM6,000. Only a small portion of the sample, consisting of 18 respondents (5.00%), earned RM6,001 and above. Collectively, these income categories encompassed the full sample of 400 respondents.

4.1.1.9 Frequency of Accumulating New Debt

Table 4.9

Frequency of Accumulating New Debt Descriptive Data

Frequency of Accumulating New Debt	No. of respondents	Proportion
Every week	34	8.00%
Every month	146	37.00%
Every 6 months	76	19.00%
More than once a year	44	11.00%
Rarely or only in emergencies	100	25.00%
Total	400	100%
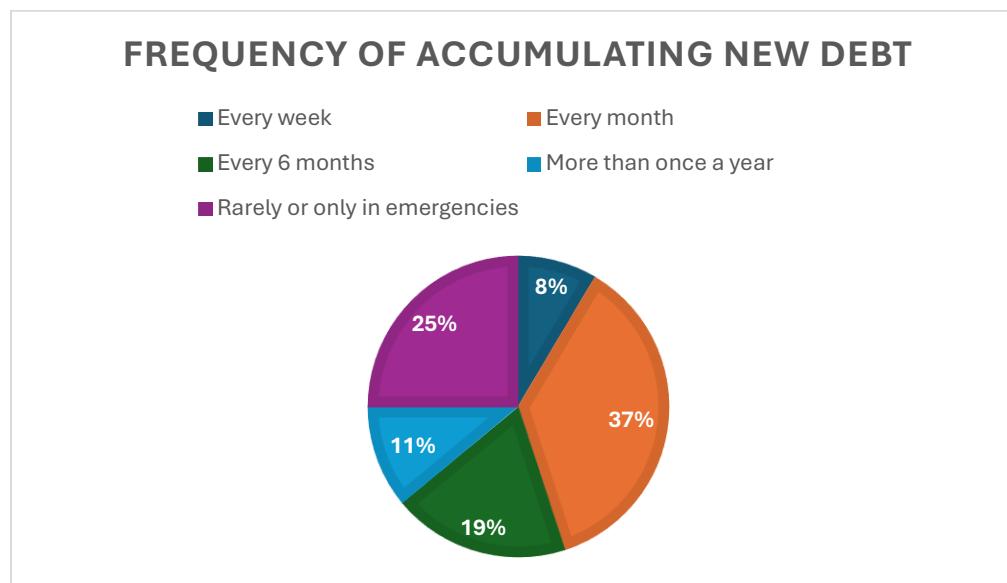
Figure 4.9. Frequency of Accumulating New Debt descriptive data.

Moreover, the respondents were analysed based on the frequency with which they accumulated new debt. As presented in Table 4.9, the largest proportion of respondents, totalling 146 individuals (37.00%), reported accumulating new debt on a monthly basis. This was followed by 100 respondents (25.00%) who indicated that they rarely accumulated debt or did so only in emergencies. Additionally, 76 respondents (19.00%) reported taking on new debt every six months, while 44 respondents (11.00%) accumulated debt more than once a year. A smaller group of 34 respondents (8.00%) reported accumulating new debt on a weekly basis. These frequency categories collectively represent the entire sample of 400 respondents.

4.1.1.10   Types of Debt Acquired

Table 4.10

Types of Debt Acquired Descriptive Data

Types of Debt Acquired	Frequency
Housing Loan	77
Car Loan	139
Student Loans	217
Credit Cards	175
BNPL	215
Medical Loan	60
Other	0
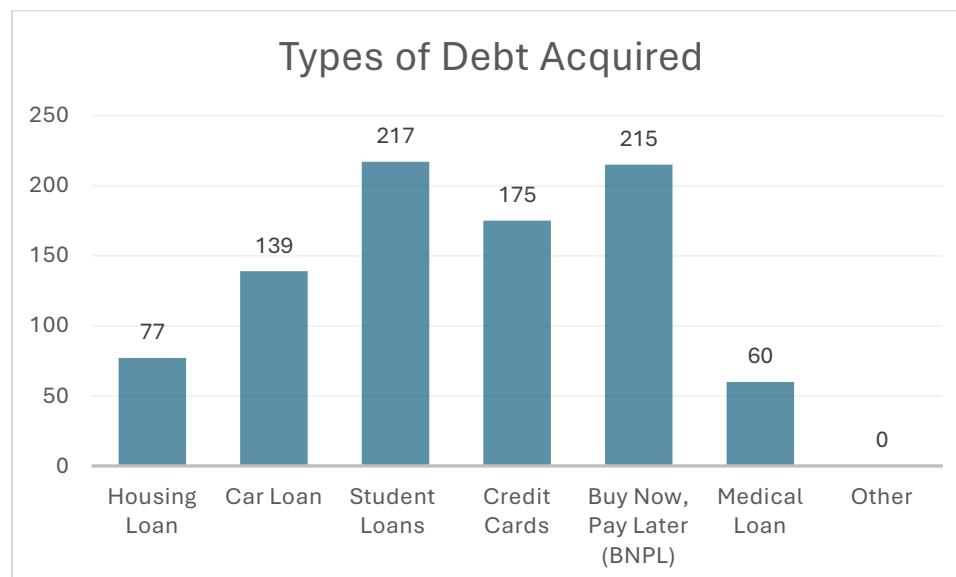
Figure 4.10. Types of Debt Acquired descriptive data.

The data in Table 4.10 outlines the types of debt acquired by the respondents. Student loans (n = 217) and Buy Now, Pay Later (BNPL) schemes (n = 215) were the most frequently reported. Credit card usage was also prevalent with 175 responses. Car loans were cited 139 times (16%), while housing and medical loans were reported 77 times and 60 times, respectively. Other types of debt not listed in the table were not reported by any respondent, with a recorded frequency of zero. These findings indicate that short-term and educational debts are the predominant financial obligations among the entire sample of 400 respondents.

4.1.1.11   Preferred Loan Repayment Options

Table 4.11

Preferred Loan Repayment Options Descriptive Data

Preferred Loan Repayment Options	Frequency
Monthly installment payments	280
Lump sum payment (one-time payment)	118
Refinancing or consolidating debts	74
Through credit card balance transfers	82
Paying off when I have sufficient funds	144
Other	0
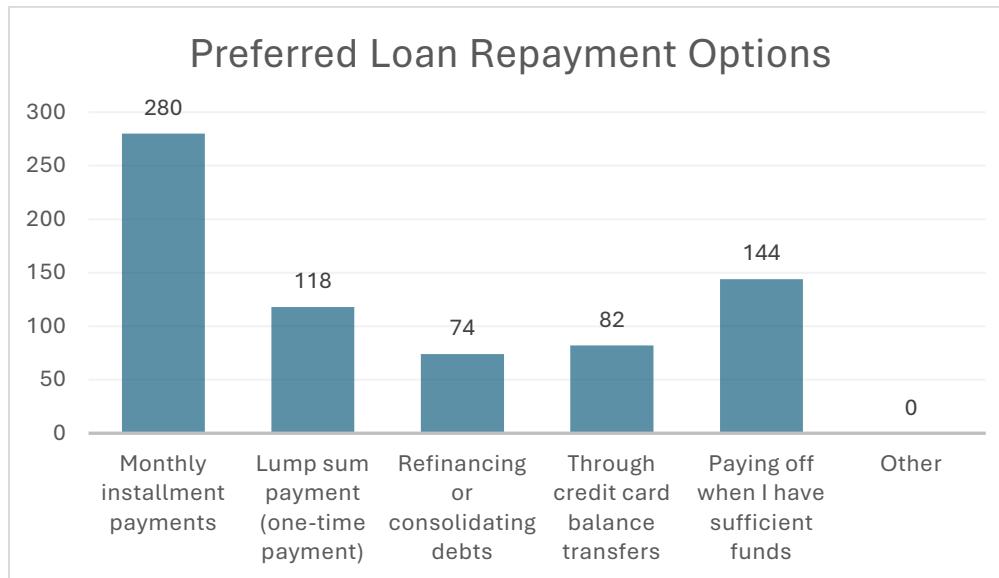
Figure 4.11. Preferred Loan Repayment Options descriptive data.

The data in Table 4.11 outlines the preferred loan repayment options among the respondents. Monthly installment payments (n = 280) were the most frequently reported method. While paying off loans when sufficient funds are available was the second most common approach, with 144 responses. Lump sum payments were cited 118 times, while repayment through credit card balance transfers recorded 82 instances. Refinancing or consolidating debts was the least selected option, reported by 74 respondents. These findings suggest that most individuals favor structured, recurring payments, while a significant portion also prefers flexible or alternative repayment strategies based on their financial capacity across the total sample of 400 respondents.

4.1.2 Central Tendencies and Dispersion Measurement of Construct

Parts B and C outline the survey results concerning both the IV and DV. The analysis includes computing the mean to understand central tendency and the standard deviation to assess the spread of responses. Each variable was examined separately.

4.1.2.1   Personal Debt Accumulation (PDA)

Table 4.12

Measurement of Central Tendencies for Personal Debt Accumulation (PDA)

No.	Question	Total	Mean	Mean Ranking	SD	SD Ranking
PDA 1	I use credit to purchase the things I wants	400	3.97	1	1.092	6
PDA 2	I feel uncomfortable with having debt	400	4.41	4	0.910	5

PDA 3	I regularly monitor and review my debt obligations	400	4.37	2	0.685	2
PDA 4	I compare loan products among different lenders before the final decision to borrow	400	4.38	3	0.661	1
PDA 5	I consider borrowing reasonable if I can repay both principal and interest	400	4.42	5	0.700	3
PDA 6	I think that the increase in costs can lead to more debt	400	4.41	4	0.705	4

The analysis begins with the evaluation of survey responses related to Personal Debt Accumulation (PDA). As presented in Table 4.12, PDA5 recorded the

highest mean score of 4.42, with an SD of 0.700. With a mean of 4.41 and DVs of 0.910 and 0.705, respectively, PDA2 and PDA6 trailed closely behind. The most consistent results were shown by PDA4, which came in second with a mean of 4.38 and the lowest SD of 0.661. With a mean of 4.37 and an SD of 0.685, PDA3 came in at number four. At 3.97, PDA1 received the lowest average score, with the highest standard deviation of 1.092, indicating the least agreement among participants and the widest range of opinions.

4.1.2.2 Peer Influence (PI)

Table 4.13

Measurement of Central Tendencies for Peer Influence (PI)

No.	Question	Total	Mean	Mean Ranking	SD	SD Ranking
PI 1	I always discuss financial management with my friends.	400	4.04	3	1.018	2
PI 2	I am more likely to consider debt	400	4.01	1	1.109	4

	when I see my friends doing so successfully.					
PI 3	When I take on debt, my friend's opinion is important to me.	400	4.02	2	1.051	3
PI 4	I feel pressured to match the spending habits of my social circle.	400	4.11	5	1.120	5
PI 5	I discuss financial decisions with my friends before making	400	4.10	4	1.018	2

	significant					
	purchases.					
PI 6	I have	400	4.25	6	0.829	1
	purchased					
	items because					
	my peers					
	recommended					
	them.					

The analysis of peer influence on personal debt accumulation begins with the evaluation of respondents' agreement with various statements. As shown in Table 4.13, PI6 recorded the largest mean score of 4.25, with the lowest SD of 0.829, indicating strong and consistent agreement among participants. PI4 followed with a mean of 4.11 and an SD of 1.120, showing a wider range of responses. PI5 was next with a mean of 4.10 and a relatively low SD of 1.018, reflecting moderate consistency. PI1 had an SD of 1.018 and a mean score of 4.04. With a mean of 4.02 and an SD of 1.051, PI3 came in second. Lastly, PI2 had the lowest mean score of 4.01, paired with a SD of 1.109, suggesting more diverse opinions among respondents.

4.1.2.3 Financial Literacy (FL)

Table 4.14

Measurement of Central Tendencies for Financial Literacy (FL)

No.	Question	Total	Mean	Mean Ranking	SD	SD Ranking
FL 1	I think an increase in food prices will not reduce purchasing power.	400	3.95	2	1.166	5
FL 2	I understand that a balance sheet will not show my financial status.	400	4.14	4	0.933	1
FL 3	I believe that a credit card holder can spend without limit.	400	3.86	1	1.286	6
FL 4	I believe that owing a credit	400	4.16	5	1.003	3

	card will increase my purchasing power.					
FL 5	I think that the longer the repayment period, the lower the overall cost of a loan.	400	4.02	3	1.127	4
FL 6	I understand that buying goods on credit will not reduce purchasing power in the future.	400	4.19	6	0.948	2

The evaluation of financial literacy responses reveals varying levels of understanding among participants. As presented in Table 4.14, with an SD of 0.948 and the highest mean score of 4.19, FL6 demonstrated great agreement with comparatively consistent replies. With a mean score of 4.16 and an SD of

1.003, FL4 came next. With a mean of 4.14 and the lowest SD of 0.933, FL2 came in second. suggesting the most uniform understanding among respondents. FL5 held a mean score of 4.02, with a SD of 1.127. FL1 followed with a mean of 3.95 and a higher SD of 1.166. Finally, FL3 recorded the smallest mean score of 3.86, with the largest SD of 1.286, reflecting the greatest variation in responses and the least agreement regarding that financial misconception.

4.1.2.4 Spending Behaviour (SB)

Table 4.15

Measurement of Central Tendencies for Spending Behaviour (SB)

No.	Question	Total	Mean	Mean Ranking	SD	SD Ranking
SB 1	I often make purchases without prior planning.	400	3.89	4	1.214	3
SB 2	I never save money for emergencies or future.	400	3.67	1	1.388	5

SB 3	I often buy items I didn't need just because they were in the sale or had a promotion.	400	3.81	2	1.211	2
SB 4	I believe my debt is mainly due to lack of financial control.	400	4.08	5	1.104	1
SB 5	I never set a monthly budget.	400	3.87	3	1.217	4
SB 6	I often borrow to balance my personal budget.	400	3.67	1	1.418	6

Table 4.15 presents the analysis of spending behaviour and its potential influence on personal debt accumulation. Among the six items, SB4 recorded the largest mean score of 4.08 with the smallest SD of 1.104, suggesting strong agreement and the most consistent responses regarding the belief that debt is

mainly due to a lack of financial control. SB1 followed with a mean of 3.89 and an SD of 1.214, indicating slightly greater variability. SB5 held a mean of 3.87 with a SD of 1.217, reflecting similar levels of agreement and dispersion. SB3 was next with a mean score of 3.81 and an SD of 1.211, showing moderate consistency in impulsive purchasing during promotions. Both SB2 and SB6 shared the lowest mean score of 3.67, indicating weaker agreement among participants. However, at 1.418, SB6 had the biggest SD., followed closely by SB2 at 1.388, reflecting the most diverse views regarding borrowing behaviour and emergency savings.

4.1.2.5 Social Media (SM)

Table 4.16

Measurement of Central Tendencies for Personal Debt Accumulation (PDA)

No.	Question	Total	Mean	Mean Ranking	SD	SD Ranking
SM 1	I find it attractive in what loan ads promise.	400	3.87	1	1.267	6
SM 2	I make impulsive purchases to	400	3.92	2	1.202	4

	match the lifestyle portrayed by social media.					
SM 3	I am likely to use 'Buy Now, Pay Later' services after seeing them promoted on social media.	400	3.93	3	1.223	5
SM 4	I feel that 'Buy Now, Pay Later' options encourage me to buy things I cannot afford immediately.	400	4.13	5	1.064	2
SM 5	I think social media ads make	400	4.16	6	1.020	1

	borrowing money easier and more accessible.					
SM 6	I tend to overspend after seeing products or services endorsed on social media.	400	4.05	4	1.156	3

The evaluation of social media influence on personal debt accumulation, as summarised in Table 4.16, highlights varying levels of agreement among respondents. SM5 recorded the largest mean score of 4.16, with the smallest SD of 1.020, indicating strong agreement and the most consistent views on how social media advertisements increase borrowing accessibility. SM4 followed with a mean of 4.13 and a SD of 1.064, reflecting consistent responses regarding the belief that 'Buy Now, Pay Later' options encourage unaffordable purchases. SM6 held a mean score of 4.05, with an SD of 1.156, showing moderate consistency in overspending tendencies due to social media endorsements. SM3 and SM2 recorded mean scores of 3.93 and 3.92, respectively, with an SD of 1.223 and 1.202, indicating relatively more diverse views. SM1 had the lowest mean score of 3.87 and the largest SD of 1.267, suggesting the least agreement and the most variation in perceptions of the attractiveness of loan advertisements seen online.

4.1.2.6 Psychological Factors (PF)

Table 4.17

Measurement of Central Tendencies for Psychological Factors (PF)

No.	Question	Total	Mean	Mean Ranking	SD	SD Ranking
PF 1	I am not confident in managing debt.	400	4.03	2	1.063	4
PF 2	I am not confident that my effectiveness in handling debt situations.	400	4.03	2	1.033	2
PF 3	I am not confident that my debt	400	4.07	3	1.083	5

	repayment plans will always go as expected.					
PF 4	I tend to purchase non-essential items to reward myself when I am feeling down.	400	4.14	4	1.048	3
PF 5	I felt frustrated when I was unable to make a purchase.	400	4.17	5	1.016	1
PF 6	I tend to borrow money when I am stressed about	400	3.84	1	1.282	6

| | my financial |
| | situation. |

Table 4.17 illustrates the impact of psychological factors on personal debt accumulation. With the lowest SD of 1.016 and the largest mean score of 4.17, PF5 was accompanied by PF4 with a mean of 4.14 and an SD of 1.048, reflecting participants' tendency to engage in emotional spending when feeling down. PF3 ranked third with a mean of 4.07 and a slightly higher SD of 1.083, suggesting more varied perspectives on the unpredictability of debt repayment plans. Both PF1 and PF2 shared the same mean score of 4.03, with PF2 showing a greater response consistency and an SD of 1.033 compared to PF1's SD of 1.063. PF6 had the smallest mean score of 3.84 and the largest SD of 1.282, indicating the least agreement and the most variability in borrowing behaviour when experiencing financial stress.

4.2   Scale Measurement

4.2.1 Reliability Test

Table 4.18

Cronbach's Alpha Reliability Analysis

No.	Type of Variables	Variable Name	Items No.	Cronbach's Alpha (α)	Reliability Test

1	DV	Personal Debt Accumulation	6	0.704	Good
2	IV	Peer Influence	6	0.849	Very Good
3	IV	Financial Literacy	6	0.859	Very Good
4	IV	Spending Behaviour	6	0.914	Very Good
5	IV	Social Media	6	0.892	Very Good
6	IV	Psychological Factor	6	0.889	Very Good

The highest reliability was observed for Spending Behaviour, with an α of 0.914, indicating very good reliability. This suggests that Spending Behaviour are highly reliable and consistent. The lowest reliability was recorded for the dependent variable, Personal Debt Accumulation, with an α of 0.704, which falls under a good category. Although it has the lowest value among the constructs, it still meets the acceptable threshold for internal consistency. The remaining independent variables, which are Peer Influence (0.849), Financial Literacy (0.859), Social Media (0.892), and Psychological Factor (0.889) fall within the very good reliability range $0.80 \leq \alpha < 0.95$, reflecting strong internal consistency among their respective items. Overall, the reliability test results indicate that the instruments used in this study are very good, with most variables demonstrating high internal consistency.

4.3 Preliminary Data Screening

An initial data screening was conducted to verify the research results reliability. As part of this process, both multicollinearity and normality tests were conducted as the first steps in the analysis.

4.3.1 Multicollinearity Test

According to Shrestha (2020), multicollinearity arises when there is a strong correlation between predictor variables. According to Kyriazos and Poga-Kyriazou (2023), a VIF of 1 indicates no multicollinearity, values between 1 to 5 suggest moderate levels, and 5 to 10 indicate strong correlation. Thompson et al. (2017) noted that tolerance values near 1 show low multicollinearity, while Kim (2019) stated that values below 0.1 indicate a serious issue.

Table 4.19

Result of Multicollinearity Test

Independent Variables	Collinearity Statistics	
	VIF	Tolerance
Peer Influence	2.350	0.426
Financial Literacy	2.934	0.341
Spending Behaviour	4.229	0.236
Social Media	4.143	0.241
Psychological Factor	3.589	0.279

Table 4.19 showed all five independent variables recorded VIF values below 5 and tolerance levels above 0.1. This indicates that multicollinearity is not a concern, and therefore, none of the variables need to be removed from the analysis.

4.3.2 Normality Testing

A normality test was performed because of the importance of normality in data processing. The histogram, the normal Q-Q plot, kurtosis and skewness values and the examination of are the three techniques used in this study to assess the dataset's normality.

Table 4.20

Result of Normality Test

Variables		Skewness	Kurtosis
Dependent Variable	Personal Debt Accumulation	-1.853	5.096
Independent Variable	Peer Influence	-1.558	1.990
Independent Variable	Financial Literacy	-1.301	0.695
Independent Variable	Spending Behaviour	-1.156	0.095
Independent Variable	Social Media	-1.369	0.817
Independent Variable	Psychological Factor	-1.466	1.390

Demir (2022) suggests that data can be considered approximately normal when skewness falls within ±2 and kurtosis remains between ±7. Table 4.20 results can be considered approximately normal. Specifically, the skewness number ranged from -1.156 to -1.853, while the kurtosis number ranged from 0.095 to 5.096. These values suggest that the distribution of data for each variable does not deviate substantially from normality. Hence, the dataset follows an almost normal distribution and is appropriate for subsequent parametric statistical analyses.

Histogram

Dependent Variable: personaldebt_score

Mean = 5.92E-15
Std. Dev. = 0.994
N = 400
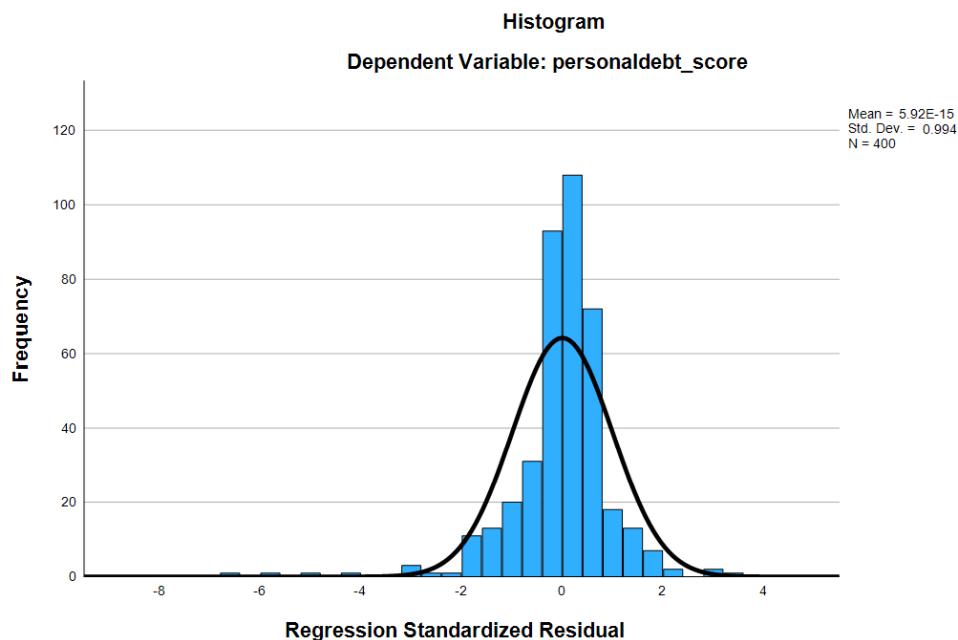
Figure 4.12. Histogram.

According to Pallant (2020), a histogram was utilised to assess whether the data meets the assumption of normality. Based on Figure 4.12, the dependent variable served as the basis for creating the histogram, which reflects personal debt accumulation. The shape of the distribution aligns closely with a normal distribution curve. The pattern generally follows a bell-shaped curve, with the highest frequency of responses concentrated near the centre and gradually decreasing toward both ends. As such, the distribution appears fairly

symmetrical with slightly extended tails, suggesting that the data is
approximately normally distributed.
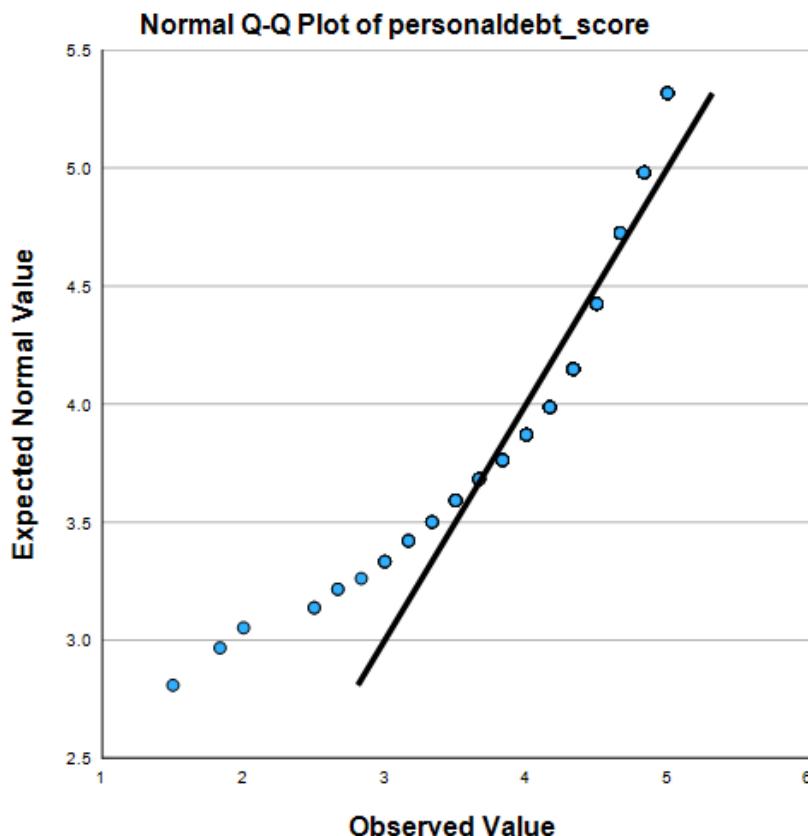
Figure 4.13. Normal Q-Q plot

Normal Quantile-Quantile plot was used to visually assess whether the data
followed a normal distribution. It compares sample quantiles with theoretical
quantiles from a normal distribution. If the data is normally distributed, the
points will align closely with a straight line, indicating model accuracy without
assumptions of location or scale (Farayola et al., 2020). Figure 4.13 displays
the data points that mostly align with the diagonal line, indicating an
approximately normal distribution. The overall pattern supports the assumption
of normality for further analysis.

4.4   Inferential Analysis

4.4.1 Multiple Regression Analysis

Table 4.21

Result of Multiple Regression Analysis

	Unstanda-rdized Coefficient Beta	Std. Error (Coef.)	Standardized Coefficient Beta	T-value	P-value
(Constant)	2.758	0.132		20.957	<0.001*
Peer Influence	0.163	0.043	0.246	3.776	<0.001*
Financial Literacy	0.099	0.045	0.161	2.208	0.028*
Spending Behaviour	(0.098)	0.043	(0.202)	(2.306)	0.022*
Social Media	0.105	0.048	0.190	2.194	0.029*

Psychological Factor	0.113	0.047	0.192	2.382	0.018*
R²					0.286
Adjusted R²					0.277
P-value (F-test)					<0.001*
F-test					31.551
Durbin - Watson					2.003

*Note: *Indicate the result significant at 95% confidence level*

As presented in Table 4.21, this analysis demonstrates the relationship between the dependent variable, personal debt among Gen Z Malaysians, and the five independent variables, including peer influence, financial literacy, spending behaviour, social media, and psychological factors. Based on the result in Table 4.21, peer influence, financial literacy, spending behaviour, social media influence, and psychological factors are significant at the t-statistic figures of 3.776, 2.208, -2.306, 2.194, and 2.382, respectively, because all p-values fall below the 0.05 significance threshold.

The results indicate that peer influence is highly significant, as the p-value is less than 0.001 under the 95% confidence threshold, well under the 0.05 significance threshold. This result aligns with the findings of Grohmann and Koch (2022) and Nurhaliza et al. (2024). They demonstrated that social

comparison and conformity strongly drive financial decisions, leading individuals to take on debt to match their peers' consumption habits. The unstandardised regression coefficient of 0.163 indicates that for each additional unit of peer influence, personal debt accumulation among Gen Z Malaysians rises on average by 0.163 units, holding other variables constant.

Moreover, at the 95% confidence level, financial literacy demonstrates significance, with the p-value of 0.028 falling below the 0.05 cutoff., whereby this outcome is consistent with Rachman and Dewi (2024) and Artavanis and Karra (2020), which supports the present study's significant result that limited financial literacy is linked to higher personal debt among Gen Z individuals. The positive unstandardised regression coefficient of 0.099 indicates that, ceteris paribus, Gen Z Malaysians are accruing 0.099 units more personal debt for every unit gain in financial literacy.

Next, the analysis reveals that spending behaviour is significantly related to personal debt accumulation, with a p-value of 0.022 meeting the 95% confidence requirement (p < 0.05). The outcome agrees with Chia et al. (2024) by showing that spending behaviour directly contributes to debt accumulation among Malaysian students through impulsive purchases. The unstandardised regression coefficient of -0.098 shows that a 1 unit rise in spending behaviour is accompanied by a 0.098 unit decrease in personal debt accumulation among Gen Z Malaysians, ceteris paribus.

With a p-value of 0.029, social media is significant at the 95% confidence level that below the 0.05 significance threshold. This finding aligns with the conclusions of Czarnecka & Mogaji (2020), Threadgold et al. (2025), and Pranata & Salehudin (2024). The unstandardised regression coefficient of 0.105

indicates that, on average, a one-unit increase in social media usage leads to a 0.105 rise in personal debt accumulation among Gen Z Malaysians, assuming all other factors remain constant.

With the 0.018 p-value, the psychological factor demonstrates significance at the 95% confidence threshold, that below the 0.05 significance threshold. The result was in line with the statements of Lea (2020) and Hamid (2025). The 0.113 positive unstandardised regression coefficient indicates that a 1 unit rise in the psychological factor, on average, will increase personal debt accumulation among Gen Z Malaysians by 0.113 units, ceteris paribus.

The determination coefficient, also referred to as R-squared (R^2), acts as a summary statistic that illustrates how well the independent variable in the regression model explains the variation seen in the dependent variable (Romeo, 2020). According to the results from the table, the value of R^2 is 0.286 which indicates that approximately 28.6% of the variance in personal debt accumulation among Gen Z Malaysians can be explained by the combined effects of peer influence, financial literacy, spending behaviour, social media, and psychological factors. This suggests that while the regression model captures a moderate proportion of the influencing factors, the remaining 71.4% of the variation is unexplained and may be attributed to other external or unobserved variables.

In respect of the adjusted R-squared, it indicates that only 27.7% of the variation in personal debt accumulation among Gen Z Malaysians is explained by the variation of peer influence, financial literacy, spending behaviour, social media, and psychological factors collaboratively after considering the degree of freedom.

With an F-value of 31.551 and a p-value under 0.005, the results confirm that
the regression model is significant as a whole, meaning that the combination of
peer influence, financial literacy, spending behaviour, social media, and
psychological factors significantly predicts personal debt accumulation among
Gen Z Malaysians.

The Durbin-Watson test, a type of statistical technique, is utilized to find out
whether autocorrelation exists in the residuals of the regression analysis (Eser,
2025). With a Durbin–Watson statistic of 2.003, the model meets the
recommended range of 1.5 to 2.5. This result suggests that the residuals are free
from significant autocorrelation, thereby confirming that the assumption of
independent errors is met in the model. This supports the reliability of the
regression results in explaining the factors influencing personal debt
accumulation among Generation Z Malaysians.

4.5   Conclusion

For this study, data were analysed with the assistance of SPSS 31.0, which efficiently
processed and summarized the survey data collected from respondents. Moreover, all
questionnaire scales were reliable and free from non-normality and multicollinearity
issues. In a nutshell, the analysis of multiple regression reveals a significant
relationship between peer influence, financial literacy, spending behaviour, social
media, psychological factors, and personal debt among Gen Z Malaysians.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0   Introduction

This part shows the study's final stage by reviewing the outcomes from the previous chapters. First, it begins with a summary of findings. Following this, the implication of the findings is discussed. Lastly, the chapter concludes with an overview of the limitations encountered during the study and provides suggestions for future studies.

5.1   Summary of Findings

Table 5.1:

Finding Summary

Type of Variables	T-stat	P-value	Findings	Hypothesis
Peer Influence	3.776	<.001	Significant	Reject H_0
Financial Literacy	2.208	<.001	Significant	Reject H_0
Spending Behaviour	-2.306	0.028	Significant	Reject H_0
Social Media	2.194	0.022	Significant	Reject H_0

Psychological Factor	2.382	0.029	Significant	Reject H_0

Based on the data shown in Table 5.1, all five independent variables (peer influence, financial literacy, spending behaviour, social media, and psychological factor) have shown statistically significant relationships with personal debt accumulation among Gen Z in Malaysia, specifically within the major urban areas of Penang, Johor, Selangor, and the Federal Territory. Since the p-values for all five independent variables are below the 0.05 standard significance level, the null hypotheses for each were rejected. These findings suggest that each factor possesses meaningful predictive power in explaining the debt burden faced by Gen Z in these regions.

5.2   Discussions of Major Findings

This section presents a more in-depth analysis of the key findings previously summarized in Section 5.1.

5.2.1 Key Determinants of Personal Debt Accumulation Among Gen Z Malaysians

5.2.1.1 Peer Influence and Personal Debt Accumulation

This study's findings indicate that peer influence significantly relates to personal debt accumulation among Gen Z Malaysians. This finding aligns with Grohmann and Koch (2022) demonstrated that individuals often replicate the consumption behaviors of their peers, even when such imitation entails increased borrowing. Their experimental evidence underscores the powerful role of social comparison, peer conformity, and the pressure to uphold perceived consumption standards in shaping financial decisions, with individuals frequently incurring debt to align with prevailing spending norms. Among Gen Z Malaysians, the peer environment not only fosters impulsive and excessive spending tendencies but also legitimizes the reliance on credit to sustain such consumption patterns. Similarly, Nurhaliza et al. (2024) emphasized that the financial behaviour of the Gen Z consumer is greatly affected by the peer environment, which leads to impulsive and excessive spending due to the social pressure created.

Nevertheless, this conclusion is not universally supported across the literature. For instance, Dusia et al. (2023) present a perspective that diverges from prevailing research on peer-driven borrowing. Their findings indicate that debt attitude—defined as personal convictions and emotional responses toward debt—serves as a strong predictor of borrowing behavior among Indonesian millennial pay-later users. Conversely, peer influence did not demonstrate statistical significance, despite widespread acknowledgment among respondents of peer engagement with pay-later services. These results imply that, within specific cultural or demographic settings, intrinsic perceptions of debt may exert greater influence on borrowing decisions than external social pressures. Although Dusia et al. (2023) offer a different perspective, the results of this study demonstrate the important connection between peer pressure and the accumulation of personal debt, especially among Gen Z Malaysian, underscoring its applicability in comprehending the social factors that influence financial behavior.

Additionally, evidence from Li et al. (2025) demonstrates that peer influence
exerts a statistically significant effect on household debt accumulation, with
individuals more likely to increase their borrowing levels when their peers
exhibit higher indebtedness, suggesting that social comparison and normative
pressures play a critical role in shaping personal financial behaviour.
Meanwhile, Kuchler and Stroebel (2021) synthesizes both causal and
observational evidence demonstrating that social interactions meaningfully
alter financial choices, including credit uptake, thereby underscoring the
robustness of peer-driven channels into indebtedness.

5.2.1.2 Financial Literacy and Personal Debt Accumulation

This research reveals a statistically significant link between financial literacy
and the accumulation of personal debt in Gen Z Malaysians. This outcome
aligns with the findings of Marcolin and Abraham (2006), Asif (2023), and
Brascoupe et al. (2013), as referenced by Refera et al. (2016), who contend that
insufficient financial knowledge often leads to ineffective money management,
excessive reliance on credit, and rising debt levels. These studies consistently
illustrate that individuals lacking essential financial competencies are more
susceptible to making decisions that negatively impact their financial well-
being.

The current study supports this position by providing empirical data from the
Malaysian context, where financial literacy among Gen Z appears to be a key
factor influencing their tendency to accumulate debt. Rachman and Dewi (2024)
found that badly informed borrowing decisions made by poorly financially

literate Gen Z individuals increased their vulnerability to debt. Similarly, Artavanis and Karra (2020) find that low financial literacy among students is linked to underestimating the burden of future repayments, which then negatively affects the student loan debt.

Collectively, these findings highlight a common concern across national contexts: young adults' financial well-being is impacted by a persistent, cross-cultural problem of poor financial literacy. The current study contributes to this expanding body of literature by emphasizing how Gen Z's personal debt problems are greatly exacerbated by a lack of financial literacy in Malaysian cities, particularly in Penang, Johor, Selangor, and the Federal Territory.

However, not all research supports this conclusion. For example, Rahman et al. (2020) had a different viewpoint on this conclusion. Based on their study in Klang Valley, they found no significant relationship between financial literacy and indebtedness. Instead, they argued that behavioural factors such as attitudes and habits played a more important role in influencing debt. The contrasting outcome may be attributed to methodological differences or possibly to regional and cultural variations in financial behaviour within Malaysia itself. Although Rahman et al. (2020) offer a different perspective, the current study indicates that financial literacy is still a fundamental element in making wise financial decisions, particularly for younger people, even if behavioral factors play a significant role.

In addition to the existing literature discussed earlier, a more recent study by Fitriadi et al. (2025) supports the findings of this study. Financial literacy and debt behaviour were found to have a significant positive relationship in their study of millennials in Sukabumi City, Indonesia. They use a quantitative cross-

sectional survey with 180 participants and discover that people with greater financial literacy tend to feel more confident in managing financial obligations, which can result in a rise in debt behaviour. This supports the notion that, even while financial literacy is crucial, people may be more inclined to borrow money when they have faith in their capacity to make sound financial decisions.

5.2.1.3 Spending Behaviour and Personal Debt Accumulation

This research identifies a strong correlation between spending behaviour and the personal debt accumulation among Malaysian Generation Z. The findings align with those of Kumar et al. (2022) and Lai & Wong (2022), who observe that spending behaviors are influenced by personal circumstances, lifestyle choices, and financial accessibility are the factors that often contribute to excessive expenditure. Additionally, Cachón-Rodríguez et al. (2024) emphasize the impact of emotional and psychological elements, including stress and impulsivity, in intensifying suboptimal financial decisions and driving higher levels of indebtedness.

Furthermore, Chia et al. (2024) indicate that spending behaviour mediates the relationship between financial socialization and debt among Malaysian students, with impulsive purchases contributing directly to financial strain and debt accumulation. Moreover, Maccarrone-Eaglen et al. (2020) observed that compulsive buyers tend to excessively utilize credit cards and experience post-purchase regret, underscoring their vulnerability to personal debt. Moreover, Khandelwal et al. (2021) report that compulsive buying behavior is linked to heightened credit card indebtedness; however, this effect can be mitigated by greater financial awareness and a proactive attitude toward saving.

Additionally, recent empirical studies consistently demonstrate that aggressive and uncontrolled spending behavior serves as a strong indicator of personal debt accumulation. Elevated levels of discretionary expenditure, impulsive buying tendencies, and increased dependence on contemporary payment technologies such as mobile payments, tap-to-pay systems, and credit cards diminish psychological resistance to spending and heighten the likelihood of delinquency. For example, Noor Baharin (2025) reports that the adoption of mobile payment systems correlates with a 9.4% increase in total credit card transaction values and a 10.7% rise in transaction frequency, particularly among younger consumers, illustrating how seamless payment technologies intensify credit utilization. Concurrently, research by Faraz and Anjum (2025) introduces the concept of "Spendception," describing a psychological detachment from expenditure that emerges due to reduced visibility of transactions when using digital or card-based payment methods. This phenomenon encourages impulsive consumption and weakens financial awareness.

In addition to behavioural traits such as present bias, overconfidence, and inadequate financial literacy, assertive spending habits contribute to an overestimation of repayment capacity and a reduced understanding of the long-term implications of debt. Evidence from both domestic and international contexts highlights consumption-driven expenditure and the widespread availability of credit as central factors in rising debt levels. Although existing research affirms this relationship, there is a notable absence of focused data pertaining specifically to Gen Z individuals in Malaysia, particularly in Penang, Johor, Selangor, and the Federal Territory, which constrains the depth of locally relevant insights. This study addresses that limitation by offering substantive findings that can assist academic researchers, enable financial institutions to develop customised financial education initiatives, and support policymakers in

crafting targeted strategies to encourage responsible spending and mitigate
excessive indebtedness among Malaysia's youth.

5.2.1.4 Social Media and Personal Debt Accumulation

This study's findings show that social media has a strong impact on personal
debt among Gen Z Malaysians. As noted by Czarnecka and Mogaji (2020),
advertisements on digital platforms make borrowing seem normal by showing
debt as something easy and manageable rather than a burden. These ads often
use emotional or informational messages to present debt as part of daily life
(Arli, 2017). In the same way, Choi (2004) found that aggressive credit card
marketing encourages people to spend more by offering easy credit while hiding
the risks of repayment, which increases debt.

This result is also supported by Smrithi and Selvi (2024) and Cao (2024), who
highlight that personal loan ads on platforms such as YouTube and Instagram
push impulsive borrowing, especially when promoted by influencers. These
promotions trigger emotions and add pressure to follow certain lifestyles, which
leads to more borrowing. In addition, Hegde (2024) describes how constant
exposure to idealised lifestyles on Instagram and TikTok creates "money
dysmorphia," where young people feel pressured to copy unrealistic financial
standards. Together, these studies support the current findings, showing that
social media not only spreads information but also shapes financial behaviour
in ways that increase debt risk among Gen Z.

Emerging research suggests that social media's impact extends beyond overt
advertising to the subtler shaping of financial attitudes, norms, and long-term

habits. Nie (2023), in a study of Indonesian Gen Z, found that social media consumption plays a significant role in influencing financial decision-making, often reinforcing peer norms and familial attitudes toward spending and borrowing. The study emphasises that tackling these influences effectively requires coordinated action from families, schools, and policymakers, as digital financial behaviours are embedded in broader social ecosystems.

The psychological dimension of social media influence is also noteworthy. Hidayah et al. (2025) demonstrated that *Fear of Missing Out* (FOMO), when amplified by interactive online shopping experiences such as TikTok Shop live commerce, strongly predicts impulsive purchase intentions. When paired with the easy availability of instant online loan services, this creates a high-risk environment in which more than 50% of the variance in consumption behaviour among young people can be explained by these two factors alone.

Further evidence comes from Jing et al. (2024) and Aisjah (2024), who found that high-intensity social media use significantly increases the likelihood of adopting Buy Now, Pay Later (BNPL) schemes among Malaysian youth. These services, often marketed as financially savvy tools for managing cash flow, in reality encourage the habitual use of short-term credit and normalise living with revolving debt. Similarly, She et al. (2022) linked frequent social networking site usage to poorer financial well-being, greater money-related anxiety, and increased credit overextension, suggesting that the financial risks of social media engagement are not confined to impulsive purchases but extend into chronic financial strain.

5.2.1.5 Psychological Factors and Personal Debt Accumulation

This study also identifies psychological factors as significant determinants of debt accumulation among Gen Z Malaysians. Debt is not only a financial issue but is also linked to emotions and thought processes. Meltzer et al. (2013) discovered that those who are in debt are significantly more likely to suffer from mental health issues, with debt being one of the greatest predictors of psychological discomfort.

Moreover, personality traits also affect borrowing and repayment behaviour. Maria and Tatiana (2018) found that impulsive and risk-taking individuals are more likely to make poor borrowing decisions, while those who are conscientious and plan for the long term are more likely to repay debts consistently. Similarly, Özşahin et al. (2019) reported that people who repay regularly show rational decision-making and an internal sense of control, while irregular payers tend to think short-term and blame outside factors, showing how psychology and culture influence debt behaviour.

Ottaviani and Vandone (2011) showed that impulsivity increases unsecured debt, while Mugichkova (2015) explained that the ease of using credit cards reduces the "pain of payment," encouraging more spending. Similarly, Hamid (2025) highlighted how overconfidence, optimism bias, and mental accounting distort people's financial decisions, leading to higher debt. Together, these findings support the results of this study, showing that psychological traits, biases, and emotional pressures strongly affect how Gen Z manages and accumulates debt.

Besides that, people who score low in conscientiousness are more often connected with higher debt levels. Findings indicate that such individuals have a greater tendency to default on student loans and show a higher likelihood of taking out mortgages (Letkiewicz & Heckman, 2018). Donnelly et al. (2012)

observed that individuals scoring higher in conscientiousness tended to manage their finances more proactively, which was linked to a reduced likelihood of falling into debt. S. Brown and Taylor (2014) reported that various Big Five personality traits influenced different indicators of household debt, with conscientiousness once again showing a notably strong impact.

Furthermore, Lea (2020) noted that people with higher impulsiveness, meaning weaker self-control, are more prone to accumulating debt. To measure this trait, psychologists often use the Brief Self-Control Scale (BSCS). Although the BSCS is closely linked with the Big Five traits of conscientiousness and emotional stability, it remains widely used in debt research because impulsiveness strongly influences how individuals make choices over time.

According to Goel & Rastogin (2023), the "Big Five" or Five-Factor Model is a leading framework in personality studies and is frequently applied in research. It assesses people on five key traits like agreeableness, conscientiousness, extraversion, openness to experience, and neuroticism. Research findings often point to conscientiousness as the most reliable indicator of a person's tendency to debt. Multiple studies have reported that greater impulsiveness is linked to higher debt levels (Achtziger et al., 2015; Gathergood & Weber, 2014; Ottaviani & Vandone, 2011; Peltier et al., 2016). Supporting this, Frigerio et al. (2020) found similar results in a meta-analysis, while also noting that factors such as debt amount and employment status can affect the strength of this link.

5.3   Implications of the Study

The study's results indicate that peer influence plays a significant role in personal debt accumulation among Generation Z Malaysians. They make financial decisions based on peer comparison rather than actual need, leading to increased borrowing or misuse of credit to sustain a desired lifestyle. Policymakers should develop specific financial education programs to address the issue of the financial decision-making impact of social pressure. For example, FWD Insurance, in collaboration with Arus Academy, has introduced a financial literacy initiative aimed at empowering young Malaysians. The programme, titled Fun(d) for Life, initially targets 500 university students across the country to enhance their financial knowledge (Khanna, 2025). These programs can be incorporated into high school and college curricula and assist in enabling Gen Z to think critically and avoid being influenced to spend by peer pressure.

Moreover, financial literacy is strongly connected to the personal debt accumulation of Gen Z in Malaysia. The low financial literacy of Gen Z would increase unreasonable loans and personal debt because Gen Z has no idea about the financial requirements and risks. Financial institutions can help to identify the necessity of offering convenient and useful financial training, including smartphone applications and gamified resources to develop skills and make better decisions about finances in real life. For instance, DuitSmart is a financial literacy mobile app launched by Hong Leong Bank in collaboration with AKPK, providing interactive modules on budgeting, credit management, savings, and debt for youths and adults (Digital News Asia, 2019). Comprehensive preparation of the younger generation on how to manage their finances will help a great potential to cope with over-indebtedness and will lead to the status of both personal and national financial and economic stability.

Furthermore, the spending behaviour has a substantial effect on the personal debt accumulation of Generation Z Malaysians. In particular, the presence of impulsive and compulsive buying behaviour ought to explain the increasing rates of Gen Z debt. Financial practitioners and educators are also encouraged to provide personalized

guidance that promotes proactive financial planning, such as allocating income towards savings and discretionary spending through frameworks. As an example, the 50-30-20 budgeting model that involves spending 50 per cent of net income on necessities, 30 per cent on discretionary spending, and 20 per cent on saving or loan repayment is being encouraged by institutions like the Employees Provident Fund (EPF) to help in sensible financial planning (Athena, 2025). These measures will help to curb spontaneous financial habits and minimize their chances of falling into debt, as the strategies will reinforce the norm of pre-thoughtful spending, which is considered one of the benefits of Gen Z consumers.

In addition, social media has appeared to be a strong force in personal debt accumulation. Lifestyles that are stylized, endorsements, and targeted or highly specific advertisements tend to make people spend money to achieve a certain level of prestige that they do not really need, becoming prone to engagement in unintentional excessive debt, which cannot be planned. Such purchasing behaviors are usually enabled by aggressive marketing strategies as well as the abundant availability of consumer credit. As part of the concerns about misleading marketing and strained credit-based transactions, the policymakers must take into consideration consumer protection policies that include curbing fraudulent transactions, misleading marketing, and other similar practices and bringing about transparency as regards credit-based transactions, especially in the context of e-commerce and digital platforms. Motivation to use financial literacy education campaigns adapted to the context of digital space may also be encouraged, as this should assist the user of social media in understanding the dangers of making reckless purchases as well as getting into debt. The educational institutions and media sources could work together to include the material about responsible financial behavior, and social media platforms, in turn, might be incentivized or even required to include the financial health and wellness tools or warnings about high-risk advertisements.

Last but not least, psychological factors play a substantial role in influencing personal debt accumulation among Generation Z Malaysians. Emotional states such as stress, anxiety, and low self-control can lead to irrational financial decisions. Spending is often used as a coping mechanism to alleviate negative emotions or to gain a temporary sense of relief or satisfaction. Peer support groups, stress management courses, and therapy are examples of mental health support services that should be made more accessible for Gen Z. Practitioners, including financial advisors and credit counselling agencies, should be trained to recognize the psychological dimensions of debt-related behaviour. By understanding the emotional factors that influence spending patterns, practitioners can tailor their advice and interventions to better meet the holistic needs of Gen Z clients. Collaborative efforts between mental health professionals and financial educators may also enhance the effectiveness of debt prevention programs.

5.4   Limitations of Study

Firstly, the study is confined to Gen Z individuals residing in Selangor, Federal Territory, Johor, and Penang. While these states represent economically vibrant and urbanized regions with high bankruptcy cases, the findings may not fully capture the experiences of Gen Z in rural or less developed states, where debt dynamics and financial behaviours could differ significantly. Hence, the results should be interpreted with caution when generalising to the wider Malaysian Gen Z population. Although Gen Z is commonly characterised as digital natives with higher exposure to technology and financial tools, disparities exist within the generation. For instance, rural Gen Z or those from lower-income households may not share the same level of digital access or financial awareness as their urban peers (Nielsen, 2019; Ng et al., 2019). This creates a limitation in generalising the findings to all Malaysian Gen Z, as the study is concentrated on urban states where digital literacy and technology usage are typically higher.

Secondly, this study relies solely on self-administered questionnaires as the primary data collection method. While such surveys are cost-effective and efficient in gathering responses from a large sample, they present notable limitations. They lack the flexibility to probe respondents for clarifications or deeper explanations, potentially resulting in misunderstandings or superficial responses that fail to capture the complexity of participants' debt experiences (Lindemann, 2023).

Thirdly, self-report measures can also distort the accuracy of findings. Response bias occurs when participants' answers are systematically influenced by factors unrelated to the actual construct being measured. For instance, individuals may present themselves more favourably due to social desirability bias, or their responses may be shaped by tendencies such as acquiescence or extreme responding. These biases introduce systematic error variance, reducing the validity and reliability of survey results. McGrath, Mitchell, Kim, and Hough (2010) emphasise that response bias is a significant source of error in applied assessments, as it can obscure true relationships between variables and inflate or deflate observed associations. In the context of this study, respondents may underreport irresponsible financial behaviours or overstate positive financial attitudes, thereby limiting the accuracy of conclusions drawn about Gen Z's debt burden (McGrath et al., 2010).

Lastly, the research was conducted within a limited timeframe, which constrained both the sample size and the depth of analysis. A larger and more diverse sample, combined with a mixed-methods approach incorporating interviews or focus groups, could provide richer insights into the underlying causes of debt among Gen Z Malaysians. As methodological literature notes, restricted timelines often force researchers to reduce sample size to meet deadlines, thereby impacting statistical power and the ability to detect meaningful relationships, including small effect sizes or subgroup differences

(CLRN Team, 2025). Without a formal power analysis, this study may also be underpowered to detect subtler or significant correlations among variables, such as between financial attitude and debt burden (Garg et al., 2024).

Despite the limitations mentioned above, they do not diminish the importance of the present researchs. Instead, they give a valuable foundation and clear directions for future research to explore the nuances of debt accumulation among Gen Z in diverse Malaysian contexts.

5.5   Recommendations for Future Research

Firstly, future studies should broaden the geographical scope beyond urbanised states; future research should broaden its scope to include rural and less developed states, as well as East Malaysia. Such expansion would provide a more comprehensive picture of debt dynamics across diverse socioeconomic and cultural contexts. Studies have shown that urban–rural gaps significantly influence financial literacy and behaviour (Yau, 2022) and that rural populations often score lower in financial planning and money management (Mokhtar et al., 2018). The findings' external validity and representativeness would both be enhanced by including these groups.

Secondly, future research should use a mixed-methods approach, integrating quantitative surveys with qualitative techniques such as interviews or focus groups. Quantitative surveys can identify large-scale patterns, while qualitative methods such as interviews or focus groups can uncover the motivations, perceptions, and lived experiences behind debt-related decisions. This combined approach would address the

superficiality risk in closed-ended surveys, producing richer and more nuanced insights
(Spohn, 2024).

Thirdly, to mitigate the response biases inherent in self-reported data, especially social
desirability and acquiescence biases, future research should reinforce respondent
anonymity. This could include using unproctored online surveys, which have been
shown to reduce biased responding (Gnambs & Kaspar, 2016). Balanced scales with
occasional reverse-coded items can help detect acquiescence bias, while advanced
techniques such as the randomised response method or list experiments can further
protect confidentiality and improve accuracy for sensitive debt-related topics, such as
overspending or loan defaults (Gomes et al., 2019).

Finally, future research should conduct a formal power analysis at the design stage.
This ensures the sample is large enough to detect anticipated effect sizes with
acceptable confidence levels. As Andrade (2020) points out, inadequate sample sizes
increase the risk of false negatives errors, while Buckley (2024) notes that power
analysis improves replicability and credibility yet remains underused in social sciences.
This is especially important in time-sensitive projects, where there is a tendency to
compromise sample size to meet deadlines.

5.6   Conclusion

This study set out to investigate what influences Gen Z's personal debt accumulation.
Data for the study were gathered by using questionnaires. The collected responses were
then analyzed with SPSS version 31.0. The results indicate that peer influence, financial
literacy, spending behaviour, social media, and psychological factors are significant

predictors of personal debt accumulation. The study thoroughly discusses these results and their implications. The study limitations are addressed as well. In addition, future study recommendations are given. These insights can guide future researchers in choosing respondents, choosing variables, and collecting data.

REFERENCES

Abdullah, N., Fazli, S. M., & Arif, A. M. (2019). The relationship between attitude towards money, financial literacy and debt management with young worker's financial well-being. *Pertanika Journal of Social Sciences and Humanities*, *27*(1), 361-387. https://core.ac.uk/download/pdf/196518965.pdf

Abdul Mulup, N. A., Isamail, M. Z., & Abd Rahim, S. (2024). Understanding the impact of failure managing debt on young people: a systematic review. *In International Conference on Business and Technology* (pp. 561-572). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-67437-2_53

Achtziger, A., Hubert, M., Kenning, P., Raab, G., & Reisch, L. (2015). Debt out of control: the links between self-control, compulsive buying, and real debts. *Journal of economic psychology*, *49*, 141-149. https://doi.org/10.1016/j.joep.2015.04.003

Ahmed, S. K. (2024). How to choose a sampling technique and determine sample size for research: a simplified guide for researchers. *Oral Oncology Reports, 12*, 100662. https://dx.doi.org/10.1016/j.oor.2024.100662

Aisjah, S. (2024). Intention to use buy-now-pay-later payment system among university students: a combination of financial parenting, financial self-efficacy, and social media intensity. *Cogent Social Sciences*, *10*(1). https://doi.org/10.1080/23311886.2024.2306705

Ajayi, V. O. (2023, May). A review on primary sources of data and secondary sources of data. *SSRN Electronic Journal,* 5378785. https://doi.org/10.5281/zenodo.16739602

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-t

Amirrudin, M., Nasution, K., & Supahar, S. (2021). Effect of variability on cronbach alpha reliability in research practice. *Jurnal Matematika, Statistika Dan Komputasi*, *17*(2), 223-230. https://doi.org/10.20956/jmsk.v17i2.11655

Andrade, C. (2020). Sample size and its importance in research. *Indian Journal of Psychological Medicine*, *42*(1), 102–103. https://doi.org/10.4103/IJPSYM.IJPSYM_504_19

Apuke, O. D. (2017). Quantitative research methods a synopsis approach. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, *6*(11), 40-47. https://doi.org/10.12816/0040336

Arain, M., Campbell, M. J., Cooper, C. L., & Lancaster, G. A. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC medical research methodology*, 10, 1-7. https://link.springer.com/article/10.1186/1471-2288-10-67

Arli, D. (2017). Does social media matter? Investigating the effect of social media features on consumer attitudes. *Journal of Promotion Management, 23*(4), 521-539. https://doi.org/10.1080/10496491.2017.1297974

Artavanis, N., & Karra, S. (2020). Financial literacy and student debt. *The European Journal of Finance, 26*(4-5), 382–401. https://doi:10.1080/1351847x.2019.1711435

Asif, N. (2023). A conceptual paper on financial literacy. *International Research Journal of Modernization in Engineering, Technology and Science, 5*(9), 738. https://www.doi.org/10.56726/IRJMETS44603

Astuti, P. D., & Faturohman, T. (2024). Perceptions and attitudes of indonesian generation z towards debt. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, *12*(2). https://doi.org/10.37676/ekombis.v12i2.5376

Athena, M. (2025). *The 50/30/20 rule: Your budgeting best friend.* KWSP. https://www.kwsp.gov.my/en/w/article/50-30-20-rule

Bandura, A., & Walters, R. H. (1977). Social learning theory. (Vol. 1, pp. 141-154). Englewood Cliffs, NJ: Prentice Hall. https://www.asecib.ase.ro/mps/Bandura_SocialLearningTheory.pdf

Bank Negara Malaysia. (2022). *Financial stability review second half 2022.* https://www.bnm.gov.my/documents/20124/10150236/fsr22h2_en_book.pdf

Barchard, K. A., & Verenikina, Y. (2013). Improving data accuracy: Selecting the best data checking technique. *Computers in Human Behavior, 29*(5), 1917– 1922. https://doi.org/10.1016/j.chb.2013.02.021

Bhardwaj, P. (2019). Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences, 5*(3), 157-163. http://dx.doi.org/10.4103/jpcs.jpcs_62_19

Birmingham, P., & Wilkinson, D. (2003). *Using Research Instruments*. Routledge. https://doi.org/10.4324/9780203422991

Brascoupe, S., Weatherdon, M., & Tremblay, P. (2013). Literature review of indigenous financial literacy in Australia, Canada, New Zealand and the United States. *AFOA CANADA, Building a Community of Professionals*. https://web.archive.org/web/20181012044345/https://www.afoa.ca/afoadocs/ Home%20Page/Final%20AFOA%20International%20Literature%20Review %20Full%20201%20Page%20Report.pdf

Brown, S. & Taylor, K. (2014). Household finances and the 'Big Five' personality traits. *Journal of Economic Psychology,* 45, 197–212. https://doi.org/10.1016/j.joep.2014.10.006

Brown, S., Taylor, K., & Price, S. W. (2005). Debt and distress: Evaluating the psychological cost of credit. *Journal of Economic Psychology*, *26*(5), 642-663. https://doi.org/10.1016/j.joep.2005.01.002

Buckley, J. (2024). Conducting Power Analyses to Determine Sample Sizes in Quantitative Research: A Primer for Technology Education Researchers Using Common Statistical Tests. *Journal of Technology Education*, *35*(2), 81–109. https://doi.org/10.21061/jte.v35i2.a.5

Bukhari, S. A. R. (2021). *Sample size determination using Krejcie and Morgan table.* Research Gate. https://doi.org/10.13140/RG.2.2.11445.19687

Bursztyn, L., Ederer, F., Ferman, B., & Yuchtman, N. (2014). understanding mechanisms underlying peer effects: evidence from a field experiment on financial decisions. *Econometrica*, *82*(4), 1273–1301. https://doi.org/10.3982/ecta11991

Bush, T. (2020). *Descriptive analysis: How-to, types, examples.* Pestleanalysis. https://pestleanalysis.com/descriptive-analysis/

Cachón-Rodríguez, G., Blanco-González, A., Prado-Román, C., & Fernández-Portillo, A. (2024). How compulsive and impulsive buying affect consumer emotional regulation. Is anxiety a differential element? *European Journal of Management and Business Economics*. https://doi.org/10.1108/EJMBE-06-2023-0172

Cao, J. (2024). The influence of social media influencers recommendation on consumers' impulsive buying behavior. *Highlights in Business Economics and Management, 37*, 161–168. https://doi.org/10.54097/v4y7y898

Chai, W. C., Tham, K. W., Cheng, C. T., Chong, K. W., & Yeoh, K. Y. (2024). Impacts of macroeconomic factors during COVID-19 pandemic on property loan impairments and overhang: case study of Malaysia. *International Journal of Housing Markets and Analysis*. https://doi.org/10.1108/IJHMA-04-2024-0056

Chantarat, S., Lamsam, A., Samphantharak, K., & Tangsawasdirat, B. (2020). Household debt and delinquency over the life cycle. *Asian Development Review*, *37*(1), 61–92. https://doi.org/10.1162/adev_a_00141

Chen, S., Zhi, K., & Chen, Y. (2022). How active and passive social media use affects impulse buying in Chinese college students? The roles of emotional responses, gender, materialism and self-control. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.1011337

Chen, X. X., & Slade, E. (2024). Theory of planned behaviour: a review. In Papagiannidis (Ed.), TheoryHub Book. https://open.ncl.ac.uk/theory-library/theory-of-planned-behaviour.pdf

Chia, M. S., Ismail, Z., & Yahaya, R. (2024). The role of spending behavior in mediating the influence of financial socialization and reaction to indebtedness among malaysian tertiery students. *International Business Education Journal, 17*(1), 1-11. https://doi.org/10.37134/ibej.Vol17.1.1.2024

Choi, J. (2004). *" Buy now, pay later": appealing to consumers by product type: advertising message strategies in magazine advertisements for credit cards* (Doctoral dissertation, University of Georgia). https://openscholar.uga.edu/record/11824?ln=en&v=pdf

Chua, S. (2025). *High household debt limits Malaysia's consumer spending despite growth forecast.* RinggitPlus. https://ringgitplus.com/en/blog/personal-finance-news/high-household-debt-limits-malaysias-consumer-spending-despite-growth-forecast.html

CLRN team. (2025). *What Are the Limitations of a Research Study?* California Learning Resource Network. https://www.clrn.org/what-are-the-limitations-of-a-research-study#google_vignette

Czarnecka, B., & Mogaji, E. (2020). How are we tempted into debt? Emotional appeals in loan advertisements in UK newspapers. *International Journal of Bank Marketing, 38*(3), 756-776. https://www.emerald.com/insight/content/doi/10.1108/ijbm-07-2019-0249/full/html

Dabla-Norris, E., & Furceri, D. (2025). *Debt is higher and rising faster in 80 percent of global economy.* IMF Blog. https://www.imf.org/en/Blogs/Articles/2025/05/29/debt-is-higher-and-rising-faster-in-80-percent-of-global-economy

Daud, I., Giriati, G., & Irfani, M. (2024). Financial literacy on a person's attitude towards debt and the influence of friends on debt habits in Indonesia. *Jurnal Ekonomi, 13*(01), 496-511. https://www.ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/3435/2996

Daud, K. A. M., Khidzir, N. Z., Ismail, A. R., & Abdullah, F. A. (2018). Validity and reliability of instrument to measure social media skills among small and medium entrepreneurs at Pengkalan Datu River. *International Journal of*

Development and sustainability, *7*(3), 1026-1037. https://isdsnet.com/ijds-v7n3-15.pdf

Demir, S. (2022). Comparison of normality tests in terms of sample sizes under different skewness and kurtosis coefficients. *International Journal of Assessment Tools in Education,* *9*(2), 397-409. https://doi.org/10.21449/ijate.1101295

Digital News Asia. (2019). *Hong Leong Bank launches HLB DuitSmart.* https://www.digitalnewsasia.com/business/hong-leong-bank-launches-hlb-duitsmart-initiative

Donnelly, G., Iyer, R. & Howell, R. T. (2012). The big five personality traits, material values, andfinancial well-being of self-described money managers. *Journal of Economic Psychology,* *33*, 1129–1142. https://doi.org/10.1016/j.joep.2012.08.001

Dusia, S. L., Setyabudhi, K. N., & Malelak, M. I. (2023). The effect of debt attitude and peer influence on debt behavior. *International Journal of Financial, Accounting, and Management (IJFAM),* *4*(4), 463–479. https://goodwoodpub.com/index.php/ijfam/article/view/1457

Eser, A. (2025, May 30). *Durbin watson statistics statistics: ZIPDO education reports 2025*. ZipDo. https://zipdo.co/durbin-watson-statistics/

Etemadi, S., & Khashei, M. (2021). Etemadi multiple linear regression. *Measurement*, *186*, 110080. https://doi.org/10.1016/j.measurement.2021.110080

Farayola, P. O., Chaganti, S. K., Obaidi, A. O., Sheikh, A., Ravi, S., & Chen, D. (2020, April). Quantile–quantile fitting approach to detect site to site variations in massive multi-site testing. *In 2020 IEEE 38th VLSI Test Symposium (VTS)* (pp. 1-6). IEEE. https://doi.org/10.1109/vts48691.2020.9107616

Fatihah, A. (2024, February 20). *Financial literacy to aid Malaysian youth's relationship with money.* BusinessToday.

https://www.businesstoday.com.my/2024/02/20/financial-literacy-to-aid-malaysian-youths-relationship-with-money/

Fatoki, O. (2012). The impact of entrepreneurial orientation on access to debt finance and performance of small and medium enterprises in south africa. *Journal of Social Sciences*, *32*(2), 121–131. http://krepublishers.com/02-Journals/JSS/JSS-32-0-000-12-Web/JSS-32-2-000-12-Abst-PDF/JSS-32-2-121-12-1365-Fatoki-O/JSS-32-2-121-12-1365-Fatoki-O-Tx%5b1%5d.pdf

Ferretti, F., & Vandone, D. (2019). Personal debt in Europe: The EU financial market and consumer insolvency. *Cambridge University Press*. https://books.google.com.my/books?id=Tm2MDwAAQBAJ&printsec=frontc over&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

Fitch, C., Hamilton, S., Bassett, P., & Davey, R. (2011). The relationship between personal debt and mental health: A systematic review. *Mental Health Review Journal, 16*(4), 153–166. https://doi.org/10.1108/13619321111202313

Fitriadi, D. C., Jhoansyah, D., & Nurmala, R. (2025). The influence of digital finance, financial literacy, and financial inclusion on debt behavior of millennials. Al-Kharaj: *Journal of Islamic Economic and Business, 7*(1). https://ejournal.iainpalopo.ac.id/index.php/alkharaj

Fonkem, B. N. (2024). Living free from personal debt: a possibility or a mere wish? *Advances in Social Sciences Research Journal*, *11*(8), 347–353. https://doi.org/10.14738/assrj.118.17483

Frigerio, M., Ottaviani, C., & Vandone, D. (2020). A meta-analytic investigation of consumer over-indebtedness: The role of impulsivity. *International Journal of Consumer Studies*, *44*(4), 328-342. https://doi.org/10.1111/ijcs.12570

Garg, M., Dhull, H., kalluri, N., & Agrawal, S. (2024). Understanding sample size determination in research: a practical guide. *Educational Administration: Theory and Practice*, *30*(5). https://doi.org/10.53555/kuey.v30i5.6040

Gathergood, J. & Weber, J. (2014). Self-control, financial literacy & the co-holding puzzle. *Journal of Economic Behavior & Organization, 107*, 455–469. https://doi.org/10.1016/j.jebo.2014.04.018

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology and Metabolism, 10*(2), 486–489. https://doi.org/10.5812/ijem.3505

Girimurugan, B., Agarwal, A., Chhajer, D., Karthik, K., & Manoghyna, J. (2023). Generation Z's financial landscape: An extensive study of their saving, spending, and investment trends in the modern economic environment. *Journal of Research in Humanities and Social Science (JRHSS)*, *12*(11), 137-145. https://www.questjournals.org/jrhss/papers/vol12-issue11/12113745.pdf

Gnambs, T., & Kaspar, K. (2016). Socially desirable responding in web-based questionnaires: a meta-analytic review of the candor hypothesis. *Assessment*, *24*(6), 746–762. https://doi.org/10.1177/1073191115624547

Gomes, H. S., Farrington, D. P., Maia, Â., & Krohn, M. D. (2019). Measurement bias in self-reports of offending: a systematic review of experiments. *Journal of Experimental Criminology*, *15*(3), 313–339. https://doi.org/10.1007/s11292-019-09379-w

Goel, A., & Rastogi, S. (2023). Understanding the impact of borrowers' behavioural and psychological traits on credit default: review and conceptual model. *Review of Behavioral Finance*, *15*(2), 205-223. https://doi.org/10.1108/RBF-03-2021-0051

Gontusan, R. (2025, January 26). *Financial literacy in Malaysia: challenges and opportunities.* Borneo Post Online. https://www.theborneopost.com/2025/01/26/financial-literacy-in-malaysia-challenges-and-opportunities/

Grohmann, A., & Koch, M. (2022). The effect of social comparison on debt taking: Experimental evidence (No. 1996). *DIW Discussion Papers*. http://dx.doi.org/10.2139/ssrn.4513822

Gujarati, D. N. (2021). *Essentials of econometrics*. Sage Publications.
https://books.google.com.my/books?hl=en&lr=&id=2CI_EAAAQBAJ&oi=fn
d&pg=PA9&dq=Gujarati,+D.+N.+(2021).+Essentials+of+econometrics+(5th
+ed.).+Sage+Publications.&ots=byKBbcpjVl&sig=eONwntHLgCHsHwZdQ
9zYVZOcwss#v=onepage&q&f=false

Hamid, F. S. (2025). Behavioral biases and over-indebtedness in consumer credit:
evidence from Malaysia. *Cogent Economics & Finance*, *13*(1), 2449191.
https://doi.org/10.1080/23322039.2024.2449191

Hegde, B. (2024, October 9). *Understanding money dysmorphia: gen z's distorted
relationship with finance*. School of Money.
https://www.schoolofmoney.co/blog/understanding-money-dysmorphia-gen-
z-s-distorted-relationship-with-finance?form=MG0AV3

Henegar, J., Archuleta, K., Grable, J., Britt, S., Anderson, N., and Dale, A. (2013).
Credit card behavior as a function of impulsivity and mother's socialization
factors. *Journal of Financial Counseling and Planning*, 24, 37–49.
https://krex.k-state.edu/server/api/core/bitstreams/f58cdde6-9516-4196-94d5-
c8360a3f1c5a/content

Hidayah, N., Daulay, A. N., & Kusmilawaty, K. (2025). FOMO and digital loans drive
impulsive purchases among Gen Z. *Academia Open*, *10*(2).
https://doi.org/10.21070/acopen.10.2025.11250

Husna, F. (2023). Get it fast, pay it later: Analysis of paylater features as a support of
the generation Z lifestyle. *Edueksos Jurnal Pendidikan Sosial & Ekonomi,
12*(01). https://doi.org/10.24235/edueksos.v12i01.13313

Ibrahim, M. E., & Alqaydi, F. R. (2013). Financial literacy, personal financial attitude,
and forms of personal debt among residents of the UAE. *International Journal
of Economics and Finance*, *5*(7), 126-138.
http://dx.doi.org/10.5539/ijef.v5n7p126

Irum, T., & Hudgins, C. (2021). *US corporate bankruptcies end 2020 at 10-year high
amid COVID-19 pandemic.* S&P Global. https://www.spglobal.com/market-
intelligence/en/news-insights/articles/2021/1/us-corporate-bankruptcies-end-
2020-at-10-year-high-amid-covid-19-pandemic-61973656

Jing, T. Y., Yi, S., Herda, N., Fun, C. S., & Lee, K. (2024). The impact of social media on bnpl adoption in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, *14*(9). https://doi.org/10.6007/IJARBSS/v14-i9/22754

Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: explored and explained. *British Journal of Applied Science & Technology*, *7*(4), 396–403. https://doi.org/10.9734/BJAST/2015/14975

Kabir, S. M. S. (2016). *Methods of data collection*. ResearchGate. https://www.researchgate.net/publication/325846997_METHODS_OF_DATA _COLLECTION

Kalaiarasi, D., Abdul-Rahman, A., Mohd Amin, S. I., & Ab Hamid, S. N. (2024). Financial Literacy and Repayment Intentions: Behavioral Insights into Personal Loan Management. *Available at SSRN 5057051*. https://doi.org/10.2139/ssrn.5057051

Kamleitner, B., Hoelzl, E., & Kirchler, E. (2012). Credit use: Psychological perspectives on a multifaceted phenomenon. *International Journal of Psychology*, *47*(1), 1-27. https://doi.org/10.1080/00207594.2011.628674

Karacimen, C. (2014). Financialization in Turkey: The case of consumer debt. *Journal of Balkan and Near Eastern Studies*, *16*(2), 161–180. https://doi.org/10.1080/19448953.2014.910393

Khandelwal, R., Kolte, A., Veer, N., & Sharma, P. (2021). Compulsive buying behaviour of credit card users and affecting factors such as financial knowledge, prestige and retention time: A cross-sectional research. *Vision, 26(2), 172-180*. https://doi.org/10.1177/0972262920981428

Khan, H. H. A., Abdullah, H., & Samsudin, S. (2016). Modelling the determinants of Malaysian household debt. *International Journal of Economics and Financial Issues*, *6*(4), 1468-1473. https://www.researchgate.net/publication/309671479_Modelling_the_Determi nants_of_Malaysian_Household_Debt

Khanna, A. (2025). *Malaysia:Insurer launches financial literacy initiative for youth.* Asia Insurance Review. https://www.asiainsurancereview.com/News/View-NewsLetter-Article/id/90581/Type/eDaily/Malaysia-Insurer-launches-financial-literacy-initiative-for-youth#:~:text=FWD%20Insurance%20in%20partnership%20with,(d)%20for%20Life%20programme

Kim, H. Y. (2013). Statistical notes for clinical researchers: Assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics, 38*(1), 52–54. https://doi.org/10.5395/rde.2013.38.1.52

Kim, J. H. (2019). Multicollinearity and misleading statistical results. *Korean journal of anesthesiology*, *72*(6), 558-569. https://doi.org/10.4097/kja.19087

Kose, M. A., Nagle, P., Ohnsorge, F., & Sugawara, N. (2021). What has been the impact of COVID-19 on debt? Turning a wave into a tsunami. https://dx.doi.org/10.2139/ssrn.3980291

Kuchler, T., & Stroebel, J. (2021). Social finance. *Annual Review of Financial Economics*, *13*(1), 37–55. https://doi.org/10.1146/annurev-financial-101320-062446

Kumar, D. S., Sudin, H., Othman, J., & Salehuddin, S. (2022). The influence of spending behaviour among university students in Malaysia. *Asian Journal of Accounting and Finance, 4(3), 30-43.* https://www.researchgate.net/publication/363205919_The_Influence_of_Spending_Behaviour_Among_University_Students_in_Malaysia

Kyriazos, T., & Poga-Kyriazou, M. (2023). Applied psychometrics: Estimator considerations in commonly encountered conditions in CFA, SEM, and EFA practice. *Psychology*, *14*(5), 799-828. https://doi.org/10.4236/psych.2023.145043

Lai, Y. X., Ting, S. T., & Wong, H. Y. (2022). Spending behavior of UTAR undergraduate students (Doctoral dissertation, UTAR). http://eprints.utar.edu.my/id/eprint/4773

Lea, S. E. G. (2020). Debt and overindebtedness: psychological evidence and its policy implications. *Social Issues and Policy Review, 15*(1). https://doi.org/10.1111/sipr.12074

Lee, D. K. (2020). Data transformation: a focus on the interpretation. *Korean journal of anesthesiology, 73*(6), 503-508. https://doi.org/10.4097/kja.20137

Letkiewicz, J. C. & Heckman, S. J. (2018). Homeownership among young Americans: a look atstudent loan debt and behavioral factors. *Journal of Consumer Affairs, 52*, 88–114. https://doi.org/10.1111/joca.12143

Li, E., Liao, L., Wang, Z., & Wang, X. (2025). Shame shared is shame halved: the peer effect on consumer credit default choice. *Electronic Journal*. https://doi.org/10.2139/ssrn.3399515

Lindemann, N. (2023, June 7). *12 Advantages and disadvantages of questionnaires*. Pointerpro. https://pointerpro.com/blog/questionnaire-pros-and-cons

Limerick, L., & Peltier, J. W. (2014). The effects of self-control failures on risky credit card usage. *Marketing Management Journal*, *24*(2), 149-161. https://www.proquest.com/openview/108522a24779fa34674c5ffb78ec1f97/1?cbl=6858907&pq-origsite=gscholar

Lowe, N. K. (2019). What is a pilot study? *Journal of Obstetric, Gynecologic & Neonatal Nursing, 48*(2), 117–118. https://doi.org/10.1016/j.jogn.2019.01.005

Maccarrone-Eaglen, A., & Schofield, P. (2020). Compulsive buying among young adults: a behavioural segmentation. *Young Consumers, 21*(1), 57-76. https://www.emerald.com/insight/content/doi/10.1108/yc-02-2019-0958/full/html

Mahmudah, T., Rismawati, S. D., Shulthoni, M., Stiawan, D., & Mohamed, M. (2021). *Analyzing the impact of online lending on the needs and consumptive lifestyle of Generation Z*. International Conference on Islamic Economic. https://proceeding.uingusdur.ac.id/index.php/icie/article/view/1671

Makwana, D., Engineer, P., Dabhi, A., & Chudasama, H. (2023). Sampling methods in research: A review. *Int. J. Trend Sci. Res. Dev, 7*(3), 762-768. http://www.ijtsrd.com/papers/ijtsrd57470.pdf

Malay Mail. (2025). *BMI: High household debt putting a damper on Malaysian consumer spending. https://www.malaymail.com/news/malaysia/2025/07/29/bmi-high-household-debt-putting-a-damper-on-malaysian-consumer-spending/185564*

Malay Today. (2024). *Generation Z in Malaysia: navigating the high cost of living and seeking government support.* https://malay.today/2024/11/15/generation-z-in-malaysia-navigating-the-high-cost-of-living-and-seeking-government-support/

Malaysia Department of Insolvency. (2024). *Bankruptcy statistic 2024.* https://www.mdi.gov.my/wp-content/uploads/2025/05/BRIEFNOTEDISEMBER2024.pdf

Malaysia Department of Insolvency. (2025). *What is bankruptcy?.* https://ekss-portal.kehakiman.gov.my/portals/media/attachments/Self-Representative/Bankruptcy.pdf

Malhotra, N. K., Nunan, D., & Birks, D. F. (2017). Marketing Research: an applied approach (Fifth edit). *UK: Pearson Education Limited.* http://www.pmm.edu.my/zxc/2022/lib/ebok/Marketing%20Research%20An%20Applied%20Approach%20(1).pdf

Maran, K. (2025, February 26). *Outstanding RM10.8 bil PTPTN debt a bitter pill to swallow.* Focus Malaysia. https://focusmalaysia.my/outstanding-rm10-8-bil-ptptn-debt-a-bitter-pill-to-swallow

Marcolin, S., & Abraham, A. (2006) Financial literacy research: current literature and future opportunities. *University of Wollongong Research Online.* https://ro.uow.edu.au/commpapers/223

Maria, G., & Tatiana, G. (2018). Psychological factors of multiple debt repayment strategies. *Review of Business and Economics Studies*, 3. https://cyberleninka.ru/article/n/psychological-factors-of-multiple-debt-repayment-strategies

Marmot, M., Ryff, C. D., Bumpass, L. L., Shipley, M., & Marks, N. F. (1997). Social inequalities in health: Next questions and converging evidence. *Social Science & Medicine, 44*(6), 901–910. https://doi.org/10.1016/S0277-9536(96)00194-3

McGrath, R. E., Mitchell, M., Kim, B. H., & Hough, L. (2010). Evidence for response bias as a source of error variance in applied assessment. *Psychological Bulletin*, *136*(3), 450–470. https://doi.org/10.1037/a0019216

Megat, P. A., Marimuthu, T., Ateik, A., Aljounaidi, A., & Melhem, W. G. (2024). Examining the Contributory Factors Influencing Credit Card Debt among Consumers in Malaysia. *Journal of Hunan University Natural Sciences*, *51*(10). https://doi.org/10.55463/issn.1674-2974.51.10.11

Meier, S., & Sprenger, C. (2010). Present-biased preferences and credit card borrowing. *American Economic Journal: Applied Economics*, *2*(1), 193-210. https://doi.org/10.1257/app.2.1.193

Meltzer, H., Bebbington, P., Brugha, T., Farrell, M., & Jenkins, R. (2013). The relationship between personal debt and specific common mental disorders. *European Journal of Public Health*, 23(1), 108–113. https://doi.org/10.1093/eurpub/cks021

Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of cardiac anaesthesia*, *22*(1), 67-72. https://journals.lww.com/aoca/fulltext/2019/22010/descriptive_statistics_and_normality_tests_for.11.aspx

Mohd, M., Ansari, R., Rahim, M., Rohaan Bhoje, M., & Sumit Bhosale, M. (2022). A study on research design and its types. *International Research Journal of Engineering and Technology* (p. 1132). https://www.irjet.net/archives/V9/i7/IRJET-V9I7216.pdf?form=MG0AV3

Mokhtar, N., Sabri, M. F., Ho, C. S. F., & Dass, M. (2018). Profile and differences in financial literacy: Empirical evidence. *Malaysian Journal of Consumer and Family Economics*, *21*, 164–185.

https://www.researchgate.net/publication/329932809_Profile_and_difference
s_in_financial_literacy_Empirical_evidence

Mugichkova, Y. (2015). Psychology of Ordinary Ideas about Debts and Credits.
Humanities and Social Sciences. Bulletin of the Financial University, *5*(4), 37–
47. https://doi.org/10.12737/17057

Nahler，G. (2009). Data editing. *Dictionary of Pharmaceutical Medicine*, 46–46.
https://doi.org/10.1007/978-3-211-89836-9_344

Nepomuceno, M. V., & Laroche, M. (2015). The impact of materialism and anti-
consumption lifestyles on personal debt and account balances. *Journal of
Business Research*, *68*(3), 654-664.
https://doi.org/10.1016/j.jbusres.2014.08.006

Ng, S. I., Ho, J. A., Lim, X. J., Chong, K. L., & Latiff, K. (2019). Mirror, mirror on the
wall, are we ready for Gen-Z in marketplace? A study of smart retailing
technology in Malaysia. *Young Consumers*. https://doi.org/10.1108/yc-06-
2019-1006

Nielsen. (2019). *Understanding Malaysia's Gen Z*. Nielsen.
https://www.nielsen.com/insights/2019/understanding-malaysias-gen-z/

Noor Baharin, A. R. (2025, June 30). *TheWall: Frictionless payments are reshaping
spending and debt patterns*. The Edge
Malaysia. https://theedgemalaysia.com/node/760181

Nor, S. H. S., Ismail, S., & Yap, B. W. (2019). Personal bankruptcy prediction using
decision tree model. *Journal of Economics Finance and Administrative Science*,
24(47), 157–170. https://doi.org/10.1108/jefas-08-2018-0076

Nurhaliza, S., Daud, I., Malini, H., Giriati, & Hendri, M. I. (2024). Financial literacy
on a person's attitude towards debt and the influence of friends on debt habits
in Indonesia. *Jurnal Ekonomi*, *13*(01), 496-511.
https://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/3435/2996

Ottaviani, C., & Vandone, D. (2011). Impulsivity and household indebtedness: Evidence from real life. *Journal of Economic Psychology*, *32*(5), 754-761. https://doi.org/10.1016/j.joep.2011.05.002

Özşahin, M., Yürür, S., & Coşkun, E. (2019). A Field Research to Identify Psychological Factors Influencing the Debt Repayment Behavior in Turkey. *EMAJ: Emerging Markets Journal*, *8*(2), 26–33. https://doi.org/10.5195/emaj.2018.156

Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS.* Routledge. https://books.google.com.my/books?hl=en&lr=&id=CxUsEAAAQBAJ&oi=fnd&pg=PP1&dq=SPSS+survival+manual:+A+step+by+step+guide+to+data+analysis+using+IBM+SPSS.+&ots=n39ByIKa6Y&sig=k7jNvok1Ail0JNknk7I1HwaIBqE&redir_esc=y#v=onepage&q=SPSS%20survival%20manual%3A%20A%20step%20by%20step%20guide%20to%20data%20analysis%20using%20IBM%20SPSS.&f=fal se

Paradis, E., Brien, B. O., Nimmon, L., Bandiera, G., & Martimianakis, M. A. (2016). Design: Selection of Data Collection Methods. *Journal of Graduate Medical Education, 8*(2), 263–264. NCBI. https://doi.org/10.4300/JGME-D-16-00098.1

Peltier, J.W., Dahl, A. J. & Schibrowsky, J. E. (2016). Sequential loss of self-control: exploring theantecedents and consequences of student credit card debt. Journal of Financial Services Mar-keting, 21, 167–181. https://doi.org/10.1057/s41264-016-0002-5

Pranata, F. A., & Salehudin, I. (2024). The Impact of Exposure to Online Advertising on The Intention to Download Online Loan Applications Among Young Adults (18-27 Years) in Indonesia. *Journal of Marketing Innovation (JMI), 4(*2). https://doi.org/10.35313/jmi.v4i2.171

Rachman, E. A. A., & Dewi, A. S. (2024). The effect of increasing generation Z debt seen from financial attitudes, financial literacy, locus of control on financial management behavior: In the city of Bandung. *Journal of Accounting and Finance, 8(2), 103-116.* https://journals.telkomuniversity.ac.id/jaf/article/view/8165

Rahman, M., Isa, C. R., Masud, M. M., Sarker, M., & Chowdhury, N. T. (2021). The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 group in Malaysia. *Future Business Journal*, *7*(1). https://doi.org/10.1186/s43093-021-00099-0

Rahman, M. S. (2016). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language "testing and assessment" research: A literature review. *Journal of Education and Learning*, *6*(1). https://doi.org/10.5539/jel.v6n1p102

Rahman, M., Azma, N., Masud, M. A. K., & Ismail, Y. (2020). Determinants of indebtedness: Influence of behavioral and demographic factors. *International Journal of Financial Studies, 8(1), 8.* https://doi.org/10.3390/ijfs8010008

Rawat, A. S. (2021). *What is descriptive analysis? Types and advantages | Analytics Steps.* Analytic Steps. https://www.analyticssteps.com/blogs/overviewdescriptive-analysis

Refera, M. K., Dhaliwal, N. K., & Kaur, J. (2016). Financial literacy for developing countries in Africa: A review of concept, significance and research opportunities. *Journal of African Studies and development, 8*(1), 1-12. https://doi.org/10.5897/JASD2015.0331

Reporter, S. D. (2025). *How Malaysian Gen Z is adapting financially amidst economic challenges.* Sinar Daily. https://www.sinardaily.my/article/224822/focus/money/how-malaysian-gen-z-is-adapting-financially-amidst-economic-challenges

Richardson, T., Elliott, P., & Roberts, R. (2013). The relationship between personal unsecured debt and mental and physical health: a systematic review and meta-analysis. *Clinical psychology review*, *33*(8), 1148-1162. https://doi.org/10.1016/j.cpr.2013.08.009

Romeo, G. (2020). Data analysis for business and economics. *Elsevier EBooks*, 695–761. https://doi.org/10.1016/b978-0-12-817648-1.00013-x

Rubin, J. D., Chen, K., & Tung, A. (2024). Generation Z's Challenges to Financial
Independence: Adolescents' and Early Emerging Adults' Perspectives on Their
Financial Futures. *Journal of Adolescent Research*.
https://doi.org/10.1177/07435584241256572

Ruliyanti, T., Sudarmin, Sumarni, W., & Ulum, M. (2021, November 26). The
Development of Questionnaire Instruments Assisted by Google Form
Application to Measure Students' Cep Characters on The Stem Integrated
Chemistry Module. *Atlantis Press*.
https://doi.org/10.2991/assehr.k.211125.002

Sablik, T. (2025, January 17). *Life cycle hypothesis*. Richmond Fed.
https://www.richmondfed.org/publications/research/econ_focus/2016/q34/jarg
on_alert#:~:text=The%20life%20cycle%20hypothesis%20argued,the%20simp
le%20life%20cycle%20hypothesis

Sabri, M. F., Anthony, M., Law, S. H., Rahim, H. A., Sufian, A., & Ithnin, M. (2023).
Impact of financial behaviour on financial well-being: evidence among young
adults in Malaysia. *Journal of Financial Services Marketing*, *29*.
https://doi.org/10.1057/s41264-023-00234-8

Sabri, M. F., Wahab, R., Mahdzan, N. S., Magli, A. S., Rahim, H. A., Suhaimi, S. S. A.,
& Nazuri, N. S. (2023). An enigma of Malaysia's low-income young adults:
Mediation of financial behaviour on financial well-being and locus of control
cohesion. *Plos one*, *18*(7), e0288204.
https://doi.org/10.1371/journal.pone.0288204

Santoso, A., & Sulistyawati, A. I. (2023). The Influence of social norms on debt
behavior, with intervention in debt as an intervening variable. *J. Ilmu Sos.
Mamangan, 12(1), 310-316.* https://ejournal.upgrisba.ac.id/index.php/jurnal-
mamangan/article/view/6386

Sathiyaseelan, M. (2015). Research Instruments. *Indian Journal of Continuing Nursing
Education*, *16*(2), 57.
https://journals.lww.com/ijcn/fulltext/2015/16020/research_instruments.8.asp
x

Schrepp, M. (2020). On the Usage of Cronbach's Alpha to Measure Reliability of UX Scales. *Journal of Usability Studies*, *15*(4). https://uxpajournal.org/wp-content/uploads/sites/7/pdf/JUS_Schrepp_Aug2020.pdf

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach.* John Wiley & Sons. https://books.google.com.my/books?hl=en&lr=&id=Ko6bCgAAQBAJ&oi%20=fnd&pg=

Selvanathan, M., Krisnan, U. D., & Wen, W. C. (2016). Factors effecting towards personal bankruptcy among residents: case study in Klang valley, Malaysia. *International Journal of Human Resource Studies*, *6*(3), 98. http://dx.doi.org/10.5296/ijhrs.v6i3.10092\

She, L., Ma, L., Voon, M. L., & Lim, A. S. S. (2022). Excessive use of social networking sites and financial well-being among working millennials: a parallel-serial mediation model. *International Journal of Bank Marketing, 41*(1). https://doi.org/10.1108/ijbm-04-2022-0172

She, L., Rasiah, R., Weissmann, M. A., & Kaur, H. (2023). Using the theory of planned Behaviour to explore predictors of financial behaviour among working adults in Malaysia. *FIIB Business Review*, *13*(1), 118–135. https://doi.org/10.1177/23197145231169336

Shossain. (2020). *What is construct and measure in qualitative research?* HotCubator. https://hotcubator.com.au/research/what-is-construct-and-measure-in-qualitative-research/

Shrestha, N. (2020). Detecting multicollinearity in regression analysis. *American Journal of Applied Mathematics and Statistics, 8*(2), 39–42. https://doi.org/10.12691/ajams-8-2-1

Shukla, D. (2023). A narrative review on types of data and scales of measurement: An initial step in the statistical analysis of medical data. *Cancer Research, Statistics, and Treatment, 6*(2), 279. https://doi.org/10.4103/crst.crst_1_23

Singh, P., Sharma, B. K., Arora, L., & Bhatt, V. (2023). Measuring social media impact
on Impulse Buying Behavior. *Cogent Business & Management*, *10*(3), 2262371.
https://doi.org/10.1080/23311975.2023.2262371

Sinnewe, E., & Nicholson, G. (2023). Healthy financial habits in young adults: An
exploratory study of the relationship between subjective financial literacy,
engagement with finances, and financial decision-making. *Journal of
Consumer Affairs*, *57*(1), 564-592. https://doi.org/10.1111/joca.12512

Smrithi, S., & Selvi, S. (2024). A Study on The Social Media Influence on Financial
Decisions. *International Journal for Research in Applied Science and
Engineering Technology*, *12*(4), 3388-3395.
https://doi.org/10.22214/ijraset.2024.60160

Spohn, D. (2024). Financial Resilience and Innovation among Generation Z in the Face
of Economic Adversity. *European Journal of Management, Economics and
Business*, *1*(3), 39–51. https://doi.org/10.59324/ejmeb.2024.1(3).04

Statistics, L. (2013). *Descriptive and inferential
statistics.* https://www.sultanchandandsons.com/images/BookImages/Chapter
s/673_TC%201307%20BookLet.pdf

Stern, H. (1962). The significance of impulse buying today. *Journal of
marketing*, *26*(2), 59-62. https://doi.org/10.1177/002224296202600212

Suter, C. (2014). Debt. In *Springer eBooks* (pp. 1465–
1469). https://doi.org/10.1007/978-94-007-0753-5_677

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting
research instruments in science education. *Research in science education*, *48*,
1273-1296. https://link.springer.com/article/10.1007/S11165-016-9602-2

Tan, B. (2024, April 23). *AKPK: Over 50,000 youths in debt due to credit cards, loans
worth close to RM2b in total*. Malay Mail.
https://www.malaymail.com/news/malaysia/2024/04/23/akpk-over-50000-
youths-in-debt-due-to-credit-cards-loans-worth-close-to-rm2b-in-total/130302

The Star. (2024, June 7). *Empowering The New Generation with Financial Literacy*.
https://www.thestar.com.my/starpicks/2024/06/07/empowering-the-new-
generation-with-financial-literacy

The Star. (2023). *Gen Z facing problems adapting to the workplace*.
https://www.thestar.com.my/aseanplus/aseanplus-news/2023/07/10/gen-z-
facing-problems-adapting-to-the-workplace

Thompson, C. G., Kim, R. S., Aloe, A. M., & Becker, B. J. (2017). Extracting the
variance inflation factor and other multicollinearity diagnostics from typical
regression results. *Basic and Applied Social Psychology, 39*(2), 81-90.
https://doi.org/10.1080/01973533.2016.1277529

Threadgold, S., Shannon, B., Haro, A., Cook, J., Davies, K., Coffey, J., Farrugia, D.,
Matthews, B., Healy, J. & Burrows, R. (2025). Buy Now, Pay Later
technologies and the gamification of debt in the financial lives of young
people. *Journal of Cultural Economy*, *18*(1), 52-67.
https://doi.org/10.1080/17530350.2024.2346210

Tran, T., & Khuc, Q. (2021). *Primary data.* OSF Preprints. https://osf.io/f25v7

Tumiran, M. A. (2023). The recent use of IBM SPSS Statistics in social science
research. *Asian Journal of Research in Education and Social Sciences*, *5*(4),
461-475. https://doi.org/10.55057/ajress.2023.5.4.44

Turunen, E., & Hiilamo, H. (2014). Health effects of indebtedness: a systematic
review. *BMC Public Health*, *14*(1). https://doi.org/10.1186/1471-2458-14-489

Verplanken, B., & Sato, A. (2011). The psychology of impulse buying: An integrative
self-regulation approach. *Journal of Consumer Policy*, *34*, 197-210.
https://doi.org/10.1007/s10603-011-9158-5

Walker, C. (2011). "Responsibilizing" a healthy Britain: Personal debt, employment,
and welfare. *International Journal of Health Services*, *41*(3), 525-538.
https://doi.org/10.2190/HS.41.3.g

Wandhe, D. P. (2024). The new generation: Understanding millennials and Gen Z. *Journal of Emerging Technologies and Innovative Research, 11*(1), 114–115. https://www.jetir.org/papers/JETIR2401713.pdf

Watson, S. (2009). Credit card misuse, money attitudes, and compulsive buying behaviors: A comparison of internal and external locus of control (LOC) consumers. *College Student Journal*, *43*(2). https://openurl.ebsco.com/EPDB%3Agcd%3A1%3A5081937/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Agcd%3A42517475&crl=c&link_origin=scholar.google.com

Weber, C., Miglioranza, M., Moraes, M., Sant´anna, R., Rover, M., Kalil, R., & Leiria, T. (2014). The five-point Likert scale for dyspnea can properly assess the degree of pulmonary congestion and predict adverse events in heart failure outpatients. *Clinics*, *69*(5), 341–346. https://doi.org/10.6061/clinics/2014(05)08

Wirz, M. (2024). *Monthly Corporate Defaults Hit Highest Level Since 2020*. The Wall Street Journal. https://www.wsj.com/livecoverage/stock-market-today-dow-jones-05-14-2024/card/monthly-corporate-defaults-hit-highest-level-since-2020-yCdFuCPfqJsUFazfmRzp

Xiang, L. Y., Toong, T. S., & Ying, W. H. (2022). *Spending behavior of UTAR undergraduate students*. http://eprints.utar.edu.my/id/eprint/4773

Xu, Y. (2025) *Household Deleveraging: International Practices*. International Monetary Fund. https://www.imf.org/-/media/Files/Publications/Selected-Issues-Papers/2025/English/SIPEA2025055.ashx

Yahya, N. C., Zaki, B. M., Azid, N. N. I. N., Ali, N. F. M., & Hussain, N. A. N. (2023). The Determinants of Household Debt in Malaysia. *Information Management and Business Review, 15*(3)*, 183-194*. https://doi.org/10.22610/imbr.v15i3(I).3528

Yau, J. T. H. (2022). Financial Literacy and Financial Behaviour in Four Different Age Groups in Malaysia. *UNIMAS Review of Accounting and Finance*, *6*(1), 71–89. https://doi.org/10.33736/uraf.5248.2022

Yeo, K. H. K., Lim, W. M., & Yii, K. (2023). Financial planning behaviour: a systematic literature review and new theory development. *Journal of Financial Services Marketing.* https://doi.org/10.1057/s41264-023-00249-1

Yoon, I. (2012). Debt Burdens Among MSW Graduates: A National Cross-Sectional Study. *Journal of Social Work Education, 48*(1), 105–125. https://doi.org/10.5175/jswe.2012.201000058

Yuliani, & Adiandari, A. M. (2020). Personal financial behavior and financial life cycle: evidence from Indonesia. *International Journal of Psychosocial Rehabilitation*, *24*, 2490-2499. http://repo.unr.ac.id/id/eprint/523

Yunchao, C., Abdullah Yusof, S., Mohd Amin, R., & Mohd Arshad, M. N. (2020). Household Debt and Household Spending Behavior: Evidence from Malaysia. *Jurnal Ekonomi Malaysia*, *54*(1), 111–120. https://doi.org/10.17576/jem-2020-5401-8

Yusuf, A. H., & Oyelakin, I. O. (2022). Impact of COVID-19 on Malaysian economy: a study of Consumer product manufacturing firms. *Journal of Hunan University Natural Sciences*, *49*(1). https://doi.org/10.55463/issn.1674-2974.49.1.37

Zahari, N. H. M., Azmi, N. N. N., Kamar, W. N. I. W. A., & Othman, M. S. (2021). Impact of live streaming on social media on impulse buying. *Asian Journal of Behavioural Sciences*, *3*(1), 13-23. https://www.scribd.com/document/674451318/NCKD4

Zain, Z. M., Atory, N. A. A. & Hanafi, S. A. (2019). Determinants of Household Debt in Malaysia from the year 2010 to 2017. *Advances in Business Research International Journal, 5*(2), 91-101. https://journal.uitm.edu.my/ojs/index.php/Abrij/article/view/4152

Zainol, Z., Daud, Z., Nizam, A. N. H. K., Abd Rashid, R., & Alias, N. (2016). Exploring factors that contribute to individual indebtedness among young Muslims. *International Journal of Economics and Financial Issues*, *6*(7), 320-328. https://dergipark.org.tr/en/download/article-file/364062

Zainordin, N. A., Lee, S. A., Kho, Y. X., Rosli, N. a. I. M., & Annuar, N. (2025). The
 role of Financial Literacy in shaping stock market investment behaviour of
 Generation Z in Klang Valley. *Jurnal Intelek*, *20*(1), 163–
 171. https://doi.org/10.24191/ji.v20i1.3810

Zainudin, R., Mahdzan, N. S., & Yeap, M. Y. (2019). Determinants of credit card
 misuse among Gen Y consumers in urban Malaysia. *International Journal of
 Bank Marketing*, *37*(5), 1350-1370.
 https://www.researchgate.net/profile/Nurul-
 Mahdzan/publication/332392679_Determinants_of_credit_card_misuse_amon
 g_Gen_Y_consumers_in_urban_Malaysia/links/64395ad72eca706c8b5cb5b0/
 Determinants-of-credit-card-misuse-among-Gen-Y-consumers-in-urban-
 Malaysia.pdf

Zavadil, T., & Messner, T. (2014). *Regional differences in household wealth across
 Slovakia.* National Bank of Slovakia.
 https://ideas.repec.org/p/svk/wpaper/1030.html

APPENDICES

Appendix A: Permission Letter for Questionnaire Survey

UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)

Wholly owned by UTAR Education Foundation (200201010564(578227-M))

9 June 2025

To Whom It May Concern

Dear Sir/Madam,

Permission to Conduct Survey

This is to confirm that the following students are currently pursuing their Bachelor of Finance (Honours) program at the Teh Hong Piow Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) Perak Campus.

I would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

The students are as follows:

Name of Student	Student ID
Ang Zi Xin	2105128
Cheah Ruo Yan	2104769
Hor Chia Chi	2105481
Yong Di Liang	2104723

If you need further verification, please do not hesitate to contact me.

Thank you.

Yours sincerely,

………………………………

Dr Tan Ai Lian
Head of Department,
Teh Hong Piow Faculty of Business and Finance
Email: tanal@utar.edu.my

Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia.
Tel: (605) 468 8888
Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (603) 9086 0288
Website : http://www.utar.edu.my

Appendix B: Questionnaire

Section 1 of 8

A Study on Debt Burden Among Gen Z Malaysians: Key Factors Influencing Personal Debt Accumulation

B *I* U 🔗 ✕

Dear respondent,

We are undergraduate students from Universiti Tunku Abdul Rahman (UTAR) conducting research on the topic of " A Study on Debt Burden Among Gen Z Malaysians: Key Factors Influencing Personal Debt Accumulation."

This questionnaire consists of three (3) sections:
Section A: Demographic Information
Section B: Personal Debt Accumulation
Section C: Factors Influencing Personal Debt Accumulation

Please answer **ALL** questions in **ALL** sections. The contents of this questionnaire will be kept strictly confidential.

Your participation in this questionnaire is highly appreciated.

Email *

Valid email

This form is collecting emails. Change settings

PERSONAL DATA PROTECTION STATEMENT

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

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to:-

    - For assessment of any application to UTAR
    - For processing any benefits and services
    - For communication purposes
    - For advertorial and news
    - For general administration and record purposes
    - For enhancing the value of education
    - For educational and related purposes consequential to UTAR
    - For the purpose of our corporate governance
    - For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

3. You may access and update your personal data by writing to us at zixinang0403@1utar.my.

Acknowledgment of Notice *

○ I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.

○ I disagree, my personal data will not be processed.

Section 2 of 8

Section A: Demographic Information

Description (optional)

Gender *

◯ Male

◯ Female

Age *

◯ 21

◯ 22

◯ 23

◯ 24

◯ 25

◯ 26

◯ 27

◯ 28

◯ Other...

Location *

◯ Pulau Pinang

◯ Selangor

◯ Wilayah Persekutuan (E.g., Kuala Lumpur, Labuan, and Putrajaya)

◯ Johor

Race *

○ Malay

○ Chinese

○ Indian

○ Other...

Marital Status *

○ Single

○ Married

○ Other...

Education Level *

○ No formal education

○ Primary school

○ Secondary school

○ Diploma/Certificate

○ Bachelor's degree

○ Master's degree

○ Other...

Current Employment Status *

○ Employed

○ Unemployed

○ Student

Income Level *

○ No income

○ RM2,000 or below

○ RM2,001 - RM4,000

○ RM4,001 - RM6,000

○ RM6,001 and above

How frequently do you accumulate new debt? *

○ Every week

○ Every month

○ Every 6 months

○ More than once a year

○ Rarely or only in emergencies

Types of Debt *

☐ Housing Loan

☐ Car Loan

☐ Student Loans (E.g., PTPTN)

☐ Credit Cards (E.g., CIMB Credit Card)

☐ Buy Now, Pay Later (BNPL) (E.g., SPayLater)

☐ Medical Loan

☐ Other...

How do you usually repay your debt? *

☐ Monthly installment payments

☐ Lump sum payment (one-time payment)

☐ Refinancing or consolidating debts

☐ Through credit card balance transfers

☐ Paying off when I have sufficient funds

☐ Other...

Section 3 of 8

Section B: Personal Debt Accumulation (PDA)

Please indicate your agreement for the following items based on the scale of 1 to 5.
(1="Strongly Disagree", 2="Disagree", 3="Neutral", 4="Agree", and 5="Strongly Agree")

PDA1 - I use credit to purchase the things I want. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PDA2 - I feel uncomfortable with having debt. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PDA3 - I regularly monitor and review my debt obligations. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PDA4 - I compare loan products among different lenders before the final decision to borrow. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PDA5 - I consider borrowing reasonable if I can repay both principal and interest. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PDA6 - I think that the increase in costs can lead to more debt. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Section 4 of 8

Section C: Peer Influence (PI)

Please indicate your agreement for the following items based on the scale of 1 to 5.
(1="Strongly Disagree", 2="Disagree", 3="Neutral", 4="Agree", and 5="Strongly Agree")

PI1 - I always discuss financial management with my friends. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PI2 - I am more likely to consider debt when I see my friends doing so successfully. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PI3 - When I take on debt, my friend's opinion is important to me. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PI4 - I feel pressured to match the spending habits of my social circle. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PI5 - I discuss financial decisions with my friends before making significant purchases. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PI6 - I have purchased items because my peers recommended them. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Section 5 of 8

Section C: Financial Literacy (FL)

Please indicate your agreement for the following items based on the scale of 1 to 5.
(1="Strongly Disagree", 2="Disagree", 3="Neutral", 4="Agree", and 5="Strongly Agree")

FL1 - I think an increase in food prices will not reduce purchasing power. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

FL2 - I understand that a balance sheet will not show my financial status. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

FL3 - I believe that a credit card holder can spend without limit. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

FL4 - I believe that owing a credit card will increase my purchasing power. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

FL5 - I think that the longer the repayment period, the lower the overall cost of a loan. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

FL6 - I understand that buying goods on credit will not reduce purchasing power in the *
future.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Section 6 of 8

Section C: Spending Behaviour (SB)

Please indicate your agreement for the following items based on the scale of 1 to 5.
(1="Strongly Disagree", 2="Disagree", 3="Neutral", 4="Agree", and 5="Strongly Agree")

SB1 - I often make purchases without prior planning. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

SB2 - I never save money for emergencies or future. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

SB3 - I often buy items I didn't need just because they were in the sale or had a promotion. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

SB4 - I believe my debt is mainly due to lack of financial control. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

SB5 - I never set a monthly budget. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

SB6 - I often borrow to balance my personal budget. *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

Section 7 of 8

Section C: Social Media (SM)

Please indicate your agreement for the following items based on the scale of 1 to 5.
(1="Strongly Disagree", 2="Disagree", 3="Neutral", 4="Agree", and 5="Strongly Agree")

SM1 - I find it attractive in what loan ads promise. *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

SM2 - I make impulsive purchases to match the lifestyle portrayed by social media. *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

SM3 - I am likely to use 'Buy Now, Pay Later' services after seeing them promoted on social *
media.

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

SM4 - I feel that 'Buy Now, Pay Later' options encourage me to buy things I cannot afford *
immediately.

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

SM5 - I think social media ads make borrowing money easier and more accessible. *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

SM6 - I tend to overspend after seeing products or services endorsed on social media. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Section 8 of 8

Section C: Psychological Factors (PF)

Please indicate your agreement for the following items based on the scale of 1 to 5.
(1="Strongly Disagree", 2="Disagree", 3="Neutral", 4="Agree", and 5="Strongly Agree")

PF1 - I am not confident in managing debt. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PF2 - I am not confident that my effectiveness in handling debt situations. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PF3 - I am not confident that my debt repayment plans will always go as expected. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PF4 - I tend to purchase non-essential items to reward myself when I am feeling down. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PF5 - I felt frustrated when I was unable to make a purchase. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

PF6 - I tend to borrow money when I am stressed about my financial situation. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree