

# **Behavioral Insights for Student Financial Decision Influencing Graduation Intentions**

Fuadah Binti Johari<sup>1</sup> \*
Hanim Binti Misbah<sup>1</sup>
Wan Nurhanan Binti Wan Suhaimi<sup>1</sup>
Mohd Nazri Bin Mohd Noor<sup>1</sup>
Nik Norsyamimi Binti Nik Noor Rezam<sup>1</sup>

<sup>1</sup>Islamic Finance and Wealth Management Institute (IFWMI), Faculty of Economics and Muamalat, Universiti Sains Islam Malaysia (USIM), 71800 Nilai, Negeri Sembilan, Malaysia

# Mohammad Mafrukhin Mokhtar<sup>2</sup>

<sup>2</sup>Financial Education and Well-Being Research Centre (FEWRC) Agensi Kaunseling dan Pengurusan Kredit (AKPK) Menara Aras Raya, Jalan Raja Laut, 50350 Kuala Lumpur, Malaysia

Email: fuadah@usim.edu.my

\* Corresponding Author

#### **Abstract**

**Purpose:** This study investigates the influence of attitude and subjective norms on students' graduation intention; a behavioral outcome strongly associated with financial decisions regarding long-term student loan repayment capacity.

**Design/methodology/approach:** Grounded in the Theory of Reasoned Action (TRA), a quantitative survey was conducted among 138 Malaysian university students using a bilingual digital questionnaire. The instrument was refined through pilot testing and administered via online platforms. Data were analyzed using multiple regression analysis.

**Findings:** The results indicate that attitude ( $\beta = 0.282$ , p = 0.002) and subjective norms ( $\beta = 0.281$ , p = 0.002) are significant predictors of students' intention to graduate. These findings underscore the critical role of psychological and social influences in shaping academic outcomes and financial behavior.

**Research limitations/implications:** While limited to a specific student population, the study highlights the potential of embedding behavioral dimensions into student support systems particularly in TRA constructs.

**Practical implications:** The integration of behavioral insights can enhance academic engagement and promote responsible student loan repayment, contributing to the sustainability of education financing.

**Originality/value:** This study advances the field by reframing graduation intention as a behavioral antecedent to loan repayment, shifting the discourse from purely financial indicators to socio-psychological determinants. Linking graduation intention to repayment sustainability is an underexplored nexus. Thus, it offers novel implications for policy and practice through behaviorally informed interventions.



**Keywords**: Financial Decision, Theory of Reasoned Action (TRA), Graduation Intention and Behavioral Insights

#### Introduction

Student loan debt has become a serious financial issue globally, threatening the economic stability and prospects of graduating students. Recent studies show worrying trends in student debt accumulation and delinquency rates. Cubillo-Salas et al. (2025) provide empirical evidence from Costa Rica's non-banking credit sector, highlighting that certain borrowers' profiles, including those engaged in commercial lending and multiple delinquent loans, are face higher risk of critical default. A similar trend is observed in the U.S, where Johnston and O'Brien, (2025) reveal that the growing in student loan debt is linked to reduce democratic engagement among indebted individuals, reflecting the broader social effects of financial burdens on students. The importance of student indebtedness necessitates a focus on graduation, as it is not only a critical behavioral outcome but also a determinant of long-term financial well-being and loan repayment capacity (Salazar-Fernandez et al., 2025; Rowan et al., 2024).

Spending and over indebtedness are closely correlated. The AKPK (2022) highlights a troubling trend of over indebtedness among young consumers, particularly students, with over 30% engage in compulsive online purchase. In term of financial well-being, AKPK (2024) also reports that 46.1% of youths are classified as "Vulnerable" or "Extremely Vulnerable" with 28% of them are struggling to secure RM1,000 emergency saving and 24.7% lacking savings for job loss. Furthermore, the linkage between financial well-being and mental health is significant as AKPK (2020) finds that 41% of Malaysian Working Adults (MWAs) negative impact of financial stress towards their mental well-being. This financial strain may have lasting effects on students as they transition into the workforce after graduation.

Graduation signifies successful educational completion, impacting individuals' future earnings, employment stability, and ability to fulfil financial obligations, including student loan repayment. Salazar-Fernandez et al. (2025), using curricular analytics approaches, demonstrate that interruptions in financial aid, such as scholarship loss, correlate with increased dropout rates and delayed academic progress. For Malaysian students depend on PTPTN, academic disruption may increase both the risk of dropout and the likelihood repayment difficulties, highlighting the interplay of financial and academic outcomes.

In response, Malaysia has introduced various measures, including PTPTN's digital repayment platforms, the National Strategy for Financial Literacy (2019–2023), and digital inclusion goals outlined under national policy blueprints (PTPTN 2025; Financial Education Network 2019; Government of Malaysia, 2021). These initiatives aim to simplify repayment processes, strengthen financial capability, and reduce inequality in financial access. Nevertheless, repayment challenges remain, suggesting that structural interventions must be complemented by behavioral insights into how student approaches both graduation and loan repayment decisions.

Student loan repayment refers to the financial actions and behaviors undertaken by individuals to fulfil their educational debt obligations. Wertheim et al. (2025) explore the association between student loans and household entrepreneurship and emphasize the economic important of loan repayment in shaping post-education financial trajectories. Complementing this,



Bhandary et al. (2024) review education loan repayment literature, identifying repayment burden, financial literacy, and income as key factors influencing repayment success. These studies frame repayment behavior as a multifaceted construct influenced by individual capacities, socioeconomic contexts, and systemic factors.

The Theory of Reasoned Action (TRA) provides a useful framework to address this challenge. TRA explains that individual behavior is influenced by two main factors, which are personal attitudes (personal evaluations of behavior) and subjective norms (perceived social pressure). In the context of student loans, repayment and graduation outcomes are influenced not only by financial capacity but also by how graduates perceive repayment and by the expectations of their families, peers, and society. Previous study illustrating how attitudes and cognitive biases and financial literacy shape financial decisions (Mazzoli et al., 2024; Hamid, 2025).

Despite the availability of financial aid and repayment schemes, global student loan repayment rates remain low, contributing to persistent repayment difficulties and socioeconomic inequalities. Existing literature rarely examines in depth the behavioral determinants that influence both graduation intentions and repayment capacities. This gap limits holistic understanding and effective intervention strategies to ensure the sustainability of PTPTN while supporting students in achieving academic success and financial stability.

This study aims to examine the influence of TRA constructs, which are attitude and subjective norms, on students' intentions to graduate, and actual outcomes related to loan repayment. This study integrating behavioral frameworks to provide insights that are both academically rigorous and policy relevant.

## **Literature Review**

# Theory of Reasoned Action (TRA)

The TRA, developed by Fishbein and Ajzen, emphasizes that an individual's behavior is directly predicted by their behavioral intention, which is shaped by two primary factors: attitudes toward the behavior and subjective norm (Shahrul Azmi et al., 2018; Ibrahim & Singaravelloo, 2020). TRA has been widely applied to understand behaviors, particularly in health, marketing, and education domains. In the context of educational and financial decision-making, TRA's constructions provide valuable insights into behaviors such as student loan repayment and academic persistence (Bhandary et al., 2024). For example, learners' decisions to graduate or persist despite financial burdens are influenced not only by their attitudes but also expectations from peers and institutions. For example, Sewell and Rogers (2023) found that personal finance education can significantly influence repayment decisions, budgeting habits, and financial planning behaviors.

Although these international studies are useful, the Malaysian context requires more focus. For Malaysia, National Higher Education Fund Corporation (PTPTN) is the primary financing instrument, and graduates' repayment intentions are frequently influenced by social, cultural, and religious elements. According to AKPK (2024), impulsive spending and low savings are major problems for many youths in Malaysian, which contribute to their negative attitudes regarding repayment. On the other hand, students who view repayment as a moral obligation and a step toward stable employment are more committed to their financial obligations. These findings suggest that TRA is suitable but must be interpreted in light of Malaysia's financial behaviors and social norms.



## Attitude and Its Influence

Attitude constitutes a critical determinant of behavioral intention within TRA, reflecting an individual's positive or negative evaluation of a specific behavior Shah et al. (2025). In the context of student loans and academic persistence, attitudes shape how students perceive graduation and loan repayment, whether as valuable goals and feasible undertakings.

Evidence from international literature, Salazar-Fernandez et al. (2025) underscores the linkage between favorable attitudes towards maintaining scholarships and increased likelihood of timely graduation. Positive evaluations of educational attainment strengthen motivation to persist and repay debts. Similarly, Rowan et al. (2024) highlight that students' attitudes toward financing education increase their motivation to complete their studies. While Mahmoud et al., (2024) further emphasize the role of psychological attitudes of Ghanaian students in their loan uptake and graduation outcome, underscoring the significance of cultural and behavioral elements.

In the Malaysian context, attitudes play a significant role. Graduates who perceive PTPTN repayment as an obligation associated with Amanah (trust) tend to discipline in repayment. Similarly, students associate repayment with Maslahah (public good), understanding that future students benefit when their commitments are fulfilled. At the same time, Wasatiyyah (moderation) further encourages borrowers to maintain a balance between their repayment obligations and spending behavior (Defarah & Asumia, 2024). Conversely, Hamid, (2025) shows that self-control bias led to over-indebtedness, indicating that negative attitudes toward financial restraint can undermine repayment behaviors.

Further, financial behavior studies show that attitudes' emotional and cognitive components significantly influence repayment and academic commitment. Chawla and Mokhtari (2025) explain that overconfidence in financial knowledge may distort attitudes, leading to risky engagements with alternative financial services that can threaten repayment abilities. Mazzoli et al. (2024) further show that product-specific financial literacy shapes advice-seeking behaviors and ensuing financial decision-making, indicating the complex role attitudes play across different financial products and contexts. This demonstrates how cultural, religious values, and financial literacy interact to shape graduates' attitudes

## Subjective Norms and Peer Influence

Subjective norms in TRA capture the social pressures an individual perceives regarding behavioral choices. These include influences from family, peer groups and institutional culture Shah et al. (2025). These normative forces play crucial role in shaping students' intentions to graduate and repay loans.

Empirical studies illustrate this influence. Yang et al. (2025) argue that individuals' perceptions of subjective norms have a significant impact on behavioral intention, Similarly, Shah et al. (2025) found that both social supports affect educational aspirations and behaviors. Backer and Rodriguez (2025) explore that community support and policy environments influence normative pressures that affect borrowing and repayment behaviors. Yu et al. (2025) provide evidence on how collective support can encourage compliance with both financial and academic regulations.

In Malaysia, graduates' intentions to repay are significantly impacted by peer pressure and family expectations (Vaicondam, 2020; Mohamed et al., 2022; Ibrahim & Singaravelloo, 2020). Friends and community leaders also shape financial decisions (Haqbin & Mohd Thas



Thaker, 2025). Okello et al. (2025) found that social pressures within group lending systems enhanced repayment behavior. These findings align with Islamic values where repayment is seen as fulfilling Amanah, while Maslahah links repayment to societal welfare, and religious communities encourage students to avoid ribā (usury) and practice ethical finance (Rahadi et al., 2024; Ananda, 2021). Thus, subjective norms in Malaysia are hence both social and spiritual, reinforcing repayment as a collective obligation.

# Literature Gap Analysis

Despite the robust literature exploring loan repayment, financial literacy, and academic persistence, explicit studies linking the TRA directly to graduation intentions during student loan repayment remain limited (Johnston & O'Brien, 2025; Gorshkov et al., 2025). Such research gaps suggest that TRA's potential for explaining and predicting student behaviors in this domain is yet to be fully utilized.

Furthermore, there is limited research within behavioral models that control student financial and educational outcomes such as TRA (Chawla & Mokhtari, 2025; An et al., 2025). Additional literature illustrates the multifaceted nature of student financial decisions, showing that emotional and psychological aspects (Hamid, 2025) and cognitive biases (Chawla & Mokhtari, 2025) play significant roles. These underline the necessity to adapt and expand TRA models to encompass psychosocial factors prevalent in the higher education landscape.

Thus, the present study aims to investigate the impact of attitude and subjective norm on students' intention to graduate while reframing graduation intention as a behavioral precursor to loan repayment. This study offers insights for scholarship and actionable strategies for educators, policymakers, and financial institutions by shifting the discussion from economic considerations to socio-psychological motivators. Therefore, this study addresses the gap by testing TRA in the underexplored context of Malaysian student borrowers, reframing graduation intention as a behavioral precursor to loan repayment.

## Theoretical Framework and Hypothesis Development

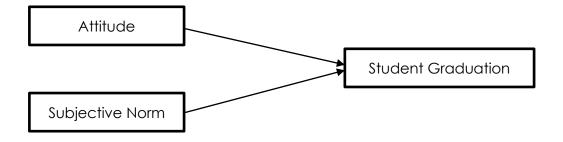


Figure 1: Theoretical Framework

Figure 1 shows that conceptual framework is grounded in the TRA, focusing on how students' attitudes and subjective norms influence their intention to graduate, a behavioral outcome closely tied to student loan repayment sustainability. Attitude reflects an individual's positive or negative evaluation of graduating, while subjective norms pertain to social pressures perceived from significant others, such as family or peers, to complete their studies. These psychological constructs are hypothesized to directly affect graduation intention.



Attitude, as a critical construct of the TRA, serves as a primary predictor of behavioral intention by reflecting an individual's evaluation of performing a behavior (Hamid, 2025; Mazzoli et al., 2024). Within the context of student loan repayment and graduation intentions, attitudes reflect students' financial responsibility, motivation toward academic persistence, and commitment to fulfilling repayment obligations.

In summary, the literature shows that positive, realistic, and ethically grounded financial attitudes are key drivers of both loan repayment behavior and graduation intention. However, attitudes only are not static, they are also shaped by financial stability, cognitive biases, cultural norms and religious values. This indicate that strengthening PTPTN repayment requires not only financial literacy campaigns but also strategies that integrate Islamic ethical principles and promote repayment as a shared social responsibility. This aligns with broader goals of educational equity and sustainability.

(H1) Attitude toward financial decisions significantly influences graduation intention. Subjective norms, the perceived social pressures to perform or not perform a behavior, strongly influence on students' academic and financial decision-making within the TRA framework (Hamid, 2025). Empirical evidence indicates that familial expectations, peer influences, institutional culture, and increasingly, virtual social networks serve as critical normative environments affecting behavioral intentions. Backer and Rodriguez (2025) highlight how institutional norms and fiscal policies intersect, demonstrating that organizational and governmental culture can shape normative pressures on students or borrowers, ultimately impacting behavioral outcomes. Similarly, Shah et al. (2025) emphasize the role of subjective norms in risky behaviors like sports betting, were peer influence and perceived social acceptance shape attitudes and indirectly affect academic performance.

(H2) Subjective norms with financial decisions significantly influence graduation intention.

## **Integrated Framework**

Considering empirical evidence, a conceptual model emerges that robustly links the theoretical constructs of TRA, attitude and subjective norms to predict graduation intentions and loan repayment behaviors.

In this model, student attitudes toward financial responsibility and academic persistence interact with social pressures from family, peers, and institutional agents. Financial education functions as moderating forces that enhance or disrupt these behavioral processes by delivering personalized information, fostering financial literacy, and expanding access to credit and repayment tools.

According to the TRA, attitudes and subjective norms are key factors in shaping behavioral intention, which is in this study, refers to students' intention to graduate. Supportive beliefs regarding graduation, including the belief of its importance for future career and financial stability, can motivate students to continue in their studies. Likewise, strong subjective norms including expectation from family and encouragement from peers or faculty, thereby, increase chance to enhance the students' commitment to finish their studies.

This conceptual framework views graduation not just as an academic milestone but as a behavior shaped by psychological and social factors. Through the interplay of these constructs, the framework offers insights on how universities and policy makers can support interventions



that build positive attitude and supportive normative environment which in turn encourage graduation and assisting students to repay future loans.

#### Method

The primary aim of this research, grounded in the theoretical framework of the TRA, is to identify how these attitudes and subjective norms in financial decisions influence student graduation. A quantitative cross-sectional design was used, with data collected using a structured questionnaire. The instrument was adapted from validated scales by Mahmoud et al. (2024) was presented in English and refined through pilot testing for clarity and contextual relevance to ensure better understanding across respondents. The questionnaire was administered bilingually, in both English and Malay, following back-to-back translation procedures to ensure content validity and linguistic clarity. A total of 138 responses were collected over one month from Malaysian university students through convenience and snowball sampling. This approach was practical for reaching a diverse university students' population across public and private institutions in Malaysia via digital platforms. While snowball sampling was used to expand the respondent pool by asking participants to share the survey link with peers in their networks. This approach is widely adopted in behavioral and educational studies where respondents are difficult to access directly. However, this sampling techniques limits the generalizability of findings, and it allowed for efficient data collection within resource and time constraints. A 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) was used to capture responses. The questionnaire included items measuring attitude, subjective norms, and graduation intention.

## Data Analysis

Data were analyzed using SPSS Version 27 and the analytical tool used was multiple regression analysis. Regression analysis is appropriate for testing the effects of independent variables on a dependent variable. In this study, the indicators for each construct of the Theory of Reasoned Action (TRA) were separately aggregated and used in the analysis. The independent variables were attitude and subjective norms, while the dependent variable was graduation intention, measured through students' confidence, optimism, and commitment toward completing their studies. Afterward, the independent variables were regressed on the dependent variable to examine the hypothesized relationships (Otoo et al., 2021). Multiple regression was selected instead of Structural Equation Modelling (SEM) because the sample size (n = 138) was relatively modest. SEM generally requires larger samples to ensure model stability and accurate estimation of latent constructs (Hair et al., 2019; Tabachnick & Fidell, 2019). Given these constraints, regression provided a more statistically reliable and parsimonious approach for testing direct predictive effects in this exploratory behavioral study. This study also tests descriptive statistics, Pearson correlation, and diagnostic tests to ensure assumptions of normality, multicollinearity and homoscedasticity were met. Thus, reliability analysis showed Cronbach's alpha values ranging from 0.684 to 0.910, indicating acceptable to excellent internal consistency.

#### **Findings**

Table 1 present the demographic profile for 138 respondents. In terms of gender distribution, the majority were female students (82.6%), while male students constituted 17.4%. This indicates a higher representation of female students in the sample. Regarding age distribution, most respondents were in the 18–22 age group (42.0%), followed closely by those aged 23–27 (38.4%). A smaller proportion were aged 28–32 (11.6%), with 5.1% aged 33–37, and only 2.9% above 37 years. This suggests that the sample primarily consisted of traditional



university-aged students, with a minority of mature students. In terms of educational level, the majority were pursuing a bachelor's degree (70.3%), followed by diploma holders (19.6%). Master's students comprised 6.5%, while doctoral candidates represented 3.6% of the sample. This reflects typical enrolment distributions within Malaysian higher education, where undergraduates form the largest cohort. For type of institution, an overwhelming majority of respondents were from public universities (93.5%), with 5.8% enrolled in private institutions, and only 0.7% from other types of higher education institutions. This indicates that public universities remain the primary providers of higher education among the sampled respondents.

Table 1: Gender and age range of respondents

Gender and age range of respond	Frequency	Percentage (%)
Gender	1	3 \ /
Male	24	17.4
Female	114	82.6
Total	138	100.0
Age range		
18-22	58	42.0
23-27	53	38.4
28-32	16	11.6
33-37	7	5.1
37 above	4	2.9
Total	138	100.0
Level of Education		
Doctoral (PHD)	5	3.6
Master	9	6.5
Bachelor's degree	97	70.3
Diploma	27	19.6
Total	138	100.0
<b>Higher Education</b>		
Institution		
Public	129	93.5
Private	8	5.8
Others	1	.7
Total	138	100.0

Table 2 present all constructs demonstrated acceptable reliability and indicator validity, with factor loadings exceeding .70 for Attitude and Student Graduation, and moderate loadings for Subjective Norms. VIF values were below 2, indicating no multicollinearity concerns. Cronbach's alpha values ranged from 0.684 to 0.910, suggesting overall satisfactory internal consistency (Hair et al., 2019).



Table 2: Measurement reliability

TRA	Questions	Item	Loading	VIF	Cronbach Alpha
Attitude	I believe taking out student loans is necessary to pursue my educational goals	ATT1	.872	1.421	.910
	I feel positive about the idea of using student loans to finance my education	ATT2	.827		
	I perceive student loans as a practical solution to fund my academic endeavors.	ATT3	.870		
Subjective Norms	I think society expects students to utilize loans to finance their academic pursuits	SN1	.654	1.421	.684
	I perceive a social norm that encourages students to take out loans to pursue higher education.	SN2	.653		
	I sense a cultural expectation that students should not hesitate to borrow money for educational expenses	SN3	.509		
Student Graduation	I am confident that I will graduate on time despite any financial challenges I may face.	SG1	.730		.862
	I feel optimistic about my prospects for graduating successfully, regardless of my financial situation.	SG2	.812		
	I am committed to overcoming any obstacles, including financial ones, to ensure I graduate on time.	SG3	.819		

Table 3 displays the Pearson correlation coefficients among the three key variables: Attitude demonstrated a moderate positive correlation with Student Graduation intention (r=.435), suggesting that students who hold more positive evaluations towards their studies and financial decisions are more likely to intend to graduate on time. Similarly, Subjective Norms were moderately positively correlated with Student Graduation (r=.435), indicating that greater perceived social expectations from family, peers, or society are associated with stronger intentions to complete their studies. Additionally, Attitude and Subjective Norms were moderately strongly correlated (r=.544), implying that students who perceive stronger normative pressures also tend to have more favorable attitudes towards graduation and managing their educational finances. These findings align with the TRA, which posits that attitudes and subjective norms are interrelated constructs that jointly influence behavioral intentions



Table 3: Pearson correlation coefficients

	Student Graduation	Attitude	Subjective Norms
Student Graduation	1.000	.435	.435
Attitude	.435	1.000	.544
Subjective Norms	.435	.544	1.000

<sup>\*\*</sup>Correlation is significant at the 0.01 level (1-tailed).

Table 4 shows the results of the multiple regression analysis showing that both Attitude and Subjective Norms are significant predictors of students' intention to graduate. Specifically, Attitude had a significant positive effect ( $\beta = 0.282$ , t = 3.168, p = .002), indicating that students who hold more positive attitudes toward their educational and financial decisions are more likely to intend to graduate on time. Likewise, Subjective Norms also had a significant positive effect ( $\beta = 0.281$ , t = 3.154, p = .002), suggesting that perceived social expectations from family, peers, or society positively influence students' graduation intentions. The unstandardized coefficients further indicate that for every one-unit increase in Attitude, the predicted graduation intention score increases by 0.268 units, while a one-unit increase in Subjective Norms increases the score by 0.260 units. Overall, these findings support TRA, confirming that both attitudinal and normative factors significantly shape students' behavioral intentions to complete their studies

Table 4: Multiple regression analysis

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	Unstandardized		Standardized		
	Coefficients		Coefficients		
Model	В	Std. Error	Beta	t	Sig.
(Constant)	2.093	.333		6.286	.000
Attitude	.268	.085	.282	3.168	.002
Subjective Norms	.260	.083	.281	3.154	.002

a. Dependent Variable: Student Graduation

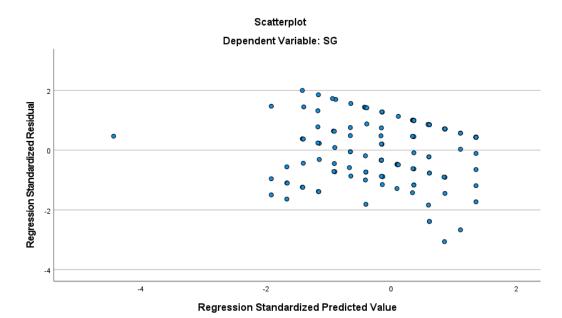


Figure 2: Scatterplot of Standardized Residuals vs. Standardized Predicted Values



Figure 2 shows the Scatterplot of Standardized Residuals vs. Standardized Predicted Values. This scatterplot is used to assess the assumption of homoscedasticity. The residuals appear randomly scattered around the horizontal axis indicating no clear pattern which suggests that the assumption of constant variance (homoscedasticity) is reasonably met.

## **Discussion and Conclusion**

## Discussion from the findings

This study reaffirms the relevance of the TRA in understanding students' graduation intention, particularly through the influence of attitude and subjective norms. The empirical findings demonstrate that both attitude ( $\beta = 0.282$ , p = 0.002) and subjective norms ( $\beta = 0.281$ , p = 0.002) significantly predict students' intention to graduate. These results are consistent with earlier studies that link psychological and social variables to behavioral outcomes in educational and financial contexts (Hamid, 2025; Mazzoli et al., 2024).

The significance of attitude highlights how students' positive evaluations of graduation, whether shaped by personal goals, perceived academic value, or financial security, play a vital role in sustaining their academic trajectories. Salazar-Fernandez et al., (2025) and Rowan et al. (2024) have shown that students who maintain scholarships or receive financial support exhibit stronger persistence and higher graduation intentions. These findings validate that fostering constructive attitudes among students can indirectly improve their capacity for student loan repayment.

Similarly, the influence of subjective norms underscores the role of social referents—such as family, peers, and lecturers- in shaping educational behavior. The positive correlation between attitude and subjective norms (r = 0.544) also indicates that students who perceive strong normative support tend to hold more positive attitudes towards graduation, suggesting an interactive effect that strengthens behavioral intention.

These results serve to move the discussion away from academic and financial alone being determinants to graduate, but to now consider psychological and social dimensions. Since attitude and subjective norms are important predictors, the present study emphasizes the importance of interventions aimed at changing students' perceptions and social contexts to increase chances of timely graduation. For instance, universities might develop interventions that promote students' perceptions about positive graduation outcomes and invite families and peer networks to foster supportive normative contexts.

Taken together, the findings lend support to the application of TRA in education, informing policies and practices with behavioral insights available to enhance the rates of graduation and, consequently, student ability to sustain repayments on their loans.

#### Conclusion

This study concludes that attitude and subjective norms significantly influence students' graduation intention, which is a critical antecedent of sustainable student loan repayment. The findings shift the focus from traditional financial indicators to socio-psychological determinants, highlighting the value of behavioral insight in predicting academic persistence and financial responsibility.



In the Malaysian context, the findings have clear policy implications. Since PTPTN is the main financing instrument, embedding behavioral dimensions into repayment strategies is essential. Policymakers and institutions should design interventions that not only strengthen financial literacy but also foster positive attitudes toward graduation and repayment by aligning them with cultural and religious values such as Amanah (trust) and Maslahah (public good). Universities, PTPTN, and agencies like AKPK could collaborate to implement structured family- and peer-based support programs, early financial counselling, and normative campaigns that frame repayment as both a personal duty and a societal contribution. Integrating these approaches into the National Higher Education and Financial Literacy strategies would help enhance graduation rates, improve repayment culture, and ensure the long-term sustainability of higher education financing in Malaysia.

## Limitations and Future Research

This study, while insightful, is subject to several limitations. Firstly, it was conducted among a relatively small and homogeneous sample of Malaysian university students, primarily from public institutions. As such, the findings may not be generalizable to private universities or other regional contexts. Secondly, the study relies on self-reported behavioral intentions rather than actual graduation or repayment outcomes, which could be influenced by response biases. For future research, several directions are proposed. Longitudinal studies should be conducted to examine how attitudes and subjective norms evolve and translate into actual graduation and repayment behavior. Researchers may also explore the intersection of financial literacy, emotional regulation, and social capital within broader behavioral models such as the Theory of Planned Behavior (TPB) or Technology Acceptance Model (TAM) to develop more comprehensive interventions.

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