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Identifying Reasons That Contribute to Dropout Rates in Open and Distance Learning

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Abstract

This study examined the reasons for high dropout numbers in programs offered through open and distance education (ODE). A mixed method approach was employed to collect data from a purposive sample of instructors and students at the Open University of Sri Lanka. A total of 38 reasons were revealed, of which aligned with existing dropout models as well as a few country- and institute-specific reasons. Results indicated that internal and external reasons mainly influenced students to drop out; student characteristics and skills also contributed to the students' decision. The most influential reasons were job and family commitment, workload, time management, and flexibility, indicating that employed students were the more severely affected fraction of the dropout population. The researchers attempted to create a holistic picture of the dropout phenomenon in ODE, providing a foundation for policymakers and educators to implement targeted interventions and individualized support mechanisms to foster student retention.

Keywords: dropout, student retention, open education**,** distance education, open and distance learning, online learning, higher education, Sri Lanka

Introduction

United Nations Educational, Scientific and Cultural Organization (Carlsen et al., 2016) defines distance education as a form of education in which the instructor and the student are separated in time and space, with knowledge-sharing occurring through printed resources, online learning, blended learning, or any other convenient delivery mode. Even though there are many advantages to open and distance education (ODE), the relatively high dropout rates and comparatively low retention rates in ODE programs have been identified as the main challenges (Elibol & Bozkurt, 2023). Earlier studies identified dropping out as a complex and diverse phenomenon (Bağrıacık Yılmaz & Karataş, 2022). Accordingly, a vast number of reasons ranging from personal, academic, social, and institutional factors could be directing or forcing the learners to discontinue their studies. Especially in the case of ODE, dropout reasons vary widely, as students come from different demographic, educational, social, and economic backgrounds, with various abilities and intentions.

Despite growing demand for distance learning, ODE institutions have suffered from financial and reputation damages caused by low retention and, thus, high dropout rates (Reissman, 2012). In addition to the common factors identified by dropout models (Bean & Metzner, 1985; Rovai, 2003; Tinto, 1975) or reasons identified through empirical studies (Bağrıacık Yılmaz & Karataş, 2022; Mohammad et al., 2012; Musingafi et al., 2015; Shikulo & Lekhetho, 2020; Thistoll & Yates, 2016), universities delivering learning content through ODE may have experienced high dropout rates due to a specific set of reasons based on their own circumstances. Thus, various researchers have been encouraged and motivated to identify the underlying causes for dropouts within specific institutions and to propose mitigation measures (Banks & Dohy, 2019; Herath et al., 2022; Mohammad et al., 2012; Muljana & Luo, 2019; Musingafi et al., 2015; Reissman, 2012; Shin & Kim, 1999; Zuhairi et al., 2019).

This study addressed the question of why students in open and distance education (ODE) programs drop out. This study employed an exploratory sequential mixed methods design, which offers a more comprehensive understanding of the research problem by integrating both quantitative and qualitative data (Creswell & Guetterman, 2018). In the initial phase, data were collected from students who dropped out of the Bachelor of Science (B.Sc.) degree program as well academic staff of the Open University of Sri Lanka (OUSL) via face-to-face interviews. Insights from the qualitative data were then used to develop the quantitative phase and an online survey was administered to former students who had dropped out. Researchers expected to identify the reasons contributing to a learner dropping this program and, thereby, to portray a holistic picture of the dropping out phenomenon relevant to ODE setting thus enabling the implementation of mitigation strategies.

Significance and Originality of the Research Problem

Historically, ODE institutions have had high dropout rates (Elibol & Bozkurt, 2023, Qayyum et al., 2019). According to a study conducted based on 27 open universities from Commonwealth countries, the average attrition rate was 84.74% (Mishra, 2017), indicating the vital and immediate need to investigate the reasons behind dropouts and thereby to implement measures to increase student persistence. According to internal data from OUSL, within the six consecutive academic years 2016 to 2023, 7,516 students registered for the Bachelor of Science degree and 48% of them (i.e., 3,583) were identified as having dropped out. This

number may increase over time. Except for a few limited studies (Herath et al., 2022, Liyanagama, 2019) no comprehensive studies have been done to identify the reasons behind the dropping out of this particular program or any program at OSUL.

Most studies on the dropout issue have been conducted in North America and Europe (Rahmani et al., 2024) and most have focused on dropout in traditional education (Lorenzo-Quiles et al., 2023; Véliz Palomino & Ortega, 2023). As well, most used cross-sectional data, and the number of studies on understanding the dropout phenomenon with longitudinal data has been very limited. Analysing longitudinal data allowed us to gain a deeper perspective on dropout. In addition, such research within the context of a university in Asia enriched the related literature by providing a different socio-cultural and economic perspective.

Literature Review

ODE has bridged the geographical gap between institutions and learners and also created opportunities for learners to achieve their educational goals, which may otherwise not be achieved due to life commitments such as family responsibilities and employment (Elibol & Bozkurt, 2023). Reportedly, the dropout rate in ODE has been much higher than that in traditional education (Moore & Kearsley, 2012). As ODE has provided educational opportunities to a wide spectrum of students coming from any social, academic, or economic background, the high dropout numbers could be a cumulative result of a plethora of reasons (Bağrıacık Yılmaz & Karataş, 2022; Budiman, 2018; Elibol & Bozkurt, 2023; Park & Choi, 2009).

Several studies have offered valuable insights into the reasons why students drop out of ODE programs. For instance, Tinto's theoretical framework (Tinto, 1975) highlighted that academic, social, and institutional factors influence dropout. Some obvious reasons behind high dropout rates in ODE have included (a) poor goal commitment (Rovai, 2003); (b) low student-instructor interaction (Hawkins et al., 2012; Shikulo & Lekhetho, 2020); (c) a student's employment status and gender (Li & Wong, 2019); (d) students' physical separation from instructors and other students (Budiman, 2015); (e) student's intellectual development (Rovai, 2003); (f) prior academic performance (Muljana & Luo, 2019); (g) time management (Muljana & Luo, 2019); (h) computer and technology skills (Rovai, 2003); and (i) difficult exam conditions (Okur et al., 2019). Further, not-so-obvious reasons such as the instructor's qualifications (Thistoll & Yates, 2016), low student-student interaction (Muljana & Luo, 2019), and the tone of the instructor's e-mail to students (Stone & O'Shea, 2019) have also been cited as reasons that influenced student retention. Collectively, these findings demonstrate that dropout rates have been influenced by a complex interplay of pedagogical, technological, and socio-institutional factors, emphasizing the need for comprehensive strategies to improve student retention in ODE programs.

Definition of Dropout

A wide range of definitions for dropout can be found in the literature. One commonly accepted version is a student who has abandoned the program at any level of the program and who will never return to complete the course (Botelho et al., 2019). In most studies, passive students have also been considered dropouts (Bağrıacık Yılmaz & Karataş, 2022). In this study, we adopted the definition proposed by Botelho et al.

(2019) and defined the dropout rate as the percentage of students who left the program at any stage and were not expected to return to complete the course.

Existing Study Models of Dropout

Tinto's student integration model (1975) was based on research conducted in a traditional education setting, while Bean and Metzner's (1985) student attrition model was a theoretical framework designed for nontraditional students. Kember (1989) proposed a longitudinal process model to test dropout in distance education. Rovai's persistence model (2003) explained the factors that affected a learner's decision to drop out of online learning. Each of these models was either inspired by previous models or modified versions of them. Rovai's model encompassed variables identified by Tinto, and Bean and Metzner. It also included student needs, learning styles, and teaching styles. Rovai categorized variables into two stages based on when they affected the student—prior to admission and after admission. Student characteristics and skills were considered in the prior-to-admission stage. The after-admission stage considered internal factors such as variables related to education, and external factors such as the non-educational variables that came into effect after students enrolled in a program.

Recently, Bağrıacık Yılmaz and Karataş (2022) conducted a comprehensive study to identify influential reasons for high dropout rates in ODE by collecting data from not only the students but also from various other stakeholders, namely, field experts, instructors, administrators, and support staff. Bağrıacık Yılmaz and Karataş's (2022) study was an improved version of Rovai's (2003) persistence model and comprehensively summarized numerous possible reasons for the discontinuation of study programs in ODE. The four major themes identified by Rovai, namely, internal and external factors, student characteristics, and student skills, were adopted as is by Bağrıaçık Yılmaz and Karataş (2022). However, Rovai's model was updated with newer data to revise some variables, remove some variables, and introduce new variables. For example, social life was incorporated as a secondary reason under external factors; some key reasons such as resources, instructor characteristics, exams, and motivation were introduced under the internal factors group. Study habits and goal commitment were moved from internal factors to student characteristics, and ethnicity and gender were removed from the model. While improving Rovai's (2003) model, Bağrıacık Yılmaz and Karataş (2022) included time management in the self-regulation variable.

Method

Research Design

This study adopted an exploratory sequential mixed methods design consisting of two phases. Data were collected from students who dropped out of the B.Sc. degree as well as academic staff of OUSL via face-to-face interviews during the qualitative phase, and then an online survey was used to collect responses from dropped-out students during the quantitative phase.

Study Group and Sampling

The study group consisted of B.Sc. program students at OUSL who enrolled in the program structure initiated in 2016, which includes revised course content, assessment methods, evaluation criteria, and

related components, implemented through a program review. The target dropout student population was classified into the following three categories and data were collected from all three (Table 1).

- Non-starters officially withdrew from the program without participating in any academic activities or never sat for any of the continuous assessments or exams.
- Official dropouts had not registered (or at least obtained studentship) for five consecutive academic years.
- Potential dropouts had abandoned the program but did not belong to any of the above two categories.

The classified lists of registrants under each of these categories were obtained from the university's information technology division. Within the six consecutive academic years considered from 2016 to 2023, out of 7,516 registered students, 3,583 (48% of total registrants) were identified as the total dropout population. This total was made up of 1,002 non-starters (28% of total), 2,120 potential dropouts (59%), and 461 official dropouts (13%).

Table 1

Study Sample Populations: Number of Participants in Each Category

Category	Population	Sample for qualitative interviews	Sample for quantitative survey
Non-starters	1,002	02	153
Potential dropouts	2,120 [a]	20	180
Official dropouts	461	02	22
Academic staff	89	14	--
Total		38	355 out of 3583[b]

Note. [a]The potential dropout number is an approximation, as students may return to the program until they are officially phased out; [b]Total dropout population was 3583.

Data Collection

In the qualitative phase, in-person semi-structured interviews were conducted with 24 student participants and 14 instructors. To ensure in-depth analysis, the target student population was identified using the stratified simple random sampling method covering all three dropout categories. To obtain an unbiased sample, a sample of 16% of staff was selected from the whole population, covering all the departments of the Faculty of Natural Sciences. Most of the student participants were interviewed via phone or Zoom as per each participant's request. Staff interviews were mostly conducted face-to-face on site. Due to travel

difficulties, only a few academic staff from regional centers were interviewed online. The interviews were conducted in Sinhala or English, depending on each participant's preference. All participants were volunteers and a consent form was given before the interview. Most of the pre-prepared interview questions were open-ended allowing the interviewees to express their views and opinions freely. Based on the participants' answers, follow-up questions were asked to elicit more information, provide an in-depth perspective, or confirm their answers, if necessary. In this phase, participants' experiences, perceptions, and opinions of student dropouts were obtained. This included qualitative aspects into the reasons behind dropouts, challenges faced by students, and the support mechanisms available.

In the second phase of the research, an online survey was developed based on the outcomes of the qualitative analysis; the survey link was distributed among the whole study population via e-mail and/or SMS. The survey request was sent three times within one month. Responses were collected until the sample was statistically saturated. Some of the responses were collected over the phone as per the participant's request.

Data Analysis

Qualitative data analysis was conducted using both deductive and inductive techniques.

Content analysis was used as the main research method based on the constructivist epistemology which reflects the participant's experiences and their perception of reality. This made it easier to systematically code the data and put it into a systematic set of words, phrases, and themes within the data. The deductive approach helped us contextualize dropout reasons into predefined themes, while the inductive approach allowed us to look for new themes and reasons.

Dropout reasons were categorised into four themes based on Bağrıacık Yılmaz and Karataş (2022), namely internal and external reasons, student skills, and student characteristics. However, the inductive approach defined some new secondary reasons as needed during the data analysis. The collected data, including interview transcripts from both students and academic staff, were carefully organized, ensuring that all identifying information was removed to protect participant anonymity. The interviews conducted in Sinhala/Tamil languages were translated into English. One of the researchers fluent in both languages cross-checked the translations.

The online survey combined the reasons identified by the qualitative study and the reasons listed in Bağrıacık Yılmaz and Karataş (2022). Data were collected separately for different student groups (i.e., non-starters, potential dropouts, and official dropouts) by using the conditional sequence method. First, demographic information (see Table 2) and academic-related details were collected, including the registered center, language medium, and subject combination. A total of 45 potential dropout reasons were listed under six major categories (i.e., academic, university and administrative, student skills and characteristics, student preferences, external reasons, and other opportunities) for the students to choose from. A Likert scale was provided based on the degree of influence each reason made on the decision to drop out. The Likert scale was 0 to 3—0 represented *no effect* or *very low influence*, 1 indicated *low influence*, 2 represented *strong influence,* and 3 indicated *very strong influence*. The neutral option was

avoided to obtain specific opinions. Respondents could also write in any other dropout factor(s) not listed in the survey.

Table 2

Demographic Data of Study Participants

Category		Non-starters	Potential dropouts	Official dropouts	Total (%)
Total number		153	180	22	355
Gender	Male	69	56	7	132(37)
	Female	84	124	15	223(63)
Age	19–29 years	132	155	21	308(87)
	30–39 years	15	20	1	36(10)
	40–49 years	2	5	0	7(02)
	≥50 years	4	0	0	4(01)
Civil status	Single	119	130	18	267(75)
	Married	34	49	4	87(25)
	Separated	00	1	0	1(00)
Employment	Unemployed	61	60	3	124(35)
	Government	44	50	7	101(28)
	Semi-gov't	13	7	2	22(06)
	Private	30	57	10	97(27)
	Self-employed	5	6	0	11(03)

The collected data were analyzed using SPSS software to examine mainly descriptive statistics. To determine if there were any statistically significant differences among student groups or demographic groups, the researchers used Mann-Whitney U test (if two independent groups) or Kruskal-Wallis H Test (if more than two independent groups) appropriately. These rank-based nonparametric tests were used

because the Kolmogorov-Smirnov normality test, histograms, skewness, and kurtosis tests confirmed that the collected data did not fit a normal distribution. Statistical data is available upon request.

Research Ethics

Prior to the qualitative interviews and quantitative online survey, ethical review approval was obtained from the Ethical Clearance Committee of the Research Unit of OUSL. No risks associated with this research were expected or predicted—participants' privacy and anonymity were protected, and sensitive questions were not included in the interview. Participants in qualitative interviews singed a consent form prior to the interviews. Further, the first part of the online survey was a consent form, which participants indicated they read and agreed to before accessing the survey questions. The participants were given the right to refuse to answer or withdraw from the study at any point without any penalty. The interview data (i.e., interview responses, voice recording, consent forms, and online survey responses) have been stored in an online cloud storage service with restricted access.

Results

Qualitative Data Analysis

The qualitative results helped us gain a deeper understanding of the common root causes of the dropout phenomenon in ODL and also identified institutional-, faculty-, country-, and region-specific reasons for dropping out. Themes and reasons from Bağrıacık Yılmaz and Karataş (2022) were used to represent data (Table 3). The program fit reason, which was listed in the Bağrıacık Yılmaz and Karataş study was not included since its exact definition was not found in the literature. In addition to the reasons present in Bağrıacık Yılmaz and Karataş, some new reasons, such as academic burden, academic delays, competency in second language, commute difficulties, social and political disappointment, and issues with regional centers were also revealed. These represented country- and/or institution-specific reasons.

Table 3

Frequency of Dropout Themes and Reasons as Revealed in Interviews

Theme	Reason	Code frequency	
		Instructors	Students
Internal	Academic integration	5	1
	Social integration	11	7
	Resources	--	1
	Accessibility	3	1
	Instructor characteristics	2	3
	Program compatibility	10	1
	Utility	4	0
	Exams	3	--

	Perceived ease of completion	--	--
	Institutional commitment	--	1
	Absenteeism	1	2
	Anxiety	--	2
	Course availability	--	--
	Flexibility	1	3
	Orientation	1	1
	Diploma validity	3	3
	Motivation	4	2
	Satisfaction	2	1
	Academic burden*	10	1
	Regional centers*#	1	4
	Academic delays*	2	1
	Internal theme total	63	35
External	Business life	12	11
	Financial reasons	10	3
	Family life	9	2
	External support/obstruction	6	2
	Social life	1	-
	Life crises	1	1
	Opportunity to transfer	5	7
	Commute difficulties*	2	3
	Social and political disappointment*	2	1
	External theme total	48	30
Student	Personality structure	2	3
characteristics	Study habits	1	--
	Goal commitment	3	1
	Belief/preconception	--	--
	Age	--	--
	Self-suitability	2	1
	Academic background	3	1
	Un/consciousness	2	1
	Technical equipment facilities	--	1
	Student characteristics theme total	13	8
Student skills	Digital literacy	3	--
	Self-regulation (Time management)	7	7

	Competency in second language*	7	1
	Student skills theme total	17	8

Note. *Reasons not present in Bağrıacık Yılmaz and Karataş (2022); #There are nine regional centers spread across the island.

Table 3 was based on the responses from 38 participants. Of these, 14 academic staff members responded to the open-ended question "Why do you think a student would drop out of the Bachelor of Science degree program offered at OUSL?" Concurrently, 24 randomly selected students who had dropped out of the programme were asked about the reason(s) for their decision to drop out. While academic staff listed all the possible dropout reasons they could think of, each student only mentioned the dropout reason/s they experienced. Thus, the total frequency values were usually smaller in the student column compared to the instructor column.

Based on the data collected from the academic staff, the most influential themes contributing to student dropout, in order of significance, were external reasons, internal reasons, student characteristics, and student skills. The most influential dropout reasons selected by instructors under external reasons were business life, family life, and financial reasons. According to one of the academic staff, "our student community is a diverse group. Since most of them are female students, the majority have family commitments restricting them from allocating enough time for studies. Another high number of students are employees." This statement highlighted the challenges students face in balancing their studies with other responsibilities, which may ultimately contribute to their decision to drop out. Some instructors pointed out that occasionally, students who did well in their first semester stopped studying by the next semester, since the second payment was due at the beginning of the second semester. For internal reasons, most instructors mentioned (a) social integration (i.e., student-instructor, student-student, and student-administrative interactions); (b) program compatibility, specifically, the inability to get familiar with the ODL mode; and (c) academic burden (i.e., high workload) as the highly influential reasons. Many instructors mentioned that a high workload may be created because students enrolled in a higher credit load than they could handle. Further, they linked high workload to the student's difficulty in time management. Some academic staff selected high workload, indicating that students had a great deal of work to complete within a limited period.

> Having two or three continuous assessment tests (CATs) and a final exam (per course) placed within a short period could be too much for students. If they have taken several similar courses, imagine the number of exams they would have to sit in per semester! They have no time to absorb knowledge but to get ready for those exams.

Several reasons related to the period before admission, such as time management (under self-regulation) and competency in a second language (both written and spoken English), were frequently mentioned by the instructors.

Regarding the other two reasons, business life and self-regulation (time management), both the instructors and students agreed that these were the most influential reasons for dropping out. The following statement

exemplified cases in which many students mentioned both reasons together, showcasing that job commitment and time management were interrelated.

> I did well during the first semester, but then I got a job . . . then I could not manage my time to balance the job and the studies. I was tired and stressed. I missed most of the lectures and some CATs. Since I was newly appointed, I could not get leave to do . . . [my] practical.

Students and instructors also mentioned opportunity to transfer as a reason for dropping out. There were several cases in which the only reason to give up on the degree was to get a job-oriented study opportunity. In addition, an opportunity to transfer to another local or foreign university, a job in a rural area, or migration to some other situations were mentioned under this category.

In addition to academic burden and competency in a second language, several other new reasons emerged from the analyzed data. Two of these were regional centers and commute difficulties, both directly related to the physical location, less than optimum facilities, and other issues in regional centers. Several students mentioned that they had to drop out because they lived far away from a regional center, and it was costly and time consuming to participate in academic activities, which also indicated limited accessibility. Some students mentioned that though they had registered for a particular regional center, they often had to go to another regional center where facilities were available for certain compulsory activities, particularly practical laboratory sessions. Further, some mentioned that the resources and help they got at certain regional centers were poor, especially during the orientation period; this discouraged them from continuing.

> I first registered at X regional center. . . . I was not given correct information regarding how to plan my academic year or how to choose courses. . . . I was not clear about how things worked, and I missed several deadlines at the very beginning, so I gave up. . . . I registered as a new registrant again at Y regional center this year, and . . . was my counselor. She/he explained everything slowly and helped me to choose courses according to my future goals.

Political and social disappointment was also mentioned as a reason for dropping out, perhaps because Sri Lanka had been in an economic collapse since 2019. Another new internal reason mentioned was academic delays, which could be due to recent global and local calamities such as COVID-19 and the Easter bombings in 2019.

Quantitative Data Analysis

A total of 45 potential reasons were included in the survey within six major categories: (a) academic, (b) university and administrative, (c) personal skills and characteristics, (d) personal preferences, (e) external reasons, and (f) other opportunities. This categorization was used to help the respondents select appropriate dropout reasons in the correct context, and thereby improve the accuracy of the collected data. Participants responded to a four-point Likert scale for each reason. Responses were reassigned into 38 reasons/codes, 32 from Bağrıacık Yılmaz and Karataş (2022) and six new reasons before feeding the data into SPSS software. Two reasons, perceived ease of completion and belief/preconception, received no responses in the qualitative analysis and thus were not included in the survey. Further, two other reasons,

namely age and opportunity to transfer, were evaluated separately, as using a Likert scale to measure them would be inappropriate. Respondents' age was collected through a short-answer question, while their opportunity to transfer (if any) was assessed using a multiple-choice question. Reliability analysis of the data was conducted by performing Cronbach's alpha (α) test, which confirmed the internal consistency of the responses (i.e., 0.947).

Significance of Dropout Reasons

A total of 355 responses (153 non-starters, 180 potential dropouts, and 22 official dropouts) were analyzed as part of the overall dropout group. According to the definition of *official dropouts*, only one batch (2016/2017) could be incorporated into the sample, contributing only 6% to the total dropout responses. The results of the official dropouts can be specific to the academic and external reasons of that particular academic year/batch; thus, this group was not analyzed separately but included in the overall dropout group. Calculated mean values of the responses were compared to determine the significance order among the dropout reasons (Table 4). In Figure 1, the mean values calculated based on the responses of the overall dropout group are presented in a column chart. According to the mean values, business life, academic burden, flexibility, self-regulation (time management), and family life were the reasons reported most often by dropout students. These reasons could be identified as interrelated and specifically relevant to part-time students. Employed students may have difficulty managing their time between studies and job and family responsibilities. As well, the flexibility of the academic activities was limited, and the academic workload was high, so learners may have been forced to abandon the program.

Table 4

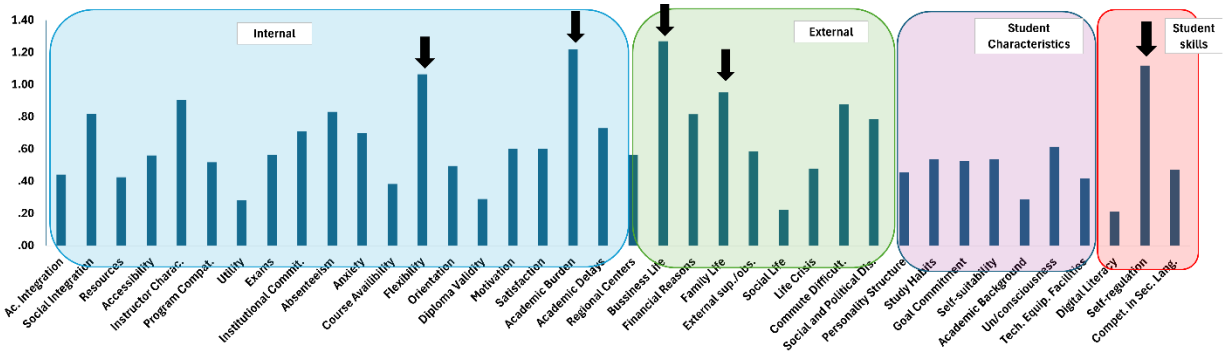
Dropout Reasons Ranked by Significance Based on Calculated Mean Values for Each Dropout Group

Significance	Non-starters	Potential dropouts	Overall dropouts
1.	Business life	Business life	Business life
2.	Self-regulation	Academic burden	Academic burden
3.	Academic burden	Flexibility	Self-regulation
4.	Family life	Self-regulation	Flexibility
5.	Flexibility	Family life	Family life
6.	Instructor characteristics	Social integration	Instructor characteristics
7.	Absenteeism	Commute difficulties	Commute difficulties
8.	Commute difficulties	Instructor characteristics	Absenteeism
9.	Financial reasons	Financial reasons	Social integration
10.	Social integration	Social and political disappointment	Financial reasons
11.	Social and political disappointment	Absenteeism	Social and political disappointment
12.	Academic delays	Academic delays	Academic delays

13.	Institutional commitment	Institutional commitment	Institutional commitment
14.	Anxiety	Anxiety	Anxiety
15.	Un/consciousness	Motivation	Un/consciousness
16.	Satisfaction	External support/obstruction	Satisfaction
17.	Study habits	Satisfaction	Motivation
18.	External support/obstruction	Regional centers	External support/obstruction
19.	Accessibility	Un/consciousness	Exams
20.	Regional centers	Exams	Regional centers
21.	Self-suitability	Program compatibility	Accessibility
22.	Goal commitment	Competency in second language	Study habits
23.	Motivation	Accessibility	Self-suitability
24.	Life crisis	Orientation	Goal commitment
25.	Exams	Academic integration	Program compatibility
26.	Program compatibility	Study habits	Orientation
27.	Resources	Goal commitment	Life crisis
28.	Technical equipment facilities	Self-suitability	Competency in second language
29.	Personality structure	Personality structure	Personality structure
30.	Orientation	Life crisis	Academic integration
31.	Academic integration	Course availability	Resources
32.	Competency in second language	Resources	Technical equipment facilities
33.	Course availability	Technical equipment facilities	Course availability
34.	Academic background	Diploma validity	Diploma validity
35.	Social life	Utility	Academic background
36.	Utility	Academic background	Utility
37.	Diploma validity	Digital literacy	Social life
38.	Digital literacy	Social life	Digital literacy

Figure 1

Mean Values Calculated for Each Dropout Reason: Responses From the Overall Dropout Group



Note. Black arrows indicate the top five reasons selected.

Internal Reasons

Academic burden, flexibility, and instructor characteristics were the most significant internal reasons identified. Academic burden was not present in Bağrıacık Yılmaz and Karataş (2022), but several researchers have mentioned the influence of high academic workload on dropping out (Vergidis & Panagiotakopoulos, 2002; Xavier & Meneses, 2021). During our qualitative analysis, both students and instructors mentioned that if the academic workload per course/semester/academic year is too heavy to manage, it influences the students to abandon the entire program. In the quantitative study, this reason was gauged by three secondary reasons—high assigned workload per course, tight/packed semester schedule, and complex/heavy course content. Flexibility within an ODE program is defined as the degree of the program's adaptability in response to the individual needs of students (Moore, 1993). A program structure should not be too rigid or too flexible, because either one will lead to high dropout rates (Moore, 1993). Given the limited physical and human resources available, many compulsory academic activities (i.e., exams and practical sessions) in the program we studies had fixed dates and times or limited alternative options. This made the program's structural rigidity high and was perhaps the reason why many dropped out students selected the flexibility factor. Instructor characteristics was another significant internal reason identified by respondents, which comprises a range of instructor qualities including (a) qualifications, (b) field knowledge, (c) degree of care about the courses, (d) ODE experience, (e) feedback to students, and (f) way in which e-mails were responded to (Bağrıacık Yılmaz & Karataş, 2022; Shikulo & Lekhetho, 2020; Yuan & Kim, 2014). Students may feel isolated or helpless when the instructor does not connect with them promptly or their goals and intentions are not synced, both of which may contribute to dropout.

External Reasons

The most significant external reasons were business life and family life. Managing time between studies and other work, life, and social responsibilities has been shown to be one of the biggest challenges for ODE students (Xavier & Meneses, 2021). In addition to the hours of employment, other secondary reasons such as the mental comfort of being employed (obtaining a degree could be a secondary choice for some employed students), and legal procedures related to employment were also considered under business life.

The family life reason was comprised of the responsibilities of caring for children, sick parents, or siblings, as well as pregnancy and marriage. Many studies exhibited that family life has a greater effect on female students (Aydın et al., 2019; Bağrıacık Yılmaz & Karataş, 2022; Lakhal & Khechine, 2021), however, as discussed later, this study showed that males were most severely affected by family life.

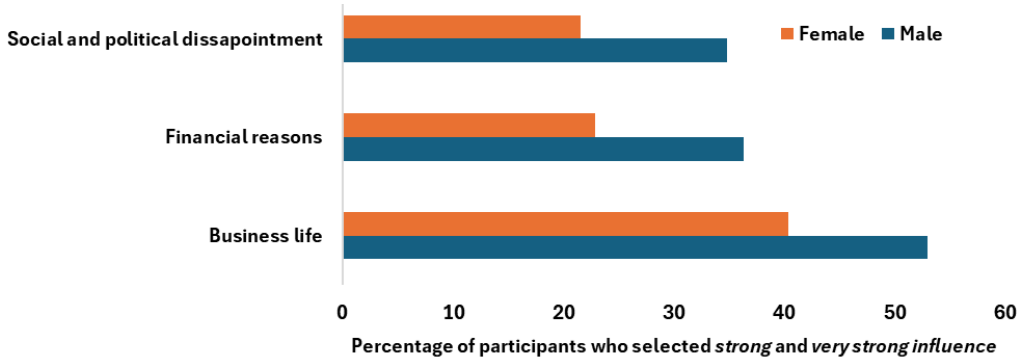
Student Characteristics and Skills

Goal commitment, study habits, knowledge of technology and technical equipment, communication (both written and oral) in English, and prior academic knowledge all play an important role in students' retention within a study program. However, the most influential reason identified by this study was time management skills. The ability to manage study with other work or commitments was considered under self-regulation, a quality that students must have acquired before program enrolment. Many students realized the importance of allocating enough time to self-learn only when exams were coming up, and were thus unable to achieve adequate academic performance to remain within the program (Aydın et al., 2019; Stiller & Bachmaier, 2017).

When analyzing the relationships or differences among the student or demographic groups with respect to their dropout reasons, the 15 most significant dropout reasons corresponding to each group were considered. There was no significant difference observed between non-starters and potential dropouts, leading us to conclude that the two groups had similar reasons for dropping out, more or less. However, *opportunity to transfer* was significantly prominent in the non-starters group; 63% of the non-starters mentioned this reason as the main factor for dropping out while it was not a prominent reason for the potential dropouts. Three external reasons, namely business life, financial reasons, and social and political disappointment, significantly affected males compared to females (Figure 2). Within the dropout population, 37% were males and most of them (73%) were employed. Clearly, job commitment had a prominent influence on their dropout decision. In contrast, 60% of dropout females were employed. In the Sri Lankan cultural context, a majority of households have a male breadwinner and/or a decision-maker who is responsible for securing the social and economic well-being of the family. Perhaps this could be the reason why most of the dropout males were severely affected by the above three inter-relatable reasons.

Figure 2

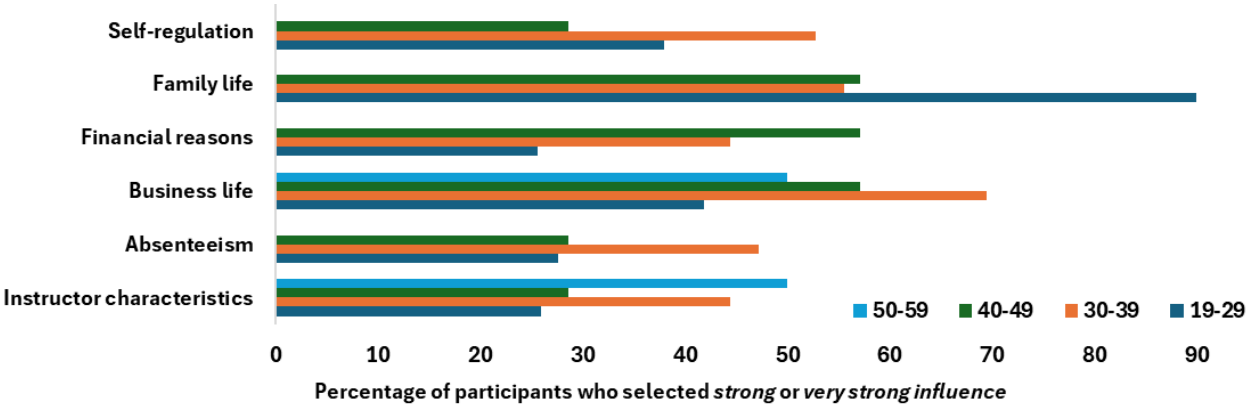
Dropout Reasons That Varied Significantly With Respect to Gender



Most of the dropout participants in this survey were between 19 and 29 years of age (87% of the sample population). A positively skewed age distribution was observed (skewness coefficient = +2.473) with a mean value of 25.95. Figure 3 shows the six factors that were found to be significantly different influences on the dropout numbers within different age groups. Family and life responsibilities greatly affected the younger students (i.e., 19 to 29 years of age) while time management and job commitments were mainly involved in the dropout decision of the 30 to 39 years of age group.

Figure 3

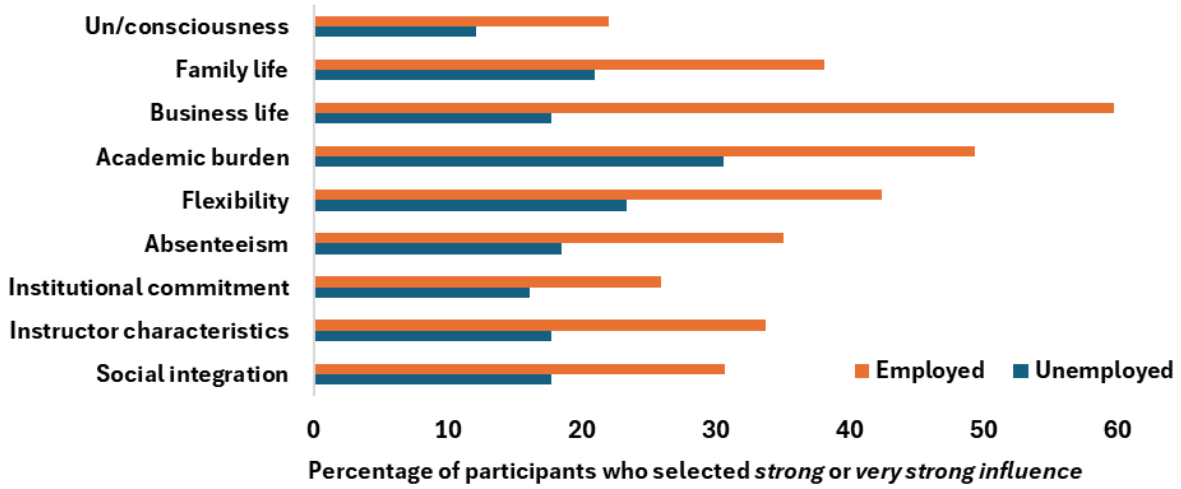
Dropout Reasons That Varied Significantly With Participants' Age



A majority of the dropout group (65%) was employed during the time they dropped out. According to the Kruskal-Wallis H Test, nine reasons, as shown in Figure 4, severely affected the employed students compared to the unemployed students. Among the different employment sectors (i.e., government, semi-government, private, or self-employed), students in the private sector were shown to be most severely affected by these reasons.

Figure 4

Dropout Reasons That Varied Significantly With Respect to Employment Status



In addition to the obvious factor, business life, the employed dropouts were affected more by family life compared to those who were unemployed. Some internal reasons that significantly affected the employed dropouts such as (a) social integration (e.g., low interaction with instructors and peers); (b) absenteeism; (c) un/consciousness (e.g., missing important deadlines); and (d) institutional commitment (e.g., poor attachment to the university) can be directly correlated to the limited time spent in the university or academic activities due to their busy schedules. Other internal reasons such as academic burden, flexibility, and instructor characteristics implied that these students did not receive enough academic support or program flexibility to maintain a proper study-work balance.

Limitations and Future Directions

Even though this study provided a broader and deeper understanding of the dropping out phenomenon in ODE, the presented model can be further improved by incorporating the views and perspectives of other stakeholders such as administrators, non-academic staff, support staff, and students' families. Further, dropping out is a dynamic and multifaceted scenario; frequent surveying to identify trending dropout reasons in order that treatment strategies can be modified promptly, is required to maintain low dropout rates in ODE programs. As well, research could investigate the specific challenges faced by diverse student populations, including those from underrepresented backgrounds or with unique educational needs. By addressing these reasons, ODE institutions can tailor support mechanisms to better meet the needs of all students and enhance overall retention rates.

Conclusion and Implications

Although many studies have attempted to identify the key reasons contributing to low student retention and to propose mitigation measures, student dropout rates in ODE continue to rise. Researchers are encouraged to analyze the dropout phenomenon based on their own geographical, institutional, and

cultural context. With that rationale in mind, this study was focused on identifying the reasons leading to student dropout in the B. Sc. program offered by the Open University of Sri Lanka. As explained, the identified results were consistent with the related literature—it was mainly internal and external reasons that affected students' decisions to drop out, while certain student characteristics and skills were catalysts to the students' decision. The most significant dropout reasons identified were (a) business life; (b) academic burden; (c) flexibility; (d) self-regulation (time management); and (e) family life. These have been shown to be prominent dropout reasons among ODL programs globally (Bağrıacık Yılmaz & Karataş, 2022; Shikulo & Lekhetho, 2020; Xavier & Meneses, 2021; Yuan & Kim, 2014) In addition, some institutional or country specific-reasons such as social and political disappointment and commute difficulties were also revealed. Further, results indicated that employed students were more likely to drop out from ODE programs compared to unemployed students. This could have been mainly because of the difficulty of managing time between studies and other commitments.

Academic burden and flexibility were the only two internal reasons that could be fine-tuned by higher education institutions. ODE practitioners and administrators need to prioritize flexibility in academic activities and implement effective monitoring mechanisms to identify at-risk students early on and provide timely support and guidance. By adopting these measures, ODE institutions can enhance student retention and promote academic success.

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