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A Qualitative Study of the Dropout Risk Factors in Open and Distance Learning (ODL)

Nora'ayu Ahmad Uzir^{1*}, Muhammad Abdul Aziz Nur Izzuddin Izham¹,
Irni Eliana Khairuddin¹, Wannisa Matcha²

* Corresponding Author

¹ School of Information Science, College of Computing, Informatics and Media, Universiti Teknologi MARA, Puncak Perdana Campus
40150 Shah Alam, Selangor, Malaysia

² Faculty of Communication Sciences, Prince of Songkla University, Thailand

n.uzir@uitm.edu.my, 2021693244@student.uitm.edu.my, imieliana@uitm.edu.my, wannisa.ma@psu.ac.th
Tel: +6012-6777653

Abstract

This paper addresses the perspective of undergraduate students of Open and Distance Learning (ODL) – a particular learning and teaching environment that is conducted virtually. This paper explores the ODL environment from the participants' perspective and focuses on 15 undergraduate students who dropped out of the academic course. This qualitative study aims to understand the reasons behind learners' decision to leave so that ideas might be developed for the successful implementation of ODL environments in the future that would appeal to all learners. The analysis showed that students left the class for eight factors: self-regulation, personal, teaching quality, environment, emotional, financial, communication and technological factors. The paper concludes by proposing several recommendations to reduce the risk of dropout for the successful future of ODL.

Keywords: Student Dropout, Open and Distance Learning, Higher Education, Information Management

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1.0 Introduction

Sustainable Development Goal 4 (SDG4) is a global goal established by the United Nations (UN) as part of the 2030 Agenda for Sustainable Development. SDG4 is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. It recognizes education as a fundamental human right and a critical enabler for achieving sustainable development worldwide. The enrolment of higher education in Malaysia is of immense importance for the nation's economic, social, and individual well-being. It contributes to economic growth, social mobility, and individual empowerment. It is a key investment in the human capital of the nation, fostering a skilled, educated, and socially responsible workforce. Ensuring equitable access to higher education and promoting its quality and relevance are critical for Malaysia's sustainable development and prosperity in the global knowledge economy (Ministry of Higher Education Malaysia, 2022).

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In particular, Universiti Teknologi MARA (UiTM), has been experiencing a steady growth in enrolment due to various factors such as increased access to higher education, expanded program offerings, and government initiatives to increase tertiary education participation. However, despite the positive trend of increased enrolment, the issue of student attrition has also been on the rise during the period from 2020 to 2021. There could be several reasons for the increase in student attrition at UiTM during this period. One possible factor could be the impact of the COVID-19 pandemic, which disrupted traditional modes of learning and affected students' academic progress. The sudden shift to online and blended learning modalities may have presented challenges for some students, such as limited access to resources, difficulties in adapting to remote learning environments, and lack of adequate support systems, leading to higher attrition rates.

This study aims to identify factors contributing to student attrition in Open and distance learning (ODL). ODL is defined as any formal or informal learning activity through the usage of information and communication technology to decrease distance, physically and mentally. This method provides flexibility for both students and instructors in terms of place and time. A survey was given to students to examine students' attitudes toward ODL. Objectively, by identifying the factors for a better understanding of students' behaviours and factors contributing to the early dropout risk, particularly in open and distance learning environments. Meanwhile, such previous studies may provide foundations of an immature framework and this proposed research is an effort to bridge such gap.

In the Malaysian context, the adoption of ODL as a response to the pandemic has illuminated both the potential and challenges of remote learning. Malaysia's diverse educational landscape has navigated the shift to ODL with varying degrees of success (Abdullah, Z. & Mohamad, S.M.N.H. (2022). Despite its promise, ODL's adoption has revealed issues such as limited digital infrastructure, connectivity gaps, and varying degrees of preparedness among students, all of which contribute to student attrition. Hence, raises the urgency to understand the dynamics of attrition during ODL within the Malaysian higher education context.

UiTM as a leading Malaysian institution, has embraced ODL to ensure educational continuity during the pandemic. As UiTM transitioned to remote learning, the unique challenges faced by its students became apparent. The sudden shift to ODL platforms prompted by the pandemic exposed students to challenges related to digital literacy, access to technology, and the absence of physical interactions. Understanding the experiences of UiTM students within the ODL framework and the factors influencing attrition rates is essential for developing targeted interventions.

ODL introduces a flexible educational opportunity that offers students the freedom to study from anywhere and at any time over the Internet. Nevertheless, shifting the constraints of a conventional lesson structure and promoting an independent learning mode can be a "double-edged sword" for students. On one hand, it presents enormous chances to improve traditional education, however, it can also present a significant obstacle to the pedagogical application of online education. ODL necessitates that students have a high degree of autonomy and responsibility in choosing their courses of study. To finish learning assignments and consequently reach the associated learning goals, students must be able to manage their study time throughout the allocated learning periods.

However, the aim could not reach every student and some of them might fail to complete their study due to many reasons. Higher education institutions continue to face a substantial and expensive problem with student attrition, also known as student dropout. Universities and students both suffer from attrition. Failure to complete a degree will hinder students' efforts to improve their socioeconomic standing, but for universities, attrition results in a significant financial loss and harms their reputation because this performance is crucial to how the institution will allocate funding for its current and graduate students. Therefore, a qualitative study is needed to understand the reasons behind those learners' decision to leave their studies, to allow for a better understanding of students' behaviours and factors contributing to the early dropout risk, particularly in open and distance learning environments.

2.0 Research Methods

2.1 Qualitative Study (Semi-Structured Interview)

The study utilized a semi-structured interview approach to collect data from 15 former students of Universiti Teknologi MARA, who had dropped out of their studies. Participants were purposively selected based on their availability and willingness to share their experiences. The sample included individuals who had dropped out from UiTM within the past few years during the COVID-19 pandemic in Malaysia which resulted in the Movement Control Order in the year 2020, representing various programs, disciplines, and levels of study. The interviews were conducted from early August to late November 2022, based on the availability and scheduling preferences of the participants. The interviews were carried out via video conferencing with applications such as Google Meet or Zoom Meetings, depending on the preferences of the participants. A semi-structured interview guide was developed for the study, which included open-ended questions and prompts to explore the participants' reasons for dropping out, their experiences during their online studies at home, and their perceptions of the factors that contributed to their decision to discontinue their studies.

In addition, the interview guide was designed to allow for flexibility and in-depth exploration of the research topic. The interviews lasted for an average duration of 30 minutes to 1 hour and 30 minutes, depending on the responses and engagement of the participants. Before the interviews, the participants were provided with information about the background, purpose and nature of the study, and their informed consent was obtained. The interviews were audio-recorded with the participant's permission, and detailed notes were taken during the interviews to capture important points and observations. The recorded interviews were transcribed verbatim, and the data were analyzed using thematic analysis. Themes and patterns were identified from the interview data, and the findings were interpreted in light of the research questions and study objectives. The study followed ethical guidelines for research involving human participants, including obtaining informed consent, ensuring confidentiality and privacy, and maintaining the anonymity of the participants. The study received ethical approval from the UiTM ethics review board.

2.2 Sampling Method

Non-probability sampling methods are commonly used in social science research, particularly when studying hard-to-reach populations or sensitive topics such as student dropouts. Non-probability sampling allows for the inclusion of participants who may be difficult to recruit through traditional probability sampling methods. For example, in a study on student dropouts, non-probability sampling may be appropriate for including students who have already dropped out and are no longer accessible through traditional sampling methods, such as random sampling.

In the case of a study on student dropouts, using non-probability sampling methods such as purposive or snowball sampling can help ensure the inclusion of a diverse range of former students who have dropped out of university, including those who may not have been accessible through probability sampling methods. This can improve the validity and reliability of the research findings by providing a more comprehensive and nuanced understanding of the factors contributing to student dropout. In conclusion, non-probability sampling methods can be a valid and reliable approach to sampling in social science research, particularly in cases where traditional probability sampling methods may not be practical or feasible.

2.3 Inclusion and Exclusion Criteria

The inclusion criteria of research are important parameters that are used to define the target population of the study. In this case, the inclusion criteria are as follows: (i) Former students who experienced ODL during the pandemic in the year 2019-2022: This criterion specifies that the study will target former students who experienced ODL during the pandemic between the years 2019-2022. This criterion is important as it allows the study to focus on a specific group of individuals who were affected by the pandemic and may have faced unique challenges related to their learning experience, (ii) former students who dropped out from UiTM during ODL with poor CGPA: This criterion specifies that the study will target former students who dropped out from UiTM during ODL and had poor CGPA. This criterion is important as it allows the study to focus on a specific group of individuals who faced academic difficulties during ODL and eventually dropped out of the program. This criterion also enables the study to examine factors that may have contributed to poor academic performance and dropout among this specific group.

Meanwhile, the exclusion criteria include students who have been expelled or suspended from UiTM and will not be involved in this research due to their ineligibility to participate. These students have been removed from the university due to academic or disciplinary reasons, and therefore, their experiences may differ significantly from those of students who have dropped out voluntarily. Additionally, their participation may potentially skew the findings, as their experiences may not be representative of the broader student population. Thus, they will be excluded from the study to ensure that the data collected accurately represents the experiences of former UiTM students who have dropped out for other reasons. Overall, the inclusion and exclusion criteria help to define the target population of the study and provide a framework for selecting participants that are relevant to the research. Hence, the study can achieve greater precision in its analysis and contribute to a better understanding of the challenges faced by former UiTM students during ODL.

2.4 Data Analysis

NVivo 12 is a computer-assisted qualitative data analysis software (CAQDAS) tool used to analyze unstructured data, including text, audio, video, and images. It is designed to help researchers organize, analyze, and visualize data from qualitative research methods such as interviews, surveys, focus groups, and observations. The software provides tools for coding, categorizing, and querying data, as well as for creating visualizations and reports to help researchers make sense of their findings QSR International (2018).

Braun and Clarke's approach is a widely used method of reflexive thematic analysis in qualitative research. It involves the identification, analysis, and reporting of patterns and themes within data, to develop an in-depth understanding of the experiences, perspectives, and beliefs of participants. The following essay will explore the key steps involved in Braun and Clarke's approach. The first step in Braun and Clarke's approach is familiarizing oneself with the data. This involves reviewing the data, making notes, and developing a broad understanding of the material. Once familiar with the data, the second step is to generate initial codes. Initial codes are the first impressions, ideas, or concepts that emerge from the data. These codes are developed through a process of line-by-line coding, which involves examining each line of text and identifying patterns and themes.

The third step in Braun and Clarke's approach is to search for themes. Themes are patterns that occur across the data and may be identified by examining the initial codes. This involves grouping initial codes into broader categories or themes, which are then refined and developed into more detailed sub-themes.

The fourth step is to review and refine themes. This involves examining the themes and sub-themes, and determining whether they accurately represent the data. The themes and sub-themes are refined through a process of reflection, discussion, and revision until a final set of themes is developed. Overall, Braun and Clarke's approach provides a clear and systematic method for conducting reflexive thematic analysis. It allows for the identification of patterns and themes within qualitative data and enables researchers to develop an in-depth understanding of the experiences, perspectives, and beliefs.

3.0 Results

Table 1 highlights factors that contributed to the dropout risk in an ODL setting. Data from the 15 respondents are presented in descending order from highest to lowest of which factors reported by respondents in causing student attrition.

Table 1 Results of Qualitative Study

Factors	Times referenced	Percentage
Self-regulation factors	59	23.0%
Personal factors	53	20.7%
Teaching Quality factors	41	16.0%
Environmental factors	38	14.8%
Emotional factors	21	8.2%
Financial factors	20	7.8%
Communication factors	13	5.1%
Technological factors	11	4.3%

3.1 Self-Regulation Factor

Research has indicated that students often develop unfavourable habits while studying from home. Notably, students frequently struggle with poor self-organization because they lack the drive to pursue self-directed learning. This dependence on instructor direction stems from the conventional face-to-face classroom environment. Students' inability to focus during online classes owing to different distractions, such as smartphone use and computer multitasking while not completely focused on the course material, is a major barrier for ODL. It emphasizes the necessity for students to take greater responsibility for their learning and self-regulate their study habits, as relying solely on instructors is insufficient.

3.2 Personal Factor

This study found that when students first switched to ODL, they frequently went through a type of "culture shock" and lacked the prerequisite training for this new way of learning. Students were commonly burdened by personal obligations and diversions while at home, such as taking care of family members, doing chores, and working part-time jobs. ODL also tended to reduce students' interest in their studies because there was no personal connection between them and their teachers. Many students expressed dissatisfaction with ODL and a preference for face-to-face instruction over sitting in front of a computer screen.

3.3 Teaching Quality Factor

The study found that 14 out of 15 respondents shared their concerns and frustrations regarding the teaching quality during ODL classes. Their feedback shed light on various aspects of teaching that they found lacking or problematic, including lecturer teaching styles, feedback responses from lecturers, and overall engagement with students. One of the primary concerns expressed by the students was related to the teaching styles employed by the lecturers in the ODL setting. Some lecturers relied heavily on recorded lectures or pre-prepared materials without providing sufficient opportunities for interactive and engaging discussions. The students craved more interactive sessions that would foster meaningful exchanges of ideas and allow for clarifications on complex topics. The lack of real-time interaction and dialogue with their lecturers created a sense of detachment and hindered their ability to fully grasp and apply the course content.

3.4 Environmental Factor

The introduction of ODL brought to light the significant influence of geographical location on Internet speed, resulting in slower connections in rural areas compared to urban counterparts. This discrepancy in Internet speed made it difficult for students to learn. Slower internet users had the option of seeing class recordings later, but this made it more difficult for them to participate in real-time discussions. Additionally, in instances where presentations are involved, this might affect students' academic achievement.

3.5 Emotional Factor

This study found that the shift to remote learning from home has resulted in a notable absence of connections with peers, replacing all in-person interactions with screens and text messages. This circumstance frequently causes feelings of isolation while studying or working together on group projects. ODL presents difficulties for instructors as well because it makes it difficult to build emotional connections with students. When they cannot see students' expressions to gauge their replies to questions, instructors struggle to successfully engage the class.

3.6 Financial Factor

The sudden shift to remote education required access to computers, laptops, tablets, or smartphones, as well as a stable internet connection. These additional expenses put a financial strain on many families, especially those who were already facing economic challenges. Moreover, the cost of online learning varies across different courses. Some courses required students to purchase specific software, access online platforms, or subscribe to digital resources, which further added to the financial burden. Due to the various costs of these resources, some students had to set aside a larger amount of money than others, escalating already existing disparities. This financial strain had a direct impact on the student's ability to fully engage in their studies and participate effectively in the online learning environment.

3.7 Communication Factor

This study discovered that eight respondents reported that their lecturers experienced problems with their internet connection during online classes. These issues ranged from intermittent connectivity to complete disconnection. As a result, students faced disruptions, lagging, and even complete interruptions in their learning sessions. Such internet-related problems hindered the flow of the class,

affected real-time interaction, and impeded the delivery of course content. Students' online learning experiences may be adversely affected by internet difficulties and technical difficulties faced by instructors. Communication, comprehension, and participation are hampered by internet access issues, poor microphone quality, and a lack of face-to-face interaction.

3.8 Technological Factor

The respondents highlighted the specific hardware requirements they lacked, including earphones, microphones, laptops, phones, and a reliable internet connection. These hardware limitations have impacted their ability to effectively communicate, complete assignments, and ensure a smooth learning experience in ODL. For active involvement, teamwork, and engagement in online discussions, good audio quality is essential. Their technology and computers, however, were not strong enough to handle the demands of online education and tasks.

4.0 Recommendations

This study identified the following recommendations to reduce the risk of dropout among undergraduate students: (i) **Prioritize Teaching Quality** by recognizing that teaching quality emerged as a crucial factor in student attrition, educational institutions should focus on improving the quality of online instruction. This includes training instructors in effective online teaching methods, providing them with the necessary tools and resources, and promoting engagement and interaction in virtual classrooms, (ii) **Enhance Self-Regulation Skills** by giving the significant role of self-regulation in ODL, institutions should invest in programs and resources aimed at developing students' self-regulation skills. Providing guidance on time management, goal setting, and study strategies can empower students to take greater responsibility for their learning, (iii) **Supportive Learning Environment** by creating a supportive online learning environment that minimizes distractions and fosters concentration. This can include providing students with guidelines for setting up productive study spaces at home and encouraging them to minimize interruptions during online classes, (iv) **Accessible to Technology** by addressing the digital divide by ensuring that all students have access to the necessary technology and internet connectivity for ODL. Institutions can explore options for providing devices and affordable internet access to students who need them, (v) **Regular Revision Practice** by encouraging students to adopt regular and thorough revision practices. Promoting the importance of reviewing course materials can help students consolidate knowledge, identify areas of weakness, and prepare effectively for assessments, (vi) **Engagement and Interaction** by implementing strategies to enhance student engagement and interaction in the online learning environment. This can involve incorporating collaborative activities, group discussions, and peer-to-peer interactions to create a sense of community and reduce feelings of isolation, (vii) **Mental Health Support** by recognizing the potential mental health challenges faced by students in ODL, especially in light of isolation and distractions. Provide access to counselling services and resources to support student's emotional well-being, (viii) **Flexibility and Communication** by offering flexibility in course schedules and communication channels to accommodate students' diverse needs and circumstances. Ensure that instructors are accessible and responsive to students' inquiries, particularly during off-class hours, and (ix) **Monitoring and Intervention** by implementing a system for monitoring students' progress and identifying those at risk of attrition early in their ODL journey. Provide timely interventions, such as academic advising or tutoring, to support struggling students. Hence, implementation of these recommendations will help students adapt to the challenges of online learning and maximize their growth potential.

5.0 Limitations and Conclusions

The current study has several notable limitations that need to be carefully addressed in future research. First, this study included a sample consisting primarily of students from Universiti Teknologi MARA. As such, the results of the study may not be generalizable to huge populations of students. Additionally, the interviews have revealed discrete disadvantages such as an ambiguous term or recall difficulty, that may be insufficient to capture and examine students' conditions, intentions, and motivations in an ODL learning setting. If possible, future studies should involve general population samples with relevant demographic backgrounds or past academic history to allow for a better understanding of learners' characteristics and factors contributing to the success or failure of a course.

In conclusion, this research has shed light on the multilayered factors contributing to student attrition in the realm of ODL. Through a systematic examination of these factors, critical areas have been identified that demand attention to enhance student retention and success in ODL settings. The findings underscore the paramount importance of self-regulation skills among ODL students. To mitigate attrition, institutions must prioritize initiatives that empower students to manage their time effectively, set goals, and cultivate self-discipline. Furthermore, teaching quality plays a pivotal role in the online learning experience. Instructors must be equipped with the tools and training required for effective online teaching, fostering engagement and interaction within virtual classrooms. Distractions in the home environment and a lack of concentration pose significant challenges to students' ODL journey.

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