THE INCREASE OF BUY NOW PAY LATER (BNPL) SERVICES IN MALAYSIA: OPPORTUNITIES AND RISKS

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DEDICATION

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LIST OF ABBREVIATIONS

FR   Financial Responsibility of BNPL Users

PC   Perceived Convenience

FL   Financial Literacy

SB   Spending Behaviour

IBT   Impulse Buying Tendency

Gen Z   Generation Z

TBP   Theory of Planned Behavior

BNPL   Buy Now, Pay Later

S-O-R   Stimulus-Organism-Response

MLR   Multiple linear regression

OLS   Ordinary Least-Squares

RM   Ringgit Malaysia

UTAR   Universiti Tunku Abdul Rahman

SPSS   Statistical Package for the Social Sciences

Sig.   Significant

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PREFACE

Given the speed at which e-commerce is expanding and the growing acceptance of BNPL services, it is imperative that both BNPL service providers and BNPL customers comprehend the elements that impact the decision to utilise BNPL services. Consequently, researchers have to focus more on this subject because of the rising tendencies that led to a rise in BNPL service utilisation.

The objective of conducting this study is to examine the factors that influence the intention to adopt the Buy Now Pay Later (BNPL) services in Malaysia: Opportunities and Risks. To achieve this goal, we have incorporated various elements along the line of perceived convenience (PC), financial literacy (FL), spending behaviour (SB) and impulse buying tendency (IBT) to analyse how they influence financial responsibility of BNPL Users (FR). As a result, we can delve deeper into the relationship between the independent variables and dependent variables.

Our goal in conducting this study is to offer insightful information that will help BNPL service providers, users, and online company owners better understand the BNPL service. The ultimate objective is to make it possible for the successful application of smart and efficient improvement measures. Additionally, this study can build the groundwork for more research on the subject and significantly add to the development of Malaysia's BNPL service.

ABSTRACT

The rapid adoption of Buy Now, Pay Later (BNPL) services in Malaysia has transformed consumer purchasing behaviour, particularly among Millennials and Generation Z. While BNPL offers convenience, flexibility, and accessibility, it has also raised concerns over impulsive spending, debt accumulation, and declining financial responsibility. This study examines the relationship between four key factors such as perceived convenience, financial literacy, spending behaviour, and impulse buying tendency and the financial responsibility of BNPL users in Malaysia. A quantitative research design was employed, utilising a structured questionnaire distributed via online platforms to a sample of 400 Malaysian adults aged 18 to 60, including current and potential BNPL users. Descriptive statistics, Pearson correlation, and multiple linear regression will be employed to analyse the data, as has been done in the first two studies, to test the proposed hypotheses. The objective of the study is to provide empirically based knowledge of the influence of these behavioural and cognitive factors related to repayment discipline and debt management in the BNPL environment. This study will add to the academic literature on consumer credit behaviour, provide BNPL providers with recommendations to improve responsible use of BNPL for consumers, and provide government policy to inform a regulatory framework which promotes and protects consumer financial well-being while allowing consumers to be innovative as the BNPL environment continues to innovate in the digital credit space.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

Buy Now, Pay Later (BNPL) services are a relatively new financial product, which suggests that this study is considered new and underexplored. In Chapter 1, this study progressively introduces the notion of this research project, as few scholars have yet investigated the subject. The chapter begins by outlining the research background, setting the foundation for the study. It then outlines the research problems, which are clearly expressed to recognize and examine the issues influencing the behavioral intention to adopt BNPL services. Thus, Chapter 1 includes the research background, problem statement, and other important parts. After this, an outline of the study's organizational structure was provided in terms of the sequence of chapters. Finally, the chapter wrapped up by summarizing the main points introduced in this portion of the report.

1.1 Research Background

The Buy Now, Pay Later (BNPL) market is growing rapidly as it becomes an increasingly popular payment option for consumers looking to purchase items like laptops, smartphones, and other goods without having to pay the full amount upfront. BNPL services allow customers to split the cost of their purchases into convenient monthly instalments. Deferred payment or deferred payment plan are other names for BNPL (Shco, 2024). However, BNPL services and credit cards are similar in that they both give customers the option to make purchases without having to pay the entire amount up front. BNPL and credit cards both include late

payments, however when the user uses a credit card to pay for purchases, the user just needs to pay the minimum amount owed each month. Interest will continue to be charged on the outstanding balance until it is fully repaid. Furthermore, the remaining amount may be carried over perpetually. Nevertheless, there is frequently no interest associated with BNPL transactions. They do, however, have a set repayment plan. Malaysian providers currently permit tenures of up to twelve months at a period (iMoney Editorial, 2025).

On the other hand, personal loans are intended for higher expenses with longer repayment terms, whereas BNPL is intended for short-term, modest purchases. Borrowers who fail to make their monthly repayments by the due date will be assessed late payment fees for personal loans. This would be contingent upon the individual banks. Typically, the fee associated with a personal loan is computed as a percentage of the total amount owed. In contrast, BNPL has no yearly fees or joining fees. To accelerate the loan application process, it is crucial to submit accurate and comprehensive documents for personal loans. Therefore, before submitting the application to the financier, the user must make sure they have the appropriate documentation to support their income stability, such as their most recent EPF statement, income tax declaration form, or salary slip (Mandy, 2024).

The evolution of consumer credit systems has significantly influenced modern purchasing behaviors, allowing individuals to acquire goods and services without requiring immediate full payment. In the past, the most common financing options for customers making significant or necessary purchases have been credit cards and personal loans. Through the revolving credit limit that credit cards provide, consumers may make the purchases and pay them back over time with just a minimum monthly payment (iMoney Editorial, 2025). However, there is a high interest rate imposed on the outstanding balance if consumers can pay their debt in full, which causes long-term financial distress. In addition to the minimum payment option, many credit cards in Malaysia also offer installment plans for specific purchases, although these often come with fixed interest rates and processing fees (iMoney Editorial, 2025). On the other hand, personal loans have specified

repayment terms and structured interest rates and are intended for larger, longer-term needs such as home improvements, medical bills, or schooling (Mandy, 2024). Despite being easily accessible, credit cards and personal loans have stringent requirements for eligibility, including a thorough documentation process, verification of credit history, and evidence of regular income. As a result, young adults, students, and those without official employment records have less access to these loans (Mandy, 2024).

In response to the increasing need for quick, flexible, and easily accessible credit products, the alternative funding sources have developed as e-commerce and online financial services are developing. Buy Now, Pay Later (BNPL) is a form of short-term, installment-based financing that allows consumers to purchase certain products now and to pay later over an agreed duration, interest-free (if they pay on time). It is one of the most recent innovations in this market (Hoo et al., 2024). BNPL usually functions on installment payment plans with minimal approval criteria, making it a more accessible choice for those who do not have stable income sources or excellent credit scores than credit cards that demand an annual credit limit and high financial barriers (Osman et al., 2024a). Financially underserved consumers are particularly attracted to the BNPL model since it provides them with an immediate financing alternative without the deep credit history verification demanded by traditional lenders (Osman et al., 2024a).

In Malaysia, BNPL services have gained extremely high popularity, riding on international trends towards digital credit alternatives. Frictionless financing models embedded in e-commerce platforms like Shopee PayLater, Atome, and Grab PayLater have seen a surge in users. The majority of the BNPL customers in Malaysia are Generation Z and Millennials who greatly appreciate convenience, instant satisfaction, flexibility in spending, and convenience through online platforms when paying (Mukhtar et al., 2023). According to Soong et al. (2024), younger customers view BNPL to be an extremely convenient, low-risk financial tool that enables them to make purchases without being constrained by the regulations of traditional banking procedures. In addition to technology innovation,

easy digital payment integration, and mobile accessibility are the main factors that drive the acceptance of BNPLs, allowing consumers to obtain short-term loans with little effort (Mukhtar et al., 2023).

As Mukhtar et al. (2023) note, there are three primary drivers to the utilization of BNPL services, which are easy access to credit, repayment terms tailored to individual preferences, and overall user friendliness. They are especially appealing to consumers who have little financial literacy or poor credit histories. Unlike conventional bank loans, which typically entail lengthy approval times and rigorous credit checks, BNPL services usually offer immediate approval with minimal documentation. This renders them an attractive option for consumers in need of immediate financial support without the limitations of conventional lending systems. Perhaps the most powerful feature of BNPL is its installment payment system, where the consumers can divide the cost of expensive products into smaller, less painful payments. This can reduce the initial financial burden and offer temporary help for consumers with short-term cash flow problems (Soong et al., 2024). Therefore, BNPL has established itself as a popular substitute for credit cards and personal loans because of its accessibility, flexibility, and convenience, especially among young, tech-savvy consumers who want a quick and easy financial solution (Mukhtar et al., 2023).

In addition to this, digital marketing platforms, targeted advertising, and social media marketing have a greatly contributed to the quick adoption of BNPL by spreading the message that it is a convenient and risk-free funding solution (Jing et al., 2024a). In order to make the deferred payments more desirable than single, lump-sum payments, BNPL providers position their services on e-commerce checkout pages and deferred payments more desirable than single, lump-sum payments, BNPL providers position their services on e-commerce checkout pages and use the data-driven algorithms to promote installment payment choices (Jing et al., 2024a). Besides, online marketing campaigns and social media influencer marketing also support the idea that BNPL is an affordable and convenient payment method, thereby encouraging young consumers to adopt it (Jing et al., 2024a).

However, this fast-marketing trend increases the likelihood of debt creation and financial over-indebtedness by supporting compulsive consumption with poor planning, resulting in concern over impulse buying (Jing et al., 2024a).

Besides that, greater financial accessibility is provided by BNPL, but its extensive use raises questions about consumer financial responsibility, debt accumulation, and repayment discipline. BNPL forces customers to rigidly follow set payback schedules, which frequently results in financial difficulties when payments are missed. This is in contrast to credit cards, which offer variable minimum payment alternatives (Osman et al., 2024a). Spending without thinking is another significant problem. According to Prasetyani et al. (2024) discovered that BNPL services promote impulsive purchases by fostering an impression of affordability, which lowers psychological barriers to buying and raises the risk of financial overstretching. Similarly, Abdul Halim et al. (2024) discovered that because the delayed payment model produces a psychological impression of affordability, which increases freedom to spend and financial hardship, BNPL customers are noticeably more likely to engage in impulsive expenditure.

According to Lusardi and Streeter (2023), whether consumers can effectively utilize BNPL is largely a function of their financial knowledge. Improved financial education increases the likelihood that someone will be able to effectively service their BNPL obligations and avoid substantial amounts of subsequent debt. But as Long et al. (2023) further explain, most of the BNPL consumers, especially young adults, lack the money management skills to accurately determine their borrowing limits, it will be resulting in missed payments, fluctuating finances, and mounting debt burdens.

BNPL creates extremely critical issues around consumer purchasing habits, financial prudence, and likelihood of debt accumulation despite providing accessibility, financial freedom, and convenience (Abdul Halim et al., 2024). The establishment of financial literacy programs, regulatory measures, and customer

protection laws is crucial in a bid to reduce related risks considering that BNPL in Malaysia continues to grow (Widayati et al., 2024). BNPL can emerge as a sustainable financing solution that harmonizes consumer convenience with fiscal prudence through the provision of sound lending practices and enhanced financial literacy (Lusardi & Streeter, 2023).

Buy Now, Pay Later (BNPL) services have become incredibly popular in Malaysia's financial ecosystem, and dominating the landscape of alternative credit products. The trends are reflective of an e-commerce environment that exists in Malaysia, along with a consumer behaviour lecture based on rapid consumer experiences, accessibility, and financial freedom. BNPL applications such as Shopee PayLater, Atome, Grab PayLater, and others allow consumers to complete an instant purchase and pay later over a period of weeks or months, and in some cases, no interest repayment if consumers' payments are made on time. According to Soong et al., (2024), notes that the segmented consumer audience is 18-35 years old, but the more important takeaway is that they already use these digital retail platforms that allow consumers to finance purchases. BNPL would be attractive to consumers because they have the ability to finance their purchases that are also integrated with digital retail platforms, and when you can eliminate hours of paperwork completing a bank application process with long delays before you get approved for financing, all the better.

Besides that, Mukhtar et al. (2023) elaborate on the simplicity of access, simplified installment schemes, and easy process for acquiring BNPL, which preparation is suitable for fast-paced lifestyles that are similar to Malaysia's, compared to the conventional credit cards and deferred payment options. Media reporting seems to substantiate this trend as some Malaysians have described BNPL as a means of budgeting, while others have stated that they get carried away with spending once they already use BNPL (Malay Mail, 2022).

This is not a unique Malaysian phenomenon. Luci Irawati et al. (2024) positioned Malaysia at the forefront of BNPL adoption in ASEAN owing to a very technologically advanced population and a very rapidly growing e-commerce industry. As of the latter half of 2024, Zainudin et al. (2024) reported that BNPL payments in Malaysia totaled RM7.1 billion with over 5.1 million users. These figures highlight BNPL's reach over more traditional financial products like starter credit cards or personal loans, particularly among younger consumers and first-time borrowers.

Credit cards, which have been around for a number of decades, offer convenience with revolving lines of credit, allowing consumers to pay the minimum while interest is accrued on balances (Wortmann & Lippold, 2023). Others offer installment plans, though usually with fixed interest and fees. However, personal loans are for costly long-term purchases such as fixing a home or acquiring a vehicle and are generally subject to tighter qualification testing and proof of stable income (Bian et al., 2023; Zainudin et al., 2024). Furthermore, BNPL stands out for offering instant approval and minimal paperwork, which is especially appealing to students, freelancers, or those with poor credit histories (Mukhtar et al., 2023).

On the other hand, the value proposition of BNPL is simplicity and convenience in making low-consideration purchases like fashion apparel, electronics, or lifestyle goods that do not demand extensive planning from a monetary perspective (Irawati et al., 2024). Unlike relying on trust to avow known banks for credit cards or pre-existing monetary credibility on personal loans, BNPL satisfies short-term demands with a "tap and go" attitude. According to Risi et al. (2023), the disruption of credit networks by the world through BNPL is lowering barriers to entry. Granting credit access where the use of credit cards is to draw credit and loans would be too expensive for low-cost products. Similarly, Morden (2022) elaborated that although most customers initially resort to the use of BNPL due to convenience, other customers regret afterward purchasing goods that they did not necessarily need. This refers to a psychological factor of the use of BNPL, in that delayed payment convenience enables emotional or indulgent spending.

However, Malaysian expansion of BNPL cannot be attributed to convenience alone. There is an important place for culture as well. Osman et al. (2024) observed that Gen Z Malaysians have a strong preference for instant consumption and BNPL closely reflects that behavior by enabling the moment of consumption while exempting them from initial fiscal cost. Moreover, Jing et al. (2024) also showed that social media platforms like Instagram and TikTok also encourage such practice, presenting BNPL as a lifestyle essential, in contrast to credit cards and loans that are perceived as serious or institutional

Next, Hoo et al. (2024) also add that BNPL adoption is more likely to be driven by peer influence and materialism compared to trust in financial institutions, which is more likely to drive credit card usage. Seasonal peaks in spending during festivities like Hari Raya or Chinese New Year also promote increased BNPL usage, with consumers opting for fast, interest-free installments rather than expensive credit or prolonged loan application procedures (S Bedi, 2024). According to Lia and Natswa (2021) point out that Gen Z consumers, particularly those with irregular incomes, are attracted to BNPL for the ease of access—though the same could also encourage spending on wants over needs, undermining financial discipline over time.

Besides that, statistical evidence further supports this behavioural shift. On the internet, BNPL customers globally are making 6.42% more purchases than non-customers (Kumar et al., 2024), and Malaysia's RM7.1 billion six-month BNPL turnover reflects the same acceleration of e-commerce activity (Zainudin et al., 2024). Credit cards are generally intended to manage long-term expenditure, although BNPL appears to cause greater, short-term consumption habits (Bian et al., 2023). In contrast, personal loans remain less visible, serving more long-term and structured financial needs. Household loan balances were worth RM1.45 trillion as of 2022—suggestive of scale, but also that such credit lines are being used for other, more planned financial needs.

BNPL is also commonly used by university students. Widayati et al. (2024) found that BNPL is frequently used by students to purchase study materials or computer equipment because they don't have a good enough credit history to obtain a credit card and personal loans are too much hassle for a small amount of money. Related to the more deliberate nature of personal loans, BNPL provides greater affective, more spontaneous shopping behavior.

Regulatorially, Malaysia's BNPL sector has expanded with minimal regulation—described as a "wild west" by Luci Irawati et al. (2024). Credit cards and loans have well-established banking regulations to govern them. The Ministry of Finance has begun to prepare regulatory guidelines to protect users from debt traps, late fees, and credit score damage (Zainudin et al., 2024) in accordance with the growing risks. Whereas credit cards have evidently fixed limits and conditions, and loans are based on contractual terms, BNPL's more fluid structure has permitted unequal practice. Pui (2023) observed that while many BNPL customers weigh the advantages and disadvantages extensively, they might be deprived of the maturity needed to employ long-term credit by virtue of customary practice and habituation.

With the growth of the BNPL, financial literacy is an urgent issue. Furqan et al. (2025) contend that higher usage of the service indicates higher risk-taking and lower cautious behavior. The change is problematic when consumers are not financially literate to assess repayment risks. Bagniewski et al. (2024) and Raji et al. (2023) noted that BNPL consumers are more exposed to debt traps when they are unaware of the overall cost of their purchases—a risk considered to be less for credit card and personal loan consumers, who are more likely to possess advanced budgeting tools. Lia and Natswa (2021) also highlighted that Gen Z's unpredictable income streams make BNPL both a financial tool and a potential risk. Unlike credit cards, which require payment of interest for late payments, or loans, which require proof of repayment ability, BNPL offers immediate access without determining whether the user is financially ready (Soong et al., 2024; Bian et al., 2023).

Against this background, policymakers and researchers are calling for greater financial literacy and regulatory transparency. Irawati et al. (2024) proposed that literacy policies be implemented alongside BNPL expansion, a perspective endorsed by emerging regulatory steps in Malaysia. With proper protection, BNPL can evolve into a sustainable credit model that balances convenience with fiscal responsibility.

1.2 Research Problem

In Malaysia, Buy Now, Pay Later (BNPL) services like Shopee PayLater and Atome have become increasingly popular, especially within the growing online shopping sector. The payment splitting features offered by these options help buyers pay purchases in smaller manageable amounts which benefits consumers between the ages of 18 to 40 (Soong et al., 2024). The BNPL payment market in Malaysia will grow at a rate of 15.1% annually through 2025 until it reaches US$2.52 billion according to Research and Markets (2025). The nation experienced an annual growth of 24.0% in BNPL market operations between 2021 and 2024. The adaptable nature of BNPL enables credit-inaccessible customers to purchase potential purchases but financial security remains at risk. Malaysia's household debt, already high at 81% of GDP in 2022, signals a fragile economic backdrop (Bank Negara Malaysia, 2022). The two critical challenges associated with BNPL services relate to both high levels of purchase spending and obstacles in debt repayment. These problems endanger user financial stability since they need more evaluation and detailed examination.

The first issue is how BNPL's ease of use encourages overspending, a problem exacerbated by many Malaysians' shaky grasp of money management. The issue severely affects Malaysia since most residents demonstrate weak abilities to manage their money. The research showed that 55% of Malaysian consumers spend exactly or more than they earn monthly, but 70% maintain monthly savings under

RM500 (RinggitPlus, 2023; Ng, 2022). The limited amount of funds in consumer safety nets renders them more prone to overspending (Ng, 2022). Many consumers take advantage of expedient approval without interest payments which drives them toward making irreversible purchases. Neighborhood news media has identified people who incur debt by purchasing expensive goods and unnecessary items beyond their financial means. Evidential data from Malay Mail (2025) showed the BNPL transaction volume reached RM7.1 billion and the user base grew to 5.1 million people in the final quarter of 2024 as consumers spent excessively during celebrations. The study conducted by UCSI University showed a disturbing percentage of 73% among Malaysian adults aged 18 to 40 who are in debt because they are trying to maintain a luxurious lifestyle (Jun, 2023). According to Financial Education Network (2025) digital payment methods, including BNPL use technological features to deceive users into omitting actual expenses through the concept of "painless spending". The situation deteriorates further when festivals occur, such as Hari Raya or year-end sales because payments exceed RM7.1 billion in late 2024 with 5.1 million users falling beyond their specified limits (Liyana, 2025). According to research conducted by the Borneo Post in 2025 it was revealed that basic financial understanding reaches only 36% of the Malaysian population despite which most people lack BNPL readiness (Borneo Post, 2025). Statistical data confirms tax on non-essential spending creates significant spikes in personal debt quantities.

The second issue is that many struggle to repay BNPL debts, threatening their long-term financial health. At the time of BNPL overuse consumers heavily overspend on purchases yet manage payments even though their finances experience a decreased flexibility and lower quality of life. Users get isolated from machines because they cannot make timely payments. A debt repayment difficulty leads to actual financial challenges which create penalties and damages credit scores while producing severe pressure on debtors. Users who lack repayment skills join this category because they cannot meet their payment deadlines and end up damaging their credit history through fees accumulation. Fortune Business Insights reports that 47% of BNPL users worldwide delay payments and Malaysian customers constitute 1.3% of those consumers who do not submit payments within three

months (Fintech News Malaysia, 2024). A recent Khazanah Research Institute (2024) data revealed that users with restricted BNPL credit of RM500 utilize more than 95% of their available funds because they subject themselves to financial risks before defaulting (Khazanah Research Institute, 2024). The Credit Counselling and Debt Management Agency (AKPK) discovered that about 53,000 Malaysians aged thirty owe a total of RM1.9 billion because they handle BNPL transactions wrongly (Eurasia Review, 2025). Between 2020 and September 2024, records from the Malaysian Insolvency Department show that 3,602 civil servants filed for bankruptcy as a result of BNPL loan mismanagement (Syed Jaymal Zahiid, 2025). Consumers facing greatest financial distress often hold both BNPL accounts and credit cards, acknowledging that recurring payment defaults generate psychological strain and disrupt household economic stability (S Bedi, 2024).

The third issue centers on the ambiguous and inconsistent manner in which BNPL credit limits are determined, which contributes to consumer confusion and impulsive purchasing behavior. Through Shopee's Spay Later system users cannot directly ask for limit adjustments, which the platform determines through internal behavioral metrics. For instance, some BNPL platforms offer temporary purchasing limits during festive campaigns, pressuring users to make quicker buying decisions. These limits often expire immediately after promotions, which can influence unplanned spending behavior. Through temporary purchasing opportunities, Shopee establishes a timed pressure on consumers to make impulse decisions for items they had not placed on their shopping list. Reddit Malaysia have documented how their credit limits unexpectedly rise during special sales days although they receive no advance notification and this development creates worries about increased spending beyond budget control. Research reports indicating actual user behavior match findings from emerging academic publications that demonstrate the behavioral consequences. Research data demonstrates that providing BNPL options to customers heightens their odds of spontaneous buying by 13% (Keil & Burg, 2023). The psychological detachment between buying and funding caused by BNPL systems leads younger consumers to recognize the financial consequences less (RSIS International, 2024). Consumer ability to budget effectively becomes

challenged by lack of transparency regarding credit limit establishment processes thus necessitating improved financial education about BNPL usage.

Although researchers have tracked the rapid rise of BNPL services in Malaysia (Soong et al., 2024), their impact on users' financial responsibility remains underexplored in the local context. While some customers value BNPL because it provides flexibility and affordability according to Malay Mail (2022) but several users confess to developing debt problems partly because of their financial mistakes and confusing platform rules. The growing use of BNPL stores remains poorly supported by research that demonstrates clear relationships between consumer benefits, financial capability levels, purchasing habits and debt repayment behaviors and their lasting money outcomes in Malaysia. Recent BNPL transaction figures indicate RM6.2 billion were processed during 2023 that highlights the growing importance of this knowledge deficit (Financial Education Network, 2025). In short, comprehensive research is needed to assess not only the opportunities BNPL creates but also the financial risks it imposes, particularly on vulnerable groups so that consumers, regulators, and providers can respond with informed solutions.

1.3 Research Objective

1.3.1 General Objectives

The purpose for this study is to analyse several factors that lead to the financial responsibility of BNPL Users.

1.3.2 Specific Objectives

To investigate the relationship to perceived convenience, financial literacy, spending behavior, impulse buying tendency and the financial responsibility of BNPL Users.

1.4 Research Questions

How do Perceived convenience, Financial Literacy, Spending Behavior, and Impulse Buying Tendency affect the Financial Responsibility of BNPL Users.

1.5 Research Significance

In addition to its ease of use and flexible payment options, the Buy Now, Pay Later (BNPL) service model has revolutionized consumer purchasing habits worldwide, especially in developing nations like Malaysia. However, worries about financial responsibility, impulsive spending, and long-term financial stability have prompted discussions about its implications from academic, industry, and policy perspectives. This research aims to offer valuable perspective in the relationship between BNPL adoption and consumer financial responsibility, focusing on perceived convenience, financial literacy, spending behaviour, and repayment patterns. The results will not only advance academic knowledge but also assist businesses in improving their BNPL strategies and policymakers in creating regulatory frameworks to protect consumers' financial wellbeing.

Moreover, this research of Buy Now, Pay Later (BNPL) is important for academic people because it helps them understand how this financial service affects businesses, consumers, and the economy. Understanding BNPL can help young people learn how to handle their money responsibly because many of them utilize it without completely comprehending the consequences. Researchers can examine how BNPL affects trends in digital payments, financial inclusion, and consumer behavior. They may explore the impact of BNPL on spending patterns, particularly in low-income and youth populations. Educators can teach economics, business tactics, and financial literacy by using BNPL as a case study. Scholars can learn about the advantages and risks of BNPL, including its impact on financial well-being, hidden fees, and debt buildup.

For **industry**, businesses can gain better insights into how BNPL affects sales, consumer behavior, and financial management from this research. By providing a simpler method of payment, BNPL is being used by a variety of businesses, including technology, e-commerce, and retail, to attract new clients. Additionally, it allows businesses to comprehend the purchasing patterns of their customers, particularly those of younger generations who favor flexible payment methods (Lian, 2022). In order to provide better services and regulations that guarantee equitable and responsible lending, financial institutions and fintech businesses will also gain knowledge about BNPL. Industries can learn how to enhance their strategy, make better financial decisions, and adjust to shifting market trends by studying BNPL. This research is crucial for companies to maintain their competitiveness in the digital economy while guaranteeing long-term expansion.

The technology changes and the innovation in their **industry** model have been mainly attributed to the entire growth of BNPL in the fintech industry. The entire digital penetration through the COVID-19 pandemic has created an arena for these BNPL players to dive into seamless, consumer-centric payment solutions developed for online commerce and increasingly for offline retail. Companies such as Affirm, Klarna, and Afterpay have capitalized on the trend by building partnerships with merchants and using data-driven models to promote tech-savvy, younger segments

like Millennials and Generation Z, who often eschew traditional credit cards (Visa Navigate, 2022). Competition, which has seen a rush of new entrants as well as partnerships between the BNPL participants and traditional financial institutions, has driven adoption. For example, the addition of BNPL options to services such as Apple Pay and PayPal highlights how innovation within the industry is expanding access to this type of financing. This study holds importance as it will shed light on how these industry trends fueled by convenience, merchant incentives, and aggressive marketing have made BNPL a normalized mainstream payment option, with potential implications for consumer spending behavior and retailer profitability.

Both the **policy dimensions** that promote and discourage the growth of BNPL are equally critical. Historically, there have not been many clear regulations regarding BNPL services in a manner much different from that applied to other standard credit services, as they are not long term and utilize no interest whatsoever. In 2022, Bank Negara Malaysia noted the lack of regulation oversight of BNPL schemes, which, unlike credit cards, do not face strict affordability checks or interest rate limitations, with spending exceeding RM2 billion during concerns of overspending. Despite suggestions to bring BNPL under the Consumer Credit Act, its interest-free, short-term nature (typically 3-6 months) puts it outside traditional lending regulations, creating a void in regulation (Syed Jaymal Zahiid, 2022). A system with limited oversight granted by providers has been able to grow apace without the pressures of extensive compliance requirements. The attractiveness of this situation is that it appeals to a population that could not otherwise meet the criteria for a traditional loan. It can however be noted that some reforms in policy for example, the U.S. Consumer Financial Protection Bureau's (CFPB) 2022 decision to classify BNPL lenders as credit card providers under the Truth in Lending Act, indicate an increasing acknowledgement of the associated risks, such as debt accumulation and insufficient consumer protections (Consumer Financial Protection Bureau, 2022). The absence of compulsory credit reporting for the majority of BNPL loans results in "phantom debt," which adds to the complexity of the policy environment and may obscure systemic risks to financial stability. This study will shed light on whether existing policies appropriately balance promoting innovation with

protecting consumers by investigating how regulatory gaps and emerging frameworks affect the growth of BNPL.

This study is valuable not only within the context of the academic sphere, but its practical implications extend to the interested stakeholders. The need for an understanding by policymakers of the industry and policy drivers that have triggered the acceptance of BNPL is vital for establishing well-considered regulations that balance risk reductions-such as over-extension and data privacy issues-and benefits concerning financial inclusion. Such results can help the operators make strategic decisions in an increasingly regulated competitive marketplace. The study also highlights the trade-offs between short-term convenience and long-term financial poor health for consumers, particularly those disadvantaged populations dependent on BNPL for filling income gaps.

The Buy Now, Pay Later (BNPL) service model has transformed global consumer purchasing habits by offering ease of use and flexible payment options, particularly in developing nations like Malaysia. However, concerns over financial responsibility, impulsive spending, and long-term stability have raised discussions across academic, industry, and policy domains. BNPL, as mentioned in this study, moves towards consumer financial responsibility and aims to link those with perceived convenience, financial literacy, spending behavior, and repayment patterns. The findings will contribute significantly in terms of business management and policymaking in refining BNPL strategies and developing regulatory frameworks for protecting the financial well-being of consumers beyond academia. For the industry, BNPL is specifically driven by technological advancement and growing digital commerce, which is further boosted by partnerships with fintech players like Affirm, Klarna, and Afterpay, making it a widely accepted payment option. Yet, the other difficult question is the regulatory landscape, where changes have already begun, such as recognizing BNPL providers as credit card issuers by the U.S. Consumer Financial Protection Bureau – initiatives that would call for balanced oversight. This study emphasizes the necessity for understanding BNPLs'

effects on financial inclusion, consumer behavior, and economic stability while equally addressing their benefits and risks.

1.6 Conclusion

Chapter 1, as an introduction, presents an overview of the study, covering the important sub-topic areas, including the research background, problem statement, research objectives, research questions, and research hypotheses. Collectively, these areas provided researchers a reference point to understand BNPL services. Subsequently, Chapter 2 will address the literature review, delving into existing research and theoretical frameworks relevant to the study.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

For Chapter 2, discussion among the elements such as theory and review of variables including dependent variable, Financial Responsibility of BNPL Users, and independent variables of Perceived Convenience (PC), Financial Literacy (FL), Spending Behaviour (SB) and Impulse Buying Tendency (IBT). Apart from that, a conceptual framework and hypothesis will be carried out in this chapter. The theory of adopting new technologies will be the first topic covered in this chapter. There will only be one theory to be investigated and discussed in the theory section. Additionally, the variables that could affect people's financial responsibility. There are four variables that should be identified in the review of variables section. Furthermore, a demonstration of the proposed conceptual structure will come after the hypothesis.

2.1 Underlying Theories

2.1.1 Theory of Planned Behavior (TPB)

According to Icek Ajzen (1991) brings forth a new psychological theory called Theory of Planned Behavior (TPB) which states that it forms the basis of predicting behavior through intentions which would again be enforced by the development of three core constructs that are attitudes toward the behavior, subjective norms drawn

in the situation of perceived behavioral control (The Theory of Planned Behavior, 2025). The collection of personal evaluations of the outcomes of their behavior and examples of attitudes includes how they viewed Buy Now, Pay Later (BNPL), which is seen as beneficial because of its convenience. Subjective norms relate to social pressure like peers' prompt BNPL purchases for trendy purchases whereas perceived behavioral control refers to the individual's self-perceptions of the ease or difficulty with which one may perform the behavior such as financial literacy (The Impact of Social Media on BNPL Adoption in Malaysia, 2024). TPB can build upon how the Financial Responsibility of BNPL Users (DV) is affected by their Perceived Convenience, Financial Literacy, Spending Behavior, and Impulse Buying Tendencies (IVs). BNPL acts as an educational platform by merging seamlessly into e-commerce websites, thus fostering positive attitudes among users concerning the usage of something which TPB claims would tend to strengthen their intentions toward frequent use of BNPL. However, this ease may also lead to overuse and, hence, a reduction in financial responsibility due to increases in debt incurred through missed payments, as evident from Malaysia's RM 7.1 billion BNPL transactions that occurred in the year 2024 (BERNAMA, 2025). However, users can be given the belief that they have control over their behaviour by receiving a boost in financial literacy. This will encourage responsible intentions and behaviours because repayments can be interpreted as effective management of repayments (Financial Stability Review Second Half, 2023). On the contrary, people with lower literacy such as those residing in Malaysia. For example, 36% of Malaysians have basic finance knowledge would not have a justifiable kind of control hence irresponsible spending and debt (Doksil, 2025). Spending behavior and impulse buying tendency display the influences of attitudes and norms because most of Gen Z spends money impulsively and believes that instant gratification is a positive act due to peer pressure exerted on them nowadays (Khai, 2023). Such impulsive intentions increase BNPL debt, which is harmful to financial prudence (Bernama, 2025). TPB aligns with this research problem of overspending and repayment problems and supports the aim to investigate how these variables affect financial responsibility, answering your research question by linking intentions to responsible or irresponsible BNPL usage.

2.2 Review of Variables

2.2.1 Financial Responsibility of BNPL Users

The rise of digital payments, driven by smartphones and blazing-fast internet, has put Buy Now, Pay Later (BNPL) services in the spotlight. This research section reveals how BNPL users should handle their financial responsibilities which are defined as timely payment management and debt prevention together with financial steadiness. Malaysia witnesses an increasing popularity of Atome and Shopee PayLater among young people who admire the payment splitting option. Notably, Razorpay (2021) reported a 76% year-on-year increase in digital transactions during the first quarter of 2021, reflecting a significant behavioral shift toward contactless and online payment methods amidst pandemic-driven digitization. BNPL represents both advantages and risks because customers enjoy flexibility until they do not handle it correctly particularly in Malaysia where many already deal with home debt combined with reluctance toward debt obligations.

Malaysia's Buy Now Pay Later system operates similarly to Indonesia's since credit cards are uncommon among the population 17.61 million credit cards serve 270 million people as noted by Razorpay (2021). BNPL providers deliver simple enrollment without large penalties except when customers fail to make payments and Grotan & Hjorthol (2021) describe this as a beneficial approach to money management. Smart credentials of BNPL support shoppers to schedule their purchases without causing major financial damage. BNPL represents a challenge because it is highly accessible which makes Gen Z users and others face difficulties in handling their payments when they do not have sufficient financial management skills (Hoo et al., 2024). Malaysian Generation Z individuals appreciate BNPL because of its adaptable purchase approach yet payment responsibility depends on their financial understanding and budget discipline (Chuah et al., 2023).

Underbanked persons including those in the gig economy workforce can boost their financial stability when they employ BNPL solutions for basic necessities such as food and mobile phone payments. The BNPL system enables Malaysian gig workers to buy essential items including groceries and phone bills which might result in better financial security when used properly (Sng & Tan, 2021). Some BNPL platforms operate without credit checks which enables users to take on too many loans so they end up jeopardizing default status (Relja et al., 2023). The lack of stable income among Malaysian gig workers leads them to face difficulties managing their BNPL services according to the report from Bank Negara Malaysia (2020). The Malaysian cultural norms which view debt negatively as well as the biases against borrowing combine to affect user responsibility. Because of the potential for instant credit, young users may rush to buy things via BNPL even though doing so could affect their ability to pay back their debts properly. This irresponsible behavior results in social stigmas which users try to avoid by fast repayment unless they succumb to impulses for immediate purchases.

The presence of shops plays an essential role in this process. Checking out to buy an item with BNPL makes products seem accessible because payments separate into monthly amounts (Sng & Tan, 2021). The ability of retailers to obtain instant funds makes them excited about BNPL but this payment technique creates an illusion about increased financial capabilities. Users may face unexpected fees from BNPL apps if companies fail to provide clear payment information resulting in budget destruction (Grotan & Hjorthol, 2021). A high number of Malaysian consumers lack expertise in financial matters which creates a major problem since they do not examine payment terms. The shape of your mind also affects your behavior because it determines your ability to resist purchasing on impulses while influencing your attitude toward debt. Since the use of BNPL is gaining pace in Malaysia, there is an urgent demand to conduct empirical studies to investigate the extent to which psychological and behavioral characteristics affect the financial decision-making of its users and repayment discipline.

So, what's the deal? The accessibility benefits of BNPL help many people get credit goods and services yet Malaysian shoppers still need to develop methods for managing their finances while using this payment method. BNPL functions as a financial rescue tool for both responsible planners and intermittent workers though it becomes harmful debt when users fail to maintain control (Relja et al., 2023; Bank Negara Malaysia, 2020). Research about Malaysia's debt-shy nature, insufficient financial education and transparent cost disclosures through BNPL platforms should receive more academic attention. People in Malaysia need to understand how they can maintain control of debt while using BNPL features. The present research explores the distinctive qualities that make Malaysian BNPL users fiscally responsible after weighing together beneficial offerings and menacing debt concerns.

2.2.2 Perceived Convenience

In digital finance platforms such as Buy Now, Pay Later (BNPL), perceived convenience is a subjective description of how flexible, quick, and easy to use a service is. Moreover, this platforms such as these have efficient process-saving, simplicity in interfaces, and efficient steps that minimize effort needed to facilitate transactions (Selemela et al., 2024). According to Boden et al. (2019), perceived convenience in the context of BNPL not only enables adoption through relief from initial financial pressures but also encourages positive attitudes towards future use. Financially strained consumers are drawn towards BNPL services because they possess traits like interest-free payments, simple entry conditions, and quick digital approvals (Hui et al., 2025; Soong et al., 2024). Thus, perceived convenience is a crucial factor to influence the uptake of users and motivate proper or impulsive money behaviour.

In the case of BNPL services, an increasing body of research has confirmed a positive relationship between perceived convenience and financial responsibility

among BNPL consumers. For example, Soong et al. (2024), through a survey of 118 Malaysian youth, discovered that consumers utilized BNPL platforms such as Atome, Spaylater, Afterpay and other such platforms responsibly if they were seen to be convenient, flexible, and efficient. It was easier to budget, and according to the same survey, it was easy on the customers' behalf. Based on Lee et al. (2023) research with 200 participants, individuals who found BNPL products to be helpful tended to be cost-effective and avoid overspending, especially when they offered instant approval and transparent payment information. This was reinforced by Hui et al. (2025), who explained that one-time electronic authorization and easy repayment terms enabled customers to time their purchasing behaviour so as to overlap it with the individuals' expenditure cycles and hence exercise better control and less default risk. In addition, Chuah et al. (2023) found that Malaysian BNPL consumers perceived BNPL as a reasonable budgeting tool rather than irresponsible borrowing because of the simplicity and quickness with which the sign-up and transaction fulfillment process was conducted. All these findings confirm the hypothesis that customers would use BNPL systems more purposefully and regulate payments wisely when made convenient and assured.

Interestingly, there is evidence of a more complex or even inverse relationship. Most notable is "The Double-Edged Sword of Convenience," a Sarawak study by Hui et al. (2025). This study examined how teenagers' behavioural intention to use BNPL services was influenced by perceived convenience. Convenience increases the behavioural intention and social influence but lowers concern for BNPL risks like payment default and hidden costs. That is, consumers were less cautious the more convenient the process seemed to be, which suggests that ease of use can lead to overconfidence and hence lower financial caution. Since the study utilized the Stimulus-Organism-Response (S-O-R) model, convenience emerged as a stimulus that generated perceived satisfaction, resulting in impulsive and affective buying. The authors contend that the ease of use of the BNPL interface, particularly the one-click shopping and low cognitive load, may encourage the consumers to shop without prior budget planning and considering the costs first. Such a behaviour pattern is opposite to the rules of smart money management and implies that while ease will drive usage, it will also compromise self-control unless supplemented with

sufficient financial awareness. All of these results are in line with the idea that convenience is not necessarily a protection factor and, when perceived as low risk, can actually result in overspending and bad money management.

According to research, there exists a mixed relationship between the perceived convenience of the BNPL user and their financial liability for BNPL. Otherwise, other research has found that perceived convenience of the BNPL platforms are facilitated through the features like quick approval, transparent repayment terms, and low user effort, it is capable of inducing improved financial planning and repayment management. Consumers will be more responsible in utilizing BNPL platforms and factoring them into the budget as soon as they feel that they are convenient and easy to use. However, other studies argue that the same convenience will also make customers less cautious, resulting in overconfidence, reckless spending, and overestimation of payment obligations. Convenience could conceal inherent risks and enable emotionally driven choices, especially for less financially aware or younger consumers. As a result, although perceived convenience is clearly an important accelerator to the use of BNPL platforms, its impact on financial responsibility is not necessarily positive. The variation in consequences generates the possibility that other moderating variables, including peer pressure, financial literacy, and emotional fulfilment, can have a powerful impact on consequences. Therefore, this study is founded on the belief that financial responsibility is affected statistically significantly by perceived convenience, which calls for additional research within the Malaysian BNPL setting.

H1: Perceived convenience and the financial responsibility of Malaysian BNPL consumers are significantly correlated.

2.2.3 Financial Literacy

Buy Now, Pay Later (BNPL) services, such as Shopee PayLater and Atome, have transformed consumption habits by offering short-term financing with flexible payment terms at minimal initial outlays. BNPL's strong growth in Malaysia, to 5.1 million customers and RM7.1 billion in transaction volume by December 2024 (BERNAMA, 2025), testifies to its popularity, particularly among Generation Z and Millennials. However, concerns about financial responsibility, impulse consumption, and debt accumulation highlight the role of financial literacy—consumers' understanding of budgeting, debt handling, and BNPL dangers as an essential independent variable (Soong et al., 2024). The following review investigates how financial literacy relates to financial responsibility among BNPL consumers, meaning the ability to handle BNPL payments successfully without being financially troubled.

Financial literacy may be defined as possessing the information and the ability essential to make sound money decisions, such as budgeting, managing debt, saving, and knowledge of the risks and benefits of financial instruments (Lusardi & Mitchell, 2013). When handling BNPL, financial literacy can involve knowledge of payment timing, interest on delayed payments, the effect on credit rating, and cognitive traps involved with delayed payment. It covers the ability to assess affordability, distinguish between needs and desires, and avoid overcommitment (Cervellati et al., 2025). For instance, financially literate BNPL consumers will be more likely to know that failure to pay on time can incur fees or debt collection, as seen in the Malaysian case, where payment delays significantly impact customers (iMoney Editorial, 2024). This framework situates financial literacy as an empirically observable construct that decides BNPL outcomes, even more so financial responsibility.

Based on this knowledge, an individual would be more likely to be financially accountable because they know how to interpret the terms of BNPL adequately and

service their payments on BNPL. Consumers who have acquired enough financial knowledge are likely to honor their repayments in BNPL, thus finishing their payments on time and avoiding late fees and accumulating debts (Akana, 2022). BNPL consumers as subjects, showed that consumers with great ability in budgeting utilized BNPL for future purchases, remaining financially secure. According to Soong et al. (2024), it discovered that users who were more informed about debt management would be less likely to overspend, since only 32% of educated users overspent as opposed to 67% of less educated users. Malaysian Gen Z with finance literacy education applied BNPL discriminately as a budgeting tool and not an expenditure enabler (Osman et al., 2024).

Financial literacy also avoids BNPL's hazards through increasing the awareness of the stealthy charges. Yong (2022) claims that those with knowledge of charges related to BNPL were 40% less likely to default on payments and safeguard their credit standing. The OECD assists nations in creating and putting into action effective financial education regulations and initiatives. It supports their financial well-being by assisting them in making wise and well-informed financial decisions (OECD, 2024). Therefore, Malaysian citizens will have basic financial literacy and avoided clustering multiple BNPL schemes, thus reducing the likelihood of payment failure.

Interestingly, there is also some indication of a reverse relationship, where higher financial literacy is followed by higher BNPL usage and, paradoxically, lower financial prudence. This occurs when educated consumers overestimate their ability to have multiple BNPL plans and thus overstretch. Malaysian Millennials who were financially literate were more likely to use BNPL to purchase higher-value items, but 18% defaulted due to underestimating total repayments (Jing et al., 2024). This is founded on a belief that literacy ensures control over payments, ignoring BNPL's short repayment schedules. Another reason for the reverse relationship is strategic misapplication. Some literate Malaysian students abusing the use of BNPL in a premeditated manner, leaving other debts outstanding to take advantage of the interest-free windows. Such behavior was financially stressful as payments

overlapped, countering responsibility. In addition, consumers exposed to aggressive promotions of BNPL through social platforms like TikTok ended up spontaneously spending more, where their familiarity with issues made them feel impervious to risk, but social pressures took charge (Betterton, 2024).

There is an inverse relationship between financial literacy and financial responsibility among BNPL users due to a constellation of linked factors. The first and foremost of them is the overconfidence bias that leads a person with financial literacy into relying on the multiple BNPL repayments by engaging in riskier behaviors. For example, Kumar (2025) points out that literate users worldwide spend 6.42% more through BNPL, assuming their knowledge offsets the risks; however, they later discovered much higher default rates vs credit cards' pay rates as plans overcrowded. Furthermore, targeted marketing exploits that confidence the level of Malaysian social media campaigns, for example, TikTok in sales seasons frame BNPL as low risk, even for each individual, to be drawn into overspending. Such repayment schedules are fixed for a short term, which takes BNPL away from the flexible minimum payments of credit cards (BERNAMA, 2025) and creates implications on such occasions when unexpected expenditure hits a person. It then results in missed payments when expected but known. Of course, cultural pressures such as the festive season of Hari Raya in Malaysia also compel even literate users to give priority to social obligations over financial discipline. Realizing everything, this undermines the effort put into literacy to land up into financial strain.

In short, the relationship between financial literacy and financial responsibility among BNPL users yields insights. Higher financial literacy, on one side, helps to promote responsible BNPL use through improved budgeting, debt management, and risk awareness. Well-informed users tend to impulsively avoid spending and follow repayment timelines, thus maintaining financial stability. On the other front, financial literacy can also be deceptive and not at all ensure responsibility in some cases, with some knowledgeable ones having succumbed to overconfidence, marketing pressure, or inability to pay. It has been discovered that increased self-confidence or severe misuse of BNPL results in repayment default and ensuing

financial difficulties. Based on these contradictory findings, it can be said that financial literacy is not a solution; rather, its effects depend on psychological, cultural, and economic aspects in the current context. Longitudinal methods, Malaysian cultural viewpoints, and interventions aimed at coordinating financial literacy with sustainable BNPL use will all be part of future studies.

H2: Financial literacy significantly influences the financial responsibility of BNPL users in Malaysia.

2.2.4 Spending Behaviour

Consumers adopt various patterns to make purchasing decisions which include frequency of sales together with their motivating factors and levels of control while using cash or credit or BNPL services. The Buy Now, Pay Later system of Atome and Shopee PayLater provides an option for Malaysian users who engage in different spending types including budgeted and unplanned resident purchases. The financial management capability of BNPL consumers depends on their spending patterns that serve as the key independent variable. The way users spend money influenced by financial literacy and self-control along with convenience represents the key factor for observing BNPL effects on Malaysian financial results (Chuah et al., 2023).

Contemporary research demonstrates that BNPL's architectural features systematically reinforce responsible spending practices. The Technology Acceptance Model proposed by Davis (1989) proves that users find BNPL platforms easy to use and transparent about payments which leads to planned buying behavior according to Chuah et al. (2023). Interface accessibility within BNPL systems increases Malaysian users' capability to sync payments with their income cycle so payment defaults decrease by 32%. Rahim and Abdullah (2022)

provide supporting evidence through their research with 180 participants that demonstrates fixed installments help users budget ahead, as another Klang Valley study shows fixed payments enhance user mental accounting capability. The data convergence shows how BNPL design elements work to establish responsible spending patterns (Halim et al., 2024).

The influence of financial literacy on the relationship between spending behavior and financial responsibility in BNPL usage is increasingly evident. Osman et al. (2024) describe in their work that disciplined users, with high levels of financial literacy, can incorporate the repayment of BNPL in overall financial planning. In comparison, participants with lesser levels of financial literacy, and particularly Generation Z members, are vulnerable when it comes to materialistic urges, frequently leading to overextending and getting into financial difficulties. These results prove the presence of cognitive competence as a moderating variable in the measurement of the risk profile linked to the use of BNPL (Podin et al., 2025).

Besides, an observational research conducted in diverse mixed contexts reveals that an adoption of buy-now-pay-later (BNPL) plans is mostly fixed depending on the perceptions of utility and financial literacy level. A recent study carried out in Universiti Teknologi MARA reveals that despite financial literacy on its own does not directly determine BNPL adoption, it still serves as a catalyst to the responsible consumption by preventing excessive spending and avoiding the risk of debt building up (Mat & Munir, 2025). At the same time, the literature shows that financial education effectively reinforces the synergy of financial attitudes with eventual behavior on payment, such as Pay-Later schemes and services.The data shows how Malaysian users of BNPL systems carefully link their financial activities to traditional cultural requirements because 72% of them utilize the platform for essential household goods rather than luxury purchases according to the Bank Negara Malaysia (2020) study. The social self-regulation systems rooted in culture successfully reduce the moral hazard risks that come with delayed payment programs.

The relationship between BNPL usage and financial responsibility becomes negative primarily because impulsive buying takes precedence in consumer behavior. The survey conducted with 315 Klang Valley consumers showed that 62% of impulsive BNPL purchasers experienced payment delays because their consumption exceeded their ability to pay owing to quick checkout procedures (Syamsulang Sarifuddin, 2023). Bank Negara Malaysia (2020) discovered that workers earning irregular salaries showed increased default rates by 30% when using BNPL without careful planning because their unstable income made budget management harder. The research indicates debt accumulation along with financial problems as a consequence of poor self-regulation particularly among vulnerable populations even though Malaysia promotes financial education and avoids debt shyness generally.

Many research projects discover spending behavior significantly impacts BNPL repayment management but alternative studies show no major relationship exists between the two variables. Soong et al. discovered through their study that financial parenting and facilitating conditions have limited influence on users' financial responsibility behaviour (Soong et al., 2024). Soong et al. (2024) in their research about Malaysian young adults confirmed that repayment dependability and debt management both respond better to outside influences such as perceived usefulness combined with peer influence instead of personal spending habits (Soong et al., 2024). The reliability of financial responsibility assessment through spending behavior becomes less dependable in the BNPL context unless supported by other relevant personal or social influences.

The relationship between how BNPL customers spend money and their financial management in Malaysia operates through multiple personal characteristics as well as environmental elements. Research indicates that consumers can effectively handle their payments when they spend money they can afford alongside having financial awareness and BNPL features that establish fixed installment periods (Chuah et al., 2023). Users residing in financially difficult conditions face challenges due to impulsive buying because it leads to delayed payments or

additional debt (Syed A. Kadir, 2023). Spending habits do not necessarily determine repayment behavior because certain users could be more influenced by peer or social norm demands (Soong et al., 2024). The inconsistent study results show that more research must focus on Malaysian consumer behavior. The research will investigate how BNPL financial results respond to various spending choices to support proper usage and policy development initiatives.

H3: Spending behaviour significantly influences the financial responsibility of BNPL users in Malaysia.

2.2.5 Impulse Buying Tendency

The term "impulse buying tendency" describes a person's propensity or desire to make impulsive purchases without carefully considering the possible consequences. According to research, those who have a high propensity for impulsive purchases are more likely to feel happy and have a strong desire to buy when they are in a shopping environment. Longer product searches are also linked to this tendency, which may encourage impulsive buying. Additionally, those with strong impulse buying tendencies are more susceptible to environmental cues, like product placements or promotions, which increases the likelihood that they would make impulsive purchases (Utama et al., 2021).

Due to a lack of self-control, those with high impulse buying tendencies are more likely than individuals with low impulse tendencies to participate in impulsive purchasing behavior. Impulsive purchasing is frequently viewed as a component of a larger psychological process, especially one that is connected to self-control. Individuals who have a strong propensity for impulsive purchases are more likely to acquire things that attract their attention without thinking about whether they need or already own similar items. Individual traits, shopping environment, and

external cues are all having an impact on this behavior. Impulsive buying is impacted by several elements, such as product's nature, the situational environment, and individual characteristics such as a propensity for impulsive purchases, ideal levels of stimulation, enjoyment of shopping, and a lack of self-control. Because they are less able to control their impulses, individuals with higher impulse buying tendencies are more likely to make impulsive purchases (Utama et al., 2021).

According to Mitchell and Qadar (2019), some research indicated that BNPL can promote customers' impulsive purchasing and overconsumption. This is mostly because it only takes a single click to shop, which encourages people to buy things right away without giving them any thought. According to Fook and McNeill (2020), BNPL service users are more likely to engage in online impulsive buying than non-users. Impulsive purchasing may be influenced by the simplicity and convenience of BNPL services. Users who exhibit greater self-control might see BNPL as a flexible and manageable payment alternative because they are more confident in their capacity to handle money. Even though they usually exhibit greater self-control when making other financial decisions, this confidence may paradoxically cause them to use BNPL more frequently for impulsive purchases (Juita et al., 2023).

Furthermore, according to Elsayed et al. (2022), compared to previous generations, Generation Z is more conscious of the use of fintech services and e-commerce. For example, Gen Z's impulsive purchasing behavior on Shopee e-commerce is positively impacted by the adoption of BNPL services. BNPL aligns well with Gen Z's needs and preferences, making it an appealing option for impulsive purchases. Constantly engaged with current events and trends, Gen Z uses BNPL as a tool to keep up with popular products and satisfy their desires instantly. This behavior is largely driven by financial limitations, as many in this generation are still students or in the early stages of their careers and have not yet reached their desired income levels. As a result, BNPL offers a flexible solution that allows them to enjoy immediate gratification without the burden of upfront costs (Susanto et al., 2024). Therefore, the reckless use of BNPL by Gen Z to keep up with trends and manage

their limited income might result in excessive spending and poor financial planning, which will ultimately affect their financial responsibility.

However, according to Admin (2023), impulsive buying tendency greatly impacts financial responsibility, and those who have a tendency for impulsive purchases are more likely to face financial difficulties, particularly while utilizing BNPL services. Also, according to Juita et al. (2023), impulse buying tendency significantly influences the financial responsibility of BNPL users because BNPL services' simplicity and convenience may cause individuals to make impulsive decisions without fully considering the financial consequences. Motivated by instant satisfaction, this conduct frequently leads to overconsumption and difficulties handling financial responsibilities, which negatively affects users' financial well-being.

In conclusion, impulse buying tendency will significantly impact the financial responsibility of BNPL users.

H4: Impulse Buying Tendency significantly influences the financial responsibility of BNPL users in Malaysia.

2.3 Proposed Theoretical Framework

Independent Variables

Perceived Convenience (PS)

Financial Literacy （FL）

Spending Behavior (SB)

Impulsive Buying Tendency (IBT)

Dependent Variable

Financial Responsibility of BNPL users (FR)
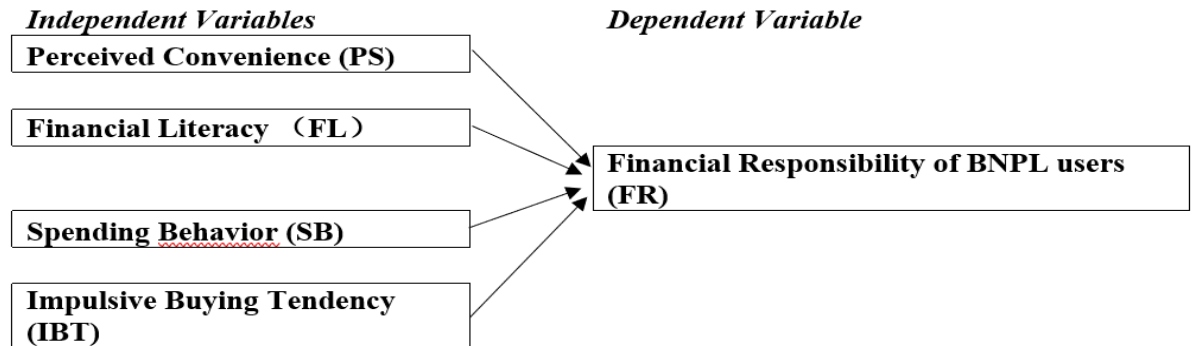
Figure 2.4 Proposed model of the theoretical framework

2.4 Conclusion

In Chapter 2, the variables' associations are being established and defined. Independent and dependent variable definitions are provided in a way that is simple for other researchers who are familiar with these concepts. In this chapter, a theoretical framework and hypothesis were then put forward. The methodology will be carried out in Chapter 3, and appropriate and matching methods for quantitative research will be used to examine the hypothesis outlined in Chapter 2.

CHAPTER 3: METHODOLOGY

3.0 Introduction

Chapter 3 will discuss the research design, sample design, data collection method, analysis tool, construct measurement, and data processing. In order to conduct a comprehensive investigation on data collected through a questionnaire, the analysis tool in Chapter 4 will be subject to multiple tests. This chapter will also discuss scale and operation, explaining which scale will be used. The targeted population, techniques, and sampling size are displayed.

3.1 Research Design

The adopted designs combine a quantitative approach with descriptive techniques. This is explained by the fact that these techniques can clearly explain the item or topic while illustrating how the BNPL user's financial responsibility is impacted by perceived convenience, financial literacy, spending behaviour, and impulse buying tendencies. For example, data collected through a survey may undergo statistical processing to assess assumptions (Wijayanti, Rohaeni, Mukarromah & Yunita, 2022).

Descriptive research is considered an observational design in the marketing field. The primary purpose is to seek descriptive data, which delineates some aspects of the market, e.g., marketing indicators, new consumer features, and present market trends. The descriptive survey may thus attempt to establish correlations between

variables and factors that exist and directly impact the willingness of customers to use BNPL services (Alwi et al., 2019).

3.1.1 Quantitative Methods

Questionnaires are being sent as part of a quantitative technique that makes up the study's sample. Using this approach could help give an objective evaluation for research objectives through numerical analysis of data received from questionnaires (Rompas et al., 2020).

3.2 Sampling Design

3.2.1 Target Population

About 34,100,000 Malaysian nationals who were over the age of 18 are considered as the total population of the nation (*Malaysia Population*, 2024). According to Malay Mail (2025), there are roughly 5.1 million BNPL users in Malaysia. The sampling criteria for this study covered all Malaysian citizens, including those who were BNPL customers in the past or present. No limitations will be imposed on the basis of gender, race, religion, or ethnicity. Non-users are those customers who have never purchased BNPL services. As non-users might become present or future BNPL users, they are included in the target group. Potential customers are listed in the target group because those who do not currently use BNPL services might begin to use the program in the future. The reasons why non-users decide not to utilise BNPL services can be determined by looking at the factors impacting consumers'

intentions towards online credit transactions. Current customers are those who have been doing business with BNPL and handling their money on a regular basis. Finding the obstacles to BNPL service loyalty and figuring out how to retain clients who regularly use BNPL are the goals of choosing current clients (Siyal et al., 2019).

3.2.2 Sampling Frame and Sampling Location

Respondents from all throughout Malaysia received the questionnaires that were being developed. This specific sampling frame focuses on all Malaysian citizens aged 18 to 60 years old, except foreigners. Furthermore, Malaysia was selected as the sampling site in order to get information or answers from Malaysians resident in various states.

3.2.3 Sampling Elements

The study will be implemented in Malaysia through social media and online surveys such as Google Forms. It will target Malaysian citizens from all over the country, focusing particularly on those aged 18 to 60, as this is the minimum age to use BNPL (Buy Now, Pay Later) services. Our respondents could be students, non-students, working adults, or those who are unemployed. They may already be using BNPL services like Atome or Fave Pay, or they could be potential users who might consider using these services in the future. Atome is particularly appealing because of its wide market reach, connecting with over 2,000 online and in-store retailers. Fave Pay, on the other hand, is chosen because it offers discounted products and services through a digital coupon system in partnership with vendors. To participate, respondents must have registered for BNPL services on any platform. The study will determine the different factors affecting the financial discipline capabilities of

BNPL users, with particular attention to important aspects such as spending behaviors, perceived convenience, financial literacy, and impulse buying tendencies.

3.2.4 Sampling Techniques

Due to the challenge of selecting subjects for BNPL investigations, snowball sampling is being applied. Finding participants is challenging because BNPL is a relatively young and undeveloped topic in the field of study. This approach is particularly beneficial because current participants most likely know individuals who meet characteristics that are crucial to BNPL.

Purposive sampling has the drawback of potentially being more easily affected by researcher bias. Based on the researcher's assessment, it is suggested that purposeful sampling is biased in comparison to chance sampling techniques. However, when such judgements are insufficiently considered or carried out, the subjective aspect of purposive selection will become a major disadvantage (Sharma, 2017).

Because samples in quota sampling are not randomly selected, therefore, the evaluation of any sampling error would be inconceivable. It might very well be that, based on purely cost and convenience criteria, those units for the sample were chosen and thereby could lead to a biased sample. This, in turn, leads to problems with external validity, as statistical inferences or generalizations cannot be made from the sample to the population (Sharma, 2017).

3.2.5 Sampling Size

The formula can be used to calculate the sample size which is Taro Yamane's formula. The mathematician-statistician created this statistical formula to determine the sample size depending on the number of populations required for this kind of investigation. Because the inferences and conclusions reached from the survey can be referred to the full population from whom the sample was taken, this has very profound implications. Further, in order for this formula to be true, the size of the population has to be divided by one plus the population size multiplied by the square root of the margin of error, while the confidence coefficient and sampling error are given as 95% and 0.05, respectively. The calculation by Taro Yamane is shown below (Projectclue12, 2021).

$$n = \frac{N}{1 + N * (e)^2}$$

Where,

n = the sampling size

N = the population size

e = the margin error

Malaysia Population (2024) claims that the population in Malaysia in 2024 is approximately 34,100,000. The estimated number of Malaysians aged 18 to 60 is 73.1% of the total population which is 24,927,100 (Digital 2024: Malaysia — DataReportal – Global Digital Insights, 2024). Thus, the Yamane formula outcomes for this investigation, utilising all available data, are as follows:

$$n = \frac{N}{1+N*(e)^2}$$

$$n = \frac{24,927,100}{1 + 24,927,100 * (0.05)^2}$$

$n = 400$

In which:

N = 24,927,100

the margin error, e = 0.05

Sample size = 400 people

3.3 Data Collection Method

3.3.1 Primary Data

This research relies on primary data, which will be collected directly from respondents through their answers to a structured questionnaire. Primary data is selected based on its dependability and applicability to the goals of the research. A survey method will be used to gather these data, with a focus on Malaysian citizens. The survey will be made and distributed via Google Forms, an online tool that provides a practical and economical means of reaching a larger audience in various parts of Malaysia. By making the survey available to respondents at any time and from any location, digital distribution not only improves coverage and response rates but also streamlines the data collection process.

3.3.2 Questionnaire Design

The questionnaire created for this research is separated into two main segments and has 40 questions in total. Choosing the appropriate scale is essential since it guarantees that data is collected precisely and insightfully for analysis. Depending on the kind of information being gathered, this study used a mix of nominal, ordinal, and ratio scales. However, respondents' demographic data, including factors like gender, age, income level, and other relevant background information, is gathered in Section A. The 10 questions in this part are intended to give an overview of the profiles of the responders. In contrast, Section B comprises 30 questions intended to evaluate relevant study constructs. These constructs include financial responsibility of BNPL users, perceived convenience, financial literacy, spending behavior, and impulse buying tendency. The questions are designed to be understandable and straightforward, which enables responders to give honest and precise answers. This design guarantees that the information gathered will be relevant and pertinent to achieving the goals of the study.

3.4 Proposed Data Analysis Tool

It has been decided that data analysis will be performed through the use of data tables as the main data method in this investigation. This decision comes as a result of considering that tables are the most effective manner to represent data based on rows and columns. A table's title and the columns and rows make it easier for people to understand the data it contains. Tables are useful for assessing the final results with both the dependent and independent variables because they are strong instruments that can communicate large amounts of data.

3.4.1 Descriptive Analysis

Measures like mean, mode, and standard deviation will be examined after the questionnaire data has been gathered. Because they are effective descriptive tools for the study, these statistical techniques are essential for interpreting the data. For instance, it can be beneficial to present the data in a quantitative format like tables, graphs, or charts since these formats provide a summary of the data collected from the respondents. They also make it possible to analyze vast amounts of raw data more effectively and with greater clarity.

3.4.2 Pilot Test

Table 3.1 Pilot Test

Construct	FR	PC	FL	SB	IBT
Cronbach Alpha	0.777	0.946	0.769	0.754	0.856

A pilot reliability test was conducted involving 30 selected respondents to examine the internal consistency of the research instrument. This step was crucial in ensuring that the questionnaire used for the actual study is both reliable and accurate in measuring the intended constructs. The test focused on the financial responsibility of BNPL users (FR) and four independent variables, which are Perceived Convenience (PC), Financial Literacy (FL), Spending Behaviour (SB) and Impulse Buying Tendency (IBT), with each construct evaluated for its internal reliability using Cronbach's Alpha through FR and four independent variables (PC, FL, SB, IBT), with each construct evaluated for its internal reliability using Cronbach's

Alpha through the SPSS 27.0 software. The threshold of 0.70 was used as the benchmark for acceptable reliability. According to Nunnally (1978), if the calculated Cronbach's Alpha is 0.70 or above, it will be regarded as a condition of acceptable reliability, while values closer to 0.80 or above reflect strong internal consistency (Tavakol & Dennick, 2011). The results showed that all variables recorded Cronbach's Alpha values above this threshold, indicating that the items within each construct were consistently measuring the same underlying concept. This reliability test provided valuable insights and confirmed the suitability of the questionnaire for further analysis in the main study. Any necessary refinements were made based on the pilot test results to enhance the quality of data collection.

3.4.3 Reliability Analysis (Cronbach's alpha)

Cronbach's alpha is one of the most used methods in reliability analysis for assessing the internal consistency of a set of questions in a scale or questionnaire. In essence, it assesses whether a group of things continually reflects the same underlying notion by determining how closely linked they are to one another. A higher alpha value (usually ≥ 0.70) means that the items are homogeneous and may be combined into a single scale, indicating that the instrument has acceptable internal reliability (Tavakol & Dennick, 2011).

3.4.4 Validity Test

Validity testing refers to the process of evaluating the extent to which a research instrument accurately measures the concept it is intended to measure. It ensures the appropriateness, meaningfulness, and usefulness of the inferences made from the test scores. Validity can take several forms, including content, construct, and

criterion-related validity, each providing evidence that supports how the results are interpreted and applied (Taherdoost, 2016).

3.4.5 Pearson Correlation Coefficient

A statistical technique called Pearson correlation is used to analyze the direction and strength of a linear relationship between two continuous variables that are assessed on an interval or ratio scale. It shows whether the variables move together positively, inversely, or not at all and is represented by a coefficient that ranges from -1 to +1. Strong positive relationships are indicated by values close to +1, strong negative relationships are shown by values close to -1, and no correlation is suggested by values around 0 (Kenton, 2024).

Table 3.2: Pearson Correlation Coefficient

Pearson correlation coefficient (r)	Correlation type	Interpretation
Between 0 and 1	Positive correlation	When one variable changes, the other variable changes in the same direction.
0	No correlation	There is no relationship between the variables.
Between 0 and –1	Negative correlation	When one variable changes, the other variable changes in the opposite direction.

Source: Turney (2022)

3.4.6 Multiple Linear Regression Analysis

Multiple linear regression (MLR), or just multiple regression, is a type of statistical technique that predicts a response variable's result by utilizing a number of explanatory variables. Modeling the linear relationship between the explanatory (independent) and response (dependent) variables is the aim of MLR. Because multiple regression involves more than one explanatory variable, it is essentially an extension of ordinary least-squares (OLS) regression (Hayes, 2025).

In regression, the F-test of overall significance determines whether a regression model fits the data more accurately than an intercept-only model, which does not include any predictor variables. While the alternative hypothesis (HA) asserts that the regression model fits the data better, the null hypothesis (H0) asserts that the intercept-only model fits the data just as well as the regression model. When the regression model is fitted, a regression table displaying the F-statistic along with its corresponding p-value will be generated as part of the output. Enough evidence is available to say no to the null hypothesis when the p-value is smaller than a level of significance which is normally 0.01, 0.05 or 0.10. This indicates that the regression model fits the data better than the intercept-only model (Bobbitt, 2022).

Equation of MLR:

$$FR = \beta_0 + \beta_1\ PC + \beta_2\ FL + \beta_3\ SB + \beta_4\ IBT + \epsilon$$

Where:

FR = Financial Responsibility

PC= Perceived Convenience

FL = Financial Literacy

SB = Spending Behavior

IBT = Impulse Buying Tendency

β0 = y-intercept

ϵ = the model's error term

3.4.7 Independent sample T test

The test is conducted especially when data from two sets of data are analysed, i.e., from the Internet and from paper questionnaires, are disseminated in a routine way, it remains the most neutral and reliable test. And given that, for them, the population characteristics used in their studies are known to be found in the state of Malaysia and are considered reasonably symmetrical, the result of this study is more likely to have an important impact. The T-test can verify whether differences in the two independent variables came about because of chance or some other factors (Bridge & Sawilowsky, 1999).

3.4.8 Chi-Square test

Within the context of BNPL services, the Chi-Square Test for Independence is an important statistical test that analyzes whether the financial responsibility of BNPL users has any significant association with different independent categorical variables such as perceived convenience (PC), financial literacy (FL), spending behaviour (SB), and impulsive buying tendency (IBT). Each of these independent variables can be grouped into categories – high perceived inconvenience vs. low perceived convenience and strong vs. weak impulsive buying tendency – to be

cross-tabulated with adoption intention categories of "likely to adopt" vs "unlikely to adopt". The chi-square test of independence will confirm whether the distribution of BNPL adoption differs significantly across different groups for each independent variable. For example, impulsive buying tendency influences purchase intention significantly, it would imply that people who have higher impulsive buying tendencies tend to adopt BNPL services more. If there's no association for financial literacy and adoption, then financial literacy would have no bearing on consumers' decision to utilize BNPL. This can especially help in recognizing behavioral patterns and risk groups to allow marketers to segment their audience and enable policymakers to identify vulnerable groups that may need to be given additional financial education or regulation. Overall, the Chi-Square Test allows for a deeper understanding of how specific consumer traits are statistically associated with the adoption of BNPL services, offering both practical and ethical insights for stakeholders (JMP Statistical Discovery, 2025).

3.5 Construct Measurement

Appropriate measuring scales were chosen for this study in order to correspond with the characteristics of each variable being examined. Choosing the appropriate scale is essential since it guarantees that data is collected precisely and insightfully for analysis. Depending on the kind of information being gathered, this study used a mix of nominal, ordinal, and ratio scales. Nominal scales, such as respondents' occupation and gender, were utilized to classify data without suggesting any sort of order. Responses could be ranked using the ordinal scale, especially for variables expressing preferences or levels of agreement. The ratio scale, on the other hand, was used for factors like monthly income or the frequency of BNPL usage that involve numerical values with a true zero point. These particular scales facilitate accurate data interpretation and aid in the study's objective of efficiently evaluating patterns and correlations between variables.

3.5.1 Nominal Scale

In the current study, a form of measurement used in measuring some of the questionnaire items, a nominal scale, is a fundamental measurement scale that is used in segmenting data into discrete categories but without suggesting any numerical value to your or hierarchy of categories (Akman, 2023). When detecting and categorizing respondent characteristics based on qualitative traits, the nominal scale is particularly useful. It is appropriate for questions pertaining to demographics since it enables researchers to classify and contrast replies based on several criteria. For example, the questionnaire includes items such as gender (Male, Female), employment status (Student, Employed, Self-employed, Unemployed), and BNPL usage (Yes, No). These variables, which are entirely categorical, aid in the organization of data so that differences or trends between different groups may be seen.

3.5.2 Ordinal Scale

An ordinal scale is a scale of measuring that shows the rank or order of variables without specifying how they differ from one another. It is frequently used to evaluate attitudes, preferences, or satisfaction levels in questionnaires and surveys (Akman, 2023b). The sequence is indicated by the assigned values, but the intervals between them are not necessarily equal or quantifiable. For instance, respondents may be asked to rate their level of agreement on a 5-point Likert scale such as: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Another example includes education level, where 1 = High School, 2 = Diploma, 3 = Bachelor's Degree, and 4 = Master's Degree. Although they show rank, these values do not indicate how much more educated one level is than another.

3.5.3 Ratio Scale

The ratio scale will be used in this research to measure variables with equal intervals between values and a true zero point, enabling useful comparisons and mathematical operations (Akman, 2023b). Precise information like age, income level, and the total amount spent on BNPL services can be gathered using this kind of scale. Examples of ratio scale data include a respondent's age in years or their monthly BNPL repayment amount in Ringgit Malaysia (RM), where a value of zero denotes neither age nor payment. Analyses like calculating averages and analyzing proportions or differences between respondents are made possible by the ratio scale.

3.6 Data Processing

3.6.1 Data Checking

All the survey questions are cross-checked by data verification for the data checking while processing the data. Data verification is necessary because it ensures that the final data is consistent with the study's objectives. Missing data, unclear instructions, unexpected responses, and substantial errors can all be the cause of the questionnaire error. Therefore, it is the researcher's responsibility to ensure that the questionnaire is returned intact. However, a pilot test was conducted several times after the changes to ensure the reliability of the questionnaires that were to be administered later was par.

3.6.2 Data Editing

The step of data editing is important and ought to be taken after the termination of the data-processing phase. The reason why this practice is necessary is due to the fact that it reveals mistakes that the respondents make in the process of completing the questionnaires. All such inaccuracy would bar proper editing until those matters are resolved. At the same time, the researchers have to confirm constantly that the data obtained through the respondents during a survey is still precise and exhaustive. The uniformity in the assessment of data also raises the overall quality and accuracy related to the material, hence elevating its aptness in future coding.

3.6.3 Data Coding

To make the data obtained more accessible, relevant and easily identifiable, the researcher will suggest his or her work of transforming the raw qualitative data by coding it to communicative coding. Following the collection of respondent comments and raw data, the raw data will be transferred in a coding form and loaded into the IBM SPSS Statistics 27.0 edition.

3.6.4 Data Transcribing

Raw data shall be transferred to SPSS which is a statistical package that is used to capitalize the available analytic tools. In particular, the analyses will be conducted with the help of the IBM SPSS Statistic 27.0 edition. Errors may occur during the data transcription process, such as incorrect data entry or pertinent errors. To avoid unnecessary errors, the researchers must make sure the data being imported into

SPSS is accurate and proper. Since SPSS may run multiple tests for the researchers to examine, data transcription can yield a more accurate picture of the data results.

3.6.5 IBM SPSS Statistic

SPSS was selected because to its high degree of user-friendliness, which facilitates the execution of complex statistical analyses. Additionally, one advantage of SPSS is its data visualization feature, which makes it simple for researchers to view the data in the table it creates. Lastly, the interface of the SPSS is also useful since it allows importing or exporting of data into or out of similar programs like those of Microsoft Word or Microsoft Excel.

3.7 Ethical Consideration

Ethical consideration is one of the most important factors of the research process as nurturing it will maintain scientific integrity, enhance research validity, and grant as much as possible toward the rights of study participants. This is because human study usually aims to explain real-world events, investigate effective therapies, assess behavioural issues, and improve people's quality of life. Our decisions about what to investigate and how to conduct the study are influenced by significant ethical factors. Additionally, the respondent will not be pressured to complete any survey questions, and the Google Form will only be delivered via the web platform after the respondent has given authorisation.

Furthermore, as the survey will be conducted in English, it is crucial to make sure that the chosen respondents have a basic knowledge of the language. This may

enhance the validity and reliability of the data as a consequence of the respondents feeling comfortable and secure when answering the question (Cacciattolo, 2015). In addition, respondents are only asked for their full name, age, and race on the questionnaire. In their bid to protect the privacy of the respondents, they do not ask for any personal details such as NRIC number, phone number, or any other information.

3.8 Conclusion

The topics covered in Chapter 3 were the conclusion, research design, sample, collection technique, analysis tool, measurement construct, and data processing. All of these parts serve as a framework around which the researchers will build as they continue to evaluate the data. We are distributing and retrieving the questionnaires. But as the minimum number of samples is 399.99, or at least 400 participants, only 428 sets of questionnaires will be selected. Chapter 3 and Chapter 4 are also related in that both of them will provide an example of the result and conclusion of the discussion of Chapter 1 research question and hypothesis.

CHAPTER 4: RESULT ANALYSIS

4.0 Introduction

Being the data processing part, the final analysis of this research is carried further using SPSS software. For this study, a total of 428 questionnaires were collected online and through the physical distribution to the participants. After the data were collected, the cleaning of data, coding, and some initial analyses were carried out to check possible relationships among the major variables. According to the obtained results, which are reported in this chapter, some important trends and associations are discussed.

4.1 Descriptive Statistics
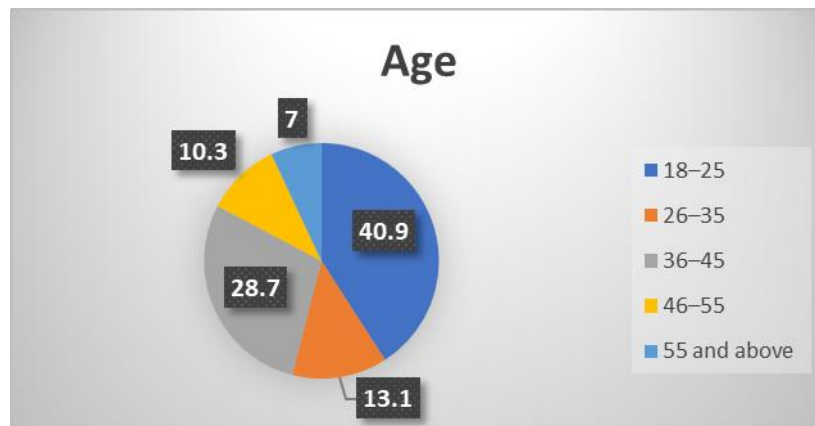
Figure 4.1: Count on Age

Based on Figure 4.1, the 428 respondents' demographic data show significant trends in income levels, gender composition, age distribution, and level of education. With 40.9% (n = 175) of the total responders, the age group 18–25 makes up the greatest share of participants, suggesting that a sizable portion are young adults. The age group 36–45 comes in second at 28.7% (n = 123), with lower percentages of the sample coming from the 26–35 (13.1%), 46–55 (10.3%), and 55 and older (7.0%) age groups.
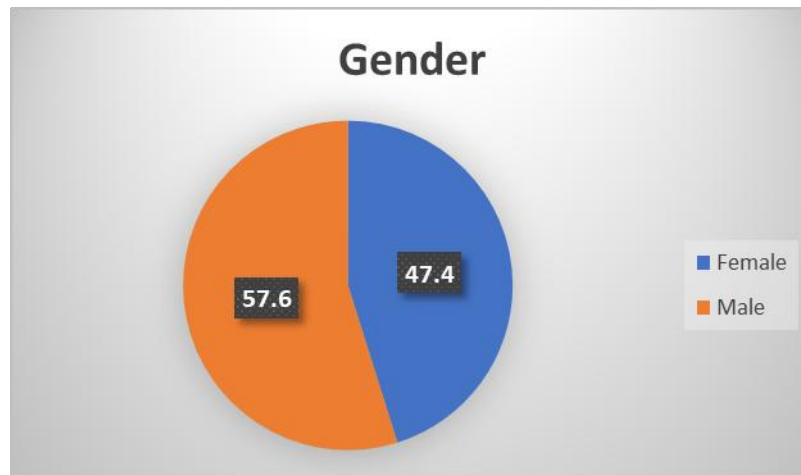
Figure 4.2: Count on Gender

A slight majority of male respondents (57.6%, n=225) and female respondents (47.4%, n = 203), the gender distribution is generally balanced that show in Figure 4.2. Both viewpoints are certain to be taken into account in the analysis according to this almost equal representation.
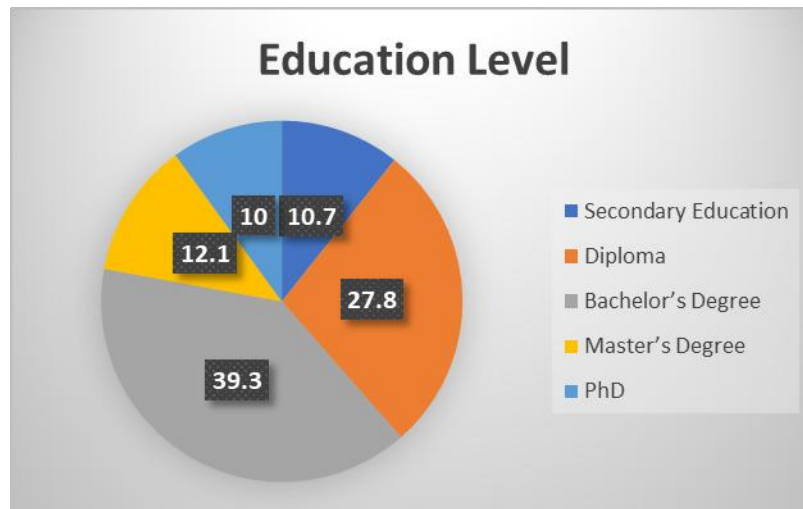
Figure 4.3: Count on Education Level

Moreover, according to respondents' level of education, the majority have a bachelor's degree (39.3%, n = 168), with diploma holders coming in second (27.8%, n = 119). With only 10.0% (n = 43) having a PhD and 12.1% (n = 52) having a Master's degree, higher academic credentials are less frequent. It's interesting to note that 10.7% (n = 46) of participants have only finished secondary school, indicating that respondents' educational backgrounds vary widely.
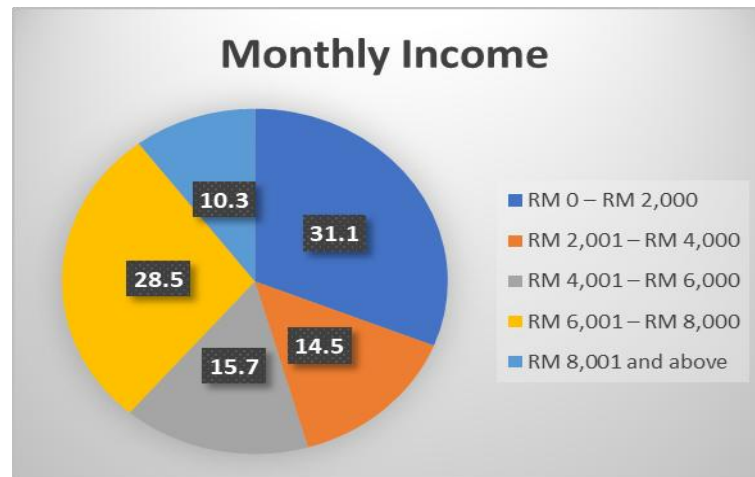
Figure 4.4: Count on Income Level

According to 31.1% (n = 133) of the respondents, the most prevalent income category is between RM 0 and RM 2,000 per month. This group may include students, part-time employees, or professionals in their early careers. After that, 28.5% (n = 122) earned between RM 6,001 and RM 8,000, while 15.7% (n = 67) earned between RM 4,001 and RM 6,000. Just 10.3% (n = 44) earn more than RM 8,000, whereas a smaller group earns between RM 2,001 and RM 4,000 (14.5%, n = 62). According to this distribution, a sizable percentage of respondents still fall into the lower income tiers, even though a sizable portion have moderate to high incomes.

In conclusion, young adults make up most of the sample, which also has a wide but skewed income distribution, a substantial presence of degree holders, and a well balance gender representation.

4.1.1 Central Tendencies and Dispersion Measurement of Constructs

Table 4.1.1 Central Tendencies and Dispersion Measurement of Constructs

Variable	N	Min	Max	Mean	Std. Deviation	Variance
DV	428	1.00	5.00	3.7858	0.98813	0.976
IV1 (PC)	428	1.00	5.00	3.9942	0.85899	0.738
IV2 (FL)	428	1.00	5.00	4.0961	0.76167	0.580
IV3 (SB)	428	1.33	5.00	3.8162	0.83234	0.693
IV4 (IBT)	428	1.00	5.00	3.4790	1.17290	1.376

Based on the table above, the Central Tendencies and Dispersion Measurement of Constructs provide a summary of participant responses about BNPL consumers' responsibility and potential influencing factors such as perceived convenience, financial literacy, spending behaviors, and impulse buying tendencies. Despite modest answer variability, the dependent variable, responsibility of BNPL users, had a mean of 3.79 (SD = 0.99), suggesting that participants largely agreed that BNPL users should act responsibly. With comparatively consistent responses, financial literacy (IV2) had the highest mean score of any independent variable at 4.10 (SD = 0.76), indicating that respondents strongly acknowledged their knowledge and comprehension of financial concepts.

However, the high mean of 3.99 (SD = 0.86) for perceived convenience (IV1) also indicated that participants agreed that BNPL services are convenient. The mean

score for spending behavior (IV3) was 3.82 (SD = 0.83), indicating an overall positive attitude toward their own spending habits. The impulse buying tendency (IV4), on the other hand, showed the biggest standard deviation (SD = 1.17), but the lowest mean (3.48), suggesting more variability and conflicting views on impulsive buying habits. Overall, the statistics indicate that respondents have more diverse tendencies when it comes to impulse buying and responsible BNPL usage, even if they usually view BNPL as convenient and consider themselves financially knowledgeable.

4.2 Factor Analysis

4.2.1 Reliability, Cronbach Alpha, Mean, and Standard Deviation

Table 4.2.1: Reliability, Cronbach Alpha, Mean and Standard Deviation

Items	Cronbach's Alpha	Mean	Standard Deviation
DV	0.861	3.7858	0.9881
IV1 (PC)	0.889	3.9942	0.8590
IV2 (FL)	0.858	4.0961	0.7617
IV3 (SB)	0.868	3.8162	0.8323
IV4 (IBT)	0.934	3.4790	1.1729

Source: Developed for the research.

Based on table 4.2.1, the internal reliability of all the constructs, such as PC, FL, SB, and IBT, are high, and none of the item elimination is necessary at the time of the test. Conducting the actual test of IBT ($\alpha = 0.934$) achieved the high figure Cronbach's Alpha value, indicating excellent reliability. This was followed by PC ($\alpha = 0.889$), SB ($\alpha = 0.868$), and FL ($\alpha = 0.858$), all of which exceeded the commonly accepted threshold of 0.70. These values show that items in each of the constructs have a high correlation, which means that they measure the same concept consistently. Since there was no need to delete any items, it indeed proves that questionnaire items were well-developed, and they had a positive impact on the reliability of all scales at hand.

4.3 Inferential Analysis

4.3.1 Pearson's Correlation Analysis

Table 4.3.1: Correlation Matrix among DV, IV1, IV2, IV3, IV4

	DV	IV1	IV2	IV3	IV4
DV	1.000	0.766**	0.615**	0.716**	0.734**
IV1 (PC)	0.766**	1.000	0.611**	0.656**	0.509**
IV2 (FL)	0.615**	0.611**	1.000	0.653**	0.403**
IV3 (SB)	0.716**	0.656**	0.653**	1.000	0.703**

IV4 (IBT)	0.734**	0.509**	0.403**	0.703**	1.000

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

N=428

Table 4.3.1 indicates that the dependent variable, the responsibility of BNPL users, and the independent variables, including perceived convenience, financial literacy, impulse buying tendencies, and spending behaviour, have statistically significant relationships. In other words, this shows that each of these factors significantly affects users' sense of responsibility when using BNPL services. Any one of these factors seems to increase the sense of responsibility.

For instance, **perceived convenience (IV1)** has a strong correlation of **0.766** with responsibility (DV), showing that users who perceive BNPL services as convenient are more likely to act responsibly. Similarly, **spending behaviour (IV3)** also shows a strong positive correlation with responsibility, with a value of **0.716**. This may imply that users who are more aware of their spending patterns feel a greater sense of accountability when using such services.

Another strong relationship is observed that **impulse buying tendency (IV4)** influence the financial responsibility, with a correlation of **0.734**. This may appear surprising, but it could suggest that individuals likely to impulse buy may also become more mindful and responsible once they recognize the financial consequences of their actions.

Lastly, **financial literacy (IV2)** also contributes positively, but slightly less strongly, with a correlation of **0.615**. This supports the idea that users who are more financially literate will consider their BNPL usage more thoughtfully and

responsibly. Interestingly, the data also shows a correlation of **0.653** between financial literacy and spending behaviour, indicating that even users with good financial knowledge may still engage in frequent spending—possibly as part of planned financial behaviour rather than impulsive decisions.

4.3.2 Multiple Linear Regression

Table 4.3.2: Regression Result of Independent Variables on the FR

VARIABLE	BETA	T-VALUE	SIG.	RESULT
(CONSTANT)	-0.432	-3.202	0.001	-
IV1 (PC)	0.431	12.957	0.000	Reject H_{10}
IV2 (FL)	0.163	4.918	0.000	Reject H_{20}
IV3 (SB)	0.022	0.523	0.601	Accept H_{30}
IV4 (IBT)	0.434	12.883	0.000	Reject H_{40}

R = 0.874; R^2 = 0.765; Adjusted R^2 = 0.762; Sig. = 0.000

Based on Table 4.3.2, the analysis shows a strong connection that the independent variables — perceived convenience, financial literacy, spending behaviour, and impulse buying tendency influences the responsibility of BNPL users. The R value is 0.874, indicating a strong positive relationship. At the same time, the R^2 is 0.765, meaning that roughly 76.5% of the variation in users' sense of responsibility can be accounted for by the four independent variables. The adjusted R^2 of 0.762 further supports the reliability of the model after adjusting for the number of predictors. The overall model is statistically significant, with a p-value of 0.000, indicating that

at least one of the independent variables has a meaningful effect on the dependent variable.

Among all predictors, impulse buying tendency (IV4) had the largest influence (β = 0.434), followed closely by perceived convenience (IV1) with β = 0.431. Both predictors are highly significant ($p < 0.001$), indicating that users who find BNPL convenient or have higher impulsive buying tendencies tend to feel more responsible when using the service. Financial literacy (IV2) also plays a significant role (β = 0.163, p = 0.000), suggesting that individuals with better money management knowledge are more likely to behave responsibly.

In contrast, **spending behaviour (IV3)** did not show a significant effect (β = 0.022, p = 0.601), indicating that how much users spend is not a strong predictor of their sense of responsibility when using BNPL.

In summary, the findings suggest that perceived convenience, financial literacy, and impulse buying tendency significantly influence BNPL users' sense of responsibility, while spending behaviour does not. Hence, the study supports rejecting H_{10}, H_{20}, and H_{40}, and accepting H_{30}.

4.3.3 Independent Sample T-test

Table 4.3.3.1: Independent Sample T-Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
PC (IV1)	Equal variances assumed.	1.036	0.309	1.431	426	0.153
	Equal variances not assumed.			1.432	422.015	0.153
FL (IV2)	Equal variances assumed.	0.603	0.438	1.219	426	0.224
	Equal variances not assumed.			1.222	424.004	0.222
SB (IV3)	Equal variances assumed.	3.632	0.057	1.882	426	0.061
	Equal variances			1.892	425.886	0.059

	not assumed.					
IBT (IV4)	Equal variances assumed.	7.395	0.007	2.246	426	0.025
	Equal variances not assumed.			2.258	425.863	0.024

According to Table 4.3.3.1, equality of variances for PC, FL, SB, and IBT is assumed because all p-values from Levene's Test are larger than 0.05, other than for IBT (p = 0.007), where equal variances are not assumed. The important influence of these independent variables shows whether or not the respondents differ by gender based on the Sig. (2-tailed) values displayed in the table. The Sig. (2-tailed) value of IBT was 0.025 (< 0.05), which is an indicator of statistically significant difference between male and female respondents regarding IBT. The p-values for PC (0.153), FL (0.224), and SB (0.061) did not show that there were any statistically significant differences in respondents' perceptions for either factor.

Table 4.3.3.2: Gender Group Statistic

Variable	Gender	N	Mean	Std Deviation	Std. Error Mean
PC (IV1)	Male	202	4.0569	0.85093	0.05987
	Female	226	3.9381	0.86415	0.05748
FL (IV2)	Male	202	4.1436	0.74340	0.05231
	Female	226	4.0537	0.77682	0.05167
SB (IV3)	Male	202	3.8960	0.78697	0.05537
	Female	226	3.7448	0.86640	0.05763
IBT (IV4)	Male	202	3.6130	1.10804	0.07796
	Female	226	3.3591	1.21795	0.08102

Reviewing Table 4.3.3.2 above, the perceived convenience (PC) [mean male (4.0569) > mean female (3.9381)], and financial literacy (FL) [mean male (4.1436) > mean female (4.0537)]. Similarly, the male respondents reported a more positive attitude for a system benefit (SB) [mean male (3.8960) > mean female (3.7448)]. The impulse buying tendency (IBT) by male respondents was higher than females [mean male (3.6130) > mean female (3.3591)]. Based on the independent T-test values, the only gender difference that is statistically significant is in IBT, as it has a p-value of less than 0.05, which is 0.025 less than the suggested one (Sig. 2-tailed = 0.025). Thus, a new H_{60} is adopted as PC, FL, and SB, and no significant gender disparity is found. Nevertheless, H_{60} is rejected when it comes to IBT, demonstrating that gender is one of the major factors that determine the impulse of buying tendency.

4.3.4 Chi-Square Test

Table 4.7: Chi-Square Test

Independent Variable	Pearson Chi-Square	df	P-value	Cramer's V	Effect Size	Valid Cases(n)
PC (IV1)	1851.678	528	0.00	0.443	Moderate Strong	428
FL (IV2)	1618.200	576	0.00	0.397	Moderate	428
SB (IV3)	1634.006	528	0.00	0.417	Moderate Strong	428
IBT (IV4)	1539.154	576	0.00	0.387	Moderate	428

The Chi-square test for association between dependent and independent variable 1 yields an association of extreme significance, with Pearson Chi-square value of 1851.678, df = 528, and significance <0.001. This implies that the observed distribution between these two variables would not have ordinarily occurred by mere chance. Cramer's V, with a value of 0.443, signifying a moderately strong effect size, supports this notion of practical significance. Whereas the Phi coefficient of 2.080 is an important one, it should be viewed with caution because of the large dimensionality of the table. There are, however, 96.5% of cells with expected counts less than 5, which may render the chi-square approximation less robust; yet, the sample size (n = 428) provides some compensation against this constraint. All of these findings taken into account point to a considerable and

statistically relevant impact exercised by PC (IV1) on the dependent variable, which deserves more investigation towards distinguishing the reasons for this association.

FL (IV2) related dependency is statistically significant as the Pearson Chi-Square came out with 1618.200 (df = 576, p < .001). Slightly lesser than PC, it is still a corroboration of an observed relationship deviating from randomness. A moderate association is suggested by the Cramer's V statistic of 0.397, indicating that FL contributes significantly to explaining the dependent variable. The Phi value of 1.944 further speculates on the strength of association, yet the value should be considered in relation to table size. Another point to consider is that 97.1% of the cells have an expected count under 5; this can affect the stability of the chi-square results. In support of that, however, is the large sample size negating any instability. The variables lean toward FL as being significantly impactful upon changes in the dependent variable, possibly holding that status in any strategic evaluation or in an intervention program.

Independent variable 3, as per the placement order, depicts the strong relationship existing between the dependent variable and the SB. The Pearson Chi-Square statistic of 1634.006 (df=528, p <.001) supports this conclusion (IV3). The value of Cramer's V is 0.417, which points to a moderate-to-strong association, a bit stronger than FL and basically on par with PC, thus providing further backing for the hypothesis that SB is really tied to the DV. The Phi value also stands at 1.954, again endorsing a strong association between these variables. But since 96.3% of the cells have counts below the 5 expected count threshold, we must look to the results with some caution, especially concerning the smaller subgroups. Still, with 428 valid cases, this result could be considered reliable. From the strategic viewpoint, SB could be a compelling variable influencing the dependent measure and should be foremost in any qualitative or multivariate investigation to assess its influence direction and nature.

Lastly, for the fourth independent variable, which is IBT (IV4), the chi-square test also suggests a significant association (Pearson Chi-Square = 1539.154, df = 576, p < .001) with the dependent variable. It is the lowest Pearson value across the four IVs but is stronger than other significant values. Corresponding to that, the Cramer's V value of 0.387 gives evidence of a moderate-sized effect, hence the influence is not so strongly pronounced as in other IVs but is still meaningful. The level of association is found to be strong when an even higher value of Phi (1.896) is calculated. IBT also shares another problem with the other three IVs because its contingency table holds a pretty high percentage of low expected counts (97.0%), which raises questions with respect to the model's stability. However, given the strength and significance of this association, IBT remains a pertinent predictor or explanatory variable in the study context and is worthy of strategic consideration along with the other IVs.

All chi-square tests confirm that all four independent variables are statistically significantly and meaningfully related to the dependent variable. The Cramer's V values suggest that the effect size ranges from moderate to moderately strong, signifying the practical importance of each variable. There are some limitations with respect to lower expected counts in some of the data tables; however, with the large size of the sample (n = 428), reliability of these results can be expected. Thus, these findings suggest that all four variables are key contributors to the outcome and should be considered priority variables for further analysis, strategic planning, or targeted actions.

4.4 Conclusion

In conclusion, the results produced by SPSS version 27.0 are being used to interpret the descriptive, factor, and inferential analyses. By gathering the information to acquire the data, the central issue for this study, the results will be carried over to the following chapter.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

This section will provide a summary and discussion of the findings from Chapter 4. Transferring the numerical results into wording results is the rationale and primary objective of this step. Additionally, the study's limitations, managerial and theoretical implications, findings of summary, and recommendations will all be written and presented. This will assist the researchers in reviewing their final research study ideas.

5.1 Discussion of Major Findings

Table 5.1: Table of Hypothesis Statement Acceptance

Independent Variables	β	P-value	Decision
Perceived Convenience (PC)	0.431	0.000	Significant
Financial Literacy (FL)	0.163	0.000	Significant
Spending Behaviour (SB)	0.022	0.601	Insignificant
Impulse Buying Tendency (IBT)	0.434	0.000	Significant

5.1.1 Relationship between PC and FR

The results in Table 5.1 show a β value of 0.431, with a p-value of 0.000, suggesting a statistically significant and great and positive relationship between perceived convenience (PC) and financial responsibility (FR). This means that with higher levels of perceived convenience in BNPL services by customers, there should be a more significant indication of responsible payment by way of mail. Access to BNPL services and ease of use reduce the cognitive load that financial decision-making involves, thus motivating consumers to act responsibly with the money they spend. BNPL services like BNPL make it easier for users to purchase, but they must use some degree of responsibility and discipline to manage those late payments.

According to Soong et al. (2024), they posited that perceived convenience and financial responsibility were positively related. Their survey of 118 young Malaysians indicated that respondents had much more willingness to use BNPL platforms Atome, Spaylater, and Afterpay in a reasonable manner if they perceived them to be convenient. They suggest that BNPL was simple to cope with payments and program budgeting practices to include BNPL because of its greater ease and flexibility. Also, Soong et al. (2024) asserted that systems engaging users' potential to manage the whole financial cycle with the lowest cognitive load for managing payments helped users to make sensible financial decisions.

Likewise, Hui et al. (2025) also contend that perceived convenience positively affects financial responsibility. In their study, they found positive relationships with responsible use of BNPL services as long as the service provided instant approval and transparent repayment terms. They concluded that the transparency and simplicity of BNPL platforms facilitate a better alignment with users' monthly spending cycles, which in turn helps consumers execute better financial control and limit late payments. The findings in their study accentuate that when BNPL services have the convenient attributes that facilitate adoption and help encourage financial responsibility, then consumers can handle their payment scheduling better.

5.1.2 Relationship between FL and FR

The regression analysis shows a significant and positive correlation between Financial Literacy (FL) and Financial Responsibility (FR) at β value of 0.163 and p-value of 0.000. It indicates that as a consumer's financial literacy improves, the consumer's financial responsibility improves, especially as it relates to consumers using BNPL. Financially literate consumers generally seem to acknowledge the future obligations regarding their debt, which can drive more responsible and informed decisions. These consumers will be less likely to act irresponsibly in these situations and are assumed to have proactive and responsible management of debt and payments such that they will not overextend themselves.

As reported by Soong et al. (2024), the positive financial behavior of BNPL users is driven by the extent of their financial literacy. A survey with 118 young Malaysians showed that the most financially literate respondents had been able to use BNPL appropriately. Further, the authors noted that the financially literate respondents in their survey could distinguish needs from wants, which ultimately helped them manage spending. Furthermore, because they are more likely to understand potential risks of BNPL, including late fees and credit reporting, financially literate respondents will not be as likely to overspend or defer payments (Soong et al., 2024). This only exemplifies further how important financial literacy is in facilitating responsible BNPL use.

Nevertheless, although financial literacy is generally associated with greater financial responsibility, Akana (2022) represented that financial literacy may not always have a direct effect. Their results illustrated that financially literate consumers are better capable of assessing the financial costs and financial risks of BNPL services. Furthermore, the findings reported that financially literate consumers remain susceptible to impulse purchases that they would not have typically purchased when BNPL services are marketed with significant promotion. According to Akana (2022), even financially literate consumers misused their

BNPL purchases because they were overconfident in their ability to pay off the purchase, or with the use of emotional or social "push", they disregarded the economic implications of their decision. This suggests that although financial literacy is a concept that can help the individual make a more informed understanding of their finances and subsequently enhance their financial well-being, there are additional influences on consumer behaviour that will reduce their ability to make better financial decisions in such BNPL contexts.

These findings could suggest that financial literacy can both further responsible BNPL use and facilitate financial overconfidence and irresponsible behavior. Thus, the relationship between financial literacy and financial responsibility is complex, and when looking to understand its effects on BNPL usage, it is essential to consider psychological, cultural, and economic contexts.

5.1.3 Relationship between SB and FR

The analysis revealed that Spending Behaviour (SB) does not have a statistically significant relationship with the Financial Responsibility (FR) of BNPL users in Malaysia, and hence   β value of 0.022 for the coefficient and the p-value of 0.601. Thus, the differences in SB in the BNPL setting do not provide meaningful indication in the FR of the respondents.

Nevertheless, this finding is opposite to a series of preliminary studies that were successful in demonstrating a significant impact of spending behaviour on the BNPL repayment behaviours. For example, studies by Chuah et al. (2023) and Rahim and Abdullah (2022) have shown attributes like regular payments and easy navigation remind users to plan and save accordingly and coordinate purchases with their income patterns and reduce the defaults on payments. Equally, Halim et al. (2024) also assumed that a strong connection between the discipline of spending

behavior and financial literacy is present. Within the scope of their analysis, higher levels of financial literacy were demonstrated to positively correlate with stricter spending and production orientation as well as a higher rate of repayment reliability.

However, the current results do not contradict the study by Soong et al. (2024), which argued that the level of repayment reliability and planning debt, among others, is less closely linked to personal spending patterns than to the external factors such as a perception of BNPL utility and the presence of peers. Furthermore, this insignificant relationship can be moderated by some other aspects, such as financial literacy, social norms, and the features of the BNPL platforms. Indicatively, the work of Osman et al. (2024) showed that financially literate humans can easily manage their BNPL payments irrespective of the frequency of spending, whereas those with low financial literacy run the risk of defaulting even on controlled spending.

Overall, empirical studies on Malaysian spending trends have rarely been observed to directly cause personal financial responsibility. Rather, cultural aspects of the beliefs about debt and peer pressure and the design of BNPL service systems seem to have an even more definite effect on the reimbursement rate. Policymakers and BNPL providers should, therefore, prioritise initiatives where financial literacy promotion and transparent cost disclosure take the stage, and not solely a focus on more responsible purchasing behaviours; these initiatives are more likely to have a substantive impact on the long-term financial well-being of consumers.

5.1.4 Relationship between IBT and FR

Based on table 5.1.1, it shows that the p-value of 0.000 and β value of 0.434, which is lower than the generally recognized significance level (0.05), imply that there is a significant relationship between financial responsibility and impulsive buying

tendency. This implies that a higher impulse buying tendency is associated with higher financial responsibility among BNPL users in this study. Given that impulsive purchasing is frequently linked to weak financial planning, this result could seem unexpected.

This finding contradicts some previous studies that examined the relationship between impulse buying tendency and financial responsibility in the context of BNPL usage. This finding contradicts the conclusions of Admin (2023), who claimed that people who have a higher tendency for impulsive purchases are more likely to run into financial difficulties when utilizing BNPL services. Also, the tendency to make impulsive purchases often leads to overspending and inadequate financial management, thereby reducing overall financial responsibility. Likewise, the results contradict the findings of Juita et al. (2023), who discovered that a tendency for impulsive purchases considerably reduces financial responsibility. They clarified that because BNPL services are easy to use and convenient, consumers are more inclined to make impulsive purchases without carefully weighing the financial consequences, which commonly leads to overconsumption and difficulties fulfilling financial responsibilities.

However, given the present context, it's possible individuals with a high tendency for impulsive purchases are still conscious of their financial constraints and take precautions to avoid making careless purchases. To keep their finances under control, they may choose to use budgeting programs or make timely loan repayments. Furthermore, even for those who are impulsive, the growing availability of structured payment options like BNPL may aid in better money management. These results demonstrate the complexity of consumer financial behavior and show that being financially responsible and impulsive purchases are not always mutually exclusive.

5.2 Research Implications

5.2.1 Managerial Implication

Over the last few years, Buy Now, Pay Later (BNPL) has seen rapid adoption in Malaysia and specifically among the younger population that looks for convenience and speed. Why people are attracted to BNPL A prime factor that accounts for how many if drawn to BNPL is its perceived convenience. It gives people an opportunity to buy something immediately and not have to pay for all of it now, which feels easy and less stressful. For businesses, this means that their platforms must be as user-friendly as possible. Little touches like rapid sign-ups, simple payment terms, and smooth-to-use mobile apps can make a big difference. Customers appreciate easy management of the system and are more likely to remain compliant with their payments and use the service responsibly (Osman et al., 2024).

In addition, the BNPL providers need to prioritize financial literacy (FL). Including pieces of financial education content, like budget planners, reminders to settle debt, and click-to-reveal FAQs, helps the consumer make smarter decisions and reduces the likelihood of misuse. According to Soong et al., 2024 demonstrated that financial literacy significantly impacts responsible BNPL usage by young adults in the context of Malaysia. There are opportunities when educational prompts linked to apps, through social media, or post-purchase messaging could provide users with the resources and information to help them budget better and prevent missed payments.

On the subject of spending behaviour (SB), it is speculated that the BNPL delayed-payment function might enhance consumers' spending or purchase frequency. Data from Malaysia (Hoo et al., 2024) demonstrates that BNPL shoppers typically spend more on average online. In order to drive financial responsibility, managers would

need to introduce gatekeeping—incorporating mechanisms such as spending thresholds, upcoming installment reminders, and regular balance reports—making it easier for consumers to evaluate affordability before agreeing to payments. Moreover, controlling impulse buying tendency (IBT) is crucial to avoid the abuse of BNPL. Recent studies demonstrate that access to BNPL options strongly stimulates online impulse purchases when combined with hedonic motives—particularly under conditions of low self-control (Fihartini et al., 2024). To respond to this challenge, platforms can use behavioural nudges such as pop-up reflection prompts before checkout, optional cooling-off delays, or pre-set spending thresholds for impulsive users.

Lastly, BNPL companies must work closely with regulators and industry to protect consumers. Malaysia's forthcoming Consumer Credit Bill 2025 will regulate BNPL providers under more rigorous disclosure, complaint resolution and fair-lending regimes (Nambiar, 2025). By proactively shaping their product/communication strategy in line with upcoming regulation – from clear fee structures and late-payment disclosures to mandatory education modules – BNPL providers can build the trust of consumers, foster long-term responsible behaviour, and secure sustained growth in a market characterized by rapid transformation.

5.2.2 Theoretical Implication

The results of the study provided more evidence to understand the impacts' source of BNPL users with respect to their possible financial responsibility. The next results suggest that perceived convenience (PC) strongly relates to financial responsibility. More specifically, the answer confirmed that users paying money back is related to whether the BNPL services were easy to use, no longer than a short sign-up process, and obtaining a quote or repayment timetable was a task that was clear and easy. The result confirmed previous theory regarding ease of use and usability as substantive factors influencing the adoption and continuance intentions

of people to use new technology. Therefore, researchers in the future could potentially investigate the convenience of BNPL services that would support users' payments, and this would be an important contribution to our understanding of digital payment platforms.

Another significant finding from the research could be the linkage between financial literacy (FL) and financial responsibility. The reading revealed that users who stated that they were more knowledgeable in money management, budgeting, and payment terms are more responsible users of BNPL. This finding suggests the potential for financial literacy to become a theoretical construct in future BNPL research, which would associate financial literacy with the need to use BNPL responsibly. It suggests that in order to be financially responsible, it is not enough just to give access to the service, but the user should know and understand how to use it in a responsible way. Future research could explore the education of or financial literacy strategies embedded into fintech systems as a way of building, or supporting, financial responsibility.

The study also indicated that spending behavior (SB) could shape users' responsible use of BNPL. For some users, BNPL is a "buy now, worry later" option and could lead to overspending or buying things they don't need. This illustrates how we must contemplate user behaviors in practice when we are applying theories of financial behavior. This research has suggested that future work must consider not only people's understanding of BNPL but also how shopping behaviors and financial discipline shape users' use of BNPL. These findings could provide a basis for the development of a behavioral model for greater understanding of SB and the use of technology-enabled financial services.

This study has a number of interesting findings, but one of the largest findings relates to impulse buying tendency (IBT). The fact that there was a correlation established between IBT and misuse of BNPL is fascinating, because even when consumers were financially literate, those who had a high IBT irresponsibly applied

BNPL. There is an added psychological and cognitive aspect to this finding because it illustrates that emotions and self-control play a role in financial decision-making. Although most behaviors in finance models are composed of logical thought, finding a few things that we can consider emotional behavior should always factor into the financial analysis and is certainly not always at the front lines of financial theories to include emotional spending behaviors regardless of whether they are responsible or irresponsible. Future research could investigate how emotional or impulsive spending choices, or how spending that is triggered by sales or by peers, can support or hurt responsible or irresponsible use of BNPL services.

In addition, this study provides a way for future researchers to recognize how future research can use these four variables, PC, FL, SB, and IBT, in conjunction with each other to gain a deeper understanding of financial responsibility. For instance, researchers may investigate how financial literacy can diminish the adverse impacts of impulse buying or if the convenience element tends to stimulate both positive and negative spending behavior. These relationships can help inform theoretical models in behavioral finance and technology acceptance.

Overall, this research adds valuable information to previous theorizing of consumer behavior and fintech. Financial responsibility is not formed merely by one item. It is formed by the usability of the system, user comprehension of money, user consumption practices, and user impulsivity. This provides future researchers with a more robust, realistic starting point. The conceptual insights can help developers and policymakers design BNPL systems that understand usage but also promote long-term responsible financial practices.

5.3 Limitations of Study

The possibility for low data accuracy due to ignorant or unclear respondents is one significant limitation of this study. Even though the questionnaire was written in a straightforward manner to cater to different comprehension levels, some participants could still not have enough knowledge or direct experience with Buy Now, Pay Later services. Not all respondents may be completely aware of how BNPL operates, particularly regarding its terms and conditions, hidden fees, or long-term financial ramifications, as it is a relatively new payment innovation in Malaysia. This can result in responses that are more based on perception than on real use or in-depth knowledge of the service. Therefore, some responses can be based on assumptions or insufficient perspectives.

The second limitation involves the reliance on online survey techniques for data collection. To reach a large audience, the survey form was disseminated via digital platforms such as Telegram, WhatsApp, and other social media channels. The online aspect of the survey may still result in a little imbalance in accessibility, even though the data includes replies from a variety of age categories, including older consumers. For instance, even if someone has experience with BNPL, they may be less likely to find or finish the survey if they are less active online or use fewer digital services. Furthermore, some elderly respondents who did engage might still have trouble using online forms to their full potential due to issues including inadequate digital literacy or trouble accessing survey technologies. Despite being useful and time-efficient, this approach has some limitations that may affect the sample's diversity.

The third limitation is the time constraint experienced during the research process. The research's depth and scope were constrained by the short time available for data collecting and processing. Due to the limited time frame, the study was unable to investigate some factors or viewpoints that could have improved the results. Reaching a larger respondent base, which may have increased the variety and

representativeness of the data, was also difficult due to the limited time frame. Additionally, the possibility for more detailed analysis and reflection was diminished by time constraints. As a result, the findings must be interpreted in light of the limited study duration.

5.4 Recommendations of Study

To address the issue of inaccurate responses caused by limited understanding among some participants, future research can pre-test the survey with a small sample of people of various ages and educational backgrounds to help detect any unclear terms or questions earlier and increase the accuracy of responses. By taking this stage, researchers may enhance the general quality and reliability of the data by making adjustments to language or structure before disseminating it more widely. To further filter or interpret the data, future research can also think about utilizing a screening question to gauge a respondent's familiarity with the subject.

Online surveys are helpful and efficient, but they could not adequately represent the target population's variety on their own. To reduce the limitations caused by relying mostly on online surveys, future research can think about using a mixed-method approach to get around this restriction by combining traditional data collection methods with online questionnaires. For instance, participants who prefer verbal communication or require more clarification might be interviewed in person, and printed questionnaires can be delivered to physical places like community centers or universities. In addition to expanding reach and inclusion, this more expansive strategy enables researchers to collect more thorough data from a range of population sectors.

Lastly, to address the limitation of time constraints, future research should be conducted over a longer time frame to ensure a more thorough result. Researchers can improve the diversity and dependability of the data by increasing the number

of respondents by extending the duration. Additionally, a longer period would enable accurate data gathering, in-depth analysis, and more detailed preparation of survey tools. Furthermore, more time provides chances to investigate relevant variables or elements that could affect the study's findings. Therefore, future research can provide stronger, more accurate, and more useful results with better scheduling and resource allocation.

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APPENDIX

Appendix 1.1 Malaysian Population

Department of Statistics, Malaysia
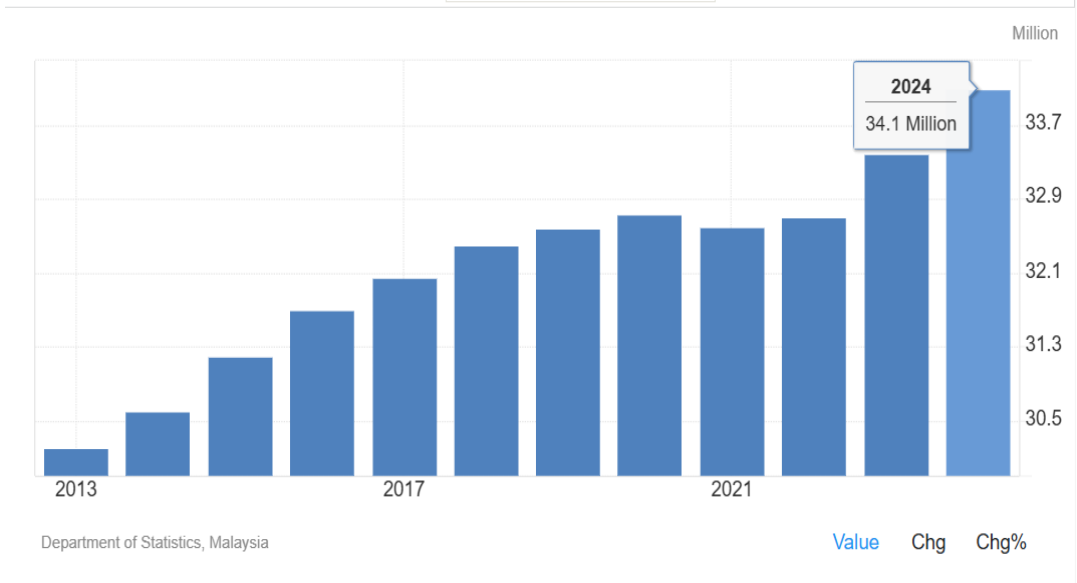
Appendix 1.2 Descriptive analysis of the questionnaire

Statistics

Gender

N	Valid	428
	Missing	0

Appendix 1.3 Descriptive analysis of Age

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	175	40.9	40.9	40.9
	26-35	56	13.1	13.1	54.0
	36-45	123	28.7	28.7	82.7
	46-55	44	10.3	10.3	93.0
	55 and above	30	7.0	7.0	100.0
	Total	428	100.0	100.0	

Appendix 1.4 Descriptive analysis of Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	203	47.4	47.4	47.4
	Male	225	52.6	52.6	100.0
	Total	428	100.0	100.0	

Appendix 1.5 Descriptive analysis of Education Level

Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor's Degree	168	39.3	39.3	39.3
	Diploma	119	27.8	27.8	67.1
	Master's Degree	52	12.1	12.1	79.2
	PhD	43	10.0	10.0	89.3
	Secondary Education	46	10.7	10.7	100.0
	Total	428	100.0	100.0	

Appendix 1.6 Descriptive analysis of Monthly Income

Monthly Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RM 0 - RM 2,000	133	31.1	31.1	31.1
	RM2,001 - RM4,000	62	14.5	14.5	45.6
	RM4,001 - RM6,000	67	15.7	15.7	61.2
	RM6,001 - RM8,000	122	28.5	28.5	89.7
	RM8,001 and above	44	10.3	10.3	100.0
	Total	428	100.0	100.0	

Appendix 1.7 Reliability Test of FR (Pilot Test)

Reliability Statistics

Cronbach's Alpha	N of Items
.777	6

Appendix 1.8 Reliability Test of PC (Pilot Test)

Reliability Statistics

Cronbach's Alpha	N of Items
.946	6

Appendix 1.9 Reliability Test of FL (Pilot Test)

Reliability Statistics

Cronbach's Alpha	N of Items
.769	7

Appendix 2.0 Reliability Test of SB (Pilot Test)

Reliability Statistics

Cronbach's Alpha	N of Items
.754	6

Appendix 2.1 Reliability Test of IBT (Pilot Test)

Reliability Statistics

Cronbach's Alpha	N of Items
.856	6

Appendix 2.2 Reliability Test of FR

Reliability Statistics

Cronbach's Alpha	N of Items
.861	6

Appendix 2.3 Reliability Test of PC

Reliability Statistics

Cronbach's Alpha	N of Items
.889	6

Appendix 2.4 Reliability Test of FL

Reliability Statistics

Cronbach's Alpha	N of Items
.858	7

Appendix 2.5 Reliability Test of SB

Reliability Statistics

Cronbach's Alpha	N of Items
.868	6

Appendix 2.6 Reliability Test of IBT

Reliability Statistics

Cronbach's Alpha	N of Items
.934	6

Appendix 2.7 Result of Descriptive Statistics

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
FR	428	4.00	1.00	5.00	3.7858	.98813	.976
PC	428	4.00	1.00	5.00	3.9942	.85899	.738
FL	428	4.00	1.00	5.00	4.0961	.76167	.580
SB	428	3.67	1.33	5.00	3.8162	.83234	.693
IBT	428	4.00	1.00	5.00	3.4790	1.17290	1.376
Valid N (listwise)	428						

Appendix 2.8 Result of Pearson Correlation Analysis

Correlations

		FS	PC	FL	SB	IBT
FS	Pearson Correlation	1	.766**	.615**	.716**	.734**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	428	428	428	428	428
PC	Pearson Correlation	.766**	1	.611**	.656**	.509**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	428	428	428	428	428
FL	Pearson Correlation	.615**	.611**	1	.653**	.403**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	428	428	428	428	428
SB	Pearson Correlation	.716**	.656**	.653**	1	.703**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	428	428	428	428	428
IBT	Pearson Correlation	.734**	.509**	.403**	.703**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	428	428	428	428	428

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

Appendix 2.9 Result of Multiple Linear Regression Test

Descriptive Statistics

	Mean	Std. Deviation	N
FR	3.7858	.98813	428
PC	3.9942	.85899	428
FL	4.0961	.76167	428
SB	3.8162	.83234	428
IBT	3.4790	1.17290	428

Correlations

		FR	PC	FL	SB	IBT
Pearson Correlation	FR	1.000	.766	.615	.716	.734
	PC	.766	1.000	.611	.656	.509
	FL	.615	.611	1.000	.653	.403
	SB	.716	.656	.653	1.000	.703
	IBT	.734	.509	.403	.703	1.000
Sig. (1-tailed)	FR	.	.000	.000	.000	.000
	PC	.000	.	.000	.000	.000
	FL	.000	.000	.	.000	.000
	SB	.000	.000	.000	.	.000
	IBT	.000	.000	.000	.000	.
N	FR	428	428	428	428	428
	PC	428	428	428	428	428
	FL	428	428	428	428	428
	SB	428	428	428	428	428
	IBT	428	428	428	428	428

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	IBT, FL, PC, SB[b]	.	Enter

a. Dependent Variable: FR

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.874[a]	.765	.762	.48172	.765	343.416	4	423	.000	2.227

a. Predictors: (Constant), IBT, FL, PC, SB

b. Dependent Variable: FR

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	318.764	4	79.691	343.416	.000[b]
	Residual	98.159	423	.232		
	Total	416.923	427			

a. Dependent Variable: FR

b. Predictors: (Constant), IBT, FL, PC, SB

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-.432	.135		-3.202	.001	-.697	-.167		
	PC	.496	.038	.431	12.957	.000	.420	.571	.503	1.987
	FL	.212	.043	.163	4.918	.000	.127	.297	.504	1.982
	SB	.026	.050	.022	.523	.601	-.072	.124	.316	3.161
	IBT	.365	.028	.434	12.883	.000	.310	.421	.491	2.035

a. Dependent Variable: FR

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	PC	FL	SB	IBT
1	1	4.892	1.000	.00	.00	.00	.00	.00
	2	.061	8.964	.09	.01	.03	.00	.56
	3	.021	15.146	.75	.36	.02	.03	.13
	4	.015	17.975	.12	.63	.34	.18	.03
	5	.010	21.925	.04	.00	.61	.79	.28

a. Dependent Variable: FR

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.3416	5.0623	3.7858	.86401	428
Residual	-2.24201	1.78406	.00000	.47946	428
Std. Predicted Value	-2.829	1.477	.000	1.000	428
Std. Residual	-4.654	3.704	.000	.995	428

a. Dependent Variable: FR

Appendix 3.0 Result of Independent Sample T-Test PC

T-Test

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
IV1	1	202	4.0569	.85093	.05987
	2	226	3.9381	.86415	.05748

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
IV1	Equal variances assumed	1.036	.309	1.431	426	.153	.11888	.08307	-.04440	.28216
	Equal variances not assumed			1.432	422.015	.153	.11888	.08300	-.04427	.28202

Appendix 3.1 Result of Independent Sample T-Test FL

T-Test

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
IV2	1	202	4.1436	.74340	.05231
	2	226	4.0537	.77682	.05167

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
IV2	Equal variances assumed	.603	.438	1.219	426	.224	.08983	.07371	-.05504	.23471
	Equal variances not assumed			1.222	424.004	.222	.08983	.07353	-.05468	.23435

Appendix 3.2 Result of Independent Sample T-Test SB

T-Test

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
IV3	1	202	3.8960	.78697	.05537
	2	226	3.7448	.86640	.05763

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
IV3	Equal variances assumed	3.632	.057	1.882	426	.061	.15120	.08035	-.00674	.30914
	Equal variances not assumed			1.892	425.886	.059	.15120	.07992	-.00589	.30829

Appendix 3.3 Result of Independent Sample T-Test IBT

T-Test

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
IV4	1	202	3.6130	1.10804	.07796
	2	226	3.3591	1.21795	.08102

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
IV4	Equal variances assumed	7.395	.007	2.246	426	.025	.25389	.11303	.03172	.47606
	Equal variances not assumed			2.258	425.863	.024	.25389	.11244	.03289	.47489

Appendix 3.4 Result of Chi Square FR with PC

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1851.678[a]	528	.000
Likelihood Ratio	1016.346	528	.000
Linear-by-Linear Association	250.455	1	.000
N of Valid Cases	428		

a. 555 cells (96.5%) have expected count less than 5. The minimum expected count is .00.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	2.080	.000
	Cramer's V	.443	.000
N of Valid Cases		428	

Appendix 3.5 Result of Chi Square FR with FL

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1618.200[a]	576	.000
Likelihood Ratio	1011.584	576	.000
Linear-by-Linear Association	161.700	1	.000
N of Valid Cases	428		

a. 607 cells (97.1%) have expected count less than 5. The minimum expected count is .00.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	1.944	.000
	Cramer's V	.397	.000
N of Valid Cases		428	

Appendix 3.6 Result of Chi Square FR with SB

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1634.006[a]	528	.000
Likelihood Ratio	1025.958	528	.000
Linear-by-Linear Association	218.914	1	.000
N of Valid Cases	428		

a. 554 cells (96.3%) have expected count less than 5. The minimum expected count is .00.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	1.954	.000
	Cramer's V	.417	.000
N of Valid Cases		428	

Appendix 3.7 Result of Chi Square FR with IBT

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1539.154[a]	576	.000
Likelihood Ratio	1056.065	576	.000
Linear-by-Linear Association	230.218	1	.000
N of Valid Cases	428		

a. 606 cells (97.0%) have expected count less than 5. The minimum expected count is .01.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	1.896	.000
	Cramer's V	.387	.000
N of Valid Cases		428	

Variables	Attributes	Items
Financial Responsibility of BNPL Users (FR)	FR 1	When shopping online I tend to choose a 'buy now, pay later' option if I can.
	FR 2	I am less concerned with the price of a product when I use buy-now-pay-later.
	FR 3	I use credit cards or debit cards to pay my BNPL installments.
	FR 4	I worry how I will pay off my BNPL debt.
	FR 5	I often make only the minimum payment on my BNPL balance.
	FR 6	I make a thorough examination of the terms and conditions of my own buy-now-pay-later provider when I open my account.
Perceived Convenience (PC)	PC 1	Using BNPL services allows me to complete purchases quickly and effortlessly.
	PC 2	BNPL platforms offer a seamless and user-friendly shopping experience.
	PC 3	I find BNPL services convenient for managing my purchases without immediate full payment.
	PC 4	BNPL services provide a convenient alternative to traditional credit options.
	PC 5	I prefer using BNPL services because they offer a more convenient payment option compared to traditional methods.

	PC 6	Using BNPL services simplifies my purchasing decisions by allowing me to defer payments easily.
Financial Literacy (FL)	FL 1	I have regular records of expense and income.
	FL 2	I am able to work effectively toward long term financial goals.
	FL 3	I have careful attention to personal financial needs.
	FL 4	I have experience in using digital payment products (Ex: Shopeepay, Atome, Grabpay)
	FL 5	I have little or no difficulty in managing my Money.
	FL 6	I have the ability to prepare my own weekly (monthly) budget.
	FL 7	I have better understanding of how to manage my credit use.
Spending Behavior (SB)	SB 1	I often make purchases without thoroughly evaluating whether I need the product.
	SB 2	I tend to spend impulsively when shopping online.
	SB 3	I buy things with BNPL even if I do not have the cash to pay upfront.
	SB 4	I find it hard to stick to a monthly budget.
	SB 5	I feel tempted to overspend when using BNPL services.
	SB 6	I rarely track my expenses after making purchases via BNPL platforms.

	IBT 1	I often buy things spontaneously using buy-now pay-later.
	IBT 2	I often buy things without thinking.
	IBT 3	I buy things that I do not need.
Impulse buying tendency (IBT)	IBT 4	I buy things I had not planned on purchasing.
	IBT 5	I buy things and later on do not know why I bought them.
	IBT 6	I buy things I normally would not buy.