

Determinant Factors Influencing Part-time Students Withdrawal in SPACE, UTM

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Received: January 22, 2025 Accepted: March 7, 2025 Published: March 17, 2025

doi:10.5296/bms.v16i2.22560 URL: <https://doi.org/10.5296/bms.v16i2.22560>

Abstract

One of the significant problems is student withdrawal from higher education, which harms institutional effectiveness, students' career paths, and national education policies. Even though much work has been done on student attrition, most of the studies focus on the full-time students with little emphasis on the part-time students. This gap is significant because part-time students are distinct in their challenges, which include work-study balance, financial constraints, and limited institutional support. This study aims to fill this gap by exploring the factors leading to part-time student withdrawal in the School of Professional and Continuing Education (SPACE) of University Technology Malaysia (UTM), thereby contributing to a better understanding of student retention strategies. This research used a descriptive research design to explore the factors that lead to student withdrawal at SPACE, UTM. The study participants were 749, consisting of 369 students who had left the institution and 380 graduates who had finished their programs. The sample was taken from institutional records, specifically, the university system's data, which comprised part-time bachelor's degree students registered between 2010 and 2022. The findings indicate that both internal and external factors contribute to student withdrawal. However, external factors were identified as the primary cause, encompassing health-related issues, financial constraints, bereavement, program suitability, and personal circumstances. In contrast, internal factors accounted for only a tiny proportion of student withdrawals, suggesting that external pressures play a more significant role in students' decisions to discontinue their studies.

Keywords: lifelong learning, part-time students, student withdrawal, external factors, internal factors, descriptive research, higher education

1. Introduction

Student withdrawal from higher education is a pressing concern, affecting institutional

success, student career development, and national education policies (Thomas, L., 2002). Bowl, M. (2001) adds that higher education institutions often struggle to retain students, particularly those enrolled in part-time programs. Unlike full-time students, part-time learners face additional challenges, such as balancing work and study commitments, financial constraints, and limited institutional support. These difficulties increase dropout rates, impacting students' academic progress, university retention statistics, and overall institutional reputation (Lee, N. E., 2017). Although research on student withdrawal has been extensive, studies explicitly focused on part-time students are lacking. Thus, exploring the reasons behind their departure from the programs is important.

Until now, research on student withdrawal has mainly focused on full-time students. The studies have revealed factors such as academic performance, financial difficulties, and personal circumstances as the key contributors (Fortin et al., 2016; Xuereb, 2014). However, no attempt has been made to explore the part-time students with issues different from their full-time counterparts. Some research indicates that external factors like work and family responsibilities have been found to affect the retention of part-time students (e.g., Harrison, 2006). However, minimal research has been conducted to systematically examine these groups' internal and external withdrawal determinants. Hence, this study is designed to fill this gap by exploring the reasons for part-time student withdrawal at SPACE, UTM to understand better their challenges and how they arrive at their decisions.

Understanding the determinants of part-time student withdrawal is crucial in developing strategic interventions to enhance student retention rates and academic achievement (Lee, N. E., 2017). This research will be necessary for higher education institutions, including SPACE and UTM, to know the critical internal and external factors that influence withdrawal decisions and, therefore, to develop particular support measures. Furthermore, the findings can help to improve policy to create a more inclusive learning environment for part-time students. This study also contributes to the growing body of knowledge in higher education research by filling a significant gap in the literature on part-time student retention, thus providing a foundation for future studies in this area.

1.1 Research Objectives

This study aims to:

1. Identify the key internal and external factors contributing to part-time student withdrawal in SPACE, UTM.
2. Analyze the relative significance of different withdrawal factors (e.g., financial, personal, institutional).

1.2 Research Questions

The study seeks to answer the following research questions:

1. What internal and external factors influence part-time student withdrawal?
2. How do these factors vary across different demographic groups (e.g., gender, field of study, employment status)?

By addressing these research questions, this study seeks to provide a comprehensive understanding of the challenges faced by part-time students and propose actionable solutions to enhance their academic success and persistence in higher education institutions.

2. Literature Review

Student withdrawal is critical in higher education, particularly for part-time students who face unique challenges (Andres, L., & Carpenter, S.,1997). This section reviews existing research on student withdrawal, categorizing findings into internal and external factors, and explores theoretical frameworks that underpin this study.

2.1 Internal Factors of Student Withdrawal

2.1.1 Academic Challenges

Mehra, N. (1973) has identified student withdrawal as a failure in academic achievement. Xuereb (2014) elaborates more on the fact that students who have difficulties with the coursework, fail assessments, or are not quite sure what is expected of them in a given course are likely to leave the institution. For instance, Fortin et al. (2016) and Haggan (1996) have established that students with lower Grade Point Average (GPA) are likely to withdraw. Helou (2018) pointed out that student withdrawal is not only academic-related, but lack of institutional support is a significant factor that affects student persistence.

2.1.2 Institutional Policies and Support

The main factor affecting student retention is institutional support and policy. Harrison (2006) asserts that academic support services for part-time students are mainly disregarded and that universities are built solely to accommodate the demands of full-time students. Nonetheless, Demeter-Karászi et al. (2019) discovered that part-time student dropout rates are lower in universities with strong mentorship and advising programs and a high level of learning flexibility. This outcome disparity demonstrates that effective student support systems can lower withdrawal rates even while political regulations may act as a barrier.

2.1.3 Psychological and Motivational Factors

Deci et al. (2018) then explained that students with a high intrinsic drive will probably remain engaged with their studies, adopting the Self-Determination Theory. Xuereb (2014) also mentioned that students who do not feel they belong to their academic community will be disconnected. However, Hjorth et al. (2016) found that although psychological factors are involved in the withdrawal process, they are also influenced by external factors like work and finance.

2.2 External Factors Influencing Student Withdrawal

2.2.1 Financial Constraints

The primary cause of student withdrawals is financial strain. The most significant causes of dropout rates, according to Fortin et al. (2016), are living expenses, tuition fees, and the lack of financial aid. This was corroborated by Zainol and Salleh (2021), who noted that the primary cause of dropout is a lack of finances. According to Grau-Valldosera, J., & Minguillón, J. (2014), students with adequate financial support but no academic or institutional support may also withdraw, proving that financial limitations are not the leading cause of withdrawal.

2.2.2 Work-Study Balance

Many students work part-time, which can lead to academic disengagement. Packham et al. (2004) pointed out that time management issues were the main reason for student withdrawal in work-study competitions. Markle, G (2015) counterposed that students with good time management skills and supportive employers will likely continue studying. Hence, based on this, work-study conflicts are not always a cause of withdrawal but rather a function of the amount of institutional and employer support.

2.2.3 Family and Personal Responsibilities

Students who have dependents or experience personal challenges like illness or bereavement are more likely to drop out, according to Dupéré et al. (2015). Zainol and Salleh (2021) found that students with high family support could complete their programs. Hence, it can be concluded that external social support can alleviate the risk of withdrawal while personal factors are the drawbacks.

2.3 Theoretical Frameworks on Student Retention

2.3.1 Tinto's Student Integration Model

Tinto's (1993) Student Integration Model identifies academic and social integration as determinants of student persistence. Instead, Xuereb (2014) and Helou (2018) back this claim, stating that students connected to their institutions will likely finish their programs. However, Fortin et al. (2016) criticize Tinto's model, which is that economic pressures often outweigh the benefits of social integration, especially for part-time students.

2.3.2 Bean's Student Attrition Model

In his 1980 book, Bean focused on the role of environmental factors in student attrition – financial problems, work and family responsibilities, etc. This model agrees with Zainol and Salleh (2021), who also noted the role of economic and personal pressures in student withdrawal. Hence, according to Harrison (2006), institutional factors such as inadequate student support services should also be considered, in addition to external factors.

2.4 Conclusion of the Literature Review

The literature review also shows that internal and external factors influence part-time student withdrawal rates. According to Xuereb (2014) and Fortin et al. (2016), academic challenges are seen as the primary internal factors that make students leave the institution, while Harrison (2006) and Demeter-Karászi et al. (2019) have agreed that institutional support is essential in this regard. According to Deci et al. (2018), the external pressures include financial constraints (Zainol & Salleh, 2021), work-study balance (Packham et al., 2004), and family responsibilities (Dupéré et al., 2015), which make the retention of students a complex task.

Although the present research contributes important insights, very few studies are based on one framework that can be applied to part-time students to incorporate these factors. From here, this study continues to explore the interactions between these factors in the context of SPACE and UTM to provide a more holistic view of part-time student withdrawal. This study extends Tinto's (1993) and Bean's (1980) models and applies them to develop a more contextually relevant framework for understanding student attrition. The results will be used to develop specific strategies to enhance part-time student retention in higher education institutions.

3. Methodology

This section presents the research design, the study location, the sampling technique, the questionnaire's construction, the data collection methods, and the study's analytical approaches.

3.1 Institutional Setting

The research was conducted at the School of Professional and Continuing Education (SPACE) of the Universiti Teknologi Malaysia (UTM). Firms offering part-time degree courses and nontraditional learners engaged in work and other activities are the target audience of SPACE, UTM. It has several learning centers in Malaysia that study diverse students.

3.2 Research Design

This study used a descriptive research design to examine the factors affecting part-time student withdrawal. Descriptive research determines trends, finds patterns, and interprets data collected from student withdrawal cases over a particular period.

3.3 Sampling Technique

The study guarantees the inclusion of different categories of students by using a stratified sampling technique. The sample consisted of part-time students who left SPACE and UTM, formally withdrawing between 2010 and 2022. The data was collected from the university's withdrawal records, and other factors like faculty, gender, and year of enrollment were used to categorize students into groups.

3.4 Foundation of the Questionnaire

The data for this study were collected from the official Withdrawal Form from SPACE, UTM. This form is an institutional document where students indicate their reasons for withdrawal and choose from predefined categories like financial issues, personal challenges, health concerns, work commitments, program suitability, and alternative academic opportunities. Furthermore, there is an open-ended section on the form where students can elaborate on their reasons and qualitative insights. Because the form is an administrative requirement for all withdrawing students, it comprehensively covers withdrawal reasons across all student demographics. Key patterns and factors influencing student withdrawal were systematically analyzed from the responses. The data for this study were collected from the official Withdrawal Form from SPACE, UTM. This form acts as an institutional document on which students indicate their reasons for withdrawal and choose from predefined categories such as financial issues, personal challenges, health concerns, work commitments, program suitability, and alternative academic opportunities. Furthermore, there is an open-ended section on the form where students can elaborate on their reasons and qualitative insights. Because the form is an administrative requirement for all withdrawing students, it comprehensively covers withdrawal reasons across all student demographics. Key patterns and factors influencing student withdrawal were analyzed systematically in the responses.

3.5 Data Collection Method

Data were collected from secondary data sources, including exit interview questions in the official withdrawal form. The institution collected these responses at the time of withdrawal. The structured questions helped capture qualitative insights into why the students discontinued their studies, and the data set was reasonably large. Other institutional data on student demographics and enrollment trends accompanied the findings.

3.6 Data Analysis Techniques

Quantitative data were analyzed using IBM SPSS Version 26, and qualitative responses were analyzed using thematic analysis. Frequencies, percentages, and means were used in descriptive statistics to describe the prevalence of withdrawal factors. In addition, chi-square tests were used to analyze the frequency of withdrawal reasons and their relationship with the demographic variables. Thematic analysis was used to categorize the qualitative responses from the exit interviews to develop recurring patterns and emerging themes. Hence, the present study has adopted a holistic approach towards part-time student withdrawal at SPACE, UTM. Hence, secondary data analysis from exit interviews has been integrated to offer a strong basis for interpreting the key determinants of student retention and dropout rates.

4. Results and Findings

4.1 Overview of Collected Data

The collected data provides a comprehensive view of the factors influencing student

withdrawal at SPACE, UTM. The dataset consists of responses from students who withdrew between 2010 and 2022, with 749 cases analyzed. The findings highlight both internal and external factors affecting student retention.

4.2 Demographic Information

As shown in Figure 1, the sample consists of 67.82% male and 32.18% female students. Figure 2 indicates that the Faculty of Mechanical Engineering had the highest representation, accounting for 22.8% of the respondents, followed by the Faculty of Electrical Engineering (15.80%) and the Faculty of Civil Engineering (14.20%). Figure 3 presents the distribution of students across various courses, revealing that students from SMM, SKMM, SKAW, SHR, SEE, SAW, and other courses constituted 14.82%, 5.87%, 6.01%, 5.34%, 10.95%, 6.54%, and 50.47%, respectively, of the total sample of 749 respondents. Finally, Figure 4 illustrates the distribution of respondents by the institutional center, showing that most students were enrolled at the Kuala Lumpur center (83.20%), followed by the Johor Bahru center (15.50%).

4.3 Thematic Analysis of Open-Ended Responses

A thematic analysis of the open-ended responses revealed recurring patterns in students' experiences. Many students expressed frustration with institutional support services, while others highlighted the need for more flexible learning arrangements. Suggestions from students included increased financial aid options, improved part-time student engagement, and expanded counseling services.

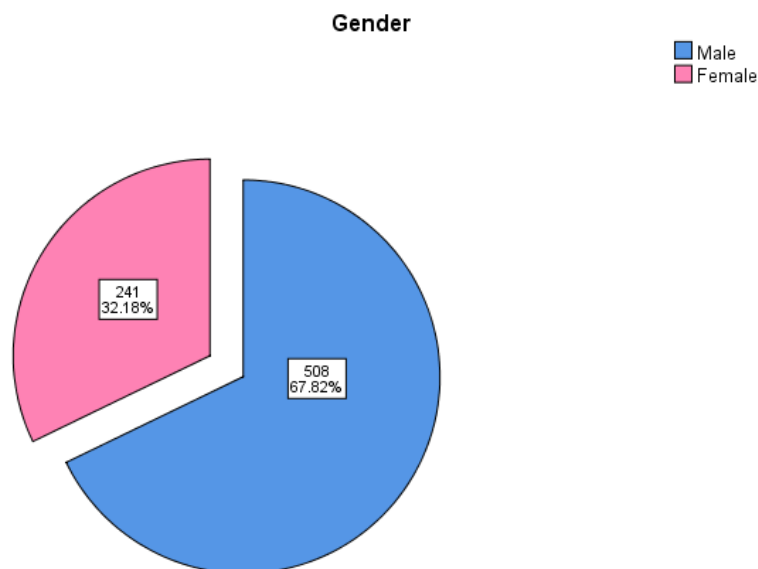


Figure 1. Gender

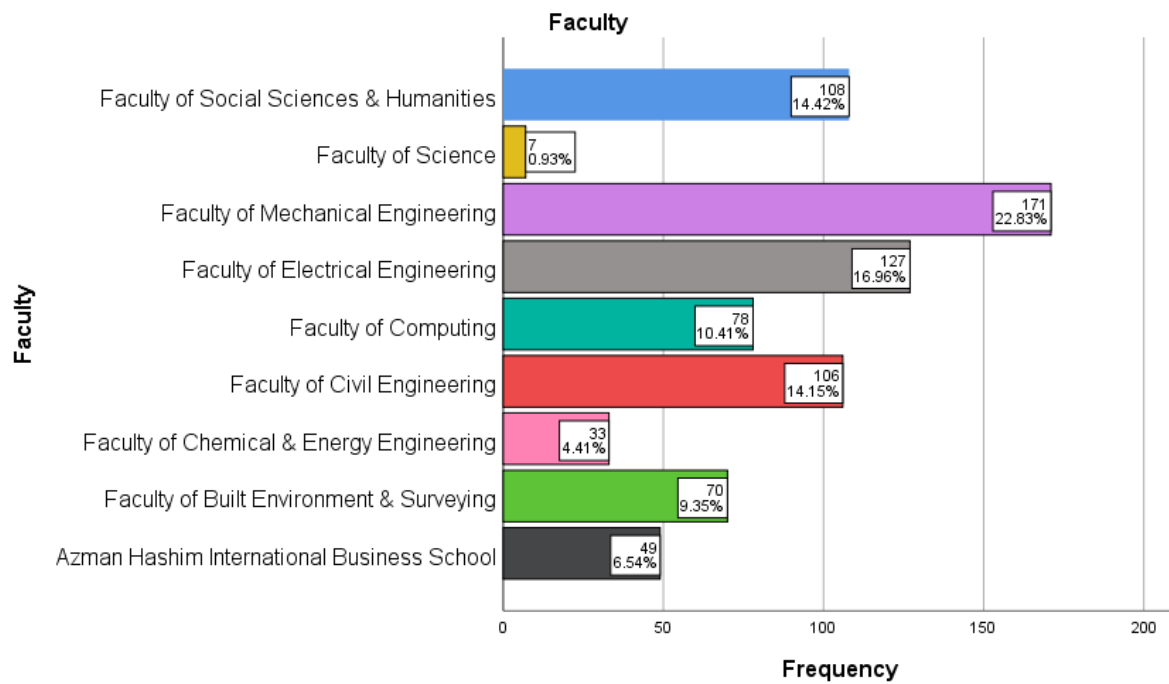


Figure 2. Faculty

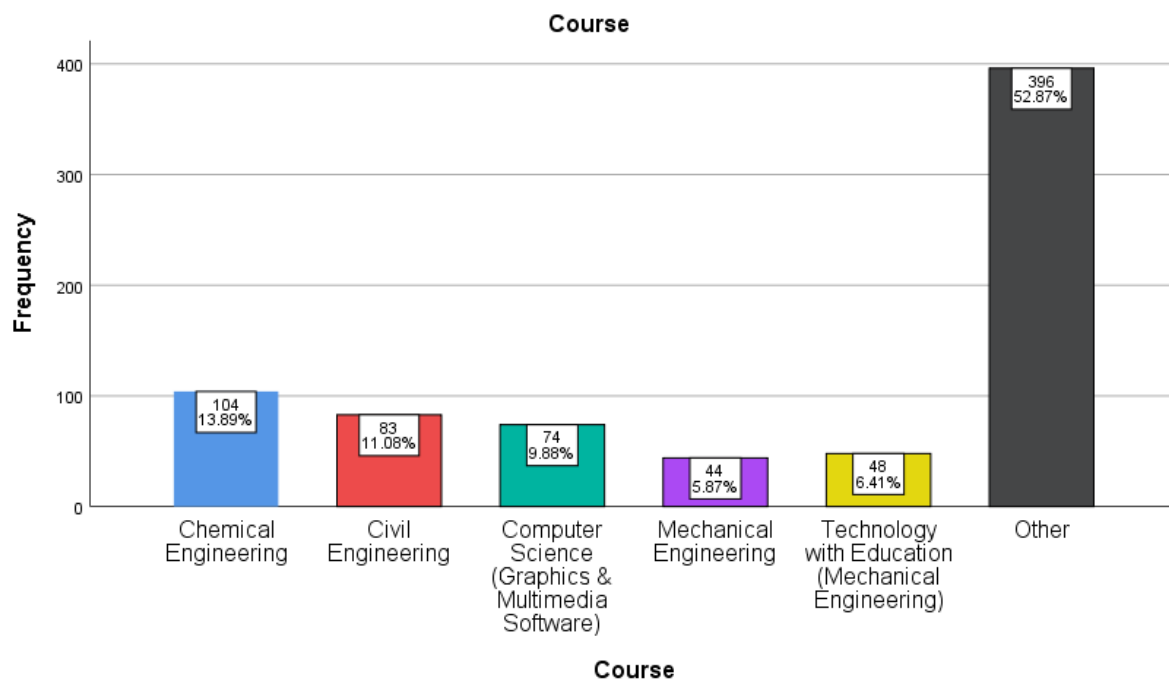


Figure 3. Course

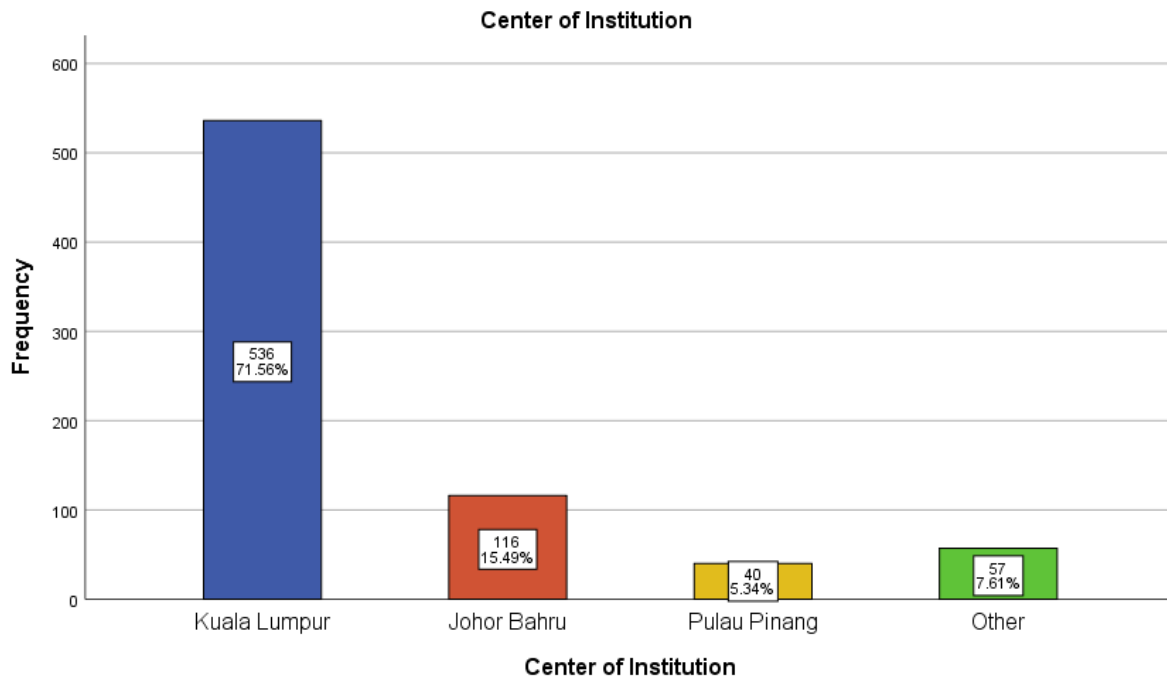


Figure 4. Center of Institution

4.4 Demographic Distribution of Graduates and Withdrawn Students

Table 1 presents the demographic distribution of respondents based on their graduation and withdrawal status using descriptive statistics. By gender, male graduates account for 34.45% of the total student population, while male students who withdrew constitute a slightly lower percentage (33.38%), indicating minimal variation between the two groups. Similarly, the Faculty of Mechanical Engineering has the highest representation among faculties, with only a marginal difference (0.15%) between graduates and withdrawn students. Regarding course enrollment, SMM courses had the highest proportion of graduate students, comprising 11.35% of the total graduates.

Finally, based on institutional center distribution, graduates from the Kuala Lumpur center represent the most significant proportion, accounting for 37.52% of the total graduates. A slightly lower percentage (34.05%) of students who withdrew also originated from the Kuala Lumpur center, indicating a comparable distribution pattern between graduate and withdrawn students.

Table 1. Descriptive statistics of graduates and withdrawal students based on demographic information

Variables	Category	Graduated (n=380)	Withdrawn (n=369)
		Frequency & Percentage (%)	
Gender	Male	258 (34.45)	250 (33.38)
	Female	122 (16.29)	119 (15.89)
Faculty	Azman Hashim International Business School	21 (2.80)	28 (3.74)
	Faculty of Built Environment & Surveying	40 (5.34)	30 (4.01)
	Faculty of Science	5 (0.67)	2 (0.27)
	Faculty of Computing	34 (4.54)	44 (5.87)
	Faculty of Social Sciences & Humanities	75 (10.02)	33 (4.41)
	Faculty of Civil Engineering	42 (5.61)	64 (8.54)
	Faculty of Electrical Engineering	73 (9.75)	54 (7.21)
	Faculty of Mechanical Engineering	85 (11.35)	86 (11.48)
	Faculty of Chemical & Energy Engineering	5 (0.67)	28 (3.74)
	Course	Chemical Engineering	103 (13.75)
Civil Engineering		40 (5.34)	43 (5.74)
Computer Science (Graphics & Multimedia Software)		73 (9.75)	1 (0.13)
Technology with Education (Mechanical Engineering)		47 (6.28)	1 (0.13)
Mechanical Engineering		0 (0.00)	44 (5.87)
Other		117 (15.62)	279 (37.25)
Center of Institution	Kuala Lumpur	281 (37.52)	255 (34.05)
	Johor Bahru	69 (9.21)	47 (6.28)
	Pulau Pinang	15 (2.00)	25 (3.34)
	Other (Miri, Kulim, Kuching, Kuantan, Kuala Terengganu, Kota Kinabalu, Kota Bharu, Kerteh, Ipoh and Alor Setar)	15 (2.00)	42 (5.61)

4.5 Determinants of Part-time Student Withdrawal

Figure 5 illustrates the causes of part-time student withdrawal from SPACE, categorizing these into internal (43.6%) and external (56.4%) factors. Among the internal factors, the

predominant reason for withdrawal was institutional dismissal due to inactivity for four semesters (38.5%). This finding aligns with Demeter-Karászi et al. (2019), who reported that a student’s status is terminated if the suspension period exceeds the allowed duration. Institutions may grant an extended suspension upon request; however, student status is automatically revoked if no request is submitted. Additionally, only 5.1% of students withdrew due to failure to meet program requirements. More so, external factors were the leading cause of more students leaving the classroom, with personal reasons (33.1%) being the most common reason. This result aligns with the study by Zainol and Salleh (2021), who established that students with strong family support and no personal problems are likely to continue their studies. Furthermore, financial constraints were also noted to be a significant factor that led to withdrawal (19.0%), which conforms with Zainol and Salleh (2021), who stressed that financial problems affect students’ academic performance and retention. Last but not least, 4.3% of students left for other reasons, such as health (1.9%), death (1.6%), and inappropriate program choice (0.8%).

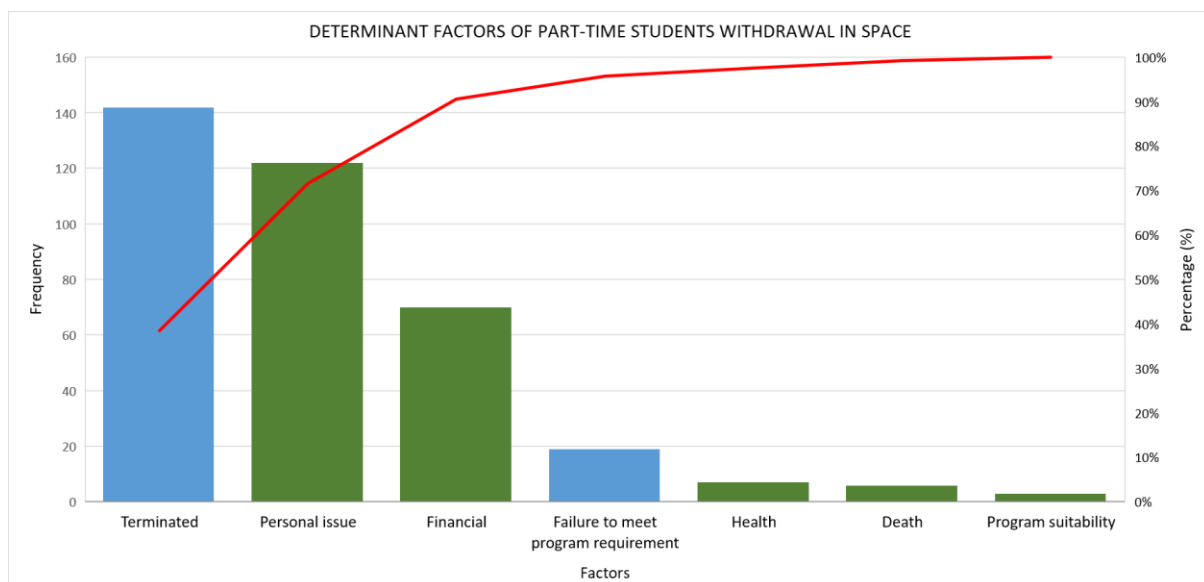


Figure 5. Factors Influencing Part-time Student Withdrawal in SPACE

Note: The blue bar represents internal factors, while the green bar represents external factors.

5. Limitations and Future Research Directions

However, some of these limitations should be acknowledged, while this study provides valuable insights into the determinant factors influencing part-time student withdrawal at SPACE, UTM.

First, this study is based on secondary data obtained from institutional withdrawal forms and, as such, does not offer a complete picture of students’ experiences, especially regarding emotional, psychological, or unreported external factors. Future research could include in-depth qualitative interviews to give a more holistic view of student withdrawal.

Second, the study only considers one institution (SPACE, UTM), and the findings cannot be generalized to other higher education institutions with different academic structures, student demographics, or policies. Comparative studies across multiple institutions, locally and internationally, could increase the broader applicability of the findings.

Third, this study does not explore institutional intervention strategies that could mitigate student withdrawal. Future research should examine what strategies higher education institutions can adopt to improve part-time student retention, thereby providing practical recommendations for universities and policymakers.

Addressing these limitations will allow future research to build upon these findings and contribute to more effective intervention strategies for improving part-time student retention.

6. Conclusion

The findings of this study indicate that two primary categories—internal and external factors—contribute to part-time student withdrawal at SPACE, UTM. Among the internal factors, the most significant contributor is student termination, accounting for 38.5% of cases. According to the university's academic handbook for part-time students, individuals who remain inactive for four consecutive semesters face expulsion. This policy contrasts with the regulations for full-time students, where inactivity for just one semester results in immediate dismissal. While termination is ultimately a consequence of the student's failure to remain engaged, it is classified as an internal factor because the action is enforced by SPACE academic management.

Another internal factor identified is failure to meet the program's requirements, which accounts for 5.1% of withdrawals. This occurs when students exceed the maximum number of semesters allowed to complete their studies. Similar to the termination factor, this withdrawal decision is implemented by academic management, further reinforcing its classification as an internal determinant.

Conversely, external factors were identified through self-reported data collected from students' withdrawal application forms, where individuals selected predefined reasons for discontinuing their studies. The most frequently cited external factors, ranked from highest to lowest, include personal issues (33.1%), financial constraints (19.0%), health-related concerns (1.9%), death (1.0%), and program suitability (0.8%).

This study has successfully identified key determinants influencing part-time students' withdrawal at SPACE, UTM. As illustrated in Figure 1, these findings highlight factors that require further consideration, particularly their implications for student retention. Since student withdrawal rates directly impact the institution's performance as a business entity within a public university, proactive measures should be taken to mitigate these issues. Additionally, the data indicate that while internal factors contribute to student withdrawals, dissatisfaction with SPACE services is not a primary reason for discontinuation.

Acknowledgments

The authors would like to express their sincere gratitude to UTMSPACE for the financial support provided through the Potential Development Fund (PDF) research grant (SP-PDF2203).

Authors contributions

Ainaa Farhana Ramli and Siti Munira Jamil conceptualized the study and developed the research framework. Nurul Raudhah Zulkifli was responsible for the methodology and findings section. All authors contributed equally to data collection, analysis, and writing the initial manuscript draft. Fatin Shaqira Abdul Hadi and Nur Syuhada Ismail were assigned specific research tasks equally among group members. Ismail Mohamad provided critical insights and supervision. Ainaa Farhana Ramli and Siti Munira Jamil reviewed and approved the final version of the manuscript for submission. All authors have read and agreed to the published version of the manuscript.

Funding

This research was funded by the Potential Development Fund (PDF) research grant (SP-PDF2203).

Competing interests

The authors declare that they have no competing interests related to this research.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Macrothink Institute.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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