

Determinants of Students' Financial Behavior in Relation to Buy Now, Pay Later (BNPL) Usage: A Multiple Linear Regression Approach

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ABSTRACT

This research aims to explore the determinants of financial behavior of university students towards the Buy Now Pay Later (BNPL) service in Malaysia. The study focuses on five independent variables such as BNPL Usage, Financial Literacy, Lifestyle, Financial Attitude and Impulsive Buying Behavior. The research design used was quantitative cross-sectional research and the data collection method was an online questionnaire distributed to the undergraduate students who are familiar with BNPL services. The multiple linear regression (MLR) was used to analyze 163 valid responses. The assumptions of the regression were assessed to ensure the suitability of the analysis. The results indicated that there are significant relationships between Financial Literacy and Financial Attitude with Student Financial Behavior while no significant relationships were found between BNPL Usage, Lifestyle and Impulsive Buying Behavior. Financial Literacy was found to be the most important variable affecting Student Financial Behavior among the significant ones. The results indicate that enhancement of students' financial knowledge and fostering responsible financial attitudes are crucial in shaping the financial management when using BNPL services. The study offers valuable insights for universities, financial educators and BNPL service providers to design programs that can address responsible financial decision-making and improve financial well-being of university students.

Keywords: Buy Now Pay Later(NPL), Determinants, Financial Behavior, Multiple Linear regression, BNPL Usage, Financial Literacy, Lifestyle, Financial Attitude and Impulsive Buying Behavior

1.0 INTRODUCTION

In the last three to five years, the financial background for young adults and tertiary level students have changed extremely due to the easy credit accessibility and emergence of financial technology features that give instant gratification of consumption. Among all the latest financial technology features, Buy Now Pay Later (BNPL) is one of the fastest growing payment methods that involving worldwide including Southeast Asia, Indonesia and here in Malaysia. BNPL is a type of short-term loan that allows the consumers to make purchases and pay in instalments, where the purchase amount is divided into equal payments. It refers to a deferred payment mechanism that allow users to receive goods or services instantly and pay through a structured instalment and a similar way to using credit cards but without needed to apply through conventional banking process. Students can get BNPL access through apps on their smartphones without needing a high income or strong banking credit qualifications. Shopee Pay Later is one of the most popular cases which offer ease activation and attractive offers that encourage the younger generation to spend even when they have insufficient funds. In this context, financial behavior among students has become more risk since many of them does not have a stable income and still depending on family allowance.

Past studies have shown that many students lack the financial literacy and do not have enough financial knowledge to plan their expenses properly, which leads to poor financial behaviour such as overspending,

mismanaging money and unable to control their monthly budget (Nazah et al., 2022). When students did not understand the real cost of credit, repayment obligation and long-term effect of instalment spending, they tend to easily fall into irresponsible spending habits. Financial attitude and lifestyle have been proven to have a significant influence on student financial management behaviour based on the previous literature (Mashud et al., 2021; Yogasnumurti et al., 2019). However, some findings show a mixed result where the influence of financial technology on student behaviour is not consistent across different studies (Suherman et al., 2025). This inconsistency creates a gap that needs further investigation since BNPL is one of the newest forms of financial technology credit usage and becoming very popular among youth. Therefore, the problem in this study is even though BNPL usage increasing among students, empirical research that simultaneously evaluates the collective impact of BNPL usage, financial literacy and lifestyle on student financial behaviour within a unified model remains limited. Hence, the general objective of this study is to statistically analyse whether BNPL usage, financial literacy, lifestyle, financial attitude and impulsive buying have significant effects on student financial behaviour by using BNPL services. Hence, this finding can help universities, educators and policymakers to identify the most critical factors that need to be improved to help reducing irresponsible spending, prevent unnecessary debt and help to strengthen financial discipline among students.

The Research Objectives are to determine the relationship between BNPL usage, financial literacy, lifestyle, financial attitude and impulsive buying behaviour on student financial behaviour regarding the usage of BNPL services and to identify which factors are most significantly influence the student financial behaviour regarding the usage of BNPL services.

2.0 METHODOLOGY

This study adopted a quantitative research design, which is appropriate for collecting and analysing numerical data that relates to student financial behaviour on the use of Buy Now Pay Later (BNPL).

The population of this study consisted of undergraduate university students who are exposed to Buy Now Pay Later (BNPL) services. This specific demographic was selected due to their active engagement in online shopping and digital financial platforms while often managing limited or unstable income, making them highly relevant for examining their financial behaviour regarding BNPL service use. Due to the time and resource constraints, this study targeted an estimated sample size ranging from 150 to 250 respondents. This range is considered adequate for performing statistical studies, such as multiple linear regression and correlation, while making that the targeted population is represented (Suherman et al., 2025). The chosen sample size is sufficient to meet the research objectives of the study. Based on the previous study, Suherman et al., (2025) has investigated Pay Later usage and student financial management among a population of 250 students and successfully analysed the data from 186 respondents by using multiple linear regression.

Purposive sampling was used in this study, where respondents were chosen according to particular standards relevant to the study's objectives. The primary data for this study were collected using a structured questionnaire that was distributed online using Google Forms to make it convenient and efficient to access the undergraduate university students in Malaysia. Responses were recorded using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This scale is widely used for assessing attitudes, perceptions and behavioural tendencies and is suitable for statistical analysis.

Multiple linear regression analysis was conducted to evaluate the influence of Buy Now Pay Later (BNPL) usage, financial literacy, lifestyle, financial attitude and impulsive buying behaviour on student financial behaviour. This statistical method enables a simultaneous assessment of the effects of multiple independent variables on a single dependent variable. Accordingly, the multiple linear regression model developed for this study is expressed as follows:

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

Where:

- Y = Student Financial Behaviour
- X_1 = Buy Now Pay Later (BNPL) Usage
- X_2 = Financial Literacy
- X_3 = Lifestyle
- X_4 = Financial Attitude
- X_5 = Impulsive Buying Behaviour
- β_0 = Intercept
- $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Regression coefficients
- s = Error term

The regression coefficients indicate the magnitude and direction of the relationship between each independent variable and student financial behaviour. A positive coefficient suggests a positive influence, whereas a negative coefficient denotes an inverse relationship between the variables.

The statistical significance of each independent variable was evaluated using the t-test, whereby a p-value of less than 0.05 indicates that the variable exerts a significant influence on student financial behaviour. The overall significance of the regression model was assessed using the F-test.

The coefficient of determination (R^2) was used to measure the proportion of variance in student financial behaviour explained by the independent variables included in the model. A higher R^2 value indicates a better fit of the regression model.

The following table describes in detail the definition of each variable.

Variable Type	Variable Name	Scale of Measurement	Description
Dependent Variable	Student financial behavior in relation to BNPL usage	Interval	Refers to how students manage their finances including budgeting, spending control, saving behavior and overall financial decision-making.
Independent Variable	BNPL usage	Interval	Refers to the extent to which students use or are exposed to BNPL services for purchasing goods or services through deferred payment options.
	Financial literacy	Interval	Refers to students' knowledge and understanding of basic financial concepts such as budgeting, saving, credit management and financial planning.
	Lifestyle	Interval	Refers to students' pattern of living, including spending habits, consumption tendencies and activities that influenced by social trends and preferences.

	Financial attitude	Interval	Refers to students' beliefs, mindset and attitudes towards money management, saving spending and financial responsibility.
	Impulsive buying behavior	Interval	Refers to students' tendency to make unplanned and emotion-driven purchases without prior consideration of financial consequences.

3.0 RESULTS AND DISCUSSION

A descriptive analysis produced the following results:

Table 1 :Demographic Profile of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	50	30.7
	Female	113	69.3
Age	20-22 years	100	61.3
	23-25 years	59	36.2
	26 years and above	4	2.5
Year of Study	Year 1	19	11.7
	Year 2	46	28.2
	Year 3	80	49.1
	Year 4	12	7.4
	Year 5	6	3.7
Monthly allowance	Less than RM500	83	50.9
	RM500-RM999	59	36.2
	RM1000-RM1499	17	10.4

Table 1 shows the demographic profile of the respondents. Majority of the respondents were female (69.3%), ages 20 to 22 years old (61.3%) and were Year 3 students (49.1%). Over half of the respondents (50.9%) indicated that they received a monthly allowance less than RM500. These findings indicate that the sample were primarily students from a university in their early 20s, while having relatively low monthly income.

Table 2 Descriptive Statistics of Study Variables

Variable	N	Mean	Standard Deviation
BNPL Usage	163	3.1656	0.79087
Financial Literacy	163	4.1043	0.70003
Lifestyle	163	2.7104	0.85898

Financial Attitude	163	4.2736	0.67328
Impulsive Buying Behavior	163	2.5988	0.95723
Student Financial Behavior	163	3.9213	0.66778

Table 2 presents the descriptive statistics of the study variables. Among all variables, Financial Attitude recorded the highest mean score, which is 4.2736, followed by Financial Literacy is 4.1043 and Student Financial Behaviour, 3.9213. This indicate that the respondents are generally demonstrated a positive financial attitude, relatively high financial literacy towards financial management. Meanwhile, BNPL Usage recorded a moderate mean score, 3.1656 indicating a moderate level of BNPL Usage among the respondents. In contrast, Lifestyle is 2.7104 and Impulsive Buying Behaviour, 2.5988 recorded the lowest mean score, suggesting a relatively low tendency among respondents towards lifestyle-driven spending and making impulsive purchases. Overall, the findings indicate that the respondents demonstrated a relatively responsible financial behaviour while having a moderate exposure to BNPL services.

A multiple regression analysis produced the following results:

Table 3 presents the regression coefficients of the final Multiple Linear Regression model.

Table 3: Final Estimated Model

Variable	Unstandardized Beta, β	Standardized Beta, β	t- value	Sig.
Constant	0.909		3.471	<0.001
Financial Literacy	0.409	0.429	5.489	<0.001
Financial Attitude	0.312	0.314	4.020	<0.001

Based on Table 3, the final regression equation is expressed as:

$$Y = 0.429 (FL) + 0.314 (FA) \quad (\text{Equation 4.2})$$

Where:

- Y = Student Financial Behaviour
- FL = Financial Literacy
- FA = Financial Attitude

Based on the results, Student Financial Behaviour is influenced by Financial Literacy and Financial attitude that has standardized Beta with value 0.429 and 0.314 respectively also with both that has p-value, less than 0.001. Based on the standardized coefficient, Financial Literacy had the highest coefficient among all the factors studied and therefore was the strongest predictor of Student Financial Behaviour.

The fitness of the final regression model was evaluated by using the ANOVA table and the coefficient of determination (R^2).

Table Error! No text of specified style in document.: Fitness of the Final Model

Statistic	Value
F-Value	69.351
Sig.	<0.001

R Square	0.464
Adjusted R Square	0.458

The results of the ANOVA show that the final regression model is statistically significant, with an F-value of 69.351 and a significance value that is less than 0.001. Hence, the last regression model is suitable in explaining the relationship among the selected independent variables and Student Financial Behavior. The model obtained an R Square of 0.464 and the Adjusted R Square value of 0.458. This suggests that Financial Literacy and Financial Attitude account for around 45.8% of the variation in Student Financial Behavior, with the remaining 54.2% is explained by the other factors that are not measured in the model.

The overall results suggest that Financial Literacy and Financial Attitude have a significant effect on the financial behaviour of the students, while BNPL Usage, Lifestyle and Impulsive Buying Behaviour do not have a significant effect. Among the significant variable, Financial Literacy was the best predictor of student financial behaviour. The study's findings suggest that encouraging students' financial attitudes and improving their financial literacy can be very important in helping them develop good financial habits, particularly when it comes to using BNPL services.

4.0 CONCLUSION

The primary aim of this study was to investigate the relationship between BNPL Usage, Financial Literacy, Lifestyle, Financial Attitude and Impulsive Buying Behaviour on the Student Financial Behaviour in relation to BNPL services among university students. Based on the findings obtained from Multiple Linear Regression analysis revealed that Financial Literacy and Financial Attitude showed a significant relationship with Student Financial Behaviour, while the usage of BNPL, Lifestyle and Impulsive Buying Behaviour were insignificant. Financial Literacy emerged as the most significant variable impacting Student Financial Behaviour among all the variables analysed.

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