

# The Relationship between Academic Programme Type and Student Satisfaction with the Quality of Higher Education in Uganda

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## **Abstract**

This study examined the relationship between the type of academic programmes offered in Ugandan higher education institutions and student satisfaction with the quality of higher education. High-quality academic programmes are those that focus on the outcomes of the higher educational processes, including student retention and graduate destinations and employability, as well as expectations of earnings proportional to the qualification. Employing quantitative and qualitative research methods, the study analysed data gathered from 400 undergraduate students, six quality assurance directors, and 12 academic heads of departments in six Ugandan universities. It found that students in different academic disciplines and different universities believed that the academic programmes they selected were strongly related to their satisfaction with the quality of higher education.

**Key Words:** academic programme, student satisfaction, student retention, employability, earnings

## **Résumé**

Cette étude a examiné la relation entre le type de programmes académiques proposés dans les établissements d'enseignement supérieur ougandais et la satisfaction des étudiants quant à la qualité de l'enseignement supérieur. Les programmes universitaires de haute qualité sont ceux qui se concentrent sur les résultats des processus d'enseignement supérieur, y compris la rétention des étudiants, la destination et l'employabilité des diplômés, ainsi que les attentes en

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matière de revenus proportionnels à la qualification. Utilisant des méthodes de recherche quantitatives et qualitatives, l'étude a analysé les données recueillies auprès de 400 étudiants de premier cycle, de six directeurs de l'assurance qualité et de 12 chefs de département dans six universités ougandaises. Elle a révélé que les étudiants de différentes disciplines académiques et de différentes universités estimaient que les programmes académiques qu'ils choisissaient étaient fortement liés à leur satisfaction à l'égard de la qualité de l'enseignement supérieur.

**Mots clés :** programme académique, satisfaction des étudiants, rétention des étudiants, employabilité, revenus

### Introduction

It is widely accepted that skills and human capital have become the backbone of economic prosperity and social well-being in the 21<sup>st</sup> century (OECD, 2012). Countries thus need to ensure that their higher education systems are capable of producing a skilled workforce that meets the demands of the labour market. High-quality academic programmes aim to promote positive outcomes such as student retention and persistence in their course of study, employability and graduate destinations, and earnings commensurate with qualifications (Pinotti, 2012; Monk, Sun and Bradley, 2012). Recent studies on university quality have focused on developing systematic and formal quality assurance models and processes (Doyle, 2006; Guthrie and Neumann, 2007; Hayford, 2003). It is suggested that the rationale for performance models and indicators in higher education is to ensure that the education provided to students equips them with skills for employment and provides the nation with a highly-skilled workforce that supports socio-economic growth and development (Chalmers, 2008).

The history of the Ugandan higher education sector dates back to the founding of Makerere University in 1922 (Hayward, 2006) that was motivated by the need to address the shortage of local human resources to serve the economic and social requirements of East African countries. Makerere University was established as a technical college to serve students from the British East African territories of Kenya, Uganda, and Tanzania (Cloete, Maassen, and Bailey, 2011; NCHE, 2016; Kasozi, 2003). In the initial stages of higher education, academic programme

quality was measured by the production of graduates with practical skills in carpentry, construction and mechanics. When the university expanded to offer other courses such as medicine, agriculture, veterinary sciences, and teacher training, more advanced quality assurance models were required (Ssekamwa, 1997; Kasozi, 2003, Muwagga, 2006).

University training also focused on producing high-quality civil servants and administrators to work for the colonial government. In the past decade, Uganda has experienced significant expansion of its higher education sector, evident in the growth in the number of public and private universities as well as the number of students applying for admission (Kasozi, 2003; Mamdani, 2007; NCHE, 2016). Higher education is regarded as having the potential to contribute to not only economic and social development but also poverty eradication in developing countries (World Bank, 2016). However, the expansion of Uganda's higher education sector has been accompanied by rising costs for both families and the government. It is against this background that this study investigated the relationship between the type of programmes that students chose and their satisfaction in terms of contributing to their welfare and socio-economic development.

### The issue of Programme Quality

Demand and supply of higher education in Uganda are expanding, indicated by the rise in the number of students seeking university places. Statistics released by the Ministry of Education and Sports (MoES) show that total university enrolment increased from 57 114 in 2002 to 345 000 in 2016 (MoES, 2018). Similarly, the number of public universities increased from three in 2002 to 13 in 2022 and there are currently 43 private universities (NCHE, 2022). Economic theory would suggest that these changes in the higher education sector would benefit those who participate in education and the nation in terms of their contribution to national development. However, there is concern that, despite the growth in university provision in Uganda, the sector has not produced graduates with the skills required by the labour market. This has contributed to high levels of graduate unemployment, which stood at 36% in 2021 (World Development Report, 2021). Studies have also suggested that many Ugandan graduates lack *employability skills* such as communication and problem-solving skills, teamwork, self-motivation,

and a positive work attitude which results in unsuccessful job interviews or them losing their jobs after a few months (IUCEA, 2014). This study, therefore, investigated whether students were satisfied that the academic programmes they chose prepared them for the expectations of the labour market.

### Literature Review

This section reviews the existing literature on the relationship between types of academic programmes and student satisfaction with the quality of higher education from theoretical and empirical perspectives.

From the theoretical point of view, the link between higher education qualifications and development is guided by the human capital theory advanced by Theodore Shultz in 1961. It suggests that individuals and nations invest in education in order to improve job opportunities and earnings (Becker, 1993; Johnes, 1993; Schultz, 1972). Many studies have shown that investment in education and training increases individual earning potential, enhances firms' productivity and promotes national economic development (Denison, 1962; Shultz, 1961). For example, Lepark and Snell (1999) showed that investment in human capital enhances a firm's competencies and competitive advantage.

Studies further suggest that individual decisions to pursue higher education involve an informal analysis of the costs of education measured against the expected return (Chevalier and Dalton, 2004; Groot and Oosterbeek, 1994). Kjelland (2008) notes that the human capital theory is based on the notion that education endows individuals with productivity-enhancing human capital and that this results in increased earnings.

Furthermore, the theory assumes that education determines labour's marginal productivity, which also determines earnings. It posits that intellectual formation constitutes a mode of economic capital, higher education is preparation for work, and education determines graduate outcomes. However, some studies have suggested that the human capital theory is limited by the fact that it imposes a single linear pathway on the complex passage between heterogeneous education and work and it does not explain how education enhances productivity or why salaries have become more unequal. This view is supported by the competitive market theory of wages which asserts that employees receive a wage

that is equal to their marginal product (Groot and Oosterbeek, 1994). Thus, the more productive a worker is, the more he/she will be paid holding the price of the goods he/she produces constant; the quality and quantity of education is important when determining such productivity. Therefore, students would be satisfied with the academic programmes they choose to pursue at university if they have high prospects of better returns in the labour market.

From the empirical perspective, several studies suggest that there is a correlation between the academic programmes students choose in universities and their potential for employment in the labour market as well as financial returns. For example, Walker and Zhu (2001) used a Labour Force Survey dataset in the UK and found that there is a strong relationship between education, employment, and earnings. Walker and Zhu's (2001) findings also suggest that degree qualifications play an important role in placing graduates in employment and that many employers use them as a point of reference in deciding on salaries.

Walker and Zhu (2001) also found substantial variations in employment and earnings across degrees. For example, they concluded that education and arts subjects have no significant effect relative to 2+ A levels. Languages and Economics/Business, Architecture and Law had returns of around 20%, Health 24%, Mathematics 19%, Engineering 11% and Science 7%. These findings suggest that the choice of a university degree has a bearing on an individual's employment and earnings prospects. Eide (1990), Kehm and Teichler (1995), and Neave and Jenkinson (1983) also suggested that social science and humanities graduates are less likely to secure employment than those in engineering and medicine. It is against this background that this study aimed to determine which degree programmes available in Ugandan universities have a strong effect on employment and earnings and whether students are guided by this economic motive when applying for such programmes.

In the Ugandan context, studies suggest that the majority of privately-owned universities have tended to avoid science and technology programmes that require expensive laboratory and workshop equipment and inputs. Instead, they offer qualifications in the arts and humanities for which there may not be strong demand in the labour market (NCHE, 2016).

Mayanja et al.'s (2001) survey of graduates from the Faculties of Arts and Science in Makerere University who were part of the labour market in 2001 suggested that Arts graduates' employment opportunities and wages are not substantially different from those of Science graduates. While Faculty of Arts graduates were as successful in obtaining jobs as their Faculty of Science counterparts, the latter had a slightly better chance of securing jobs immediately after graduation whereas the former were more likely to enjoy career growth and promotion to top management. Furthermore, the study found that Faculty of Arts graduates' salaries were in the same range as those of Faculty of Science graduates. They also suggested that Arts graduates seemed to make the same contribution to economic growth in terms of GDP as their science counterparts. While these findings suggest that arts and science students would have similar expectations of their employment and earnings prospects, it is important to establish which students are more confident about their labour market prospects based on the kind of academic programme they are enrolled in.

In terms of student satisfaction with their academic programmes, Hoang, Ngo, and Pham (2018) suggest that post-secondary institutions confront many questions regarding the value and effectiveness of their academic programmes. Such concerns have been heightened by the commodification of education and the rise of student consumerism. Hoang, Ngo, and Pham's (2018) findings suggested that dissatisfied students had notably different educational orientation profiles from their peers who were moderately and highly satisfied. Nara, Saxon, and Reubenson (2014) employed an ex-post facto, non-experimental approach to examine the relationship between student satisfaction and academic performance in Armenian higher education. Data were collected by means of a self-reported questionnaire administered to 372 students in nine public and three private four-year degree institutions in different rural and urban areas. The statistical analysis revealed significant differences in student satisfaction and academic performance, with those who reported lower satisfaction having poorer academic performance. This suggests that, apart from labour market expectations, student satisfaction with academic programmes is also influenced by their level of academic performance.

### Objectives of the Study

1. To establish which programmes of study have the highest impact on student satisfaction with the quality of higher education.
2. To determine which programmes of study are the best predictors of student retention, employment prospects and earnings.

### Methodology

#### Research Paradigm, Design, and Approach

This study leaned towards the positivist research paradigm which is rooted in the ontological principle and doctrine that truth and reality are free and independent of the viewer and observer (Nownaisin, 2020; Kothari, 2008; Creswell, 2009). It followed a correlational cross-sectional survey research design, with mainly quantitative approaches, enabling sampling of a large number of units of analysis in a relatively short time as well as the findings' generalisation to other universities in Uganda (Creswell and Clark, 2007; Gorard, 2013; Lindell and Whitney, 2001). Qualitative approaches were used to corroborate the findings from the quantitative analysis.

#### Study Population, Sample Size, and Selection

The study population included all participants and stakeholders in Uganda's higher education sector. The target population included all students enrolled in private and public universities; academic heads of departments in both types of universities; and quality assurance directors of the selected universities.

The accessible population was students selected from six universities (three private and three public) who were the principal subjects of the study. To complement the findings from the students, interviews were conducted with 12 academic heads of departments at six universities and six quality assurance directors. They were selected since they were able to provide information on the kind of academic programmes offered at their respective universities and which appeal most to students.

Using Yamane's (1967) formula for sample size selection (Israel, 2009), a sample of 400 students was selected. According to Yamane's formula, the sample size for a population size of 345 000 is 399; thus, the sample size of 400 respondents was appropriate considering the

margin of error of +/- 0.05. The targeted and actual sample for all the participants in the study are presented in Table 1.

**Table 1:** Summary of Targeted and Actual Sample

Sn	Category	Targeted Participants	Actual Participants	Response Rate
1	University Students	400	400	100%
2	Quality Assurance Directors	6	6	100%
3	Academic Heads of Department	12	12	100%

Source: Primary data

### Methods of Data Collection and Research Instruments

A structured questionnaire was used to gather data from the university students as principal subjects. It included questions on their choice of academic programme and the programmes they rated highly for employment and earnings. A structured questionnaire was preferred because standardised data on facts and opinions was required, with the students responding to identical items. To ensure both face and content validity, the instrument for the principal subjects (students in the graduating class) was subjected to a pre-test with 10 students randomly selected from different academic programmes at Kyambogo University. Reliability was ensured by conducting initial statistical tests on data collected from pre-tested surveys to establish whether the outcomes related to the study's objectives and hypotheses. The initial statistical tests and the interviews with the selected stakeholders also revealed that the predictors of internal efficiency were correlated with the quality of university education.

Cronbach's Alpha was used to measure the internal consistency of the questionnaire administered to students. This reliability test was appropriate because the study worked with multiple Likert scale variables (Warner, 2013). For each of the research hypotheses,  $\alpha \leq 0.7$  indicated that the instrument was reliable in measuring what it was meant to measure.

Interviews were conducted to collect qualitative data from purposively selected heads of academic departments at the six universities to corroborate the data gathered from the students.

### Data Analysis Methods

A chi-square test of independence was conducted on the coded data to measure whether there is a relationship between the types of academic programmes that students selected and their opinions on their employment and earnings prospects. The qualitative data from the interviews with the quality assurance directors, university heads of academic departments, and human resource managers were categorised and presented descriptively.

### Findings of the Study

The academic programmes offered by a university should motivate students to complete their course of study and create positive expectations of securing employment and remuneration commensurate with their qualification. For the purpose of this study, academic programmes were categorised as Arts, Social Sciences and Humanities; Business, Accounting and Management; Education and Teaching; and Engineering, Science and Technology.

### Findings for Objective 1

The study's first objective was *to establish which programmes of study have the highest impact on student satisfaction with the quality of higher education*. Data analysis commenced by investigating whether there is an association between the academic programmes that students chose to study at university and their satisfaction with the quality of higher education. Student satisfaction with the quality of higher education was measured by their persistence to complete their course of study, employment expectations, earnings expectations based on information from their colleagues who completed their programme, and demand for graduates with the qualification in the labour market.

The Chi-Square test of independence using SPSS Statistics was conducted to measure if an association exists between the type of study programme and student satisfaction with the quality of higher education. This test was preferred because the independent variable study programme is nominal, categorising students who were enrolled for courses in Arts, Social Sciences and Humanities; Business, Accounting and Management; Education and Teaching; and Engineering, Science and Technology. The dependent variable student satisfaction with the

quality of higher education was ranked at an ordinal level on a five-level Likert scale for indicators of satisfaction such as retention and completion of a programme of study; employment prospects and options; better earnings prospects; and demand for graduates in the labour market. This kind of data fulfills the two key assumptions to run a Chi-Square test of independence, namely, that the two variables are ordinal or nominal, and that they consist of two or more categories of independent groups. The findings of this analysis are presented in Table 2.

**Table 2:** Correlation between Academic Programme of Study and Student Satisfaction with the Quality of Higher Education

Indicators of Student Satisfaction with the Quality of Higher Education	Chi-Square -Value	P-Value
Retention and completion of a programme of study	23.361	0.104
Employment prospects and options	20.874	0.183
Better earnings prospects	30.700	0.015
Demand for graduates in the labour market	30.807	0.014

Source: Primary data

The findings in Table 2 suggest an association between the type of academic programme that students select at university and their satisfaction with the quality of higher education measured by how the programme motivates students to complete their course and how it influences their labour market expectations in terms of employment and earnings. The results show that the association between students' responses on the effect of the study programme on retention has a Chi-Square value of 23.361, with a p-value of 0.104. Employment prospects has a Chi-Square Value of 20. and a p-value of 0.183; earning prospects a Chi-Square value of 30.700 and a p-value of 0.015, and demand for graduates in the labour market has a Chi-Square value of 30.807 with a p-value of 0.014.

These results are statistically significant at the 0.01 and 0.05 levels of significance, providing evidence to reject the null hypothesis and accept the alternative hypothesis that *the type of study programme undertaken by students at university is strongly correlated with their motivation to complete their course of study and their labour market expectations*. These findings also mean that students from different academic disciplines and

different universities (both private and public) believe that the academic programme they chose to study is strongly related to their satisfaction with the quality of higher education.

The second part of this analysis was examining which programme of study has the highest impact on student satisfaction with the quality of higher education. This involved interpreting the column percentages in cross-tabulation in SPSS. The column percentages from the five-level Likert scale were combined to come up with three categories, Agree, Undecided, and Disagree. The findings are presented in Table 3.

**Table 3:** The Relationship between the Programme of Study and Student Satisfaction with the Quality of Higher Education

Type of Study Programme	Study Programme Influences Course Completion		
	Agree	Undecided	Disagree
Arts, Social Sciences and Humanities	80.9	9.5	9.5
Business, Accounting and Management Courses	66.3	21.8	10.9
Education and Teaching Courses	76.1	8.7	15.2
Engineering, Technology and Science	88.2	2.9	8.8
Type of Study Programme	Study Programme has high Employment Prospects		
	Agree	Undecided	Disagree
Arts, Social Sciences and Humanities	81.0	11.1	7.9
Business, Accounting and Management Courses	76.4	9.1	14.5
Education and Teaching Courses	76.1	10.9	13.0
Engineering, Technology and Science	79.4	13.2	7.4
Type of Study Programme	Study Programme has High Earnings Prospects		
	Agree	Undecided	Disagree
Arts, Social Sciences and Humanities	87.3	6.3	6.3
Business, Accounting and Management Courses	76.3	19.0	32.5
Education and Teaching Courses	78.3	4.3	17.4
Engineering, Technology and Science	79.4	13.2	7.4

Source: Primary data

The findings in Table 3 indicate little difference between the students' responses on the effect of their study programmes on their ability to

complete or stay on course and their labour market expectations. More than 65% of the respondents from the four categories of academic programmes confirmed that their programme of study encouraged them to stay and complete their course, and more than 75% believed that their programme of study had high prospects for employment and earnings. These results suggest that universities in Uganda offer academic programmes that attract the interest of students.

Given the fact that there seemed to be no significant difference in the effect of the study programme on student retention, employment expectations, and earnings expectations among students in different disciplines, interviews were conducted with other university stakeholders to confirm or reject this finding. A Head of Department observed:

*Liberalization and privatization of the higher education sector in Uganda has increased the financial burden on families that send their children to university. Parents and students are making hard choices and decisions when they select which programme students should study at the university. This could be the reason why students from different disciplines all think that their programme of study will lead them to employment and better earnings* (Head of Department, October 2017).

Another remarked:

*Students will take pride in being at the university. These students may not know what their Programme of study has for them in terms of employment and earnings. This could have been caused by the inadequate guidance and counseling that students receive both at lower levels of education and university. However, it is for a fact that some study disciplines like engineering, medicine, and law have a higher potential for employment and earnings compared to other programmes in the arts and humanities fields.* (Head of Department, November 2017)

The above views imply that, firstly, while students select a programme based on their expectations in relation to future employment and earnings, some might not have sufficient information to make an informed decision. Secondly, some study programmes have more impact in terms of employment and earnings than others. These observations concur with the views of the Quality Assurance Directors who noted that

Uganda's National Council for Higher Education (NCHE) has adopted measures to ensure that universities align their offerings with the requirements of the labour market. For example, a Quality Assurance Director observed that:

*Since the NCHE in Uganda was established in 2001, it has emphasised ensuring a relevant curriculum in universities and has provided monitoring and assessment of standards. Quality Assurance Directorates have been established in universities to ensure internal monitoring and assessment at the institutional level. All these are aimed at ensuring that high-quality and relevant academic programmes are taught in universities to prepare students for the world of work.* (Quality Assurance Director, November 2017)

Taken together, these findings imply that university stakeholders believe that the study programmes offered relate to student retention, employment expectations, and earnings prospects. Universities thus need to put mechanisms in place to ensure that they offer courses and programmes that meet the labour market expectations of both graduates and employers.

### Findings for Objective 2

The second objective was to *determine which programmes of study are the best predictors of student retention, employment prospects, and earnings*. The academic programmes were classified into the following four categories:

1. Arts and Social Sciences/Humanities.
2. Business/Accounting and Management.
3. Education and Teaching-related Programmes.
4. Engineering/Medicine/Science and Technology.

Three multiple regression models were run to establish which of the four programme categories had a strong and statistically significant effect on enabling university students to complete their programme/retention; had high potential for employment; and had a strong effect on earnings expectations. The hypothesis to be verified in this model was:

*Academic Programmes statistically and significantly predict the quality of higher education in Uganda.*

The findings of the analysis are presented in Table 4.

**Table 4:** Model Summary and ANOVA Results for the Three Models

IV: Academic Study Programmes	DV: Indicators of Quality of Higher Education		
	Retention	Employment Prospects	Earnings Prospects
R	0.703	0.729	0.734
R-Square	0.494	0.532	0.538
Adjusted R-Square	0.493	0.530	0.537
F-Statistics	72.996	60.157	11.004
P-Value	0.000	0.000	0.000

Source: Primary data

The results in Table 4 demonstrate a significant level of predictive ability for the dependent variables. More specifically, the correlation coefficient (R) values indicate strong associations: R=0.734 for course completion and persistence, R=0.729 for employment expectations, and R=0.734 for earnings expectations. These correlations suggest that these variables can be reasonably predicted.

The coefficient of determination (R-squares) reveals the extent to which the independent factors related to the variable ‘type of study programme’ account for the variability in the dependent factors. The findings indicate that these independent factors explain 49.4% of the variability in retention, 53.2% of the variability in employment expectations, and 53.8% of the variability in earnings prospects. This implies that the respondents strongly believed that the type of academic programme significantly impacts student satisfaction with the quality of higher education. The F-ratios in the ANOVA table also indicate that the overall regression models are a good fit for the data. Programme completion/retention has  $F(4,245) = 72.996, p < .0005$ ; employment prospects  $F(4,245) = 60.157, p < .0005$ ; and earnings prospects  $F(4,245) = 11.004, p < .0005$ . These values indicate that the independent variables statistically and significantly predict the dependent variable.

**Table 5:** Coefficient Results for the Models

IV: Type of Academic Study Programme	DV: Indicators of Quality of Higher Education								
	Retention			Employment Prospects			Earning Prospects		
	Beta	t	Sig.	Beta	T	Sig.	Beta	t	Sig.
Arts and Social Sciences	0.304	7.756	0.000	0.216	5.390	0.000	0.316	8.778	0.000
Business/Management	0.469	11.971	0.000	0.274	7.865	0.000	0.506	14.064	0.000
Education/Teaching	0.253	6.060	0.000	0.204	5.826	0.000	0.216	5.390	0.000
Science/Technology	0.435	10.785	0.000	0.274	7.052	0.000	0.435	10.785	0.000

Source: Primary data

The findings in Table 5 indicate that all the independent variables included in the model are statistically significantly different from 0, meaning that all the academic programmes that students chose are important in determining student satisfaction with the quality of higher education in Uganda. Furthermore, the business and management programmes’ t-values are 11.971 for retention, 7.865 for employment prospects, and 5.390 for earnings prospects; while science and technology have t-values of 10.785 for retention, 7.052 for employment prospects, and 10.785 for earnings prospects, indicating higher levels of student satisfaction with these programmes than with arts and education programmes.

These findings on academic programme quality’s effect on student satisfaction with the quality of higher education were supported by the heads of academic departments who emphasised that the programmes offered by universities affect student satisfaction more than other factors. They noted that acquisition of a university degree alone may motivate students to complete their course because they are aware that a university qualification opens the door to future benefits whether or not it is highly rated. A head of department remarked that:

*Most of our students are from deprived backgrounds and once they have enrolled for a university degree that alone is a big achievement in their community. They will pursue that programme to the end irrespective of whether it has immediate employment benefits or not because they know that they will be among the few in their community to have a degree qualification. (Head of Department, 16 November 2017)*



While most of the interviewees agreed that the type of academic programme that students enrolled for was more important, they were also of the view that other inputs such as the quality of university facilities and teaching staff determine the quality of the outcomes. It was also noted that it is generally accepted that parents and guardians enrol their children in higher education to increase their chances of employment and a higher income. They thus suggested that universities have the responsibility to offer programmes that meet parents and students' expectations. A participant from one of the public universities noted:

*I think the government in this country has realised that higher education should benefit parents, students, and the country. This is why university administrators are under intense pressure from NCHE and from the government to restructure their programmes and weed out those courses that do not have direct career paths. ... Newly created universities are under instructions to specialise in specific fields such as agriculture, vocational, business, and science and technology, and some courses that used to be stand-alone are proposed to be course units to be taught to all students. (Head of Academic Department, 16 November 2017)*

This observation suggests that stakeholders in the higher education sector are realising that higher education should produce employable graduates not only to meet parents and students' expectations but also those of employers. The findings also show that the government requires universities to primarily offer programmes in the fields of science and technology, vocational training and agriculture, as well as business and management. These fields promote student and parent satisfaction, as they provide direct career opportunities and pathways to employment.

### Discussion of Findings

For the purpose of this study, the academic programmes were classified into four categories, namely, Arts and Social Sciences/Humanities; Business/Accounting and Management; Education and Teaching Related Programmes; and Engineering/Medicine/Science and Technology. The results point to minimal differences in students' responses on the effect of their study programmes on their ability to complete the course or fulfil their labour market expectations. More than 65% of the respondents

in the four programme categories confirmed that their programme encouraged them to complete their course, with more than 75% stating that they believed that their programme had high employment and earnings prospects. These findings suggest that Ugandan universities offer academic programmes that attract the interest of students with high labour market expectations. However, engineering, medical, science, and technology-related academic programmes were ranked highest in terms of employment and earnings prospects.

These findings are in line with those of previous graduate tracer studies by Kasozi (2003), Mamdani (2007), and the NCHE (2017) that established that 80%-89% of graduates in Human Medicine and Architecture obtained jobs within three months of graduation compared to 36%-60% of Social Sciences and Law graduates. This points to higher demand in the labour market for graduates of the former programmes.

An earlier study by the NCHE (2016) found that enrolment in science and technology courses in all Ugandan higher education institutions was below 40% while that in arts and humanities was estimated at 70%. Thus, more students in the country's private and public universities are enrolled in arts than in science programmes. Furthermore, the study found that 76.7% of all students enrolled in science courses were in public universities, with only 23.3% in private institutions.

### Conclusions

The study found that the type of academic programme is strongly correlated with students' motivation to complete the programme and their labour market expectations. This suggests that regardless of the programme or university (public or private) they enrol in, students believe that the academic programmes they choose is strongly related to their satisfaction with the quality of higher education. Therefore, universities need to put mechanisms in place to ensure that they offer courses and programmes that meet the labour market expectations of both graduates and employers in different economic sectors. It was also found that some programmes of study have higher employment and earnings prospects. This implies that universities need to keep abreast of labour market dynamics so that they can offer programmes that are well-aligned with students' desired career opportunities and their parents' expectations.

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