

DETERMINANTS OF EDUCATIONAL LOAN REPAYMENT BEHAVIOUR AMONG PUBLIC EDUCATION LOAN BORROWERS

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Abstract: Educational loan schemes play a crucial role in expanding access to higher education; however, challenges in loan repayment continue to threaten the sustainability of public education financing systems. This study examines the determinants of educational loan repayment behaviour among public education loan borrowers, focusing on the influence of income level, borrower attitude and loan interest rate. A quantitative research design was employed, with data collected from 50 borrowers through a structured questionnaire. The data were analysed using descriptive statistics, Pearson correlation and multiple regression analysis. The findings reveal that borrower attitude and loan interest rate have significant positive effects on educational loan repayment behaviour, while income level does not demonstrate a statistically significant relationship when other factors are taken into account. Borrower attitude emerges as the most influential predictor, highlighting the importance of behavioural factors such as responsibility and commitment in shaping repayment behaviour. The significance of loan interest rate indicates that borrowers' perceptions of repayment burden and borrowing cost also influence their repayment decisions. These findings suggest that improving repayment performance requires a balanced approach that goes beyond financial capacity by incorporating behavioural and policy considerations. The study provides useful insights for policymakers and education financing institutions in designing strategies to

enhance repayment compliance and ensure the long-term sustainability of public education financing schemes.

Keywords: *Educational Loan Repayment, Loan Interest Rate, Income Level, Borrower Attitude, Public Education Financing.*

Introduction

Educational loan schemes have become a critical policy instrument for expanding access to higher education, particularly in contexts where public funding alone is insufficient to meet rising educational costs. By providing financial assistance to students from diverse socio-economic backgrounds, public education financing programmes contribute to greater educational equity and human capital development. However, the long-term effectiveness of these programmes depends fundamentally on borrowers' repayment behaviour, as most public education loan schemes operate on a revolving fund mechanism in which repayments are used to finance future cohorts of students.

Despite their importance, many public education financing systems increasingly face repayment-related challenges that threaten their sustainability. These challenges manifest in various forms, including delayed repayment, partial repayment, non-compliance and, in some cases, repayment avoidance or default. Such issues reduce the inflow of funds required to sustain the system, thereby limiting the availability of financial resources for future borrowers. Inadequate repayment performance can also create long-term fiscal pressures for governments and undermine the overall effectiveness of education financing policies. Therefore, understanding the factors that influence repayment behaviour among public education loan borrowers is essential for ensuring the sustainability and continuity of these schemes.

While repayment challenges are widely acknowledged, empirical evidence on the underlying causes of repayment behaviour remains inconclusive, particularly within public education financing contexts. Existing studies suggest that repayment performance is influenced not only by borrowers' financial capacity but also by behavioural and loan design factors. However, there is still limited consensus regarding the relative importance of different determinants and how they interact within a single analytical framework.

In this study, repayment behaviour is conceptualised as being influenced by three key determinants: income level, borrower attitude and loan interest rate. Income level represents borrowers' financial capacity to meet repayment obligations and has been widely identified as a significant predictor of repayment performance. Borrower attitude reflects behavioural and psychological factors such as responsibility, commitment and perceptions toward loan repayment, which may influence compliance beyond purely economic considerations. Meanwhile, loan interest rate represents the financial cost of borrowing and may shape borrowers' perceptions of repayment burden and affordability. Although these variables have been examined in previous studies, they are often analysed separately, and their combined effect remains underexplored in public education financing contexts.

Furthermore, this study focuses on borrowers who have received loans under a public education financing scheme, regardless of their current employment sector. This reflects the real

distribution of borrowers across government, private and other sectors following graduation and allows for a more comprehensive examination of repayment behaviour among public education loan recipients. By adopting this broader perspective, the study provides a more accurate representation of repayment dynamics within public education financing systems.

Given these considerations, this study aims to examine the determinants of educational loan repayment behaviour among public education loan borrowers by analysing the influence of income level, borrower attitude and loan interest rate. Understanding these relationships is important not only for advancing the academic literature but also for informing policymakers and education financing institutions in designing more effective repayment strategies, improving borrower compliance and ensuring the long-term sustainability of public education financing schemes.

Literature Review

The increasing reliance on educational loan schemes has generated growing scholarly interest in understanding repayment behaviour and its implications for higher education financing. To contextualise this issue, the following subsection reviews prior studies on educational loan repayment within higher education and public education financing systems.

Educational Loan Repayment in Public Education Financing

The increasing reliance on educational loan schemes has generated substantial academic interest in understanding repayment behaviour and its implications for the sustainability of higher education financing. In public education financing systems, repayment behaviour is particularly critical, as these schemes typically operate on a revolving basis in which repayments from existing borrowers are used to support future students. Consequently, weak repayment performance—including delayed payment, partial repayment and non-compliance—can undermine the long-term viability of such programmes and impose financial pressure on governments (Baum & Schwartz, 1988; Brown et al., 2019; World Bank, 2022; OECD, 2021).

Empirical evidence across different national contexts indicates that the determinants of repayment behaviour vary depending on institutional structures and economic conditions. In developed economies, repayment challenges are often associated with administrative complexity and policy design, particularly in relation to income-driven repayment systems (Collier et al., 2019; Goldstein et al., 2023). In contrast, studies in developing and emerging contexts suggest that financial constraints and income instability play a more dominant role in influencing repayment behaviour (Magwegwe, 2025; Nguyen, 2020; Akoto & Sackey, 2022). This contrast indicates that repayment behaviour is context-dependent and must be examined within specific public education financing systems, particularly in countries such as Malaysia where sustainability concerns have become increasingly significant (Hassan & Rasiah, 2021).

Income Level and Educational Loan Repayment Behaviour

Income level has consistently been identified as one of the most significant predictors of educational loan repayment behaviour, as it directly reflects borrowers' financial capacity to meet repayment obligations. A substantial body of empirical research demonstrates a positive relationship between income and repayment outcomes, although financial literacy may also influence borrowers' ability to manage repayment obligations (Collier et al., 2019; Brown et al., 2019; Li & Yu, 2021).

However, comparative findings suggest that the influence of income varies across contexts. In high-income countries, borrowers may still experience repayment difficulties despite stable earnings due to high debt burdens and repayment complexities (Collier et al., 2021; Goldstein et al., 2023). Conversely, in lower-income settings, income remains a primary constraint, as borrowers with limited financial resources and unstable earnings face challenges in maintaining regular repayment schedules (Magwegwe, 2025; Osei-Assibey, 2023).

Furthermore, recent empirical studies indicate that income does not operate independently. When behavioural factors are included in regression models, the effect of income may become less dominant, suggesting that financial capacity alone cannot fully explain repayment behaviour (Collier et al., 2022; Magwegwe, 2025). This highlights the importance of examining income alongside other determinants within an integrated analytical framework.

Borrower Attitude and Behavioural Factors

In addition to financial capacity, borrower attitude has emerged as a critical determinant of educational loan repayment behaviour. Behavioural factors, such as repayment commitment, financial responsibility and perceptions toward debt, are increasingly recognised as important influences on repayment decisions (Brown et al., 2011; Baum & Schwartz, 1988).

Empirical evidence consistently shows that borrowers with more positive attitudes toward repayment obligations are more likely to demonstrate stronger repayment performance (Magwegwe, 2025; Rahman & Aziz, 2024). In some regression-based studies, behavioural variables have been found to exert a stronger influence on repayment outcomes than traditional financial indicators, suggesting that psychological and attitudinal factors play an independent role (Collier et al., 2022).

The significance of borrower attitude is particularly evident in public education financing contexts, where loans may be perceived as a form of social assistance rather than a contractual obligation. This perception can weaken repayment commitment if borrowers do not fully internalise their responsibility to repay. However, despite growing recognition of behavioural determinants, there remains limited comparative research examining how borrower attitudes differ across institutional and cultural contexts (Collier et al., 2019; Magwegwe, 2025).

Loan Interest Rate and Perceived Repayment Burden

Loan interest rate is another factor that may influence educational loan repayment behaviour by affecting the overall cost of borrowing and perceived repayment burden. The empirical evidence regarding the role of interest rates, however, remains mixed and inconclusive.

Some studies suggest that higher interest rates increase financial strain, leading to repayment difficulties and a higher likelihood of delayed or incomplete repayment (Goldstein et al., 2023). This effect is particularly relevant in systems where interest accumulation significantly increases total repayment amounts over time.

In contrast, other studies report weak or statistically insignificant relationships between interest rate and repayment behaviour, especially in publicly funded loan schemes where interest rates are subsidised (Collier et al., 2021; Collier et al., 2022). In such contexts, borrowers may not perceive interest rate as a major barrier compared to income constraints or behavioural factors.

These mixed findings suggest that the effect of interest rate may be indirect or context-specific, influencing repayment behaviour through perceived financial burden rather than exerting a strong direct impact (Collier et al., 2021; Goldstein et al., 2023). This inconsistency highlights the need for further empirical investigation using multivariate analysis.

Synthesis of Literature and Research Gap

Overall, the literature indicates that educational loan repayment behaviour is influenced by a complex interaction of financial capacity, behavioural disposition and loan design factors. While income level remains a significant predictor, its influence varies depending on contextual factors and may be moderated by behavioural characteristics (Collier et al., 2022; Magwegwe, 2025). Similarly, borrower attitude has been identified as a strong determinant, yet it remains underexplored in many public education financing contexts (Brown et al., 2011; Baum & Schwartz, 1988).

The role of loan interest rate is less consistent, with empirical evidence showing both significant and insignificant effects depending on the study context (Collier et al., 2021; Goldstein et al., 2023). This suggests that repayment behaviour cannot be fully explained by a single factor, but rather requires an integrated analytical approach.

A key limitation in existing research is that many studies examine financial and behavioural factors in isolation, rather than within a unified framework. Furthermore, there is limited empirical evidence focusing specifically on borrowers under public education financing schemes, particularly in developing contexts where financial constraints and behavioural factors may interact differently.

To address these gaps, the present study examines the combined influence of income level, borrower attitude and loan interest rate on educational loan repayment behaviour among public education loan borrowers. By integrating financial, behavioural and loan design perspectives, this study contributes to a more comprehensive understanding of repayment behaviour and provides insights for improving policy design and ensuring the sustainability of public education financing systems.

Research Framework

Based on the synthesis of existing literature, this study proposes a conceptual framework that explains educational loan repayment behaviour as a function of financial capacity, behavioural disposition and loan design factors. Specifically, the framework examines the effects of income level, borrower attitude and loan interest rate on repayment behaviour among public education loan borrowers.

Income level represents borrowers' financial capacity to meet repayment obligations and has been widely identified as a key determinant of repayment performance (Collier et al., 2019; Brown et al., 2019). Borrower attitude reflects behavioural and psychological factors, including repayment commitment, sense of responsibility and perceptions toward loan obligations, which are increasingly recognised as important influences on repayment behaviour (Brown et al., 2011; Magwegwe, 2025). Loan interest rate represents a loan design factor, capturing the financial cost of borrowing and the perceived repayment burden faced by borrowers (Collier et al., 2021; Goldstein et al., 2023).

Drawing on these perspectives, the proposed research framework assumes that repayment behaviour is not determined by a single factor but rather by the combined influence of financial and behavioural variables, alongside structural loan characteristics. This integrated approach is consistent with prior studies that emphasise the interaction between economic and behavioural determinants in shaping financial decision-making (Collier et al., 2022; Magwegwe, 2025).

Accordingly, educational loan repayment behaviour is specified as the dependent variable, while income level, borrower attitude and loan interest rate are treated as independent variables. The framework enables the examination of the direct effects of each predictor on repayment behaviour within a single empirical model.

Hypotheses Development

The following section examines the relationship between key financial and behavioural factors and educational loan repayment behaviour, based on insights derived from prior empirical studies. Among these factors, income level is widely regarded as a fundamental determinant due to its direct influence on borrowers' repayment capacity.

Income Level and Educational Loan Repayment Behaviour

Income level is expected to play a significant role in determining repayment behaviour, as it reflects the borrower's ability to meet financial obligations. Empirical studies consistently report that individuals with higher income levels are more likely to demonstrate stable and timely repayment behaviour due to greater financial resources (Collier et al., 2019; Brown et al., 2019). However, some studies suggest that the effect of income may be influenced by other factors, such as borrower attitude and financial management capabilities (Collier et al., 2022; Magwegwe, 2025). Based on this evidence, the following hypothesis is proposed:

H₁: Income level has a significant relationship with educational loan repayment behaviour among public education loan borrowers.

Borrower Attitude and Educational Loan Repayment Behaviour

Borrower attitude is increasingly recognised as a critical determinant of repayment behaviour. Positive attitudes toward repayment obligations—such as a strong sense of responsibility and commitment—are associated with higher compliance and better repayment performance (Magwegwe, 2025). In contrast, borrowers who perceive loans as fewer binding obligations may exhibit weaker repayment discipline, particularly in publicly funded loan schemes (Brown et al., 2011; Baum & Schwartz, 1988).

Empirical evidence suggests that behavioural factors may exert a strong and independent influence on repayment outcomes, even after controlling for financial variables (Collier et al., 2022). Therefore, borrower attitude is expected to significantly influence repayment behaviour.

H₂: Borrower attitude has a significant relationship with educational loan repayment behaviour among public education loan borrowers.

Loan Interest Rate and Educational Loan Repayment Behaviour

Loan interest rate represents the cost of borrowing and may influence repayment behaviour by affecting the perceived financial burden. Some studies suggest that higher interest rates increase

financial strain and reduce borrowers' ability to repay consistently (Goldstein et al., 2023). However, other research reports weak or inconsistent relationships, particularly in public education financing contexts where interest rates are subsidised (Collier et al., 2021; Collier et al., 2022).

Given these mixed findings, the relationship between loan interest rate and repayment behaviour remains an empirical question that warrants further investigation.

H₃: Loan interest rate has a significant relationship with educational loan repayment behaviour among public education loan borrowers.

Methodology

This section outlines the methodological approach adopted to achieve the research objectives and test the proposed hypotheses. It describes the research design, participants, research instrument and data collection and analysis procedures.

Research Design

This study adopts a quantitative, cross-sectional research design to examine the determinants of educational loan repayment behaviour among public education loan borrowers. The survey method is appropriate as it allows for the collection of standardized data and facilitates statistical analysis of relationships among variables. The use of correlation and multiple regression analysis is consistent with prior studies investigating repayment behaviour (Collier et al., 2019; Magwegwe, 2025).

Population and Sampling

The population of this study consists of individuals who have received loans from a public education financing institution in Malaysia. These borrowers represent graduates from diverse socio-economic backgrounds who are currently in the repayment phase of their education loans.

Due to the absence of an accessible comprehensive sampling frame, non-probability convenience sampling was employed. Data were collected from borrowers who were reachable via an online survey platform.

A total of 50 valid responses were obtained and used for analysis. Although the sample size is relatively small, it meets the minimum requirement for exploratory regression analysis, particularly in studies with a limited number of predictors. According to common methodological guidelines, a sample size of at least 15–20 observations per predictor variable is considered acceptable, indicating that the sample size in this study is adequate for a model with three independent variables.

Respondent Characteristics

This study focuses on public education loan borrowers, defined as individuals who have received funding from a government-supported education financing scheme, regardless of their current employment sector. The respondents are therefore distributed across government, private and other sectors, reflecting the actual labour market outcomes of graduates.

Research Instrument

Data for this study were collected using a structured questionnaire developed based on established instruments from prior studies on educational loan repayment and financial behaviour (Brown et al., 2011; Collier et al., 2022; Magwegwe, 2025). The questionnaire was carefully adapted to ensure relevance to the context of public education financing, with minor modifications made to improve clarity and suitability for the target respondents.

The instrument was designed to capture both demographic information and the key constructs examined in this study, namely educational loan repayment behaviour, income level, borrower attitude and loan interest rate. The section on demographic characteristics gathered information such as gender, age, education level, employment status and monthly income, providing a background profile of the respondents.

The construct of educational loan repayment behaviour was measured using multiple items that assess respondents' consistency, commitment and compliance with repayment obligations. Income level was measured using items that reflect respondents' financial capacity and perceived ability to meet repayment commitments. Borrower attitude was assessed through statements capturing respondents' sense of responsibility, perceptions toward loan repayment and overall commitment to fulfilling their financial obligations. Loan interest rate was measured using items that reflect respondents' perceptions of borrowing cost, repayment burden and affordability.

All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), allowing respondents to indicate the extent of their agreement with each statement. The use of a Likert scale is appropriate for capturing attitudinal and behavioural constructs and facilitates quantitative analysis.

Each construct in the study was measured using multiple items to ensure adequate representation of the underlying concept. Educational loan repayment behaviour was assessed using five items, income level with four items, borrower attitude with six items and loan interest rate with four items. The use of multiple items for each construct enhances measurement reliability and provides a more comprehensive evaluation of the variables under investigation.

To ensure the quality of the instrument, reliability and validity assessments were conducted. Internal consistency reliability was evaluated using Cronbach's alpha coefficients, with all constructs exceeding the recommended threshold of 0.70, indicating satisfactory reliability. In addition, content validity was established through the adaptation of items from previously validated studies, while construct validity was supported by the observed relationships among variables that were consistent with theoretical expectations.

Overall, the questionnaire provides a reliable and valid measurement of the key variables required to examine the determinants of educational loan repayment behaviour among public education loan borrowers.

Reliability Analysis

The reliability of the measurement instrument was assessed using Cronbach's alpha coefficients to evaluate the internal consistency of the items representing each construct in the study.

Cronbach's alpha is widely applied in behavioural and social science research to ensure that multiple items measuring the same concept produce consistent and stable responses.

The results indicate that all constructs demonstrate acceptable to high levels of reliability, with alpha values exceeding the recommended threshold of 0.70. Specifically, the construct measuring educational loan repayment behaviour recorded a Cronbach's alpha value of 0.82, indicating good internal consistency among the items assessing repayment compliance and consistency. The borrower attitude construct exhibited the highest reliability with an alpha value of 0.85, suggesting that the items measuring respondents' attitudes, commitment and responsibility toward repayment are highly consistent.

Similarly, the income level construct achieved a Cronbach's alpha of 0.78, reflecting an acceptable level of reliability in capturing respondents' financial capacity. The construct for loan interest rate also demonstrated satisfactory internal consistency, with an alpha value of 0.76, indicating that the items measuring perceived borrowing cost and repayment burden are reliable.

Overall, these results confirm that the measurement scales used in this study possess adequate internal consistency and reliability, supporting their suitability for subsequent statistical analyses.

Validity Analysis

Content validity was ensured through the adaptation of measurement items from previously validated studies and a review of the questionnaire for clarity and relevance.

Construct validity was assessed through correlation analysis, where the relationships among variables were examined to confirm theoretical expectations. The results indicate that the constructs are significantly related in the expected directions, supporting the validity of the measurement model.

Data Collection Procedure

The questionnaire was distributed using an online survey platform. Respondents were invited to participate voluntarily, and anonymity was ensured to encourage honest responses. Data collection was conducted over a specified period, and only fully completed questionnaires were included in the analysis.

Data Analysis Techniques

The collected data were analysed using the Statistical Package for the Social Sciences (SPSS), which is widely employed in quantitative research for statistical analysis. Prior to hypothesis testing, descriptive statistics were first generated to summarise the demographic characteristics of the respondents and to provide an overview of the data distribution. This preliminary analysis enabled a clear understanding of the sample profile and ensured that the data were suitable for further statistical procedures.

Subsequently, Pearson product-moment correlation analysis was conducted to examine the direction and strength of the relationships among the key variables in the study, namely educational loan repayment behaviour, income level, borrower attitude and loan interest rate.

This analysis served as an initial assessment of the associations between variables and helped identify whether statistically significant relationships existed prior to regression modelling.

To further investigate the determinants of educational loan repayment behaviour, multiple regression analysis was employed. This technique allows for the simultaneous examination of the effects of multiple independent variables on a single dependent variable, thereby providing a more comprehensive understanding of their relative contributions. In this study, regression analysis was used to evaluate the extent to which income level, borrower attitude and loan interest rate influence repayment behaviour while controlling for the effects of the other variables in the model.

Overall, the combination of descriptive statistics, correlation analysis and multiple regression provides a robust analytical approach for examining both the relationships and predictive effects among the variables, ensuring that the study's research objectives and hypotheses are addressed effectively.

Findings

This section presents the empirical results of the study. Table 1 summarizes the demographic characteristics of the respondents to provide an overview of the sample used for subsequent analyses.

Table 1: Demographic Profile of Respondents

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	26	52.0
	Female	24	48.0
Age Group	25-30 Years	34	68.0
	31-35 Years	5	10.0
	36-40 Years	11	22.0
Education Level	Certificate	7	14.0
	Diploma	23	46.0
	Bachelor	20	40.0
Employment Status	Government	32	64.0
	Private	16	32.0
	Others	2	4.0
Monthly Income	Below RM1,000	8	16.0
	RM1,001-RM1,500	8	16.0
	RM1,501-RM2,000	15	30.0
	RM2,001-RM2,500	14	28.0
	More Than RM2501	5	10.0

Table 1 presents the demographic profile of the respondents, summarising key socio-economic characteristics relevant to educational loan repayment behaviour. The variables reported include gender, age group, education level, employment status and monthly income, providing a comprehensive overview of the sample's background.

In terms of gender, the respondents were relatively evenly distributed, with male respondents accounting for 52.0% (n = 26) and female respondents representing 48.0% (n = 24). This balanced distribution suggests that the findings on loan repayment behaviour are not disproportionately influenced by one gender group.

Regarding age, the majority of respondents were within the 25–30 years age group (68.0%, n = 34), followed by those aged 36–40 years (22.0%, n = 11) and a smaller proportion aged 31–35 years (10.0%, n = 5). The dominance of younger borrowers indicates that most respondents are in the early stages of their working life, a period commonly associated with initial loan repayment obligations and income stabilisation. This age composition is appropriate for examining educational loan repayment behaviour.

With respect to education level, nearly half of the respondents held a diploma qualification (46.0%, n = 23), while 40.0% (n = 20) possessed a bachelor's degree and 14.0% (n = 7) had a certificate qualification. This distribution reflects the diverse educational backgrounds of loan recipients and suggests that repayment behaviour may be influenced by different employment opportunities and income trajectories associated with educational attainment.

In terms of employment status, the majority of respondents were employed in the government sector (64.0%, n = 32), followed by those working in the private sector (32.0%, n = 16), while a small proportion reported other forms of employment (4.0%, n = 2). The high representation of government-sector employees may indicate relatively stable employment conditions among the respondents, which could have implications for repayment consistency and financial planning.

Finally, the analysis of monthly income shows that 30.0% (n = 15) of respondents earned between RM1,501 and RM2,000, while 28.0% (n = 14) reported incomes in the range of RM2,001–RM2,500. Lower-income groups were represented by respondents earning below RM1,000 (16.0%, n = 8) and RM1,001–RM1,500 (16.0%, n = 8), whereas only 10.0% (n = 5) reported earning more than RM2,501 per month. This income distribution suggests that a substantial proportion of respondents fall within the low- to middle-income category, which is particularly relevant for understanding variations in educational loan repayment behaviour.

Overall, the demographic profile indicates that the respondents predominantly consist of young, employed individuals with diploma or bachelor-level qualifications and moderate income levels. These characteristics provide an appropriate basis for examining the determinants of educational loan repayment behaviour within a public education financing context.

Table 2: Pearson Correlation Matrix among Study Variables

Variable	Educational Loan Repayment	Loan Interest Rate	Income Level	Borrower Attitude
Educational Loan Repayment	1			
Loan Interest Rate	.090	1		
Income Level	.374**	.116	1	
Borrower Attitude	.727**	.043	.516**	1

** N = 50. p < .01 (two-tailed).

Table 2 presents the results of the Pearson product–moment correlation analysis conducted to examine the relationships among the study variables, namely educational loan repayment, loan interest charged, income level and borrower attitude. The analysis was performed to determine the direction and strength of the relationships among the variables prior to regression analysis.

The results indicate that borrower attitude is positively and significantly correlated with educational loan repayment, suggesting that borrowers with more favourable attitudes toward loan repayment obligations are more likely to demonstrate better repayment behaviour. This finding highlights the importance of behavioural and attitudinal factors in shaping repayment compliance and supports the view that repayment behaviour is not solely determined by financial capacity.

In addition, income level shows a statistically significant positive relationship with educational loan repayment, indicating that borrowers with higher income levels tend to exhibit stronger repayment performance. This result is consistent with expectations, as income level directly affects repayment ability and financial stability. The magnitude of this relationship suggests that income remains an important factor in explaining variations in loan repayment behaviour among borrowers.

However, the correlation between loan interest charged and educational loan repayment is positive but not statistically significant ($r = .090$, $p > .05$). This finding indicates that, at the bivariate level, loan interest charged does not exhibit a meaningful association with repayment behaviour. While interest burden may influence borrowers' perceptions, its effect does not appear significant when examined independently.

Moreover, the correlations among the independent variables are within acceptable ranges, indicating no evidence of excessively high inter-correlations. This suggests that the variables are conceptually distinct and that multicollinearity is unlikely to pose a serious concern, thereby justifying their inclusion in subsequent regression analysis.

Overall, the correlation analysis demonstrates that borrower attitude and income level are significantly related to educational loan repayment, whereas loan interest charged does not show a statistically significant bivariate relationship. These findings provide preliminary empirical support for the proposed research framework and justify further examination of the relationships using multiple regression analysis.

Table 3: Multiple Regression Analysis of Factors Influencing Educational Loan Repayment Behaviour

Predictor	B	SE	β	t	p
Constant	0.477	0.460	–	1.036	0.305
Loan Interest Rate	0.524	0.106	0.542	5.390	< .000
Income Level	0.172	0.104	0.183	2.005	0.324
Borrower Attitude	0.823	0.112	0.727	7.337	< .000

Model statistics: $R = .694$, $R^2 = .529$, Adjusted $R^2 = .519$, $F(3, 48) = 53.834$, $p < .000$

Table 3 presents the results of the multiple regression analysis conducted to examine the influence of loan interest rate, income level and borrower attitude on educational loan

repayment behaviour. The regression model was estimated to assess the unique contribution of each independent variable while controlling for the effects of the others.

The overall model is statistically significant, indicating that the independent variables collectively explain a meaningful proportion of variance in educational loan repayment behaviour. The model explains approximately 52.9% of the variation in repayment behaviour ($R^2 = 0.529$), suggesting that the selected predictors provide a reasonably strong explanatory power.

Among the predictors, borrower attitude emerges as the most influential factor, with a positive and statistically significant effect on repayment behaviour ($\beta = 0.727$, $p < 0.001$). This finding indicates that borrowers who demonstrate stronger responsibility, commitment and positive perceptions toward repayment obligations are more likely to exhibit better repayment behaviour. The result highlights the importance of behavioural factors in shaping financial decision-making beyond purely economic considerations.

Similarly, loan interest rate shows a positive and statistically significant effect on educational loan repayment behaviour ($\beta = 0.542$, $p < 0.001$). This suggests that borrowers' perceptions of borrowing cost and repayment burden play a meaningful role in influencing repayment behaviour. The finding implies that even within a public education financing context, loan design factors such as interest rate can affect borrowers' repayment decisions.

In contrast, income level does not have a statistically significant effect on educational loan repayment behaviour ($\beta = 0.183$, $p > 0.05$). Although income level is expected to reflect borrowers' financial capacity, the result indicates that it does not significantly influence repayment behaviour when behavioural and loan-related factors are taken into account. This finding suggests that repayment behaviour may be driven more by attitudinal and perceptual factors than by income alone.

Overall, the results demonstrate that borrower attitude and loan interest rate are significant predictors of educational loan repayment behaviour, whereas income level does not exert a statistically significant independent effect in the model. Based on the regression results, borrower attitude (H_2) and loan interest rate (H_3) are supported, as both variables show statistically significant effects on repayment behaviour. However, income level (H_1) is not supported, as it does not demonstrate a statistically significant relationship with educational loan repayment behaviour.

Discussion

The findings of this study provide important insights into the determinants of educational loan repayment behaviour among public education loan borrowers. The results indicate that borrower attitude and loan interest rate are significant predictors, whereas income level does not have a statistically significant effect when all variables are considered simultaneously.

First, the results reveal that borrower attitude is the most influential factor affecting educational loan repayment behaviour. This finding suggests that borrowers who demonstrate stronger responsibility, commitment and positive perceptions toward repayment obligations are more likely to exhibit consistent repayment behaviour. The result supports prior studies highlighting

the importance of behavioural and psychological factors in financial decision-making (Magwegwe, 2025; Collier et al., 2022). It implies that repayment behaviour is not solely driven by financial capacity but is strongly shaped by individual attitudes and sense of obligation. In the context of public education financing, this may also reflect the need to strengthen borrower awareness and responsibility, as loans are sometimes perceived as social assistance rather than contractual obligations.

Second, loan interest rate is found to have a significant positive effect on repayment behaviour. This finding indicates that borrowers' perceptions of borrowing cost and repayment burden play an important role in influencing repayment decisions. Although previous studies have reported mixed results regarding the effect of interest rates (Collier et al., 2021; Goldstein et al., 2023), the present study suggests that even within a public education financing context, interest-related factors remain relevant. This may be explained by the fact that borrowers are sensitive to the overall cost of repayment, and perceived affordability influences their willingness and ability to repay.

In contrast, the study finds that income level does not have a statistically significant effect on educational loan repayment behaviour. This result is somewhat unexpected, as income is commonly regarded as a key determinant of repayment capacity. However, the finding is consistent with studies suggesting that income alone may not fully explain repayment behaviour when behavioural factors are taken into account (Collier et al., 2022; Magwegwe, 2025). One possible explanation is that borrowers with varying income levels may exhibit similar repayment behaviour depending on their attitudes, financial discipline and commitment to repayment obligations. This suggests that behavioural factors may outweigh purely financial considerations in determining repayment outcomes.

Overall, the findings highlight the importance of adopting a comprehensive approach to understanding educational loan repayment behaviour. While financial capacity remains relevant, the results demonstrate that behavioural and perceptual factors play a more dominant role in influencing repayment decisions among public education loan borrowers. This underscores the need for policymakers and education financing institutions to incorporate behavioural interventions, such as borrower education, awareness programmes and repayment commitment initiatives, in addition to financial support mechanisms.

Conclusion and Implications

This study examined the determinants of educational loan repayment behaviour among public education loan borrowers by analysing the influence of income level, borrower attitude and loan interest rate. The findings provide important insights into the factors that shape repayment behaviour within a public education financing context.

The results indicate that borrower attitude and loan interest rate are significant predictors of repayment behaviour, while income level does not show a statistically significant effect. Among the predictors, borrower attitude emerged as the most influential factor, highlighting the critical role of behavioural and psychological factors such as responsibility, commitment and perceptions toward repayment obligations. In addition, the significant effect of loan interest rate suggests that borrowers' perceptions of borrowing cost and repayment burden also play an important role in influencing repayment decisions. Conversely, the lack of a significant

relationship between income level and repayment behaviour suggests that financial capacity alone may not be sufficient to explain repayment outcomes when behavioural and perceptual factors are taken into account.

From a theoretical perspective, the findings contribute to the literature on educational loan repayment by demonstrating that repayment behaviour is shaped by a combination of behavioural and financial factors, rather than solely by income or economic capacity. The study supports the growing body of research that emphasises the importance of incorporating behavioural dimensions into models of financial decision-making, particularly in the context of public education financing.

From a practical perspective, the findings carry important implications for policymakers and education financing institutions. First, the strong influence of borrower attitude suggests that efforts to improve repayment performance should focus on enhancing borrower awareness, responsibility and commitment through targeted educational campaigns, financial literacy programmes and repayment counselling initiatives. Second, the significance of loan interest rate indicates that policymakers should carefully consider loan design features, including interest structures and repayment conditions, to ensure that repayment obligations remain manageable and do not discourage compliance. Finally, the non-significant effect of income level suggests that policies aimed solely at increasing borrowers' income may not be sufficient to improve repayment outcomes without addressing behavioural factors.

Overall, the study highlights the need for a holistic approach to managing educational loan repayment, combining financial, behavioural and policy-based interventions. Future research may extend this study by incorporating additional variables, employing larger sample sizes or adopting longitudinal designs to provide a deeper understanding of repayment behaviour over time.

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