

THE ADOPTION OF MOBILE PAYMENT APPS
AMONG UNIVERSITY STUDENTS IN MALAYSIA:
DETERMINANTS AND IMPLICATIONS

JOSHUA CHOY CHEE FOONG

BACHELOR OF FINANCE (FINANCIAL
TECHNOLOGY) WITH HONOURS

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND
MANAGEMENT DEPARTMENT OF FINANCE

DECEMBER 2025

Copyright @ 2025

ALL RIGHTS RESERVED. No part of this paper may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, graphic, electronic, mechanical, photocopying, recording, scanning, or otherwise, without the prior consent of the authors.

DECLARATION

We hereby declare that:

1. This undergraduate research project is the end result of my own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
2. No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
3. The word count of this research report is 9254.

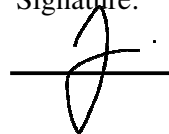
Name of Student:

Student ID:

Signature:

Joshua Choy Chee Foong

22UKB05102



Date: 11/12/2025

ACKNOWLEDGEMENT

This study and the underlying research would not be feasible without the exceptional support of my supervisor, Ms. Ung Leng Yean. As a result, I would like to thank her for her encouragement and useful advice during the planning and execution of this research endeavour. Her passion, knowledge, and meticulous attention to detail have motivated me and helped me finish my work on time.

I also want to express my gratitude to Dr. Ngoo Yee Ting, my second examiner, for her wise counsel and recommendations regarding my research topic. I am grateful for his helpful advice in helping me to improve my studies and for his willingness to give up his time in such a professional manner.

Additionally, the resources and facilities provided by Universiti Tunku Abdul Rahman are deeply appreciated. I can visit and peruse books and journals to obtain the information I need for my research topic because there are physical online resources available.

Lastly, I would like to thank all my family, friends, and anybody else who helped me with my research project. I value their encouragement and support, as well as their participation in the project from start to finish.

Thank you.

TABLE OF CONTENTS

Copyright Page.....	ii
Declaration.....	iii
Acknowledgement.....	iv
Table of Contents.....	v
List of Tables.....	x
List of Figures.....	xii
List of Abbreviations.....	xiii
List of Appendices.....	xiv
Preface.....	xv
Abstract.....	xvi

CHAPTER 1 INTRODUCTION

1.0 Introduction.....	1
1.1 Research Background.....	1
1.2 Problem Statement.....	2
1.3 Research Objectives.....	3
1.3.1 General Objectives.....	3
1.3.2 Specific Objectives.....	4
1.4 Research Question.....	4
1.5 Hypothesis of Study.....	5
1.6 Significance of the Study.....	5
1.7 Chapter Layout.....	6
1.8 Conclusion.....	7

CHAPTER 2 LITERATURE REVIEW

2.0 Introduction.....	8
2.1 Underlying Theories	8
2.1.1 Technology Acceptance Model (TAM).....	8
2.1.2 Unified Theory of Acceptance and Use of Technology (UTAUT)	9
2.1.3 Perceived Risk Theory	10
2.2 Review of Variable.....	10
2.2.1 Dependent Variable	10
2.2.1.1 Mobile Payment Adoption.....	11
2.2.2 Independent Variable	11
2.2.2.1 Campus Environmental Influence.....	11
2.2.2.2 Perceived Ease of Use.....	12
2.2.2.3 Perceived Risk of Overspending.....	13
2.2.2.4 Perceived Personalization	13
2.2.2.5 In-App Purchase Expectation	14
2.3 Proposed Conceptual Framework	14
2.4 Hypothesis Development	15
2.4.1 Campus Environmental Influence and Mobile Payment Adoption ..	15
2.4.2 Perceived Ease of Use and Mobile Payment Adoption	16
2.4.3 Perceived Risk of Overspending and Mobile Payment Adoption	16
2.4.4 Perceived Personalization and Mobile Payment Adoption.....	17
2.4.5 In-App Purchase Expectation and Mobile Payment Adoption	17
2.5 Chapter Summary	17

CHAPTER 3 RESEARCH METHODOLOGY

3.0 Introduction.....	19
3.1 Research Design.....	19
3.2 Data Collection Method.....	20

3.2.1 Primary Data	20
3.2.2 Secondary Data	20
3.3 Sampling Design.....	21
3.3.1 Target Population.....	21
3.3.2 Sampling Frame and Sampling Location.....	21
3.3.3 Sampling Elements	22
3.3.4 Sampling Technique	22
3.3.5 Sampling Size	22
3.4 Research Instrument.....	23
3.4.1 Questionnaire Design.....	23
3.4.2 Pilot Study.....	24
3.5 Origins of Construct Measurement (Scale and Optional Definitions).....	25
3.5.1 Origins of Construct Measurement	25
3.5.2 Scale of Measurement.....	26
3.5.2.1 Nominal Scale	26
3.5.2.2 Ordinal Scale.....	27
3.5.2.3 Interval Scale	27
3.6 Data Processing.....	28
3.7 Data Analysis	29
3.7.1 Descriptive Analysis	29
3.7.2 Reliability Analysis.....	30
3.7.3 Inferential Analysis	30
3.8 Chapter Summary	30

CHAPTER 4 RESEARCH RESULT

4.0 Introduction.....	32
4.1 Descriptive Analysis	32

4.1.1 Respondent Demographic Profile	32
4.1.1.1 Gender	32
4.1.1.2 Age	33
4.1.1.3 University Type.....	34
4.1.1.4 Current Level of Study	35
4.1.1.5 Monthly Income Level	36
4.1.1.6 Current Use of Mobile Payment Apps	38
4.1.2 Central Tendencies Measurement of Constructs	39
4.1.2.1 Mobile Payment Adoption.....	39
4.1.2.2 Campus Environmental Influence.....	39
4.1.2.3 Perceived Ease of Use.....	40
4.1.2.4 Perceived Risk of Overspending.....	41
4.1.2.5 Perceived Personalization	41
4.1.2.6 In-App Purchase Expectation	42
4.2 Scale Measurement	42
4.3 Inferential Analysis.....	43
4.3.1 Pearson Correlation Coefficient.....	43
4.3.1.1 Correlation between Campus Environmental Influence and Mobile Payment Adoption	44
4.3.1.2 Correlation between Mobile Payment Adoption and Perceived Ease of Use.....	45
4.3.1.3 Correlation between Perceived Risk of Overspending and Mobile Payment Adoption	45
4.3.1.4 Correlation between Perceived Personalization and Mobile Payment Adoption	46
4.3.1.5 Correlation between In-App Purchase Expectation and Mobile Payment Adoption	47
4.3.2 Multiple Regression Analysis.....	48
4.3.2.1 Model Summary	48

4.3.2.2 Coefficient Analysis	49
4.3.2.3 Estimated Multiple Regression	50
4.3.3 Hypothesis Testing.....	51
4.4 Chapter Summary	52

CHAPTER 5 DISCUSSION, CONCLUSION, AND IMPLICATIONS

5.0 Introduction.....	54
5.1 Discussion of Major Findings.....	54
5.1.1 Campus Environmental Influence and Mobile Payment Adoption ..	54
5.1.2 Perceived Ease of Use and Mobile Payment Adoption	55
5.1.3 Perceived Risk of Overspending and Mobile Payment Adoption	55
5.1.4 Perceived Personalization and Mobile Payment Adoption.....	56
5.1.5 In-App Purchase Expectation and Mobile Payment Adoption	56
5.2 Implication of Study	57
5.2.1 Theory Implication.....	57
5.2.2 Practical Implication	58
5.2.2.1 Campus Environmental Influence.....	58
5.2.2.2 Mobile Payment Adoption	59
5.2.2.3 Perceived Risk of Overspending.....	59
5.2.2.4 Perceived Personalization	60
5.2.2.5 In-App Purchase Expectation	60
5.3 Limitations of the Study.....	60
5.4 Recommendations of Future Research	61
5.5 Chapter Summary	62
References.....	63

LIST OF TABLES

	Page
Table 3.1: Pilot Study Reliability Test (Cronbach's Alpha)	24
Table 3.2: Origins of Construct Measurement	25
Table 4.1: Statistic of Respondents' Gender	33
Table 4.2: Statistic of Respondents' Age	34
Table 4.3: Statistic of Respondents' University Type	35
Table 4.4: Statistic of Respondents' Current Level of Study	36
Table 4.5: Statistic of Respondents' Monthly Income Level	37
Table 4.6: Statistic of Respondents' Current Use of Mobile Payment	38
Table 4.7: Central Tendencies Measurement of Constructs of Mobile Payment Adoption	39
Table 4.8: Central Tendencies Measurement of Constructs of Campus Environmental Influence	40
Table 4.9: Central Tendencies Measurement of Constructs of Perceived Ease of Use	40
Table 4.10: Central Tendencies Measurement of Constructs of Perceived Risk of Overspending	41
Table 4.11: Central Tendencies Measurement of Constructs of Perceived Personalization	41
Table 4.12: Central Tendencies Measurement of Constructs of In-App Purchase Expectation	42
Table 4.13: Reliability Test of Full Study	42
Table 4.14: Statistic of Correlation Between Campus Environmental Influence and Mobile Payment Adoption	44
Table 4.15: Statistic of Correlation Between Perceived Ease of Use and Mobile Payment Adoption	45

Table 4.16: Statistic of Correlation Between Perceived Risk of Overspending and Mobile Payment Adoption	45
Table 4.17: Statistic of Correlation Between Perceived Personalization and Mobile Payment Adoption	46
Table 4.18: Statistic of Correlation Between In-App Purchase Expectation and Mobile Payment Adoption	47
Table 4.19: Model Summary	48
Table 4.20: Coefficient	49
Table 4.21: ANOVA	50

LIST OF FIGURES

	Page
Figure 2.1: Conceptual Framework for This Study	14
Figure 3.1: G*Power 3.1.9.7	23
Figure 3.2: Example of Nominal Scale in Questionnaire	27
Figure 3.3: Example of Ordinal Scale in Questionnaire	27
Figure 3.4: Example of Interval Scale in Questionnaire	28
Figure 3.5: Example of Numerical Code	29
Figure 4.1: Statistic of Respondents' Gender	33
Figure 4.2: Statistic of Respondents' Age	34
Figure 4.3: Statistic of Respondents' University Type	35
Figure 4.4: Statistic of Respondents' Current Level of Study	36
Figure 4.5: Statistic of Respondents' Monthly Income Level	37
Figure 4.6: Statistic of Respondents' Current Use of Mobile Payment	38

LIST OF ABBREVIATION

TAM	Technology Acceptance Model
PU	Perceived Usefulness
PEOU	Perceived Ease of Use
UTAUT	Unified Theory of Acceptance and Use of Technology
UTAUT2	Unified Theory of Acceptance and Use of Technology 2
H0	Null Hypothesis
H1	Alternative Hypothesis
SPSS	Statistical Package for the Social Sciences
IV	Independent Variable
DV	Dependent Variable
SEM	Structural Equation Modelling
PLS	Partial Least Squares

LIST OF APPENDICES

Appendix 3.1: Permission to Conduct Survey	68
Appendix 3.2: Survey Questionnaire	70
Appendix 3.3: Reliability Test (Pilot Study)	75
Appendix 4.1 Reliability Test (Full Study).....	77
Appendix 4.2 Pearson Correlation Coefficient (Full Study)	79

PREFACE

At Universiti Tunku Abdul Rahman (UTAR), a research project is one of the main requirements for undergraduate students pursuing the Bachelor of Financial Technology (HONS) to complete their studies. This research project, supervised by Ms Ung Leng Yean, examines the topic “The Adoption of Mobile Payment Apps Among University Students in Malaysia: Determinants and Implications”. The motivation for this study arose from the rapid growth of mobile payment usage nationwide, yet inconsistent adoption patterns among university students. Although mobile payments have become increasingly common, not all students use them actively, suggesting the presence of underlying behavioural and environmental factors affecting their adoption. Therefore, this study aims to investigate key determinants—namely campus environmental influence, perceived ease of use, perceived risk of overspending, perceived personalization, and in-app purchase expectation—to better understand students’ adoption behaviour. By identifying the factors that shape students’ decisions to use mobile payment systems, this research is expected to benefit universities, policymakers, and service providers in improving cashless initiatives, enhancing user experience, and promoting safer and more efficient digital payment practices. Ultimately, this study contributes to a deeper understanding of financial technology adoption among young adults in Malaysia.

ABSTRACT

This study investigates the key determinants of mobile payment adoption among university students in Malaysia. As mobile payments continue to grow nationwide, adoption among young users remains inconsistent, highlighting the need to understand the factors shaping their usage behaviour. Five variables—campus environmental influence, perceived ease of use, perceived risk of overspending, perceived personalization, and in-app purchase expectation—were examined using a quantitative approach. A total of 240 valid responses were collected through an online survey, and the data were analysed using descriptive statistics, reliability testing, Pearson correlation, and multiple regression analysis. The findings reveal that campus environmental influence and perceived ease of use significantly and positively predict mobile payment adoption, indicating that supportive campus infrastructure and user-friendly applications play a crucial role. Conversely, perceived risk of overspending, perceived personalization, and in-app purchase expectation were found to be insignificant predictors, suggesting that students prioritise convenience and usability over financial concerns or additional app features. These insights contribute to existing literature by demonstrating the dominance of functional and environmental factors over psychological or feature-driven influences among young users. The study concludes with practical recommendations for universities, policymakers, and service providers to enhance mobile payment adoption and outlines directions for future research.

CHAPTER 1: INTRODUCTION

1.0 Introduction

The objectives, questions, issue statement, overall study design, hypotheses, significance, , and background will all be covered in this chapter.

1.1 Research Background

Mobile payment market at the global context is growing fast. It is anticipated that there will be more than 3.5 billion mobile wallet users by 2025. or nearly half of the entire world population (Digital Wallet Statistics, 2025). The most notable contributors to this growth are Asia with China and India at the head of it, and Southeast Asia with numerous digital payments canthers (Purohit et al., 2022).

The government in Malaysia is also actively involved in encouraging people to use cashless methods by establishing policies like the MyDigital blueprint and campaigns conducted by Bank Negara Malaysia. Cashback, discounts and merchant integration are also the incentives that E-wallet providers are trying to use towards adoption. According to Rahman et al. (2020), contactless payments became popular because of health and safety concerns, and the COVID-19 pandemic further drove the usage rate.

The most recent data will provide a clearer picture of Malaysia's e-wallet adoption. Touch 'n Go ewallet has the largest share of the market, with 51.1 percent of the sample responding affirmatively by one national survey, with MAE (28.3), GrabPay, Boost and Shopee Pay following closely as their competitors (Koh et al., 2023). According to another report, e-wallets are one of the most often used payment methods in Malaysia as 35.6% of transactions involving daily spending are conducted through wallets (Mordor Intelligence, 2024). The most active users are young users and in particular, Gen Y and Gen Z with more than 40% of them paying with e-wallets multiple times in a day (Koh et al., 2023).

Such statistics reveal that e-wallets have become an inseparable part of the lives of Malaysian students, yet the rates of their usage remain unequal because people are worried about infrastructure, convenience, and overspending.

1.2 Problem Statement

Although mobile payment usage has rapidly increased in Malaysia, university students' usage patterns are uneven. Although the use of e-wallets may be very active among students in their daily lives, some students are still reluctant or often do not use it even though they are readily available and countries run programs to promote cashless transactions (Rahman et al., 2020; Digital Wallet Statistics, 2025). This opposite behaviour suggests that adoption among the students is anything but homogenous.

Such disparities imply that there are behavioural uncertainties of students. Attitudinal, spending and perception differences suggest that students can possess certain issues or obstacles that can affect their decisions. According to earlier research, perceived risks and individual beliefs influence users' acceptance of

technology., which may account for variations in adoption behavior (Davis, 1989; Featherman and Pavlou, 2003).

Even though most students possess adequate digital access, smartphones, internet, and experience with e-wallets facilities, not every one of them use mobile payment regularly. The causes of this gap between access and actual use can be perceived ease of use, trust, or spending, as prior studies found that usability challenges and overspending risks have a negative influence on user behaviour (Leong et al., 2021; Jiang, 2022; Kumar et al., 2022).

Furthermore, despite being among the most regular users of technology, there is a dearth of research that explicitly targets Malaysian university students. There is a knowledge vacuum about what encourages or inhibits mobile payments adoption in university or institutions because most of the prior research focuses on the general population rather than a student group (Yong et al., 2021; Wu, 2011). This emphasizes how crucial it is to conduct a detailed investigation for the variables that influence university students' mobile payments adoption.

1.3 Research Objectives

1.3.1 General Objective

This study's objective is to investigate the variables that affect Malaysian university students' use of mobile payments. It focuses on how student adoption behavior is

influenced by enabler and inhibitor factors, like the campus environment, perceived ease of use, perceived personalization, expectations for in-app purchases, and perceived risk of overspending. The results will inform the views and willingness of students on mobile payments where universities, policymakers and service providers can devise measures to promote safer and effective utilization of mobile payment systems.

1.3.2 Specific Objectives

- i. To assess the impact of campus environment on mobile payment adoption.
- ii. To look into how perceived ease of use affects the mobile payments adoption.
- iii. To investigate how mobile payment influenced by perceived risk of overspending.
- iv. To verify the sense of perceived personalization of mobile payment usage.
- v. To ascertain how mobile payment uptake is impacted by the expectation of in-app purchases.

1.4 Research Questions

- i. How does the campus environment impact students' mobile payments usage?
- ii. How could adoption be impacted by perceived usability?
- iii. How do adoption and perceived risk of overspending relate to each other?
- iv. How susceptible is adoption to perceived personalization?
- v. How does the expectation of in-app purchases affect uptake?

1.5 Hypotheses of Study

Hypotheses one:

H0: The campus environment has negative impact to mobile payments.

H1: The campus environment has positive impact to mobile payments.

Hypotheses two:

H0: Mobile payments negatively impacted by perceived ease of use.

H2: Mobile payments positively impacted by perceived ease of use.

Hypotheses three:

H0: Mobile payments negatively impacted by perceived risk of overspending.

H3: Mobile payments positively impacted by perceived risk of overspending.

Hypotheses four:

H0: Perceived personalization has negative impact to mobile payment.

H4: Perceived personalization has positive impact to mobile payment.

Hypotheses five:

H0: Mobile payments negatively impact by expectation of in-app purchases.

H5: Mobile payments positively impact by expectation of in-app purchases.

1.6 Significance of the Study

Theoretical and practical value are added in this research. In theory, it adds factors that are very important to students to the Technology Acceptance Model (Davis,

1989) and UTAUT (Venkatesh et al., 2003), such as impact of the campus environment, possible expenditures, and expectations of in-app purchases. By using both enablers and inhibitors, this study gives a more complete view for the mobile payment's usage.

In real-life, these results are useful to several stakeholders. Ease of use, personalization, and integration with lifestyle can be important to the mobile payment provider, and some design and marketing can be informed by it. In the case of universities, the significance of the campus setting highlights the need to improve digital infrastructure, including providing the ability to pay via e-wallet in cafeterias and other facilities of the campus. To policymakers, the results indicate that financial literacy interventions that focus on risks of overspending and inclusion of safe and responsible usage of mobile payments should be implemented.

1.7 Chapter Layout

The study backdrop, issue description, aims, questions, hypotheses, and importance are all introduced at Chapter 1. The theoretical underpinnings and previous research on the usage of mobile payments are reviewed at Chapter 2. For study technique, including design, sample, tools, and data analysis, is covered at Chapter 3. For results of investigation are presented at Chapter 4 utilizing regression analysis, correlation, reliability testing, and descriptive statistics. The findings, practical and theoretical ramifications, study's shortcomings and suggestions for more investigation are presented at Chapter 5.

1.8 Conclusion

Conclusion, shown the importance of the growth for mobile payments among university students worldwide, particularly at Malaysia. The adoption is influenced by the five factors, campus environment, perceived ease of use, perceived risk of overspending, perceived personalization, and expectations for in-app purchases. The study's goals, questions, and hypotheses were outlined, and its theoretical and practical significance was clarified.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

Within the chapter the dependent variable is mobile payment adoption by Malaysian university students; independent variables are campus environment, perceived ease of use, perceived risk of overspending, perceived personalization, and expectations for in-app purchases. The underlying theory, literature study, suggested conceptual framework, creation of hypotheses, and chapter summary are all described.

2.1 Underlying Theories

2.1.1 Technology Acceptance Model (TAM)

One of the most important models about technology adoption is Davis's (1989) Technology Acceptance Model (TAM). Perceived usefulness (PU) and perceived ease of use (PEOU) are two key factors that influence the technology adoption, according the TAM. PEOU indicates that belief using system requires no effort, while PU describes that belief using a system improves task performance. Attitudes are based on these beliefs, and these determine behavioural intention and actual usage.

PU in mobile payments indicates the perception that the students hold about e-wallets in terms of efficiency, convenient, and effectiveness of e-wallets in financial transactions. PEOU indicates the ease that they experience with the app interfaces. Rahman et al. (2020) showed that acceptance of cashless payment in Malaysia was strongly predicted by opinions of usefulness and convenience of use. The same results were observed by Leong et al. (2021), who concluded that PEOU affected the adoption of mobile payment, especially in younger and technologically more advanced users. It has been criticized, however, as being too functionalist and neglecting contextual factors (including campus environment) and inhibitors (including risk of overspending).

2.1.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

Venkatesh et al. (2003) created the Unified Theory of Acceptance and Use of Technology (UTAUT), a framework that integrates eight contemporary paradigms of technology use. The four factors that UTAUT identified are performance expectancy, effort expectancy, social influence, and favourable conditions. Once it comes to implementing mobile payments, performance standards are comparable to usefulness, simplicity of use is comparable to effort expectancy, peer or societal expectations are comparable to social influence, and infrastructure support is comparable to enabling circumstances.

The study of mobile payments has made considerable use of the UTAUT model. Widyanto et al. (2021) improved UTAUT by incorporating the notion of perceived security, risk, and trust, which turned out to be more predictive. Using UTAUT2, Leong et al. (2021) confirmed that mobile payment adoptions are influenced by performance expectancy, effort expectancy, and facilitating factors in Malaysia. UTAUT is specifically relevant to university students since, based on social media,

peer pressure, and campus infrastructure, these students are greatly impacted in their choices.

2.1.3 Perceived Risk Theory

Perceived risk theory was developed by Bauer (1960) and focuses on the ambiguity and potential negative consequences of consumer decision-making. Featherman and Pavlou (2003) extended the concept by determining the following dimensions: financial risk, performance risk and psychological risk. Even though mobile payments are convenient, they can generate the perception of risk. These are fears of fraud, misuse of data and overspending.

Rahman et al. (2020) observed in Malaysia that issues pertaining to trust and security still pose a hindrance in the use of cashless payments. Jiang (2022) reasoned that mobile payments have the potential to uplift impulsive spending because money is lost. It is a major deterrent to the spending habits of students who tend to lack the necessary financial literacy and have limited income. The combination of the perceived risk theory and TAM and UTAUT gives a more comprehensive approach to adoption analysis.

2.2 Reviews Variables

2.2.1 Dependent Variable

2.2.1.1 Mobile Payment Adoption

Mobile payment adoption describes how people are prepared to embrace and make mobile payment applications as part of their lifestyle. Frequency of use, preferences of paying with cash or card, intentions to continue using, and recommendations are the behaviours that represent adoption (Alalwan et al., 2017).

The uptake has increased all over the world with over 3.5 billion users projected by 2025 (Digital Wallet Statistics, 2025). According to Rahman et al. (2020), both government policies and the private sector's campaign have encouraged the use of e-wallet payment systems in Malaysia. According to Balakrishnan (2023), mobile payments among Malaysians are becoming more popular in relation to transactions but also in connection with lifestyle matters. Yong et al. (2021) emphasized peer networks, ease of use, and services availability in the campus were major determinants of adoption among university students. Although such positive developments have occurred, adoption has not been even and obstacles like the risk of overspending and absence of campus infrastructure are still major challenges.

2.2.2 Independent Variables

2.2.2.1 Campus Environmental Influence

Campus environment influence is the extent to which the university environment is enabling in terms of adopting mobile payments. It involves infrastructural facilitation, e.g., the acceptance of e-wallets at cafeterias, bookstores, vending

machines, and administrative offices, and social influence by peers and other students overall. According to Wu (2011), when universities integrate these systems into their everyday operations, mobile payments in the academic setting is more favourable.

Peer norm and facilitating conditions have been identified as good predictors of e-wallet acceptance in Malaysia. Leong et al. (2021) showed that an enabling environment to use mobile payments is provided through readiness and institutional support, whereas Yong et al. (2021) have also stressed that the support to use mobile payments among students is more likely to happen when their peers and academic environments encourage its use. Rahman et al. (2020) also discovered that infrastructural preparedness and social push to use cashless payments were also significant in the Malaysian environment. Combined, these results indicate that the environment of the campus is a decisive factor of e-wallet usage in students.

2.2.2.2 Perceived Ease of Use

Students' perceptions for the simplest utilize of mobile payment apps are known as perceived ease of use (PEOU). According to Davis (1989), it is a crucial component of the TAM structures. PEOU is often associated with intuitiveness, simplicity of learning, and interface design.

Research demonstrates that PEOU has a significant impact in mobile payment usage. Leong et al. (2021) found out that young people in Malaysia preferred apps that were simple and quick to use. Additionally, Saragih and Mulyadi (2024) showed that Gen Z adoption in Indonesia was significantly influenced by usability. PEOU could also be the key to successful adoption as not all apps possessing a high level of functionality can become popular without PEOU because people avoid

using complicated applications. Among college students who must combine both school and social life, efficiency and simplicity are particularly appreciated.

2.2.2.3 Perceived Risk of Overspending

The concern that mobile payments encourage overspending is known as perceived risk of overspending. Payments via digital channels make money exchange less salient, which leads to a psychological process of decoupling with spending (Jiang, 2022). Lee et al. (2022) noted that Malaysian Gen Y and Gen Z frequently document impulse buying with regards to using e-wallets. The same study by Kumar et al. (2022) identified that students have difficulties when managing budgets using frictionless payments.

There are risks of overspending which may deter the uptake of mobile payment among students particularly those with constrained financial means. Nevertheless, this impact can be different: part of the students remains using mobile payments even when they tend to spend excessive sums on it because it is more convenient and fits their lifestyle. Overspending risk, therefore, is a significant inhibitor that will have to be empirically tested in student groups.

2.2.2.4 Perceived Personalization

The level of personalization that consumers perceive in mobile payment apps, such as customized offers, reward schemes, and spending data, is known as perceived personalization. Relevance and trust are increased through personalization, which leads to greater user satisfaction (Nguyen and Khoa, 2024).

Leong et al. (2021) carried out a study in Malaysia, students valued benefits of personalization, such as discounts at campus shops or payback on transportation. As Balakrishnan (2023) stressed, personalisation encourages further engagement because it matches the services with the lifestyle of users. Personalization is important to students who tend to be drawn to deals and rewards.

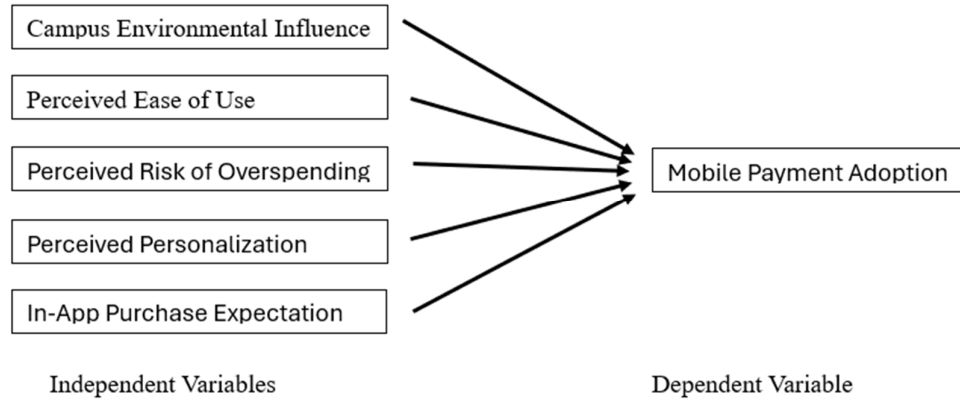
2.2.2.5 In-App Purchase Expectation

In-app purchase expectation defines the expectation of students who anticipate using mobile payment applications when accessing digital applications e.g. gaming credits, music or video streaming, and event tickets. Additionally, the most important components of mobile payment systems worldwide is in-app purchases (Purohit et al., 2022).

Balakrishnan (2023) asserts that lifestyle integration is crucial to Malaysia's mobile payment readiness. Yong et al. (2021) also emphasized the in-app services raise adoption because students do not view the mobile payments as financial tools but as lifestyle platforms. This construct describes the adoption of entertainment and digital consumption as motivators among the younger demographics.

2.3 Conceptual Framework

Figure 2.1: Conceptual Framework



Literature reviewed for this study offers the conceptual framework in which five independent variables—campus environment influence, perceived ease of use, perceived risk of overspending, perceived personalization, and in-app purchase expectation—moderate the mobile payment adoption. Collectively, these variables represent the impediments and facilitators of adoption, which offers a comprehensive explanation of student behaviour.

2.4 Hypotheses Development

2.4.1 Campus Environmental Influence and Mobile Payment Adoption

University setting is at the centre of defining financial behaviours of students. Wu (2011) demonstrated that when mobile payment systems are integrated into the campus facilities, using mobile payment systems becomes a normal aspect of student life. Adoption studies conducted in Malaysia have confirmed that institutional and social support are important in encouraging for use of digital

payments (Leong et al., 2021; Rahman et al., 2020; Yong et al., 2021). Thus, it is expected that students in favourable campus contexts will adopt at a faster rate.

H0: The campus environment has negative impact to mobile payments.

H1: The campus environment has positive impact to mobile payments.

2.4.2 Perceived Ease of Use and Mobile Payment Adoption

One importance TAM's pillars are convenience. Davis (1989) highlighted its importance, while Leong et al. (2021) demonstrated its applicability in Malaysia. This is also true for Indonesia's Gen Z, as Saragih and Mulyadi (2024) noted that usability is a crucial concern. Apps are more likely to be adopted by students who believe they are easy to use.

H0: Mobile payments negatively impacted by perceived ease of use.

H2: Mobile payments positively impacted by perceived ease of use.

2.4.3 Perceived Risk of Overspending and Mobile Payment Adoption

Concerns about overspending hinder the use of mobile payments. According to the author, frictionless spending increases impulsivity (Jiang, 2022), and Lee et al. (2022) discovered similar impact in Malaysian students. Kumar et al. (2022), who focused on the issue of financial difficulties among young people, also found similar results. Greater perceived overspending risk therefore is likely to lower adoption.

H0: Mobile payments negatively impacted by perceived risk of overspending.

H3: Mobile payments positively impacted by perceived risk of overspending.

2.4.4 Perceived Personalization and Mobile Payment Adoption

By tailoring services to users' demands, personalization adds value. Leong et al. (2021) and Balakrishnan (2023) also validated that personalised features are a successful adoption factor in Malaysia. Nguyen and Khoa (2024) associated personalization with trust and satisfaction as well. Consequently, the increase of perceived personalization ought to facilitate adoption.

H0: Perceived personalization has negative impact to mobile payment.

H4: Perceived personalization has positive impact to mobile payment.

2.4.5 In-App Purchase Expectation and Mobile Payment Adoption

Lifestyle features for e-wallets are expanded by in-app purchases. Balakrishnan (2023) and Yong et al. (2021) proved these features as being vital according to Malaysian students. Therefore, it is expected that increased in-app purchase expectations will improve adoption.

H0: Mobile payments negatively impact by expectation of in-app purchases.

H5: Mobile payments positively impact by expectation of in-app purchases.

2.5 Chapter Summary

Actual research and theories on mobile payment usage have been covered inside this chapter. TAM, UTAUT, and Perceived Risk Theory provided the theoretical framework. 5 independent variables—campus environment, perceived ease of use, perceived risk of overspending, perceived personalization, and in-app purchase expectation—were given in addition to the dependent variable, adoption. Five hypotheses were developed along with a conceptual framework.

Chapter 3: Research Methodology

3.0 Introduction

The chapter describes the method used to look at how Malaysian university students use mobile payment. The full description of research design, data collecting, sample design, research instrument, construct measurement, data processing, and data analysis processes. These methodological choices ensure that the study objectives and the hypotheses developed in the preceding chapters are addressed in a methodical and reliable manner.

3.1 Research Design

A quantitative study design was employed in the proposed investigation. Since the study's goals are to survey the correlations of independent and dependent variables and verify hypotheses statistically, a quantitative method is appropriate (Sekaran and Bougie, 2019). The study provides objective and broadly applicable findings on the factors influencing mobile payment acceptance using numerical data.

The design is both causal and descriptive. In that it generalizes the respondents' demographic traits and their overall mobile payment usage patterns, it is descriptive. It is causal in that it examines both cause and effect relationships with the dependent variable of mobile payments adoption, and independent variables which are campus environment, perceived ease of use, perceived risk of overspending, perceived personalization, and in-app purchase expectations. The cross-sectional survey

methodology was collected at a specific time. In terms of time and resources, the approach is suitable for undergraduate studies and is frequently employed in adoption studies (Saunders et al., 2019).

3.2 Data Collection Method

The study uses primary and secondary data.

3.2.1 Primary Data

The questionnaire was distributed for university students throughout Malaysia to collect primary data. Questionnaires permit gathering of standardised responses, respondents are anonymous, and the method is affordable when addressing a wide sampling (Collins, 2021). The distribution modes included online and physical: online through Google Forms to contact students in various universities and physical versions in the selected places inside the campuses to obtain the responses of the students.

3.2.2 Secondary Data

Government reports, books, academic journals and industry publications were used to get secondary data. These sources were used as theoretical bases, to serve

purposes of questionnaire development, and to contextualise the results. Scholarly articles on the use of mobile payment in Malaysia (Rahman et al., 2020; Leong et al., 2021; Yong et al., 2021), discuss on excessive spending (Lee et al., 2022; Kumar et al., 2022), and business reports on the evolution of mobile payment (Digital Wallet Statistics, 2025) are some examples.

3.3 Sampling Design

3.3.1 Target Population

Pupils from Malaysia universities make up the research group for this study. Students are particularly relevant since they are the first to use FinTech advances, are digital natives and app users, and actively use mobile devices. Because of their low income and vulnerability to social pressure, they also constitute a unique market to investigate the uptake of mobile payments.

3.3.2 Sampling Frame and Sampling Location

Students at Malaysia's public and private universities are included in the sample frame. Due to availability and population density, the study concentrated on universities in Selangor and Kuala Lumpur; however, online distribution allowed for the inclusion of students from other states, resulting in a more diverse sample.

3.3.3 Sampling Elements

The analytical units are the students. To be eligible to participate, respondents had to meet two requirements: (1) they had to be at least 18 years old, and (2) they must have a smartphone, as the adoption of mobile payments would not be possible without one.

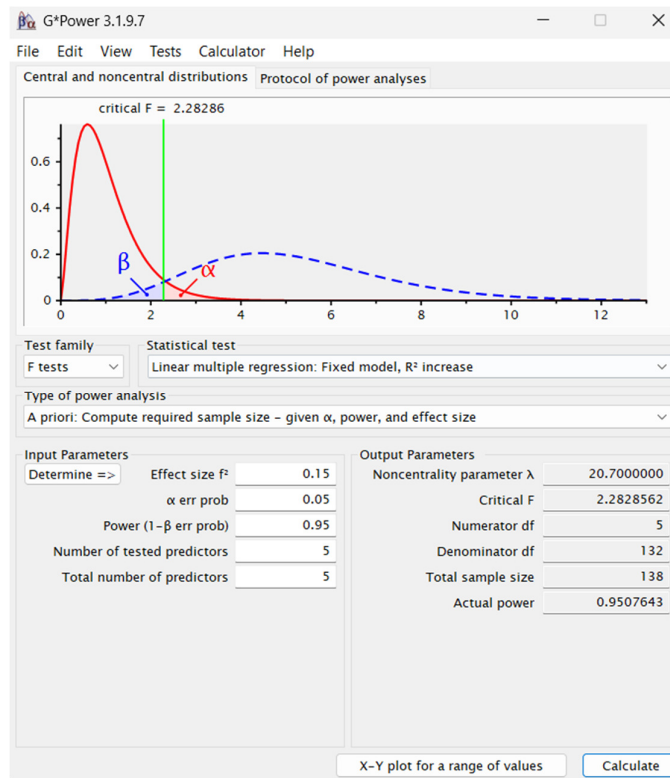
3.3.4 Sampling Technique

Non-probability convenience sampling was used for the study to get information from readily available respondents. Although this method may limit generalisability, it is commonly applied in technology adoption studies and is suitable for undergraduate research with limited time and resources (Sekaran & Bougie, 2019). Similar Malaysian e-wallet studies, including Leong et al. (2021) and Yong et al. (2021), have also used this approach.

3.3.5 Sampling Size

The necessary sample size for multiple linear regression was computed by using G*Power 3.1.9.7. The analysis showed a minimum of 138 respondents were needed to reach an actual power of 0.95 using five predictors with a medium effect size ($f^2 = 0.15$), a significance threshold of 0.05, and desired statistical power of 0.95 (Faul et al., 2009). A total of 240 valid replies were gathered for this investigation, much over the required minimum.

Figure 3.1: G*Power 3.1.9.7



3.4 Research Instrument

The primary research was used by the questionnaire. The questionnaires are appropriate when gathering a lot of data, when it is necessary to achieve standardisation, and when statistical analysis is required (Cint, 2025). They are also anonymous, and this fosters honesty.

3.4.1 Questionnaire Design

Inside the questionnaire, it has three different sections . Gender, age, university type, degree of education, monthly income, and use of mobile payment were all included in Section A's demographic questionnaire. The dependent variable measured in Section B, that is, cell phone payment adoption, was a set of items based on frequency of use, preferring to use over cash or cards, willingness to continue using, and willingness to suggest to peers (Alalwan et al., 2017; Yong et al., 2021). Each independent variables—campus environment influence, perceived ease of use, perceived risk of overspending, perceived personalization, and in-app purchase expectation—was represented by five groups of questions in Section C. Additionally, the Likert-scale items from 1 (strongly disagree) to 5 (strongly agree) were used to calculate each construct.

3.4.2 Pilot Study

Forty-two students will participate in a pilot study to evaluate the validity, reliability, and clarity of the questionnaire. To find unclear issues, improve wording, and make sure respondents understand each question as intended, pilot testing is crucial. Cronbach's Alpha will be used to assess internal consistency, with a minimum acceptable level of 0.70 (Nunnally, 1978).

Table 3.1: Pilot Study

Variable	Cronbach's Alpha	Reliability Level
Mobile Payment Adoption	0.934	Excellent
Campus Environmental Influence	0.886	Good
Perceived Ease of Use	0.964	Excellent
Perceived Risk of Overspending	0.896	Good
Perceived Personalization	0.926	Excellent
In-App Purchase Expectation	0.825	Good

3.5 Constructs Measurement

In order to get answers from respondents, the questionnaire design made use of a few relevant and useful measurement scales.

3.5.1 Origins of Construct Measurement

Table 3.2: Origins for Construct Measurement

Variables	Original Sources
Mobile Payment Adoption	Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust.
	Yong, C., Tham, J., Azam, S. M. F., & Khatibi, A. (2021). An empirical study on acceptance of mobile payment and its competitive advantage in Malaysia.
Campus Environment Influence	Wu, H. C. (2011). Understanding mobile payment in university campus. In <i>Proceedings of the International Conference on Digital Society (ICDS 2011)</i>
Perceived Ease of Use	Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology.
	Leong, M. Y., Hew, T. S., Tan, G. W. H., & Ooi, K. B. (2021). Technology readiness and UTAUT2 in e-wallet adoption in Malaysia.

Perceived Risk of Overspending	Jiang, Y. (2022). The influence of payment method: Do consumers pay more with mobile payment?
	Lee, Y. Y., Gan, C. L., & Liew, T. W. (2022). Do E-wallets trigger impulse purchases? An analysis of Malaysian Gen-Y and Gen-Z consumers.
	Kumar, D. S., Sudin, H., Othman, J., & Salehuddin, S. (2022). The influence of spending behaviour among university students in Malaysia.
Perceived Personalization	Nguyen, T. H., & Khoa, B. T. (2024). Mobile wallet adoption in emerging economies: The role of personalization, trust, and perceived usefulness.
	Leong, M. Y., Kwan, J. H., & Ming, L. M. (2021). Technology readiness and UTAUT2 in e-wallet adoption in a developing country.
In-App Purchase Expectation	Balakrishnan, V. (2023). Going cashless? Elucidating predictors for mobile payment readiness among Malaysians.
	Yong, C., Tham, J., Azam, S. M. F., & Khatibi, A. (2021). An empirical study on acceptance of mobile payment and its competitive advantage in Malaysia.

3.5.2 Scale of Measurement

The variables in this research are identified and classified using the scale of measurement. Scales are divided into two categories: non-metric and metric. The interval and ratio scales were regarded as metric, but the ordinal and nominal scales are seen as non-metric.

3.5.2.1 Nominal Scale

The most fundamental measurement is represented by the nominal scale. By highlighting the distinctions of each respondent, nominal scale helps the researchers

recognize and categorize them (Sekaran & Bougie, 2019). Questions 1, 3, 4, and 6 in Section A are primarily taken from the nominal scale.

Figure 3.2: Example for Nominal Scale in Questionnaire

1. Gender:
 - Male
 - Female

3.5.2.2 Ordinal Scale

Given that ordinal scales rely on rankings, they are unable to quantify the difference in rankings. Put differently, the ordinal scale could demonstrate the difference but not the actual separation between the observations (Sekaran & Bougie, 2019). Questions 2 and 5 in Section A employ the ordinal scale.

Figure 3.3: Example for Ordinal Scale in Questionnaire

1. Age:
 - Below 20
 - 21–23
 - 24–26
 - 27 and above

3.5.2.3 Interval Scale

Questionnaire's Sections B and C make the most use of the interval scale. Using a 5-point Likert scale, rising numbers between two sections correspond on the five

sub-stages of the degree of agreement. The following numbers has a different meaning: five (highly agree), four (agree), three (neutral), two (disagree), and one (strongly disagree). Respondents will be prompted to choose an answer which best conveys their degree of agreement with the statements found in the questionnaire's Sections B and C (Sekaran & Bougie, 2019).

Figure 3.4: Example for Interval Scale in Questionnaire

Mobile Payment Adoption

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I regularly use mobile payment apps for transactions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I prefer mobile payments over cash or card.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I intend to continue using mobile payment apps in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am likely to recommend mobile payment apps to my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobile payment apps are my default method of payment when available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.6 Data Processing

The collected data underwent several process stages. First, responses will be screened in terms of completeness and questionnaires whose data are not available or make no sense are not included. Second, an editing process was undertaken to rectify small errors where possible. Third, replies were coded, and Likert-scale with

numerical rating (1 = strongly disagree, 5 = strongly agree) was assigned to each response. Lastly, transcribed coded data were inputted into the SPSS to be analysed. Such an organized practice guaranteed the validity and precision of the information (Sekaran and Bougie, 2019).

Figure 3.5: Example for Numerical Code

Example of numerical code setting in Section A:

1	=	Male
2	=	Female

Example of numerical code setting in Section B and C:

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

3.7 Data Analysis

Data analysis was done using SPSS. The analysis consisted of three steps: inferential analysis, reliability analysis, and descriptive analysis.

3.7.1 Descriptive Analysis

Gender, age, university type, degree of education, monthly income, and mobile payment were all included in description of the respondents' demographic characteristics. Patterns and trends were identified using reported frequencies, and percentages.

3.7.2 Reliability Analysis

Internal consistency was checked by reliability analysis to test each construct. The alpha that was applied was that of Cronbach, and the alpha value of above 0.70 was deemed reasonable (Nunnally, 1978). As a result, each construct's measuring items became dependable and consistent.

3.7.3 Inferential Analysis

The theories presented in Chapter 2 were tested using inferential analysis. The strength and direction of the relationships between the variables were evaluated using Pearson correlation. Multiple regression analysis was used to examine the predictive influence of the five independent factors on mobile payments. Only results that were statistically valid were taken into consideration, and the testing hypothesis threshold was set at 0.05.

3.8 Chapter Summary

Research methodology is to survey Malaysian university students' usage of mobile payments was outlined in the chapter. Quantitative, cross-sectional survey design was employed; 240 students were given standardized questionnaires to complete. Reliability was assessed using recognized scales used to measure the structures after the study instrument underwent a pilot test. The steps involved in the data processing were outlined and the analysis plan entailed descriptive, reliability and inferential statistics. These research methodologies give sufficient grounds on which hypotheses that were stipulated in Chapter 2 can be tested.

CHAPTER 4: RESEARCH RESULTS

4.0 Introduction

SPSS is used to enter and analyse the information gathered from the respondents. The research discusses three different kinds of analyses: inferential analysis, reliability test, and descriptive analysis.

4.1 Descriptive Analysis

The target respondents' attributes will be outlined in the six items in part A of the questionnaire.

4.1.1 Respondent Demographic Profile

The respondents' gender, age, university type, degree of education, monthly income, and mobile payment were all included in the demographic profile data.

4.1.1.1 Gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	150	62.5	62.5	62.5
	Male	90	37.5	37.5	100.0
Total		240	100.0	100.0	

Table 4.1: Statistic on Respondents' Gender

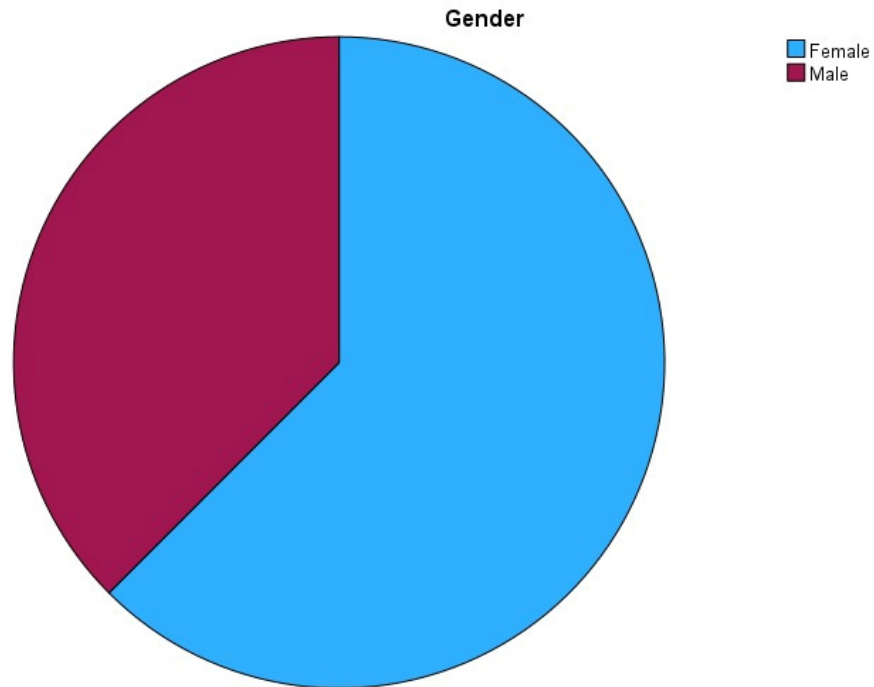


Figure 4.1: Statistic on Respondents' Gender

Table 4.1 shows that women made up 62.5 percent of the respondents (n = 150), while men made up 37.5 percent (n = 90).

4.1.1.2 Age

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-23	127	52.9	52.9	52.9
	24-26	47	19.6	19.6	72.5
	27 and above	34	14.2	14.2	86.7
	Below 20	32	13.3	13.3	100.0
	Total	240	100.0	100.0	

Table 4.2: Statistic on Respondents' Age

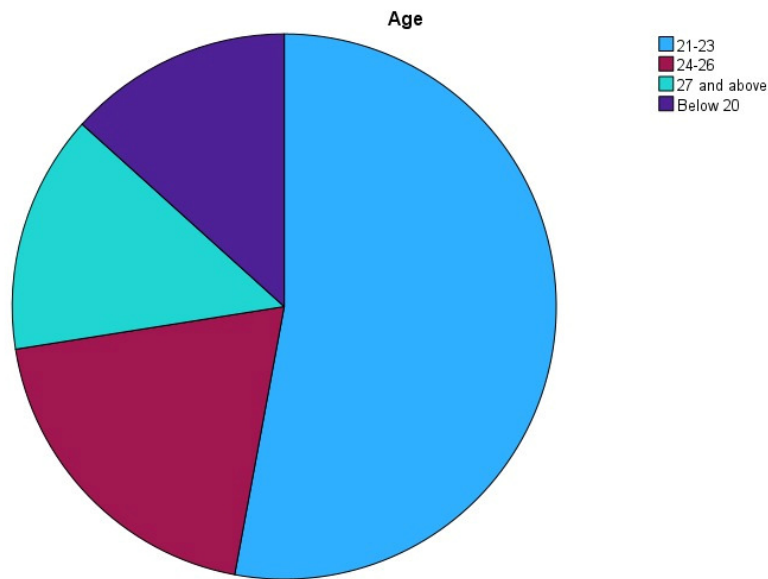


Figure 4.2: Statistic on Respondents' Age

According to Table 4.2, most respondents were aged 21–23 years (52.9%, n = 127), followed by those aged 24–26 (19.6%), 27 and above (14.2%), and below 20 (13.3%).

4.1.1.3 University Type

UniversityInstitution				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	.8	.8	.8
Private	154	63.9	63.9	64.7
Public	85	35.3	35.3	100.0
Total	241	100.0	100.0	

Table 4.3: Statistic on Respondents' University Type

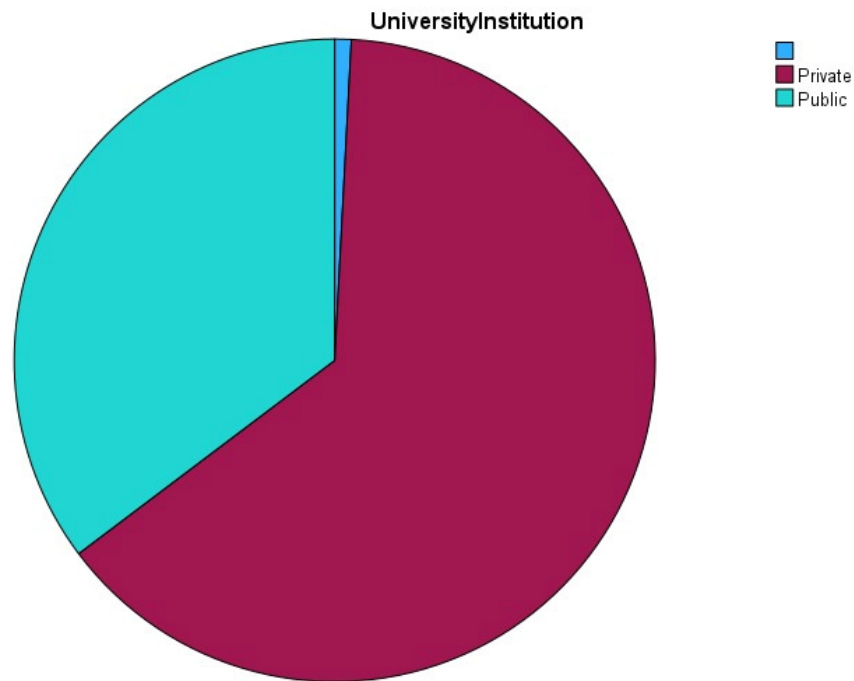


Figure 4.3: Statistic on Respondents' University Type

According to Table 4.3, most of the respondents were from private university (63.9 percent, n = 154) while others were from public university making up 35.3 percent (n = 85).

4.1.1.4 Degree of Education

		CurrentLevelofStudy			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	.4	.4	.4
	Bachelor's Degree	146	60.8	60.8	61.3
	Certificate	1	.4	.4	61.7
	Diploma	48	20.0	20.0	81.7
	Foundation	15	6.3	6.3	87.9
	Master's Degree	28	11.7	11.7	99.6
	SPM	1	.4	.4	100.0
	Total	240	100.0	100.0	

Table 4.4: Statistic on Respondents' Degree of Education

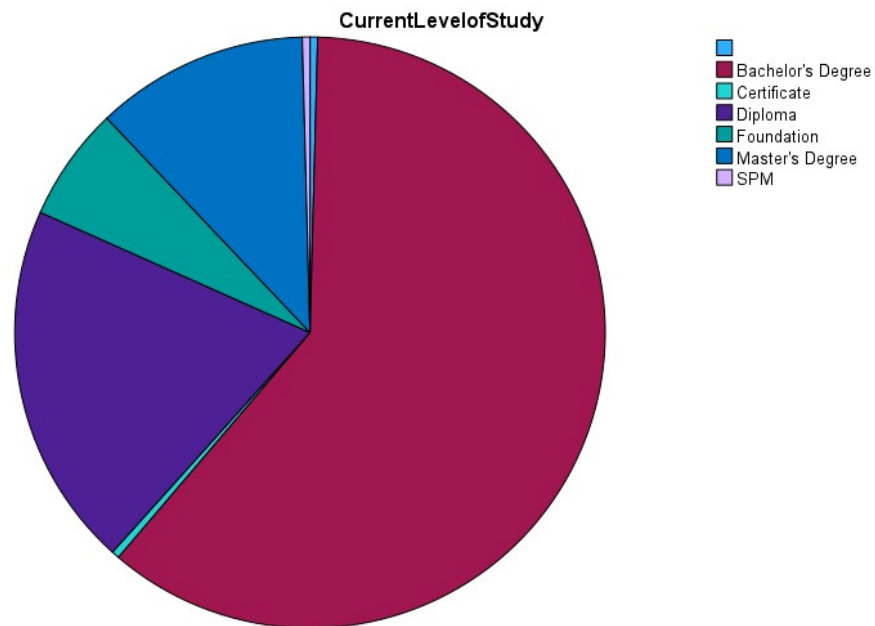


Figure 4.4: Statistic on Respondents' Degree of Education

According to Table 4.4, most respondents were Bachelor's degree students (60.8%, n = 146), followed by Diploma students (20.0%, n = 48), Master's students (11.7%, n = 28), and Foundation students (6.3%, n = 15). Only 0.4% (n = 1 each) were from Certificate and SPM levels.

4.1.1.5 Monthly Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than RM500	28	11.7	11.7	11.7
	No Income	52	21.7	21.7	33.3
	RM1,001 – RM1,500	32	13.3	13.3	46.7
	RM1,501 – RM2,000	21	8.8	8.8	55.4
	RM2,001 – RM2,500	21	8.8	8.8	64.2
	RM2,501 – RM3,000	22	9.2	9.2	73.3
	RM3,001 – RM4,000	12	5.0	5.0	78.3
	RM4,001 and above	15	6.3	6.3	84.6
	RM501 – RM1,000	37	15.4	15.4	100.0
	Total	240	100.0	100.0	

Table 4.5: Statistic on Respondents' Monthly Income

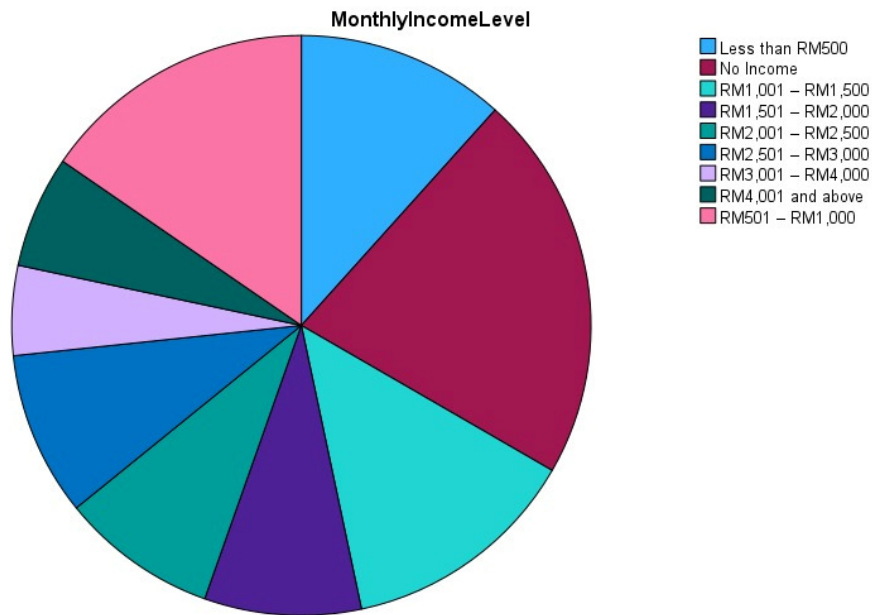


Figure 4.5: Statistic on Respondents' Monthly Income

According to Table 4.5, most respondents reported having no income (21.7%, n = 52), which is expected as the majority are full-time students. The next largest group earned RM501–RM1,000 monthly (15.4%, n = 37), followed by RM1,001–RM1,500 (13.3%, n = 32) and less than RM500 (11.7%, n = 28). Smaller

proportions reported incomes between RM2,501–RM3,000 (9.2%, n = 22), RM1,501–RM2,000 (8.8%, n = 21), RM2,001–RM2,500 (8.8%, n = 21), RM4,001 and above (6.3%, n = 15), and RM3,001–RM4,000 (5.0%, n = 12).

4.1.1.6 Mobile Payment

Doyoucurrentlyusemobilepaymentappse.g.TouchnGoBoo

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	.8	.8	.8
	Yes	238	99.2	99.2	100.0
	Total	240	100.0	100.0	

Table 4.6: Statistic on Respondents' Mobile Payment

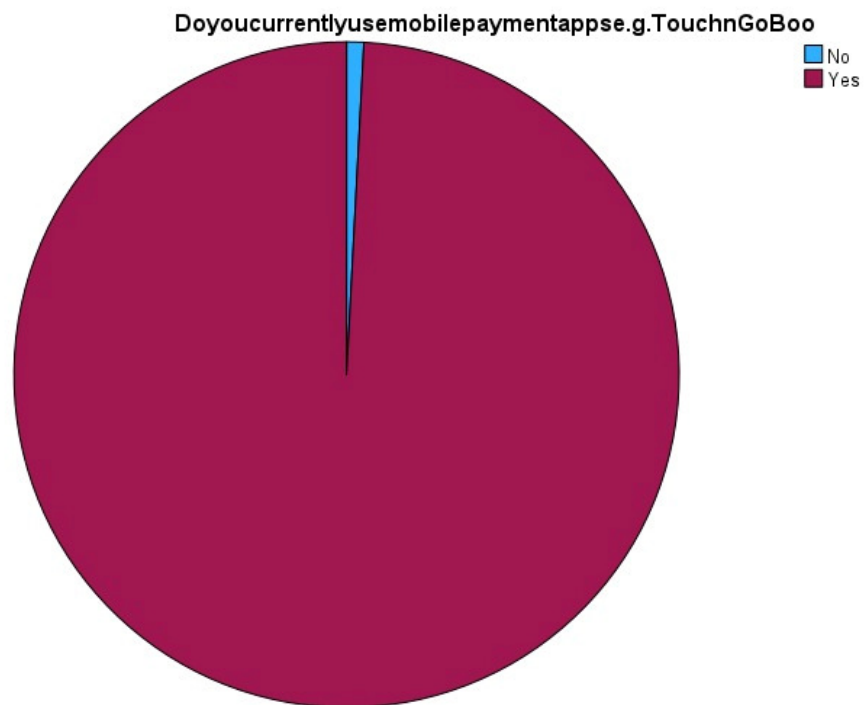


Figure 4.6: Statistic on Respondents' Mobile Payment

According to Table 4.6 shows that 99.2% of respondents (n = 238) said they used mobile payment apps, while only 0.8% (n = 2) said they did not.

4.1.2 Central Tendencies Measurement of Constructs

Independent (IV) as well as dependent (DV) variables' means, and standard deviations will be calculated in this section. SPSS will be used to analyse the thirty questions in parts B and C.

4.1.2.1 Mobile Payment Adoption

Table 4.7:

Central Tendencies Measurement Constructs for Mobile Payment Adoption

		Q1	Q2	Q3	Q4	Q5
N	Valid	240	240	240	240	240
	Missing	0	0	0	0	0
Mean		3.6917	3.6667	3.7292	3.6500	3.7000
Std. Deviation		1.31165	1.28612	1.19867	1.26524	1.27480

Table 4.7 displays that Q3 with the highest mean value (3.7292), closely followed by Q5 (3.7000), Q1 (3.6917), Q2 (3.6667), and Q4 (3.6500). Meanwhile, Q1 had the highest standard deviation (1.31165), followed by Q2 (1.28612), Q5 (1.27480), Q4 (1.26524), and Q3 (1.19867).

4.1.2.2 Campus Environmental Influence

Table 4.8:

Central Tendencies Measurement Constructs for Campus Environmental Influence

		Statistics				
		Q6	Q7	Q8	Q9	Q10
N	Valid	240	240	240	240	240
	Missing	0	0	0	0	0
Mean		3.8667	3.7083	3.6125	3.8375	3.7208
Std. Deviation		1.13472	1.20248	1.19441	1.22160	1.20719

Table 4.8 displays that Q6 got the highest mean value (3.8667), followed by Q9 (3.8375), Q10 (3.7208), Q7 (3.7083), and Q8 (3.6125). But concurrently, Q9 (1.22160) got the highest standard deviation, followed by Q10 (1.20719), Q7 (1.20248), Q8 (1.19441), and Q6 (1.13472).

4.1.2.3 Perceived Ease of Use

Table 4.9:

Central Tendencies Measurement Constructs for Perceived Ease of Use

		Statistics				
		Q11	Q12	Q13	Q14	Q15
N	Valid	240	240	240	240	240
	Missing	0	0	0	0	0
Mean		3.8000	3.7500	3.9000	3.8208	3.7917
Std. Deviation		1.20390	1.23580	1.15277	1.23291	1.27017

Table 4.9 displays that Q13 got the highest mean value (3.9000), followed by Q14 (3.8208), Q11 (3.8000), Q15 (3.7917), and Q12 (3.7500). But Q15 has the largest standard deviation (1.27017), followed by Q12 (1.23580), Q14 (1.23291), Q11 (1.20390), and Q13 (1.15277).

4.1.2.4 Perceived Risk of Overspending

Table 4.10:

Central Tendencies Measurement Constructs for Perceived Risk of Overspending

		Statistics				
		Q16	Q17	Q18	Q19	Q20
N	Valid	240	240	240	240	240
	Missing	0	0	0	0	0
Mean		3.6167	3.4000	3.5000	3.2458	3.4792
Std. Deviation		1.26876	1.26359	1.25428	1.30415	1.31915

Table 4.10 displays that Q16 got the highest mean value (3.6167), followed by Q18 (3.5000), Q20 (3.4792), Q17 (3.4000), and Q19 (3.2458). Q20 has the highest standard deviation (1.31915) in terms of variability, followed by Q19 (1.30415), Q16 (1.26876), Q17 (1.26359), and Q18 (1.25428).

4.1.2.5 Perceived Personalization

Table 4.11:

Central Tendencies Measurement Constructs for Perceived Personalization

		Statistics				
		Q21	Q22	Q23	Q24	Q25
N	Valid	240	240	240	240	240
	Missing	0	0	0	0	0
Mean		3.5958	3.7250	3.6583	3.5875	3.6083
Std. Deviation		1.20285	1.15322	1.15708	1.16102	1.15201

Table 4.11 displays that Q22 has highest mean value (3.7250), closely followed by Q23 (3.6583), Q25 (3.6083), Q21 (3.5958), and Q24 (3.5875). With a standard

deviation of 1.20285, Q21 had the largest variability, followed by Q24 (1.16102), Q23 (1.15708), Q22 (1.15322), and Q25 (1.15201).

4.1.2.6 In-App Purchase Expectation

Table 4.12:

Central Tendencies Measurement Constructs for In-App Purchase Expectation

		Statistics				
		Q26	Q27	Q28	Q29	Q30
N	Valid	240	240	240	240	240
	Missing	0	0	0	0	0
Mean		3.3542	3.6250	3.5708	3.4417	3.4042
Std. Deviation		1.27889	1.20364	1.22183	1.27280	1.23036

Table 4.12 shows that Q27 got the greatest mean value (3.6250), followed by Q28 (3.5708), Q29 (3.4417), Q30 (3.4042), and the lowest mean was Q26 (3.3542). Q26 has greatest standard deviation variability (1.27889), followed by Q29 (1.27280), Q30 (1.23036), Q28 (1.22183), and Q27 (1.20364).

4.2 Reliability Test

Table 4.13:

Reliability Test (Full Study)

Construct	Number of Items	Cronbach's Alpha	Reliability Level
Mobile Payment Adoption	5	0.849	Good
Campus Environment Influence	5	0.794	Acceptable
Perceived Ease of Use	5	0.817	Good
Perceived Risk of Overspending	5	0.777	Acceptable
Perceived Personalization	5	0.762	Acceptable
In-App Purchase Expectation	5	0.735	Acceptable

The Alpha of Cronbach for this study is displayed in Table 4.13. Cronbach's Alpha must be 0.70 or higher for a construct to be considered reliable. The results show that all the study's independent as well as dependent variables had alpha values more than 0.70, indicating strong internal consistency. Mobile Payment Adoption was the instrument with the best reliability, having the alpha of 0.849 which shows very high consistency of its items. This is then succeeded with Perceived Ease of Use (0.817), Campus Environmental Influence (0.794), Perceived Risk of Overspending (0.777), and Perceived Personalization (0.762) all of which lie within the acceptable limits on reliability of 0.70-0.80. Although In-App Purchase Expectation has the lowest alpha value (0.735), its reliability is still considered acceptable.

Overall, the findings demonstrate that the measuring items of the reliability for the questionnaire is high, indicating that constructs can be utilized without hesitation in subsequent statistical analyses, such as regression and correlation.

4.3 Inferential Analysis

4.3.1 Pearson Correlation

This section shows correlations for each variable that displayed by using the Pearson Correlation Coefficient. Since both IVs and DVs are Likert scales, this approach is the best way to evaluate how the two variables relate to one another.

4.3.1.1 Correlation among Campus Environmental Influence and Mobile Payment Adoption

Table 4.14:

Statistic for Correlation among Campus Environmental Influence and Mobile Payment Adoption

Correlations between Campus Environmental Influence and Mobile Payment Adoption			
		Campus Environmental Influence	Mobile Payment Adoption
Campus Environmental Influence	Pearson Correlation	1	.731**
	Sig. (2-tailed)		<0.001
	N	240	240
Mobile Payment Adoption	Pearson Correlation	.731**	1
	Sig. (2-tailed)	<0.001	
	N	240	240

According to Table 4.14 a positive correlation (bivariate correlation value of 0.731) among mobile payment usage and campus environmental influence. The link is regarded as strong because this coefficient is between ± 0.71 and ± 0.90 . Additionally, the p-value is below 0.001, which lower than the alpha value 0.01, indicating a statistically significant relationship among use of mobile payments and the impact on the campus environment.

4.3.1.2 Correlation among Perceived Ease of Use and Mobile Payment Adoption

Table 4.15:

Statistic for Correlation among Perceived Ease of Use and Mobile Payment Adoption

Correlations between Perceived Ease of Use and Mobile Payment Adoption			
		Perceived Ease of Use	Mobile Payment Adoption
Perceived Ease of Use	Pearson Correlation	1	.811**
	Sig. (2-tailed)		<0.001
	N	240	240
Mobile Payment Adoption	Pearson Correlation	.811**	1
	Sig. (2-tailed)	<0.001	
	N	240	240

According to Table 4.15, a positive association among perceived ease of use and mobile payment usage, with bivariate correlation value of 0.811. The link is regarded as very strong because this coefficient falls between ± 0.71 and ± 0.90 . Additionally, the association is statistically significant due to the p-value is below 0.001, and the alpha value is below 0.01.

4.3.1.3 Correlation among Perceived Risk of Overspending and Mobile Payment Adoption

Table 4.16:

Statistic for Correlation among Perceived Risk of Overspending and Mobile Payment Adoption

Correlations between Perceived Risk of Overspending and Mobile Payment Adoption			
		Perceived Ease of Use	Mobile Payment Adoption
Perceived Risk of Overspending	Pearson Correlation	1	.410**
	Sig. (2-tailed)		<0.001
	N	240	240
Mobile Payment Adoption	Pearson Correlation	.410**	1
	Sig. (2-tailed)	<0.001	
	N	240	240

According to Table 4.16, a positive association among mobile payment adoption and perceived risk of overspending, with bivariate correlation value of 0.410. The association is considered moderate since this result is within the coefficient range of ± 0.41 to ± 0.70 . Additionally, association was significantly because the p-value is below 0.001, and below the alpha value 0.01.

4.3.1.4 Correlation among Perceived Personalization and Mobile Payment Adoption

Table 4.17:

Statistic for Correlation among Perceived Personalization and Mobile Payment Adoption

Correlations between Perceived Personalization and Mobile Payment Adoption			
		Perceived Ease of Use	Mobile Payment Adoption
Perceived Personalization	Pearson Correlation	1	.559**
	Sig. (2-tailed)		<0.001
	N	240	240
Mobile Payment Adoption	Pearson Correlation	.559**	1
	Sig. (2-tailed)	<0.001	
	N	240	240

According to Table 4.17, a positive association among perceived personalization and mobile payment acceptance, with a bivariate correlation value of 0.559. The association is categorized as moderate because the coefficient falls between ± 0.41 and ± 0.70 . Furthermore, the association is significantly because of the p-value is lower than 0.001, and also lower than the alpha value 0.01.

4.3.1.5 Correlation among In-App Purchase Expectation and Mobile Payment Adoption

Table 4.18:

Statistic for Correlation among In-App Purchase Expectation and Mobile Payment Adoption

Correlations between In-App Purchase Expectation and Mobile Payment Adoption			
		Perceived Ease of Use	Mobile Payment Adoption
In-App Purchase Expectation	Pearson Correlation	1	.539**
	Sig. (2-tailed)		<0.001
	N	240	240
Mobile Payment Adoption	Pearson Correlation	.539**	1
	Sig. (2-tailed)	<0.001	
	N	240	240

According to Table 4.18, a positive association among in-app purchase expectation and mobile payment usage, with a bivariate correlation value of 0.539. This association is categorized as moderate because the coefficient is between ± 0.41 and ± 0.70 . The statistical significance of the link is further supported by the p-value below 0.001, which is also below the alpha value 0.01.

4.3.2 Multiple Regression Analysis

4.3.2.1 Model Summary

Table 4.19: Model Summary

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.837 ^a	.701	.694	.55302	1.800

a. Predictors: (Constant), InAppPurchaseExpectation, CampusEnvironmentalInfluence, PerceivedRiskofOverspending, PerceivedPersonalization, PerceivedEaseofUse

b. Dependent Variable: MobilePaymentAdoption

Five independent variables—Campus Environmental Influence, Perceived Ease of Use, Perceived Risk of Overspending, Perceived Personalization, and In-App Purchase Expectation—collectively explain 69.4% of the variance in mobile payment adoption among university students, with the table's adjusted R square value of 0.694. Students' adoption behavior may also be influenced by additional factors not included in this model, as indicated by the remaining 30.6% of unexplained variance.

4.3.2.2 Coefficient Analysis

Table 4.20: Coefficient

		Coefficients ^a					Collinearity Statistics	
Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.047	.186		-.254	.800		
	CampusEnvironmentalInfluence	.325	.063	.288	5.166	<.001	.412	2.425
	PerceivedEaseofUse	.625	.061	.582	10.181	<.001	.392	2.551
	PerceivedRiskofOverspending	.003	.048	.003	.059	.953	.638	1.568
	PerceivedPersonalization	-.025	.062	-.021	-.410	.683	.485	2.062
	InAppPurchaseExpectation	.062	.058	.054	1.073	.284	.505	1.978

a. Dependent Variable: MobilePaymentAdoption

According to the coefficients table, the regression analysis shows how each independent variable contributed to the university students' mobile payments adoption. The strongest significant predictor is perceived ease of use ($\beta = 0.582$, $p < 0.001$), which shows that students will use e-wallets more frequently if they think

they are simple and straightforward to use. The other important positive predictors with significant effect and a significant negative value ($p < 0.001$) include the campus environmental influence ($\beta = 0.288$). In contrast, as the p-values are greater than 0.05, perceived risk of overspending ($\beta = 0.003$, $p = 0.953$), perceived personalization ($\beta = -0.021$, $p = 0.683$), and in-app purchase expectation ($\beta = 0.054$, $p = 0.284$) do not significantly affect adoption. This indicates that the issue of excessive spending, personalization, or in-app purchase choices based on a particular lifestyle do not significantly contribute to the rise in popularity of digital payment apps among students. Also, all the VIF are less than 5, which means that the variables do not have any multicollinearity problems.

4.3.2.3 Estimate Multi Regression

$$\hat{Y} = -0.047 + 0.325X_1 + 0.625X_2 + 0.003X_3 - 0.025X_4 + 0.062X_5$$

Table 4.20 above displays the estimated multiple regression.

Table 4.21: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	167.448	5	33.490	109.504	<.001 ^b
	Residual	71.564	234	.306		
	Total	239.012	239			

a. Dependent Variable: MobilePaymentAdoption

b. Predictors: (Constant), InAppPurchaseExpectation, CampusEnvironmentalInfluence, PerceivedRiskofOverspending, PerceivedPersonalization, PerceivedEaseofUse

A significance value of less than 0.001 and a F value of 109.504 are displayed in ANOVA results. The significance value is below the traditional limit of 0.05, showing that all independent variables—Campus Environmental Influence, Perceived Ease of Use, Perceived Risk of Overspending, Perceived Personalization, and In-App Purchase Expectation— have a substantial effect on the dependent variable, the adoption of mobile payments.

4.3.3 Hypotheses Testing

Hypotheses One:

H0: The campus environment has negative impact to mobile payments.

H1: The campus environment has positive impact to mobile payments.

H0 is rejected if the p-value < 0.05 .

P-value for the impact of the campus environment is less than 0.001 (Table 4.20). Campus environment influence is deemed statistically significant since the significance level is less than 0.05. Furthermore, a positive effect is indicated by the standardized beta value ($\beta = 0.288$). As a result, H0 is refused and H1 is approved, demonstrating that university students' mobile payments usage is positively impacted by a favourable campus environment.

Hypotheses Two:

H0: Mobile payments negatively impacted by perceived ease of use.

H2: Mobile payments positively impacted by perceived ease of use.

H0 is rejected if the p-value < 0.05 .

P-value for perceived ease of use is lower than 0.001 (Table 4.20). Which is statistically significant due to the significance level is below 0.05. Additionally, a strong positive association is suggested by β value of 0.582. As a result, H0 is rejected and H2 is approved, suggesting that university students' mobile payment usage positively influenced by perceived ease of use.

Hypotheses Three:

H0: Mobile payments negatively impacted by perceived risk of overspending.

H3: Mobile payments positively impacted by perceived risk of overspending.

H0 is rejected if the p-value < 0.05 .

P-value for perceived risk of overspending was 0.953 (Table 4.20). The variable is deemed statistically insignificant due to its value is higher than 0.05. As the result, H0 is accepted and H3 is denied, suggesting that university students' mobile payments usage is not significantly impacted by their perception of risk of overspending.

Hypothesis Four:

H0: Perceived personalization has negative impact to mobile payment.

H4: Perceived personalization has positive impact to mobile payment.

H0 is rejected if the p-value < 0.05 .

P-value for perceived personalization was 0.683 (Table 4.20). The variable is statistically insignificant due to its value is more than 0.05. As the result, H4 is refused whereas H0 is approved, suggesting that university students' mobile payments usage is not greatly impacted by personalized features.

Hypothesis Five:

H0: Mobile payments negatively impact by expectation of in-app purchases.

H5: Mobile payments positively impact by expectation of in-app purchases.

H0 is rejected if the p-value < 0.05 .

P-value for the expected in-app purchases is 0.284 (Table 4.20). This number is considered statistically insignificant because it is more than 0.05. As the result, H5 is rejected whereas H0 is accepted, indicating that university students' mobile payments usage is not substantially influenced by in-app purchase expectations.

4.4 Conclusion

In summary, this study's empirical results include descriptive, scale measures, and inferential analysis. Only perceived ease of use and campus environmental influence are significant impact on university students' mobile payments adoption,

according to the data, which showed 69.4% of the variation of mobile payments adoption was explained by the model. Other factors that were not significant included perceived personalization, perceived risk of overspending, and expectation of in-app purchases. To make sure the reliability of the results, the data are further evaluated to confirm that they meet the requirements of normativity, linearity, independence, and multicollinearity. Overall, the results indicate that the main elements influencing the mobile payments adoption in this context are practical usability and environmental support.

CHAPTER 5: DISCUSSION, CONCLUSION, AND IMPLICATIONS

5.0 Introduction

This chapter discusses study's findings considering the goals and theories. It assesses and compares the results from statistical analysis in Chapter 4 with earlier studies. This chapter also presents research findings-based conclusions, which are followed by theoretical and practical recommendations. Finally, research limitations are noted and recommendations for future study are made.

5.1 Discussion of Major Findings

5.1.1 Campus Environmental Influence and Mobile Payment Adoption

Study shows, a statistically significant correlation among the use of mobile payments by university students and environmental impact on campuses. This indicates that students will embrace the idea of mobile payments due to favourable campus environments, including digital platforms, utilization and campus advertising. This is in line with Wu (2011) who observed more adoption in cases where digital services are incorporated in campus life and Leong et al. (2021) and

Balakrishnan (2023) who observed that students favoured systems that would suit their lifestyle requirements. In a similar vein, Yong et al. (2021) highlighted how campus environments impact the people acquire their digital payment habits. H1 is thus approved since it demonstrates that the campus setting has a favourable impact on the mobile payment usage.

5.1.2 Perceived Ease of Use and Mobile Payment Adoption

This study's conclusions demonstrated that students' mobile payment adoption is significantly impacted by perceived ease of use. This suggests that when mobile payment systems are simple, less labour-intensive, and user-friendly, students are more likely to employ them. This outcome is consistent with Davis's (1989) Technology Acceptance Model (TAM), which says that a key component of technology utilization is simplicity of use. Oliveira et al. (2016) and Leong et al. (2021) reported similar findings, noting that students favour platforms that are simple to understand and quick to use. Furthermore, Alalwan et al. (2017) verified that user acceptability can be facilitated by the systems' efficient operation. Overall, H2 is accepted since university students' mobile payments usage is statistically significant with perceived ease of use.

5.1.3 Perceived Risk of Overspending and Mobile Payment Adoption

Results indicate that perceptions of risk of excessive spending are not of significant relevance to the mobile payment adoption among Malaysian university students. Despite the results of the previous research indicating that the provision of mobile

payments can lead to impulse purchases (e.g., Jiang, 2022; Lee et al., 2022), the short of significant effects of overspending concerns on the adoption behaviour can be noted in this research. A potential reason is that most of the respondents in this research said they had no income thus this could make the issues of overspending less relevant because students with a limited financial means would lay more emphasis on convenience and simple functionality rather than financial risks. This finding is contrary to the Bauer-theory of risk-based decision-making (1960), which puts a lot of emphasis on financial risk as a key determinant. Thus, H3 is dismissed, which proves that perceived risk of overspending and the mobile payments' usage is not significant by university students.

5.1.4 Perceived Personalization and Mobile Payment Adoption

This results show that university students' mobile payments usage is not significantly influenced by perceived personalization. Results of the study show that this feature does not have enough power to influence students' involvement adopting behavior, despite the findings of earlier research, such as Nguyen and Khoa (2024), which suggested that tailored rewards and offers promote engagement. Personalized promotions or spending insights would not be very valuable because most respondents said they had no personal income. Students seem to be more interested in simple functionality and convenience, unlike Widyanto et al. (2021), who put more importance on personalization as one of the defining factors of user experience. H4 can, therefore, be rejected because, in this case, perceived personalization does not significantly affect mobile payment adoption.

5.1.5 In-App Purchase Expectations and Mobile Payment Adoption

This research also concluded that there are no significant effects of expectation of in-app purchase regarding adoption of mobile payment among students. While previous research found that the digital aspect of lifestyles would encourage the mobile payments usage (Balakrishnan, 2023; Yong et al., 2021), current findings are different. The first is that in-app buying is not as relevant or accessible to most respondents since most of them do not have a personal income. Mobile payments are mostly carried out by students as a way of making basic and low prices transactions as opposed to entertainment and subscription-based services. This is contrary to Purohit et al. (2022), which implied high Gen Z responsiveness towards in-app features. Consequently, H5 is rejected, indicating that university students' adoption of mobile payments is not significantly impacted by their expectations regarding in-app sales.

5.2 Implications of Study

5.2.1 Theory Implication

This study's research findings significantly advance our understanding of mobile payment usage theoretically, especially when focusing on Malaysian university students. First, the results are constant with the Technology Acceptance Model (TAM) since mobile payment adoption was statistically significantly impacted by perceived ease of use. This suggests the technological simplicity is a main factor in users' acceptance of digital financial applications. Second, this research broadens our understanding by showing that campus environment is a significant predictor, highlighting the significance of peer exposure and institutional support—two elements that are not frequently discussed in traditional literature on technology adoption.

Moreover, the trivial impact on the perceived risk of overspending, perceived personalization, and in-app purchase expectation indicates that they can be less important amongst the students who do not have any income, which is the case with the demographic profile of this study. Students might not have much money, which means that the considerations of the budget, personal functionality, or extra expenditure on applications are not as important as the location and need. This poses a challenge to traditional risk-based strategies by demonstrating that youthful, low-income consumers may be more accepting of the possibility of financial hazards when they believe mobile payments to be very useful. Therefore, the study provides some new information by demonstrating that contextual encouragement and cognitive simplicity provide a greater influence on mobile payments adoption among university students with limited financial resources than do psychological or feature-based factors.

5.2.2 Practical Implication

5.2.2.1 Campus Environmental Influence

Universities must enhance digital infrastructure and promote cashless programs via events, QR payment locations, and student-driven campaigns because the campus environment significantly influences the acceptance of mobile payments. Wu (2011) observed that incorporation of payment systems in the campus services makes them convenient and more utilized. On the same note, Leong et al. (2021) highlighted that acceptance is enhanced by the familiarity with the campus digital ecosystem. Adoption may also be enhanced by peer influence because students tend to imitate the behaviour of their peers (Yong et al., 2021). Improving Wi-Fi internet connectivity and enabling e-wallet payments for all campus-related activities, such

as printing, vending, and cafeteria purchases, would be the next step in encouraging students to use e-wallet.

5.2.2.2 Perceived Ease of Use

Application developers must prioritize user-friendly interfaces, fast transaction times, and simple navigation features since perceived simplicity has the strongest impact on mobile payment usage. According to Davis (1989), technology adoption is strongly influenced by its usability. Simplicity will encourage people to accept digital financial solutions, according to Oliveira et al. (2016). Transaction tutorials or in-app assistance can be provided to students by e-wallet providers, enabling them to have a better idea of how to make a transaction (Leong et al., 2021). The provision of a smooth authentication path and reduction in the number of technical glitches can also increase the readiness of students to pay online.

5.2.2.3 Perceived Risk of Overspending

Even though no significant effect of the perceived risk of overspending was observed in the current study, developers are still encouraged to use the digital budgeting tools in enhancing the responsible spending behaviours. Jiang (2022) research indicated that mobile payments can be used to facilitate impulse purchases because they are readily available. To overcome this, spending restrictions, transaction history alerts and balance notifications are some of the features that can be incorporated to enhance financial discipline. It is advised by Lee et al. (2022) that notifications and restriction options can ensure excessive spending is eliminated. Although it does not affect adoption, perceived risk does not serve as an obstacle, whereas management of overspending issues can improve retention and trust in the long term.

5.2.2.4 Perceived Personalization

Although no effect of personalization was observed on adoption, the payment providers may still increase user satisfaction through the provision of customised discounts codes, reward system and suitable expenditure suggestions. Nguyen and Khoa (2024) stated that personalization reinforces the engagements, yet it might not have a direct effect on the usage behaviour. Rather, Balakrishnan (2023) observed that Malaysian youths are driven more by utility and convenience as opposed to customised features. Personalization must therefore be viewed as an added feature and not a major factor in adoption and may be brought on board surreptitiously by rewarding with apps or exclusive promotions offered to students.

5.2.2.5 In-App Purchase Expectation

It is still conceivable for developers to include optional features like digital coupons, entertainment subscriptions, or lifestyle-based special offers, even though in-app purchase expectations did not significantly predict the study. According to Balakrishnan (2023), digital features are appealing and may not be sustained if they are not supplemented with a practical advantage. According to Yong et al. (2021), students also tend to give priority to basic functions such as paying bills and buying foodstuffs as opposed to add-on services. Thus, the providers can place the in-app purchase capabilities as additional add-ons without making transactional functions too complicated or ineffective.

5.3 Limitations of Study

Even though the research adds significantly on our knowledge of the factors influencing Malaysian university students' mobile payments adoption, several flaws need to be noted. First, the results' generalizability is limited by the non-probability convenience sampling since the sample is primarily based on single university, may not be totally representative of students at different universities in terms of campus culture or technology infrastructures. Second, even though the reliability levels are satisfactory according to Cronbach alpha, social desirability bias is more likely to occur when self-reported questionnaires are used and item mis answering. Third, the study only examines a very small number of independent variables, such as impact of campus environment, perceived ease of use, perceived risk of overspending, perceived personalization, and expectation of in-app purchase. Other potential influences, such as security concerns, financial literacy, peer pressure, and technological support, are not covered. Additionally, cross-sectional research only records perceptions on a specific moment in a time, making it impossible to understand how adoption behavior can change over time. Finally, the study uses standard regression analysis which finds associations but does not give the full causal relationships; other more robust methods like Structural Equation Modelling (SEM) may help gain more insights into the mediating and moderating effects in future studies.

5.4 Recommendations of Future Research

Based on the limitations, there are several recommendations for the future research that identified by this study. To begin with, the use of probability sampling methods and collection of information in several universities of various regions in Malaysia should be adopted in future research to enhance representativeness and enhance the generalisability of the results. Second, mixed-method or qualitative methods including interviews or focus group discussion would enable the researcher to delve deeper into the perceptions of students and reveal a more detailed picture of it that

might not be induced by quantitative surveys. Third, to give researchers a deeper understanding on the mobile payments' adoption, the model should be expanded in the future to include extra variables, such as perceived security, trust, financial literacy, peer influence, technological support, and potential mediating or moderating influences like behavioral intention and digital literacy. Fourth, the longitudinal research design would give researchers to monitor the changes in the perception and use patterns of the students with time progressing, particularly in the light of the further development of digital payment technologies. Lastly, authors recommend for future researchers to employ more sophisticated analytical techniques, such as Partial Least Squares (PLS) or Structural Equation Modelling (SEM), which would enable concentrating on both direct and indirect effects between variables and strengthen overall adoption model.

5.5 Chapter Summary

The study's conclusions about its goals and hypotheses were discussed in this chapter. The mobile payments adoption was found to be significant with perceived ease of use and campus environmental impact, but not by perceived risk of overspending, personalization, or in-app purchase expectations. Theoretical and practical consequences were given to researchers, academic institutions, and service providers. Additionally, the study's weaknesses were discussed, along with suggestions for further research. that would expand the range of sample, variables, and techniques. In general, this chapter argues that usability and environmental support have an impact on students' mobile payments adoption in higher education.

REFERENCES

Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *International Journal of Information Management*, 37(3), 99–110. <https://doi.org/10.1016/j.ijinfomgt.2017.01.002>

Al-Qudah, A. A., Al-Okaily, M., Shiyab, F. S., Taha, A. A. D., Almajali, D. A., Masa'deh, R., & Warrad, L. H. (2024). Determinants of digital payment adoption among Generation Z: An empirical study. *Journal of Risk and Financial Management*, 17(11), 521. <https://doi.org/10.3390/jrfm17110521>

Al-Sharafi, M. A., Muhammed, I., Alzaeemi, S., Albashrawi, M. A., Chae, I., & Dwivedi, Y. K. (2025). Factors shaping FinTech adoption: A systematic review, key determinants, theoretical insights, conceptual framework and future research directions. *Information Discovery and Delivery*.

Balakrishnan, V. (2023). Going cashless? Elucidating predictors for mobile payment readiness among Malaysians. *SAGE Open*, 13(4), 21582440231215111. <https://doi.org/10.1177/21582440231215111>

Bauer, R. A. (1960). Consumer behavior as risk taking. In R. S. Hancock (Ed.), *Dynamic marketing for a changing world* (pp. 389–398). American Marketing Association.

Bujang, M. A., Omar, E. D., Foo, D. H. P., & Hon, Y. K. (2024). Sample size determination for conducting a pilot study to assess reliability of a questionnaire. *Restorative Dentistry & Endodontics*, 49(1). <https://doi.org/10.5395/rde.2024.49.e3>

Cint™, Digital Insights Gathering Platform. (2025, September 2). *Quality and standards - CINTTM | the world's largest research marketplace*. Cint™ | the World's Largest Research Marketplace. <https://www.cint.com/products/cint-exchange/quality/>

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Collins, H. (2021). *Creative research: The theory and practice of research for the creative industries* (3rd ed.). Bloomsbury Visual Arts.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>

Digital Wallet Statistics (2025): Users, growth rate & Trends. (2025, July 23). Capital One Shopping. <https://capitaloneshopping.com/research/digital-wallet-statistics/>

Exploring the Impact of Perceived Risk on User’s Mobile Payment Adoption. (2022). In *buscompress.com*. buscompress. Retrieved November 26, 2025, from https://buscompress.com/uploads/3/4/9/8/34980536/riber_12-1_01_m21-1201_1-20.pdf

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human-Computer Studies*, 59(4), 451–474. [https://doi.org/10.1016/S1071-5819\(03\)00111-3](https://doi.org/10.1016/S1071-5819(03)00111-3)

Jiang, Y. (2022). The influence of payment method: Do consumers pay more with mobile payment? *arXiv preprint*. <https://arxiv.org/abs/2210.14631>

Koh, S. W., Shamsudin, A., Ong, T., Nurhazli, A., Muhamad, F., & Yasin, Y. F. (2024). DEMOGRAPHIC AND BEHAVIORAL PROFILING OF E-WALLET USERS: A COMPARATIVE ANALYSIS OF E-WALLET PLATFORMS. *Journal of Information System and Technology Management*, 9(35), 01–20. <https://doi.org/10.35631/jistm.935001>

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>

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

Laukkanen, T. (2016). Consumer adoption versus rejection decisions in seemingly similar service innovations: The case of the Internet and mobile banking. *Journal of business research*, 69(7), 2432-2439.

Lee, Y. Y., Gan, C. L., & Liew, T. W. (2022). Do E-wallets trigger impulse purchases? An analysis of Malaysian Gen-Y and Gen-Z consumers. *Journal of Marketing Analytics*, 11(2), 244–261. <https://doi.org/10.1057/s41270-022-00164-9>

Leong, M. Y., Kwan, J. H., & Ming, L. M. (2021). Technology readiness and UTAUT2 in e-wallet adoption in a developing country. *F1000Research*, 10, 863. <https://doi.org/10.12688/f1000research.72853.1>

Mobile Payment Market Size, Share | Trends Report [2032]. (n.d.). <https://www.fortunebusinessinsights.com/industry-reports/mobile-payment-market-100336>

Mohd Arof, Khairul & Ismail, Syuhaida & Saleh, Abd Latif. (2018). Contractor's Performance Appraisal System in the Malaysian Construction Industry: Current Practice, Perception and Understanding. *International Journal of Engineering & Technology*. 7. 46. 10.14419/ijet.v7i3.9.15272. Can you use this to cite my 3.6 pilot Study

Mordor Intelligence. (2024). *Malaysia payments market - Growth, trends, forecast (2024–2029)*. <https://www.mordorintelligence.com/industry-reports/malaysia-payments-market>

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.

Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile payment: Understanding the determinants of customer adoption. *Computers in Human Behavior*, 61, 404–414. <https://doi.org/10.1016/j.chb.2016.03.030>

Purohit, S., Kaur, J., & Chaturvedi, S. (2022). MOBILE PAYMENT ADOPTION AMONG YOUTH: GENERATION Z AND DEVELOPING COUNTRY PERSPECTIVE. *Journal of Content Community and Communication*, 8, 194–209. <https://doi.org/10.31620/jccc.06.22/14>

Rahman, M., Ismail, I., & Bahri, S. (2020). Analysing consumer adoption of cashless payment in Malaysia. *Digital Business*, 1(1), 100004. <https://doi.org/10.1016/j.digbus.2021.100004>

Ramli, F. a. A., & Hamzah, M. I. (2021). Mobile payment and e-wallet adoption in emerging economies: A systematic literature review. *Journal of Emerging Economies and Islamic Research*. <https://doi.org/10.24191/jeeir.v9i2.13617>

Saragih, N. M. H., & Mulyadi, N. M. C. (2024). INFLUENCE OF PERCEIVED USEFULNESS, TRUST, PERCEIVED EASE OF USE AND SOCIAL INFLUENCE ON E-WALLET ADOPTION IN GENERATION Z. *Pedagogic Research - Applied Literacy Journal*, 2(1), 8–15. <https://doi.org/10.70574/stfrsq53>

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.

Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill-building approach* (8th ed.). Wiley.

Singhal, B. (2025, February 24). *The Impact of Financial Infrastructure on Digital Payment adoption: Project 1*. Studocu. <https://www.studocu.com/in/document/sambalpur-university/bachelor-of-commerceaccounting-honors/the-impact-of-financial-infrastructure-on-digital-payment-adoption-project-1/118966807>

Talwar, S., Dhir, A., Khalil, A., Mohan, G., & Islam, A. N. (2020). Point of adoption and beyond. Initial trust and mobile-payment continuation intention. *Journal of Retailing and Consumer Services*, 55, 102086. <https://doi.org/10.1016/j.jretconser.2020.102086>

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>

Widyanto, H. A., Kusumawardani, K. A., & Yohanes, H. (2021). Safety first: extending UTAUT to better predict mobile payment adoption by incorporating perceived security, perceived risk and trust. *Journal of Science and Technology Policy Management*, 13(4), 952–973. <https://doi.org/10.1108/jstpm-03-2020-0058>

Wu, H. C. (2011). Understanding mobile payment in university campus. In *Proceedings of the International Conference on Digital Society (ICDS 2011)* (pp. 101–106). IARIA. https://personales.upv.es/thinkmind/dl/conferences/icds/icds_2011/icds_2011_1_30_10151.pdf

Yong, C., Tham, J., Azam, S. M. F., & Khatibi, A. (2021). An empirical study on acceptance of mobile payment and its competitive advantage in Malaysia. *International Journal of Entrepreneurship*, 25(5), 1–12. <https://www.researchgate.net/publication/358034381>

APPENDICES

Appendix 3.1: Permission to Conduct Survey



Re: U/SERC/78-607/2025

6 October 2025

Dr Lim Boon Keong
Head, Department of Finance
Faculty of Accountancy and Management
Universiti Tunku Abdul Rahman
Jalan Sungai Long
Bandar Sungai Long
43000 Kajang, Selangor

Dear Dr Lim,

Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your students' research project from Bachelor of Finance (Financial Technology) with Honours programme enrolled in course UKFN3026. We are pleased to inform you that the application has been approved under **Expedited Review**.

The details of the research projects are as follows:

No.	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Exploring the Adoption of Digital Finance Among University Students in Malaysia Using the Technology	Chong Ming Fatt	Dr Agha Jahanzeb	6 October 2025 – 5 October 2026
2.	The Impact of Buy Now Pay Later (BNPL) Services on Financial Behaviour (Delinquency Rate): A Study Based on UTAR	Khoo Jia Wen	Dr Fok Kok Fai	
3.	Exploring the Digital Finance Literacy and AI Fintech Adoption Nexus Among Malaysian Youth Using UTAUT2	Teoh Yee Xin		
4.	Decoding Cryptocurrency Intentions in Malaysia: A Trust-Driven TAM Model with Digital Financial Literacy as a Moderator	Chen Chloe	Dr Agha Jahanzeb	
5.	From Innovation to Adoption: Effects of Leveraging AI and TAM to Elevate Security, Trust, and Service Quality in Malaysia's Digital Banks	Ho Yang Yi		
6.	The Adoption of Mobile Payment Apps Among University Students in Malaysia: The Roles of Overspending Risk, Personalization, In-App Purchase Expectation, Campus Influence, and Ease of Use	Joshua Choy Chee Feong	Ms Ung Leng Yean	
7.	Determine the Intention to Adopt a Digital Bank Among Generation Z in Malaysia	Tang Ping Yee		
8.	BNPL Lead Financial Distress Among Youngsters	Vanesa a/p Siva Balan	Dr Fok Kok Fai	
9.	Drivers of Cryptocurrency Adoption in Malaysia Among Young Generation	Law Jun Khai	Dr Bui Quoc Hay	
10.	Factor Influencing Consumer Intention to Adopt Biometric Authentication	Ivy Lu Zi Ying	Dr Eaw Hooi Cheng	

Kampar Campus: Jalan Universiti, Bandar Baru, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (05) 468 8888 Fax: (05) 466 1313
Sungai Long Campus: Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (03) 9086 0288 Fax: (03) 9019 8868
Website: www.utar.edu.my



No.	Research Title	Student's Name	Supervisor's Name	Approval Validity
11.	A Study of Cybersecurity Practices on User Behavior in Malaysia's Mobile Banking Services	Lee Mei Shi	Dr Eaw Hooi Cheng	6 October 2025 – 5 October 2026
12.	Investigating Young Adults' Perceptions of the Adoption of AI-Driven Investment Tools	Yap Ion Sze	Dr Sia Bk Kai	
13.	Agentic AI Attributes in Holistic, Utilitarian, and Systematic Processes: Trust Shaping Agentic AI Robo-Advisory User Acceptance	Lee Khai Xin	Dr Tang Kin Leong	
14.	Acceptance of AI Tools in Investment Strategies: Evidence from Universiti Tunku Abdul Rahman (UTAR)	Helen Tee Xin Ye	Dr Sia Bk Kai	
15.	Antecedents of Understanding the Investors' Acceptance of Artificial Intelligence	Yeong Shi Qi		
16.	Trust Level of Digital Assets Among Consumer in Malaysia	Kenneth Liew Zhe Jun		
17.	The Effect of Service Quality on Competitive Advantage: A Case Study of Starbucks and ZUS Coffee in Malaysia	Choo Yan Hua	Dr Ooi Bee Chen	
18.	Financial Literacy and the Money Management Behaviour Among Young Adults in Malaysia	Hew Shan Yuan	Ms Salzarul Arabh Binti Ibrahim	
19.	Cryptocurrency Adoption Behaviour Among Gen Z in Malaysia: Unified Theory of Acceptance and Use of Technology	Lim Keng Kit	Dr Agha Jahanzeb	
20.	The Impact of Food Price Inflation on Household Budget Allocation in Malaysia	Foo Jia Mun	Dr Ooi Bee Chen	
21.	Measuring Traditional and Digital Financial Literacy Levels Among Malaysian University Students	Jesslyn Nggu Hui Wen	Dr Bui Quoc Hay	
22.	From Intention to Action: Exploring Actual Usage Behaviour of Digital Money Management Tools Among Malaysian Youth	Song Yin Ting		
23.	Factors Influencing Acceptance of Stock and Bonds: A Behavioral Perspective	Lai Yee Jun	Dr Agha Jahanzeb	
24.	Financial Literacy Accessing Digital Financial Services Among University Students in Malaysia	Kimberly Ong Sue Ern	Mr Low Choon Wei	
25.	The Influence of Cybersecurity Awareness on Financial Fraud Prevention Among the Young Generation	Tang Xin Yi	Dr Ngoo Yee Ting	
26.	Examining the Influence of Green Financial Initiatives on the Automation and Performance Growth of Malaysia's Fin-ecosystems SMEs	Tan Yuki	Dr Eaw Hooi Cheng	
27.	The Role of Trust in Adoption of Digital Insurance Services in Malaysia	Lim Xian Ting	Pu Farida Bhanu Binti Mohamed Yusoff	

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research;
- (2) Confidentiality of participants' personal data must be maintained; and
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.
- (4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

Kampar Campus: Jalan Universiti, Bandar Baru, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (05) 468 8888 Fax: (05) 466 1313
Sungai Long Campus: Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (03) 9086 0288 Fax: (03) 9019 8868
Website: www.utar.edu.my



The Adoption of Mobile Payment Apps Among University Students in Malaysia: Determinants and Implications

Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,



Professor Dr Zuraidah Abd Manaf
Chairman
UTAR Scientific and Ethical Review Committee

c.c. Dean, Faculty of Accountancy and Management
Director, Institute of Postgraduate Studies and Research

Kampar Campus : Jalan Universiti, Bandar Baru, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (056) 666 8888 Fax: (056) 666 1111
Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (603) 9066 6226 Fax: (03) 9079 8866
Website: www.utar.edu.my



Appendix 3.2: Survey Questionnaire

Section A: Demographic Profile

Please select the most appropriate option for each of the following:

1. Gender:
 - Male
 - Female
2. Age:
 - Below 20
 - 21–23
 - 24–26
 - 27 and above
3. University/Institution:
 - Private
 - Public
4. Current Level of Study:
 - Diploma
 - Bachelor's Degree
 - Master's Degree
 - Other: _____
5. Monthly Income Level
 - No income
 - Less than RM500
 - RM501 – RM1,000
 - RM1,001 – RM1,500
 - RM1,501 – RM2,000
 - RM2,001 – RM2,500
 - RM2,501 – RM3,000
 - RM3,001 – RM4,000
 - RM4,001 and above
6. Do you currently use mobile payment apps (e.g., Touch 'n Go, Boost, GrabPay, etc.)?
 - Yes
 - No

Section B: Dependent Variables

Based on your using experience, please select the most appropriate options that best indicate your agreement level about the following statements.

Mobile Payment Adoption

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I regularly use mobile payment apps for transactions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I prefer mobile payments over cash or card.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I intend to continue using mobile payment apps in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am likely to recommend mobile payment apps to my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobile payment apps are my default method of payment when available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section C: Independent Variables

Based on your using experience, please select the most appropriate options that best indicate your agreement level about the following statements.

Campus Environmental Influence

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I observe a lot of people on campus using mobile payment apps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I'm encouraged to use mobile payments by the campus stores and facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My propensity to use mobile payments is increased by university advertisements and events.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobile payments seem like a natural aspect of university life for students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I use mobile payments more frequently, because mobile payments are so prevalent at my campus.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Perceived Ease of Use

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I find it simple to learn how to use mobile payment apps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My ability to become proficient with mobile payment apps is simple.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I think it's simple to use mobile payment apps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It doesn't take much brain work to interact with mobile payment apps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apps for mobile payments seem user-friendly to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Perceived Risk of Overspending

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Mobile payment apps make it too easy to spend money.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I tend to overspend when I use mobile payment apps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel less in control of my expenses when paying digitally.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I lose track of how much I spend through mobile payments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would spend less if I used cash instead of mobile payments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Perceived Personalization

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The mobile payment app allows me to customize its features.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel the app fits my preferences and habits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can personalize how I receive spending notifications or budgets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The app provides me with relevant offers and recommendations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel more engaged when an app reflects my personal settings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In-App Purchase Expectation

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel I need to make purchases to get the best features of the app.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am more motivated to use the app if it offers rewards through spending.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The app encourages spending to unlock benefits or promotions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel pressured to top up or pay inside the app to enjoy its full use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The app makes me feel like non-paying users are missing out.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix 3.3: Reliability Test (Pilot Study)

Scale: Mobile Payment Adoption

Case Processing Summary

		N	%
Cases	Valid	42	100.0
	Excluded ^a	0	.0
	Total	42	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.934	5

Scale: Campus Environmental Influence

Case Processing Summary

		N	%
Cases	Valid	42	100.0
	Excluded ^a	0	.0
	Total	42	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.886	5

Scale: Perceived Ease of Use

Case Processing Summary

		N	%
Cases	Valid	42	100.0
	Excluded ^a	0	.0
	Total	42	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.964	5

Scale: Perceived Risk of Overspending

Case Processing Summary

		N	%
Cases	Valid	42	100.0
	Excluded ^a	0	.0
	Total	42	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.896	5

Scale: Perceived Personalization

Case Processing Summary

		N	%
Cases	Valid	42	100.0
	Excluded ^a	0	.0
	Total	42	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.926	5

Scale: In-App Purchase Expectation

Case Processing Summary

		N	%
Cases	Valid	42	100.0
	Excluded ^a	0	.0
	Total	42	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.825	5

Appendix 4.1: Reliability Test (Full Study)

Scale: Mobile Payment Adoption

Case Processing Summary

		N	%
Cases	Valid	240	100.0
	Excluded ^a	0	.0
	Total	240	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.849	5

Reliability

Scale: Campus Environmental Influence

Case Processing Summary

		N	%
Cases	Valid	240	100.0
	Excluded ^a	0	.0
	Total	240	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.794	5

Reliability

Scale: Perceived Ease of Use

Case Processing Summary

		N	%
Cases	Valid	240	100.0
	Excluded ^a	0	.0
	Total	240	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.817	5

Reliability

Scale: Perceived Risk of Overspending

Case Processing Summary

		N	%
Cases	Valid	240	100.0
	Excluded ^a	0	.0
	Total	240	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.777	5

Reliability

Scale: Perceived Personalization

Case Processing Summary

		N	%
Cases	Valid	240	100.0
	Excluded ^a	0	.0
	Total	240	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.762	5

Reliability

Scale: In App Purchase Expectation

Case Processing Summary

		N	%
Cases	Valid	240	100.0
	Excluded ^a	0	.0
	Total	240	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.735	5

Appendix 4.2: Pearson Correlation Coefficient (Full Study)

Correlations

		Correlations					
		MobilePayment Adoption	CampusEnvironmentalInfluence	PerceivedEaseofUse	PerceivedRiskofOverspending	PerceivedPersonalization	InAppPurchaseExpectation
MobilePaymentAdoption	Pearson Correlation	1	.731**	.811**	.410**	.559**	.539**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
	N	240	240	240	240	240	240
CampusEnvironmentalInfluence	Pearson Correlation	.731**	1	.731**	.410**	.626**	.552**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001
	N	240	240	240	240	240	240
PerceivedEaseofUse	Pearson Correlation	.811**	.731**	1	.462**	.632**	.579**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001
	N	240	240	240	240	240	240
PerceivedRiskofOverspending	Pearson Correlation	.410**	.410**	.462**	1	.481**	.564**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001
	N	240	240	240	240	240	240
PerceivedPersonalization	Pearson Correlation	.559**	.626**	.632**	.481**	1	.582**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001
	N	240	240	240	240	240	240
InAppPurchaseExpectation	Pearson Correlation	.539**	.552**	.579**	.564**	.582**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	
	N	240	240	240	240	240	240

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