THE UNIVERSITY OF THE WEST INDIES

University Office of Planning
and Development

RESEARCH BRIEF

First Year Student Attrition Survey 2010/11

Introduction

This report provides information on the extent of undergraduate student attrition at the University of the West Indies. This study undertaken by the University Office of Planning and Development (UOPD) examines University and campus first-year attrition rates (percentage of students who completed their first year of study but failed to register for their second year) for students who enrolled at the University in 2009/10. In addition, influential factors associated with student attrition as determined by a survey administered to non-persisting students are presented.

This study is part of a larger agenda of institutional research by the UOPD intended to inform University planning and decision-making. This report is the second of its kind, the initial survey of first-year leavers was conducted in 2009 (overall first year attrition rate for the Cave Hill, Mona and St. Augustine campuses was 11%) and the results will be used to develop a better understanding of factors associated with first-year student attrition in the hope of developing programmes and/or interventions that can increase student persistence.

Study Objectives

This study was designed to answer the following questions:

•What are the first year attrition rates for the UWI?

Summary

During the second semester of the 2010/11 academic year, the University Office of Planning and Development (UOPD) conducted a second study on student attrition at the University of the West Indies (UWI). This study specifically investigated the rates of first-year attrition (percentage of first-time students who failed to register for their second year of study) of undergraduate students at the University who initially enrolled at the UWI during the first semester of the 2009/10 academic year as well as student-reported factors that influenced their decision to leave.

The project was initiated to assess the rates of first-year attrition across the University and to understand the factors that influenced students to leave the University. University and campus attrition rates were determined from data obtained from the University Student Information System (SIS). In addition, a survey was administered to students who freely chose to leave the University before registration for their second year of study to investigate factors that may have influenced their decision to leave the University prematurely.

Approximately 42% (n= 619) of invitees responded to the survey. The most influential factors emerging from the results were **Finance**, **Personal Demands and Time Management** and **Academic Quality and Support Services**. The results of the survey suggest that the provision of substantial financial assistance to part-time students combined with a stronger support system to all undergraduate students may prove to be effective student retention strategies.

•What self-reported factors do students identify as influences on their decision not to return to the UWI?

In answering these questions, the UOPD will be able to provide information to the Executive Management Team (EMT) of the University on the degree of attrition at the University, information derived from this report will also assist with the creation a profile of students who are likely to leave the University during their first year of study. Consequently, if needed, retention programmes and strategies could be developed to address student attrition.

Methodology

This study used both survey information and data from the University SIS. A list of all first year students who were registered for the 2009/10 academic year was extracted from the student information system. The database included the names, demographic information, contact information and end statuses for each student. Table 1 lists the definitions for end status classifications used in the study.

The survey was administered to all non-returning students with the exception of students with end statuses classified as "Internal Transfers" or those who were required to withdraw from the University as the study's objective was to investigate influencing factors on a student's choice to leave the University. The questionnaire was administered electronically via the survey tool Zoomerang. A month after the dispatch of questionnaires, the staff of the UOPD and the campus planning offices (CPOs) administered the survey to non-respondents via telephone to achieve an acceptable response rate.

A chi-square test of independence was performed on variables to examine any relationships between the rates of attrition and the demographic variables. In addition, a factor analysis was conducted on the list of reasons that influenced a student's decision to drop out to determine any underlying patterns in responses by students.

Instrument

The instrument was developed using a number of similar questionnaires employed in various higher education institutions. Respondents

Table 1: End Status Definitions

End Status	Definition
Active/Registered	Registered for the 2009/2010 academic year.
Internal Transfer	Student transferred to another UWI campus or to another programme at the UWI
Active not Registered	The student is supposed to continue but did not register for the 2009/2010 academic year but did not submit a letter requesting a Leave of Absence or Voluntary Withdrawal.
Leave of Absence (LOA)	Student formally requested a leave of absence
Required to Withdraw (RTW)	Students were required to withdraw due to poor academic performance
Letter of Warning for Academic Performance	The student received a letter of warning based on poor academic performance
Voluntary Withdrawal (VW)	Student formally withdrew from the University
Status Missing	Unable to determine end status of student

provided demographic information and were requested to give ratings on questions related to factors that may have influenced their decision to drop out of the University.

Question items requested students to state whether each factor was not a reason, a minor or a major reason that influenced their decision to drop out. Closed-ended questions with a Yes/No response option as well as open-ended items were included in the questionnaire.

Results

University and Campus attrition rates

Figure one shows the attrition rates of the 2009/10 cohort of first-year admissions based on their subsequent status in 2010/2011, attrition rates were calculated using the formula:

$$Attrition\ Rate = \frac{Active\ not\ Registered + LOA + RTW + Letter\ of\ Warning + VW\ (2010/11)}{Total\ Number\ of\ First-year\ Admissions\ (2009/10)} \times 100\%$$

Approximately 16% of first year University admissions for the 2009/2010 academic year did not return to continue their studies for the 2010/2011 academic year. Approximately 35% of this cohort did not return for their second year of study at the Open Campus (fig. 1). First-year attrition rates on the Cave Hill, Mona and St. Augustine campuses ranged from approximately 12% to 14% for the same period (fig. 1).

Figure 1: University and Campus Attrition Rates
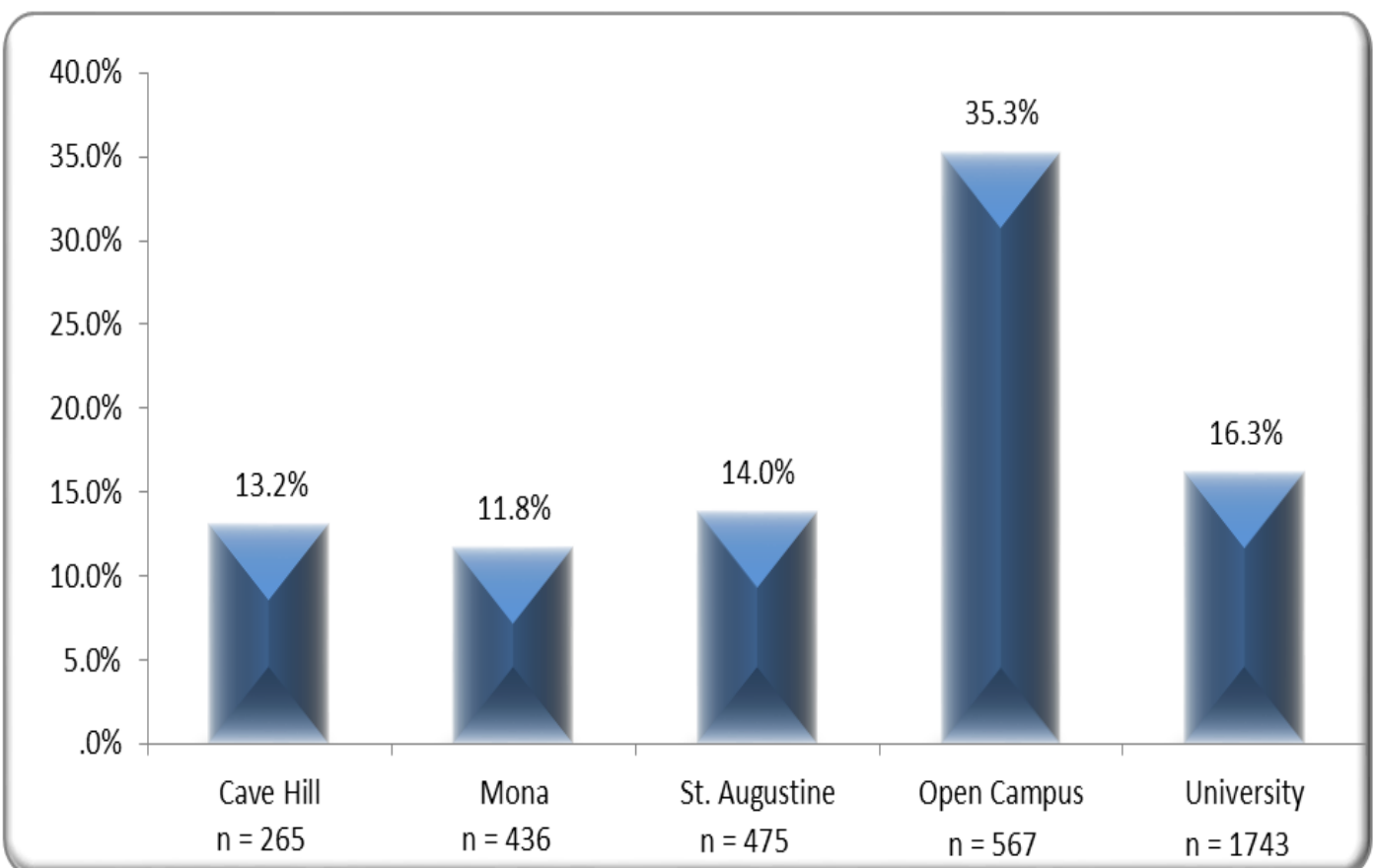
Analysis of Attrition rates by Demographics

The attrition rate for males who did not return for their second year of study in 2010/11 was approximately 18% compared to 16% for females (fig. 2). The relationship between sex and the rate of drop out was tested using a chi-square test of independence. The relation between these variables was significant, X^2 (1, N = 10684) = 8.11, p < .01. Males were more likely to drop out of the University before registering for their second year of study in comparison to females.

Approximately 28% of persons who registered to attend the University on a part-time or evening basis in 2009/10 did not return the following year (fig. 3). In contrast, 10% of persons who registered at the University on a full-time status did not return for their second year of study. Chi square tests revealed there was a significant difference between students enrolled full-time versus students who attended part-time or an evening basis, X^2 (2, N = 10668) = 612.73, p < .01. Students who attended the University in the evening or part-time were more likely to drop out prematurely compared to persons who attended the University full-time.

Attrition rates for persons in the 17-19 age group as well as those in the 20-24 age group was near 12% (fig. 4), while the attrition rates for persons who fell in the 25-29, 30-34 and 35 and above age groups ranged from 25% to 27% approximately. The differences in attrition rates among age groups was also significant, X^2 (4, N = 10693) = 319.33, p < .01. Students in the 17-19 age group were more likely to continue on to their second year of study in contrast to students in the 20-24, 25-29 or 30-34 age groups.

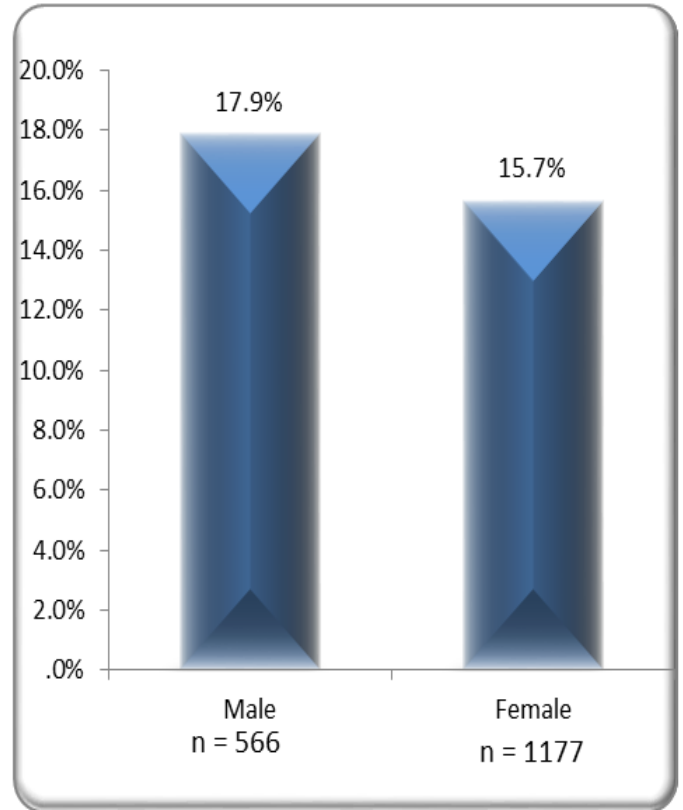**Figure 2: University Attrition Rate by Sex**
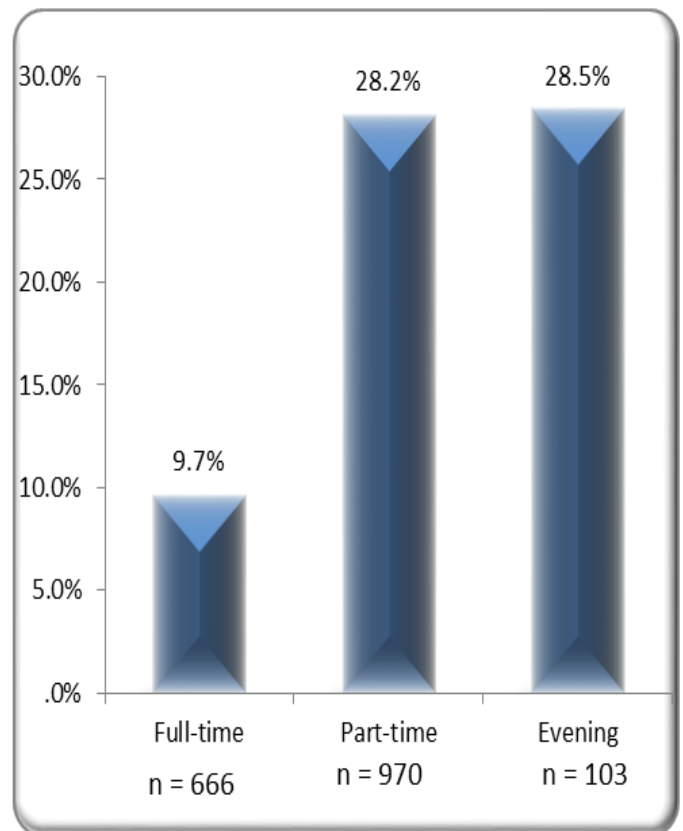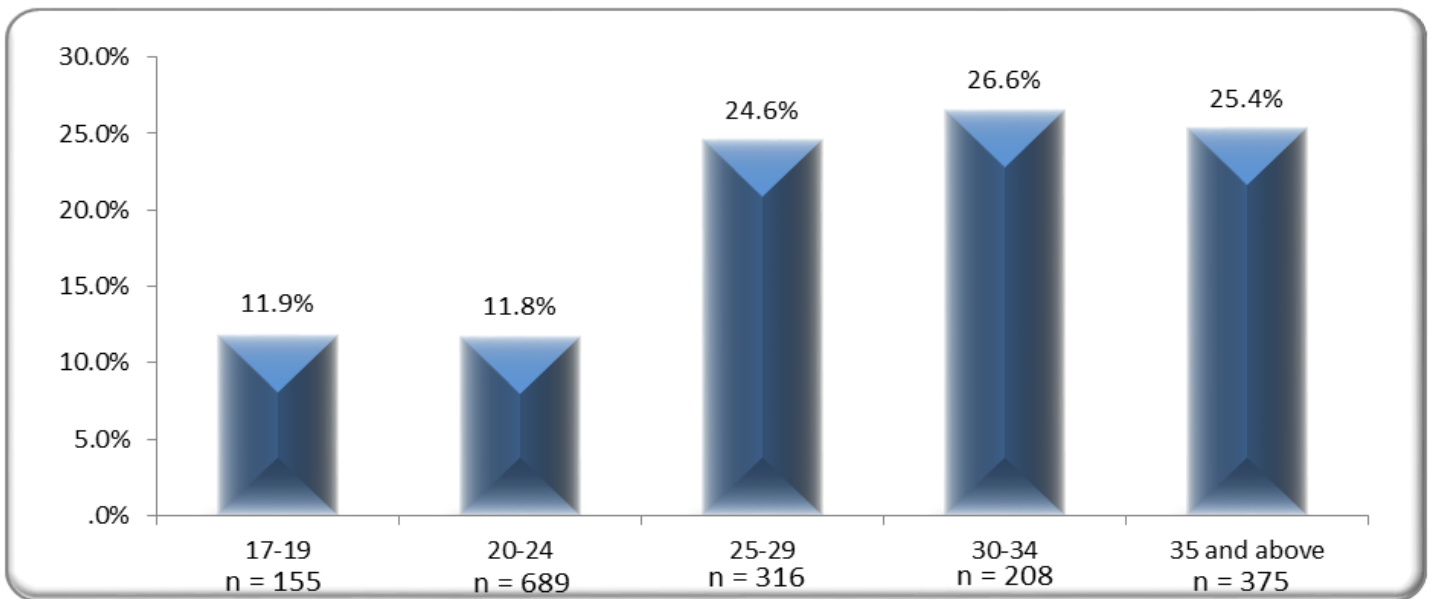

Figure 3: University Attrition Rate by Status

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Survey Results

Demographics

For the purposes of this report, the survey was not administered to students who were "Required to Withdraw" or "Internal Transfers". These students did not receive the survey as this study focused on students who freely chose to leave the University. Of the 1452 students invited to participate, 619 persons responded to the survey yielding a University-wide response rate of 42%. Most respondents were registered with the Open Campus during their first year of study (39%), attended the University on a part-time basis (66%) and came from the Faculty of Social Sciences (42%). Most of the respondents were female (73%), in the 20-24 age range (36%), of African descent (56%), were single (69%). Additionally, most respondents (49%) reported that the highest level of education completed by their parents was at the secondary school level.

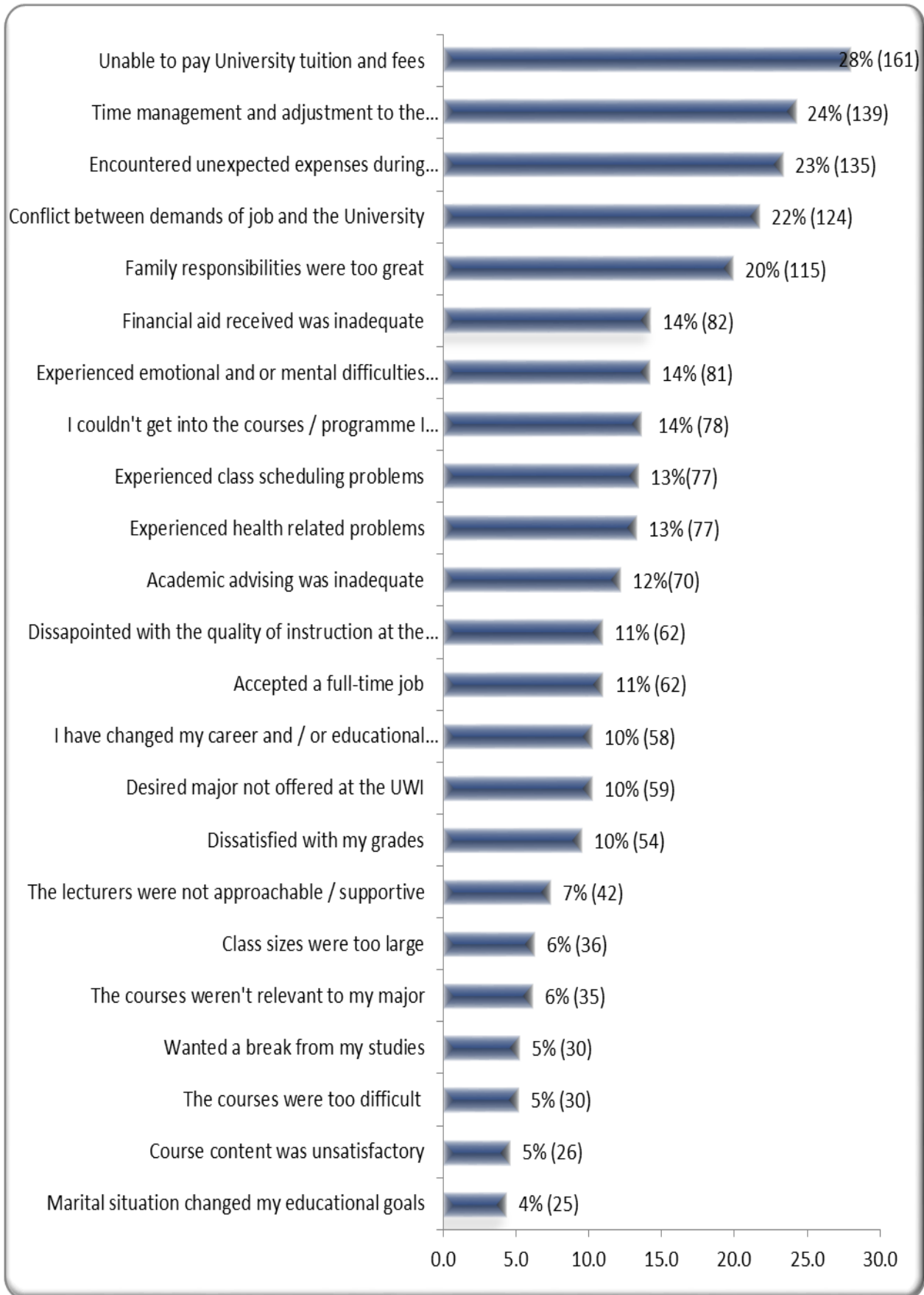## Motives influencing non-returning students

Participants were provided with a list of twenty-three potential reasons (obtained from similar student attrition studies) that may have influenced their decision to drop out of the University and asked to indicate whether each reason was a major, minor or not a reason that influenced their decision to leave the University.

The results show that two of the top three factors listed as major reasons were financial in nature. An inability to cover the University's tuition and fees was the number one reason chosen by respondents, 28% of respondents chose this as a major reason that influenced their decision not to return (fig. 16). The second ranked factor chosen as a major reason was "Time management and adjustment to the increased responsibility of attending the University", 24% of respondents listed this as a major reason. Unforeseen expenses were another financial influence that appeared in the top three, 23% of respondents listed unexpected expenses as a major influence on their decision to leave during their first year of study .

The bottom three reasons included factors related to courses, approximately 5% of participants listed course difficulty and unsatisfactory course content as major factors that influenced their decision to drop out of the University . In addition, 4% of participants stated a change in their marital civil status as a major reason that influenced their decision to drop out .

Figure 5: Major Reasons that influenced students to drop out - UNIVERSITY % (n)

Reason	% (n)
Unable to pay University tuition and fees	28% (161)
Time management and adjustment to the…	24% (139)
Encountered unexpected expenses during…	23% (135)
Conflict between demands of job and the University	22% (124)
Family responsibilities were too great	20% (115)
Financial aid received was inadequate	14% (82)
Experienced emotional and or mental difficulties…	14% (81)
I couldn't get into the courses / programme I…	14% (78)
Experienced class scheduling problems	13% (77)
Experienced health related problems	13% (77)
Academic advising was inadequate	12% (70)
Dissapointed with the quality of instruction at the…	11% (62)
Accepted a full-time job	11% (62)
I have changed my career and / or educational…	10% (58)
Desired major not offered at the UWI	10% (59)
Dissatisfied with my grades	10% (54)
The lecturers were not approachable / supportive	7% (42)
Class sizes were too large	6% (36)
The courses weren't relevant to my major	6% (35)
Wanted a break from my studies	5% (30)
The courses were too difficult	5% (30)
Course content was unsatisfactory	5% (26)
Marital situation changed my educational goals	4% (25)

Factor Analysis

A factor analysis was performed on the twenty-three potential causes of attrition to determine if there were any participant response patterns that may further identify any underlying motives that influenced a student's decision to drop out.

The results of the factor analysis further support the ranking of responses and yielded seven factors explaining a total of 60.1% of the variance for the entire set of variables. Factor 1 was labeled **Academic Quality and Support Services** due to high loadings by the following items: disappointed with the quality of instruction at the UWI, the lecturers were not approachable/supportive, academic advising was inadequate, experienced class scheduling problems, course content was unsatisfactory, and class sizes were too large. This first factor explained 20% of the variance for the entire set of variables. The second factor derived, which accounted for 11% of the variance, was labeled **Finance** due to the high loadings by the following items: encountered unexpected expenses during attendance at the UWI, financial aid received was inadequate and unable to pay University tuition and fees.

Factor 3 was labeled **Personal Demands and Time Management** and accounted for 9% of the variance. The question items that loaded highly on this factor included: family responsibilities were too great, marital situation changed my educational goals and time management and adjustment to the increased responsibility of attending the University was a challenge.

Discussion

Analysis of the University's student database revealed an overall first-year attrition rate of 16.3% for students that entered the University in 2009/10 (fig. 1). However, the University's first-year attrition rate is lower than comparable higher education institutions in the United States. First-year attrition rates across campuses were fairly similar for the three residential campuses and ranged from (12% to 14%, fig. 1), however, the first year attrition rate for the Open Campus was approximately 35%. While the attrition rate for the Open Campus was significantly higher than the residential campuses it is comparable to other distance learning institutions.

With regards to student demographics, persons who attended the University on a part-time or evening basis had considerably higher first-year attrition rates when compared to full-time students (fig. 3). These persons may have full-time jobs or family commitments and as a result may experience more of a challenge balancing the demands of work and family with the demands of the University.

The same logic applies to older students who registered for their first year of study, the first-year attrition rate for persons older than 25 was considerably higher compared to younger students (fig. 4). Older students may have more job and family responsibilities and this may pose a challenge when trying to balance the demands of family, work and a tertiary education.

Analysis of the reasons for dropping out given by non-returning students (via ranking and factor analysis) revealed three interlinked but discernible influences; **Finance**, **Personal Demands and Time Management** and **Academic Quality and Support Services**.

Recommendations

Based on the analysis of student information as well as the results of the survey, several recommendations are proposed to decrease student attrition and improve the quality of data related to student end status.

Operational

1. Continue an annual or biennial non-returning student survey to monitor University attrition rates and refer students requesting advisement to the relevant units.
2. Consider the introduction of a University early warning system and student referral procedures (as currently implemented at the Mona campus).
3. Examine the need to expand course and programme availability in the evenings and on weekends.
4. Expanded provision of financial support to part-time students in the form of scholarships, emergency funds, payment of non-tuition costs such as books, internet access, printing costs, library fines and parking fees and fines.
5. Examine the quality of tutor support provided to students.
6. Implement a University marketing outreach exercise to contact student leavers each academic year and invite them to re-enroll at the University.

Student Tracking

1. Common student end status categories and definitions are required across the four campuses to ensure consistency, comparability and integration of student tracking data.
2. The category of "Active not Registered" needs to be further investigated and revised to yield more precise student end statuses.

Future Research

1. Determine the economic impact of student attrition through a cost-benefit analysis of student attrition, assessment procedures, intervention strategies, marketing to recruit new students etc., to determine if, and what types of intervention programmes are required.
2. Further examine the effect of student demographics, University entrance scores, first and second semester GPAs and socioeconomic information on student attrition.
3. Examine the first-year attrition rates for Masters and PhD. Level students.

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For the full report detailing results by campus and faculty please contact Tiffany Best at
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