

Exploring effective strategies to revamp the student enrolments in private tertiary institutions: A case of Rwanda

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Abstract

Different reports by the Ministry of Education in Rwanda have confirmed a decrease in student enrolments in Rwandan private universities since 2014, such that there is a need for effective strategies to address this issue. This study was undertaken to explore effective strategies to revamp student enrolments in six selected private tertiary institutions in Rwanda. The study adopted a descriptive survey design and used a sample of 382 participants out of 13914 subjects. The study employed a structured questionnaire for data collection. The data was analysed by means of percentages, frequencies, means and standard deviation. The findings revealed that the effective institution-based strategies to improve student enrolments in private universities in Rwanda are notably: motivate new applicants by helping the alumni to get jobs, reduce the costs and bring flexibility in fee payment, offer more flexible and marketable programs, improve quality in teaching and provide adequate instructional facilities. It was also found that the effective Government-based strategies are notably: promote graduate employability in Rwanda, provide study loan to private university students, promote more technical programmes than general ones, provide financial support to private universities by the Rwandan government to build their capacity. The study recommended that there should be partnership between the managers of private tertiary institutions and the government of Rwanda in putting in place the suggested effective strategies to revamp the student enrolments of the institutions.

Keywords: effective strategies, private tertiary institutions, revamp, student enrolments, Rwanda

Introduction

Provision of education to citizens has been said to be central in training more members of the potential workforce of a country. Higher education is among the essential levels of education for the development of highly qualified human resources for a country. Universities and colleges play a major role in this endeavour. Because of globalisation and the upcoming knowledge-based economy, there has been a worldwide growth and proliferation of higher education institutions (Stander 2017). The study of Roser and Orteiz-Ospina (2014) examined the gross enrolment ratio for different regions of the globe. They found that the current number of student enrolments is shrinking gradually in some areas of specialisation, resulting in a decline of student enrolments in

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certain universities around the globe. Hammed (2018) in his report states that over 50% of public universities and more than two thirds of private universities were not able to meet their enrolment targets in 2016, and decreasing student enrolment continue to be a burden for higher education institutions globally.

Current research on higher education has shown that agriculture and veterinary majors are less popular in different universities around the world (Nelson 2014). A study by the Babson Survey Research Group in January 2018 found a decrease in higher education enrolment in general, but with growth in students enrolled only in distance courses. The study highlighted a decline from 18.3 million to 17.1 million (6.4 percent) in the worldwide student enrolments. Furthermore, UNESCO Institute of Statistics (UIS, 2017) indicated that starting from 2015 the world gross enrolment rate in universities has started shrinking compared to the previous years.

In Rwanda, private tertiary institutions contribute copiously to the development of the nation by providing high level education to its citizens and their overall functioning depends significantly on the number of enrolled students. The main reason is that tuition is almost taken as the sole means of generating funds for these institutions (Teixeira & Koryakina, 2011). That means, these institutions should get considerable student enrolments for proper performance and for their sustainability.

Statement of the problem and purpose of the study

Based on the reports of the Ministry of Education in Rwanda, the rate of student enrolments in tertiary institutions in Rwanda has started decreasing since 2014. As a result, some private universities in Rwanda have started facing financial deficits which have forced them to close their doors and left their students and employees in horrific conditions. Since 2017, the Ministry of Education (MINEDUC) through Higher Education Council (HEC) conducted a number of audits in order to evaluate the quality of education provided in private higher learning institutions in Rwanda as well as determining their capacity to run their businesses as educational institutions. So far, eight private universities in Rwanda have been closed due to their lesser capacity to run their operations; the root cause of this phenomenon is the shrinking of student enrolments at these institutions which cause their shortages of finance. The survey conducted by MINEDUC (2018) found that Gross enrolment rate (GER) of the university students declined between 2015 and 2017. Similarly, the same study showed a large disparity in terms of student enrolments per field of study in Rwandan private universities. A higher rate of student enrolment was found in fields like business, administration and law, with a low rate in the fields like natural sciences, mathematics and statistics, while a very low rate was found in fields such as agriculture and the humanities. The report of MINEDUC (2018) indicates that the rate of student enrolment has been shrinking gradually since 2014. The report shows that the enrolment in private tertiary institutions increased from 21948 students in 2006 to 28909 students in 2009 (31.7%); from 31170 students in 2010 to 43717 in 2013 (40.2%) and from 49254 students in 2014 to 50822 students in 2018 (3.1%). Based on these statistics, it is clear that the rate of student enrolments declined from 40.2% (for 2010-2013) to 3.1% (for 2014-2018). Indeed, there need to be strong solutions found for this problem to ensure the sustainability of private higher learning institutions in Rwanda.

The concept of student enrolments in higher learning institutions has attracted the attention of a considerable number of researchers worldwide, but most of their studies have focused on exploring factors affecting students' university choice and factors influencing students' enrolment in general. However, there are very few studies which attempted to explore effective strategies to improve student enrolments in general. Furthermore, there are no studies which attempted to explore effective strategies to improve student enrolments in either private tertiary institutions or focusing on Rwanda. This study was carried out to fill this gap in the literature. In addition, the researchers believe that the findings of this study will be very useful to the managers of private

tertiary institutions in Rwanda as it will inform them how best they can improve their student enrolments. That means, the findings of this study will serve as an important tool for policy formulation as well as the improvement of education practices in relation to private university student recruitments both nationally and internationally.

Research questions

The study was guided by the following research questions:

- What are the most important variables influencing students' decision to enrol in private tertiary institutions in Rwanda?
- What are the students' challenges regarding private tertiary institutions in Rwanda?
- What are the institution-based and government-based strategies to increase student enrolments in private tertiary institutions in Rwanda?

Literature review

This section comprises the review of related literature. The review focuses on the themes from the research objectives as discussed in the next sections.

Factors influencing student's university choice

There are several studies on factors influencing student's university choice; some are described below. The study of Irfan, Wasim, Rana and Nadeem (2013) concluded that the choice of tertiary institutions has become more complex and is influenced by factors like desired programmes, courses and university reputations, institutional reputation and distance from home. Yusof *et al.* (2008) confirmed that available programmes are highly considered by first years while choosing a specific university. Similarly, Ismail (2009) hypothesised that university choice is influenced by the academic recognition of a university. Consequently, the study concluded that academic programmes significantly influence college choices. For Hoyt and Brown (2003) available degree options are among the essential factors influencing students' university choice. Ming (2010) examined factors affecting students' university and college choice decision in Malaysia. The findings revealed that factors affecting students' choice of university are institutional location, courses offered, university image, instructional resources, costs, availability of financial support and employment prospects.

Danjuma, Shasi and Hauwa (2014) investigated whether there is a close association between customer service and student enrolment in one of the most important private universities in Nigeria, and the willingness of the registered students to recommend their university to other prospective students. The study used Pearson correlation to analyse the data. In the end, the findings revealed that service delivery positively correlates with the choice of a university.

Marinngé (2006) conducted a study aiming at determining the important factors that students consider while making decisions regarding their choice of university and programmes. The study used a sample of 387 students (186 males and 201 female) and a survey questionnaire containing a 10 points Likert scale. In addition, the questionnaire included 35 university choice factors that students had to rank respectively. In the questionnaire, there were also 10 items designed to discover the factors influencing students' choice of course or programme. Data was analysed using descriptive statistics establish the factors under investigation. The study revealed that labour market factors in relation to employment and career projections greatly influence student's choices of universities or programmes.

Le, Dobele and Robinson (2019) examined the dynamics of university choice in relation to the usage of information sources. This study used a sample of potential students from Vietnam. The study showed that the courses offered are among the important factors influencing university student enrolments. Moreover, the study concluded that frequently poor content of the courses

offered by a university can negatively influence student enrolments in universities. Commenting on this study, it could be understood that students need marketable programmes which generate more jobs rather than courses with poor content which do not offer job opportunities. Indeed, unmarketable programmes influence decline in student enrolments.

However, Walsh, Moorhouse, Dunnet and Barry (2015) found different results in a longitudinal study on factors influencing university choice in England. The students were first investigated during their application for university enrolment and when they were about to start studying in the respective courses of their choice. The findings revealed that courses or programmes offered by a university do not affect a student's choices. These findings simply mean that whatever courses or programmes and whether they are marketable or not, cannot affect student enrolment.

Strategies to improve university student enrolments

Student enrolments are essential to any higher learning institutions and tuition remains a key determinant of the proper functioning of tertiary institutions worldwide. This is due to the fact that school fees remain the main source of revenue in these institutions (Mata-López & Tobón, 2018). Indeed, shortage of student enrolments in private higher learning is considered a threat for these institutions. Consequently, some studies were carried out in order to find durable strategies to address the problem whenever it arises. Some of these studies are discussed below. Atieno (2009) argues that due to a high competition in the tertiary education sector, recruiting sufficient students for private tertiary institutions is not an easy undertaking. He further notes that tertiary institutions are continuously facing the difficulty of encouraging more students to enrol. Although they spend a lot of money marketing their programmes, their expectations regarding the number of enrolling students have not been met yet. For this author, the demand to raise student enrolments has made the institutions develop a number of mechanisms to encourage more applicants. These include: increasing students' satisfaction through the provision of good services to students, using strong marketing strategies like advertisements and face-to-face meetings with potential clients.

Asgill *et al.* (2013) have advised the managers of tertiary institutions to use the following strategies in order to get more applicants: using social connections, radio, television, e-mails, on-site workshops, professional conferences, among others. According to Zozaya and Herlinda (2013), in terms of business, to meet the customers' satisfaction, the business owner must have the information regarding their personality, experiences, expectations, desires, points of view, and these are necessary for determining the ways one can gain a superior position in the tertiary education market. Mahin (2011) in her report proposed some enduring strategies to enhance student enrolment rates. These are namely: significant support to the students while searching for universities and enrolment procedures and facilitating the families' understanding and handling of university costs.

Clifford, Miller, Stasz, Goldman, Sam and Kumar (2013) explored the effectiveness of various approaches adopted to enhance access to tertiary education. The study found that in spite of scarce resources for public tertiary education in third-world nations, governments and institutions devised some strategies to ensure access to tertiary education. These are namely provision of scholarships and adopting fee policies tailored to different needs of students and extensive student loan schemes (Lee and Healy 2006). Atieno (2009) explored the effect of communication strategies on improving student enrolments among private universities in Kenya. The study adopted a descriptive research approach to elaborate on the problem under investigation. The study employed a sample of 100 students that were chosen from four private universities in Kenya, using the stratified sampling technique. The study used a questionnaire as the data collection instrument. The results showed that communication strategies significantly influence the enhancement of student enrolments in private high learning institutions. It was

found that print media is the most utilised method for displaying information among the universities. Most of the respondents confirmed that they had received messages about universities on the radio. Therefore, they proposed that social media and the Internet should be utilised as well.

Azad and Shubra (2012) conducted a study to find ways to solve the problem of declining student enrolments in computer science courses. Specifically, the study analysed the efforts made to recognise the causes and find strategies to improve computer science enrolment. The findings revealed that to increase student enrolments for computer science programmes, universities have to offer multidisciplinary and cross-disciplinary courses. For Braun (2017) effective strategies to increase student enrolments are namely knowledge concerning the potential students, discovering the important dynamics for selecting a university, revamping the enrolment procedures and having a perception of your position vis-a-vis your competitors. The Australian Government (2017) suggested the following strategies for enhancing student enrolment in tertiary institutions. These are quality services to learners, more flexible admission conditions, better teaching activities and teachers' competence, a conducive learning environment, keeping an eye on student development and transparency in completion rates.

Hammel (2018) reported that more than 50% of public universities and more than two thirds of private universities did not succeed in achieving their targeted student enrolments in 2016. Decreasing student enrolments remains a problem for universities all over the world. He further notes that satisfying the various needs of all kinds of students is central to the success of the universities. Tertiary institutions are also advised to make virtual visits and improve substance, accord simple application procedures, provide financial support, make relevant reminders, make the customers (students) enthusiastic and optimise the enrolment process. Filzah, Siti & Nik (2016) carried out a study to examine the strategies for improving university student enrolments in Malaysia. This study revealed that non-active enrolment strategies like institutional reputation and advertisements significantly influence university student enrolments. Nevertheless, active enrolment strategies (i.e. overseas recruitment) had not had a significant correlation with student enrolment.

Methodology

This research was conducted in January-February, 2020. It was carried out in six private tertiary institutions including the Adventist University of Central Africa (AUCA), Christian University of Rwanda (CHUR), Institut Supérieur de Ruhengeri (INES-RUHENGERI), KIM University, Protestant Institute of Arts and Social Sciences (PIASS) and University of Tourism Technology and Business Studies (UTB). The six private universities were selected out of 20 tertiary institutions operating in Rwanda. The selection was based on the assertion by Borg and Gall (2003) that at least 30 percent of the entire population is appropriate for the sample. Thus, six institutions were involved in the study, in the belief that the sample was representative enough. Given the preferred time scope of the study, only tertiary institutions that were five years old by the end of the 2018-2019 academic year were involved in the study. The six tertiary institutions were selected using a systematic sampling technique: the institutions were first sorted alphabetically, and then the interval of four numbers was used to select the ones to be involved in the study.

The sample frame of the study includes undergraduate students, academic registrars and marketing officers from the six selected private universities in Rwanda. Therefore, the target population of this study comprised 13914 subjects (13902 undergraduate students, 6 academic registrars and 6 marketing officers) of which a sample of 382 participants (370 undergraduate students, 6 academic registrars and 6 marketing officers) was drawn. The student sample was chosen by means of the sampling table by Krejcie and Morgan (1970). The table is based on the following formula.

$$s = \frac{\chi^2 NP}{d^2 (N-1) + \chi^2 P (1-P)}$$

s : required sample size

χ^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size

P = the population proportion (assumed to be .50 since this would provide the maximum sample size)

D = the degree of accuracy expressed as a proportion (.05).

In addition, stratified (probability) sampling technique was used in selecting the undergraduate students. By this technique the researcher divides (stratifies) the population into sub-groups (strata) having the same characteristic, and then from each group a particular sample is randomly chosen (Creswell 2012). In fact, the researchers divided the undergraduate students into four strata, according to the years of study (year 1, 2, 3, and 4). These strata were chosen in order to have diversified and reliable data. Within each group, the researcher used a simple random selection of the undergraduate students for inclusion in the sample. For the academic registrars and marketing officers, the researcher used a census technique which consists of taking the whole population as a sample because it is too small (Creswell 2012).

This study used a structured questionnaire to collect data from the six sampled tertiary institutions. The questionnaire contained close-ended questions only in five point Likert scales (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree). The questionnaire was the same for all the participants (students, academic registrars and marketing officer) and all their responses were analysed together. This was found to be the best approach for this study because its objectives did not entail using different research instruments. Thus the researchers found no reason to utilise a specific instrument per each category of respondents. Before collecting data, the researcher sought authorisation to carry out this activity from the vice-chancellors of the six tertiary institutions. Before data collection, the researchers sought the informed consent from the respondents using an appropriate form. Before collecting the data, the researchers did a pilot study to establish the reliability of the instruments by means of Cronbach alphas analysis. The pilot study was done by having 15 respondents (13 students, 1 academic registrar and 1 marketing officer) fill in the questionnaire and give their feedback on it. This exercise was conducted in one private university that was randomly selected. However, the institution that was selected for the pilot study was not involved again in collecting the main data. The data was taken from the questionnaires and entered into Statistical Package for Social Sciences (SPSS) version 20. The following table shows the Cronbach alphas scores obtained.

Table 1: Pilot study results

Variables	Number of items	Cronbach Alpha	Comments
UCF	15	0.903	Accepted
CUS	15	0.957	Accepted
SRSE	15	0.949	Accepted

Note: UCF=University choice factors, CUS= Challenges among university Students, SRSE=Strategies to Revamp Student Enrolments.

The results in Table 1 show that the Cronbach alphas were above 90%. This indicated that most items in this questionnaire had high squared multiple correlations, an indication that the questionnaire passed the reliability test. A Cronbach alpha above 0.7 is considered satisfactory (George & Mallery 2003). This meant that the tool was adequate in establishing the factors affecting students' choice of university, challenges among private university students and strategies to improve student enrolments in private tertiary institutions in Rwanda. The results in

Table 1 helped the researchers ensure that the instrument is reliable. The observations from the pilot study by the participants, helped the researcher eliminate all the errors and make any other necessary adjustments. In data analysis, SPSS was employed to generate all the intended results. In addition, the researcher used descriptive statistics (percentages, frequencies, mean and standard deviation) in data analysis.

Findings

This section comprises the findings as per the objectives of this study. The findings are presented under topics such as:

- Variables influencing students' decision to enrol in private tertiary institutions in Rwanda,
- Students' challenges in private tertiary institutions in Rwanda,
- Institution-based strategies to increase student enrolments in private tertiary institutions in Rwanda and
- Government-based strategies to increase student enrolments in private tertiary institutions in Rwanda.

All the findings are based on the responses from undergraduate students, academic registrars and marketing officers. All the responses were analysed altogether across each objective. Due to their involvement in student enrolment, the researchers found it appropriate to involve the three categories of respondents in this study.

Demographic characteristics of respondents

This study involved 382 participants (370 undergraduate students, 6 academic registrars and 6 marketing officers). Specifically, the study involved 74 respondents from AUCA, 42 respondents from CHUR, 87 respondents from INES-RUHENGERI, 50 respondents from KIM University, 41 respondents from PIASS and 88 respondents from UTB. In terms of gender, this study involved 204 (53.4%) male and 178 (46.6%) female participants. Concerning the age of respondents, 156 (40.8%) were less than 20 years, 184 (48.2%) were from 20 to 30 years old while 42 (11.0%) were above 30. Concerning education level, 7 (1.8%) held master's degrees, 27 (7.1%) had bachelor's degrees, while 348 (91.1%) were still doing undergraduate study. In Rwanda some people opt to have more than one degree in order to increase their chances of getting jobs. Thus, some of the participants were doing additional bachelors' degrees. With regard to the marital status of the respondents, 354 (92.7%) were single and 28 (7.3%) were married. The married participants were very few compared to the single ones, because the majority of the undergraduate students are generally single and some of them don't even have the legal age for marriage in Rwanda (21 year). In the education system of Rwanda, most undergraduate students start their studies when they are 19 years old.

Response rate

This section presents the response rate with regard to this study. In other words, it shows the extent to which the expected participants turned up. The field study was carried out between November 2019 and March 2020. The study sample was 382 participants and the questionnaires were administered to the 382 respondents (370 undergraduate students, 6 academic registrars and 6 marketing officers). That means the response rate was 100 percent and was appropriate for the study. Mugenda and Mugenda (2012) argue that a response rate of more than 60% is adequate for social sciences.

Table 2: Response rate

S/N	Category of participants	Number of Expected participants	Participated	Percentages
1	Undergraduate students	370	370	100%
2	Academic registrars	6	6	100%
3	Marketing officers	6	6	100%
4	Total	382	382	100%

Source: Research data (2019)

Results in Table 2 show that all the expected participants have turned up for the study. That means the data was collected from the expected number of participants and none missed. Thus the response rate was 100 percent and as per the researchers' plan.

Variables influencing students' decision to enrol in a particular private university in Rwanda

The following table includes all the items that the respondents (students, academic registrars and marketing officers) were asked in order to identify variables influencing students' decision to enrol in private higher learning institutions in Rwanda. For each item, the respondents had to choose one alternative among *disagree strongly*, *disagree*, *neutral*, *agree* and *agree strongly*, by ticking the appropriate box.

Table 3: Descriptive statistics for variables influencing students' decision to enrol (N=382)

Options	N	Min	Max	Mean	STD
Cheap costs	382	1.00	5.00	4.3037	.90024
Flexibility of payment methods	382	1.00	5.00	2.5340	1.30521
Good service delivery	382	1.00	5.00	2.6675	1.29483
Flexible programs and matching with my secondary school options	382	1.00	5.00	4.1073	1.40733
Marketable programs	382	1.00	5.00	2.8325	1.26250
Flexible admission conditions	382	1.00	5.00	2.5838	1.26410
Flexible academic rules and regulations	382	1.00	5.00	4.0314	1.33362
Adequate instructional facilities	382	1.00	5.00	3.8534	1.18143
Good infrastructure	382	1.00	5.00	2.6911	1.35114
Competent and flexible lecturers	382	1.00	5.00	3.9005	1.20609
Good student/campus life	382	1.00	5.00	2.6702	1.24065
Good location of the university	382	1.00	5.00	3.8429	1.47292
Family pressure or advice	382	1.00	5.00	2.8874	1.33218
Peer pressure or advice	382	1.00	5.00	2.8665	1.22763
Conducive learning environment	382	1.00	5.00	2.9869	1.18934
Valid N	382				

Note: Strongly Disagree=[1-2]=[Very Low Mean; Disagree= [2-3]=[Low mean; Neutral= [3-4]=[moderated mean; Agree= [4-5]=[High mean; Strongly Agree = [5-]=[Very High mean

Source: Research data

The results in Table 3 show that the majority of respondent agree that the following variables have influenced students' decision to enrol in their respective private universities. These are namely:

- Cheap costs ($\mu=4.3037$ and $STD=0.90024$),
- Flexible programs and matching with one's secondary school options ($\mu=4.1073$ and $STD=1.40733$), and
- Flexible academic rules and regulations ($\mu=4.0314$ and $STD=1.33362$).

In addition, the results show that the majority of respondents were neutral about the following variables. These are namely:

- Competent and flexible lecturers ($\mu=3.9005$ and $STD=1.20609$),
- Good location of the university ($\mu= 3.8429$ and $STD=1.47292$) and
- Adequate instructional facilities ($\mu=3.8534$ and $STD=1.18143$).

The results also show that the respondents mostly disagreed that the following variables have influenced their decision to enrol in their respective universities. These are namely:

- Flexibility of payment modalities ($\mu=2.5340$ and $STD=1.30521$),
- Good service delivery ($\mu=2.6675$ and $STD=1.29483$),
- Marketable programs ($\mu=2.8325$ and $STD=1.26250$),
- Flexible admission conditions ($\mu=2.5838$ and $STD=1.26410$),
- Good infrastructure ($\mu=2.6911$ and $STD=1.35114$),
- Good student/campus life ($\mu=2.6702$ and $STD=1.24065$),
- Family pressure or advice ($\mu=2.8874$ and $STD=1.33218$),
- Peer pressure or advice ($\mu=2.8665$ and $STD=1.22763$) and
- Conducive learning environment ($\mu=2.9869$ and $STD=1.18934$).

Students' challenges in private tertiary institutions in Rwanda

The following table includes all the items that the respondents (students, academic registrars and marketing officers) were asked to identify students' challenges in private higher learning institutions in Rwanda. For each item, the respondents had to choose one alternative among *Disagree strongly*, *Disagree*, *Neutral*, *Agree* and *Agree strongly*, by ticking the appropriate box.

Table 4: Descriptive statistics on students' challenges (=382)

Options	N	Min	Max	Mean	STD
Difficulty in obtaining tuition fees	382	1.00	5.00	4.1230	1.03383
Lack of flexibility in fee payment	382	1.00	5.00	4.1021	1.10001
Poor service delivery	382	1.00	5.00	2.6911	1.35114
Incompetent lecturers	382	1.00	5.00	3.9110	1.13519
Poorly developed curricula	382	1.00	5.00	2.8665	1.22763
Inadequate learning facilities	382	1.00	5.00	3.8298	1.28175
Poor infrastructure	382	1.00	5.00	2.4058	1.33802
Bad location of the university	382	1.00	5.00	2.6126	1.30078
Very harsh academic rules and regulations	382	1.00	5.00	2.8325	1.26250
Bad learning environment	382	1.00	5.00	2.5838	1.26410
Lack of/poor accommodations	382	1.00	5.00	3.7644	1.32490
Lack of/poor restaurants	382	1.00	5.00	3.8325	1.20070
Lack of extra-curricular activities	382	1.00	5.00	2.9869	1.18934
Declined motivation to study university	382	1.00	5.00	4.2461	.88568
Shortage of employment opportunities among Rwandan graduates	382	1.00	5.00	4.4476	.91996
Valid N	382				

Note: Strongly Disagree=[1-2]=[Very Low Mean; Disagree=[2-3]=[Low mean; Neutral=[3-4]=[moderated mean; Agree=[4-5]=[High mean Strongly Agree = [5-]=[Very High mean
Source: Research data

The results in Table 4 show that the majority of respondents agree that they are facing the following challenges in their respective universities. These are namely:

- Shortage of employment opportunities among Rwandan graduates ($\mu=4.4476$ and $STD=0.91996$),
- Declined motivation to study at university ($\mu=4.2461$ and $STD= 0.88568$),
- Difficulty in getting tuition fees ($\mu=4.1230$ and $STD=1.03383$) and
- Lack of flexibility in fee payment ($\mu=4.1021$ and $STD=1.10001$).

In addition, the results show that the majority of respondents were neutral about the following challenges in their respective universities. These are namely:

- Incompetent lecturers ($\mu=3.9110$ and $STD=1.13519$),
- Inadequate learning facilities ($\mu=3.8298$ and $STD=1.28175$),
- Lack/poor restaurants ($\mu=3.8325$ and $STD=1.20070$) and
- Lack/poor accommodations ($\mu=3.7644$ and $STD=1.32490$).

The results also show that the respondents mostly disagreed with the following challenges:

- Poor service delivery ($\mu=2.6911$ and $STD=1.35114$),
- Poorly developed curricula ($\mu=2.8665$ and $STD=1.22763$),
- Poor infrastructure ($\mu=2.4058$ and $STD=1.33802$),
- Bad location of the university ($\mu=2.6126$ and $STD=1.30078$),
- Very harsh academic rules and regulations ($\mu=2.8325$ and $STD=1.26250$),
- Bad learning environment ($\mu=2.5838$ and $STD=1.26410$) and
- Lack of extra-curricular activities ($\mu=2.9869$ and $STD=1.18934$).

Institution-based strategies to increase student enrolments in private tertiary institutions in Rwanda

The following table includes all the items that the respondents (students, academic registrars and marketing officers) were asked in order to identify institution-based strategies to increase student enrolments in private tertiary institutions in Rwanda. For each item, the respondents had to choose one alternative among *Disagree strongly*, *Disagree*, *Neutral*, *Agree* and *Agree strongly*, by ticking the appropriate box.

Table 5: Descriptive statistics on institution-based strategies (N=382)

Options	N	Min	Max	Mean	Std.
Reduce the costs and bring flexibility in fee payment	382	1.00	5.00	4.2513	.88717
Use of media/social media in marketing the institution	382	1.00	5.00	2.7117	1.45168
Improve the services to students	382	1.00	5.00	2.8006	1.46974
Make academic rules and regulations more flexible	382	1.00	5.00	2.8988	1.47977
Offer more flexible and marketable programs	382	1.00	5.00	4.2199	.87773
Improve quality in teaching	382	1.00	5.00	4.0995	.95326
Provision of adequate instructional facilities	382	1.00	5.00	3.8796	1.23855
Provision of adequate infrastructure	382	1.00	5.00	2.6166	1.31157
Improve the student/campus life	382	1.00	5.00	2.6227	1.32965
Provision of more extra-curricular activities	382	1.00	5.00	2.6166	1.35994
Optimise the learning environment	382	1.00	5.00	2.5061	1.39834
Motivate new applicants by helping alumni get jobs	382	1.00	5.00	4.4241	.91832
Improve the institutional reputation	382	1.00	5.00	2.7304	1.28511
Sensitise the active students to bring their friends/peers	382	1.00	5.00	2.6440	1.25447
Make the academic rules and regulation less rigid	382	1.00	5.00	2.6911	1.35114
Valid N	382				

Note: Strongly Disagree=[1-2]=[Very Low Mean; Disagree=[2-3]=[Low mean; Neutral=[3-4]=[moderated mean;

Agree=[4-5]=[High mean Strongly Agree = [5-]=[Very High mean

Source: Research data

The results in Table 5 show that the majority of respondents have agreed that the following institution-based strategies can increase the student enrolments in private higher learning institutions in Rwanda. These are:

- Motivate new applicants by helping the alumni to get jobs ($\mu=4.4241$ and $STD=0.91832$),
- Reduce the costs and bring flexibility in fee payment methods($\mu=4.2513$ and $STD=0.88717$),
- Offer more flexible and marketable programs ($\mu= 4.2199$ and $STD=0.87773$) and
- Improve quality in teaching ($\mu=4.0995$ and $STD=.95326$).

Furthermore, the results show that most of the respondents were neutral about the provision of adequate instructional facilities ($\mu= 3.8796$ and $STD= 1.23855$) as one of institution-based strategies to increase the student enrolments in private higher learning institutions in Rwanda.

The results also show that the respondents mostly disagreed with the following proposed institution-based strategies. These are namely:

- Use of media/ social media in marketing the institution ($\mu= 2.7117$ and $STD= 1.45168$),
- Improve the services to students ($\mu= 2.8006$ and $STD= 1.46974$),
- Make the academic rules and regulations more flexible ($\mu= 2.8988$ and $STD= 1.47977$),
- Provision of adequate infrastructures ($\mu= 2.6166$ and $STD= 1.31157$), Improve the student/ campus life ($\mu= 2.6227$ and $STD= 1.32965$),
- Provision of more extra-curricular activities ($\mu= 2.6166$ and $STD= 1.35994$),
- Optimise the learning environment ($\mu= 2.5061$ and $STD= 1.39834$),
- Improve the institutional reputation ($\mu= 2.7304$ and $STD= 1.28511$),
- Sensitise the active students to bring their friends/peers ($\mu= 2.6440$ and $STD= 1.25447$) and
- Make the academic rules and regulation less rigid ($\mu= 2.6911$ and $STD= 1.35114$).

The following table includes all the items that the respondents (students, academic registrars and marketing officers) were asked in order to identify government-based strategies to increase student enrolments in private tertiary institutions in Rwanda. For each item, the respondents had to choose one alternative among *Disagree strongly*, *Disagree*, *Neutral*, *Agree* or *Agree strongly*, by ticking the appropriate box.

Table 6: Descriptive statistics on Government-based strategies (N=382)

Options	N	Min	Max	Mean	Std.
Make the admission conditions more flexible	382	1.00	5.00	2.6675	1.32092
Admit fewer students into public universities	382	1.00	5.00	2.5995	1.38393
Provide financial support to private universities	382	1.00	5.00	4.2513	.88717
Reduce the control over private universities	382	1.00	5.00	2.8534	1.30393
Promote graduate employability in Rwanda	382	1.00	5.00	4.4293	.91873
Oblige all private universities in Rwanda to offer similar costs	382	1.00	5.00	2.7199	1.31120
Prove study loans to private university students	382	1.00	5.00	4.3691	.91209
Reward the best performing private universities in terms of student enrolments	382	1.00	5.00	2.7382	1.33774
Sensitise parents to take their children to university	382	1.00	5.00	3.0445	1.34987
Give accreditation to private universities proportionally to the available number of students	382	1.00	5.00	4.2513	.88717
Promote more technical programmes than those of general education	382	1.00	5.00	4.3037	.90024
Sensitise the youth about the role of university studies in job creation	382	1.00	5.00	4.1937	.93019
Increase fairness in employee recruitment	382	1.00	5.00	3.9581	1.11695
Encourage the youth to study at university with the aim of job creation not job seeking	382	1.00	5.00	4.0916	1.05217

Set up an organ for speaking for private tertiary institutions	382	1.00	5.00	2.7382	1.33774
Valid N	382				

Note: Strongly Disagree=[1-2]=[Very Low Mean; Disagree=[2-3]=[Low mean; Neutral=[3-4]=[moderated mean; Agree=[4-5]=[High mean Strongly Agree = [5-]=[Very High mean
Source: Research data

The results in Table 6 show that the majority of respondents have agreed that the following Government-based strategies can increase the student enrolments in private higher learning institutions in Rwanda. These are:

- Promote graduate employability in Rwanda ($\mu=4.4293$ and $STD=0.91873$),
- Provide study loan to private university students ($\mu=4.3691$ and $STD=0.91209$),
- Promote more technical programs than those of general education ($\mu=4.3037$ and $STD=0.90024$),
- Provide financial support to private universities ($\mu=4.2513$ and $STD=0.88717$),
- Sensitise the youth about the role of university studies in job creation ($\mu=4.1937$ and $STD=.93019$),
- Encourage the youth to study university with the aim of job creation not job seeking ($\mu=4.0916$ and $STD=1.05217$).
- Give accreditation to private universities proportionally to the available students in Rwanda ($\mu=4.2513$ and $STD=.88717$).

Furthermore, the results in Table 5 show that most of the respondents were neutral about the following government-based strategies. These are:

- Increase fairness in employee recruitment ($\mu=3.9581$ and $STD=1.11695$) and
- Sensitise of parents to take their children to university ($\mu= 3.0445$ and $STD=1.34987$).

The results also show that the majority of respondent mostly disagreed with other proposed government-based strategies. These are namely:

- Make the admission conditions more flexible ($\mu= 2.6675$ and $STD=1.32092$),
- Admit fewer students into public universities ($\mu= 2.5995$ and $STD=1.38393$),
- Reduce the control over private universities ($\mu= 2.8534$ and $STD=1.30393$),
- Oblige all private universities in Rwanda to offer similar costs ($\mu= 2.7199$ and $STD=1.31120$),
- Reward the best performing private universities in terms student enrolments ($\mu= 2.7382$ and $STD=1.33774$) and
- Set up an organ for speaking for private tertiary institutions ($\mu= 2.7382$ and $STD=1.33774$).

Discussion

As found in the study, there are a variety of factors influencing the students' decision to enrol at a particular private university in Rwanda. These factors include:

- Cheap costs by the universities,
- Flexible programs and matching with one's secondary school option,
- Flexible academic rules and regulations,
- Competent and flexible lecturers,
- Good location of the university and adequate instructional facilities.

These findings are different from other studies to certain extent. First, this study focuses on private universities while other studies examine all kinds of universities in general. Second, this study found more factors influencing students' decision to enrol in a particular private university than other studies. While this study found 6 factors, others found fewer. Some studies found results contradicting with those of this one. The study of Marcotte (2011) was consistent with those of this study to some extent: its findings revealed that cheap costs influence students'

choice of university. However, Kroth (2015) got contradicting results; his study found that costs do not affect university student enrolments. Similar results were also found by Nurudeen (2017), whose study concluded that the range of programmes offered by a university is among the most prominent factors influencing students' choice of university. On the contrary, the study by Weerasinghe and Ferdindo (2018) found that programmes offered by a university do not influence students' choice. Similar results were found by the study of Hoyt and Brown (2003); Kioko (2012); Matsolo, Ningpuanyeh and Susuman (2018) and Alloway and Dalley-Trim (2009), which confirmed that a favourable location of a university influences students' choices. However, Hossler, Bean & Associates (2009) got different findings; their study confirmed that the location of a university does not influence university choice. In fact, students like to study in universities which are close to their homes in order to reduce the cost of transport. They also like to study where instructional facilities are adequate because they facilitate their learning greatly. Similar results to this study were also found by Fosu (2014) whose findings revealed that courses offered, high calibre lecturers, well-stocked library and Internet, flexible lecture timetable and recognition of qualification by employers were the most important factors that influence students' choice of university. All in all, the findings of this study are somewhat different from those resulting from other studies. This study found that flexible rules and regulations influence students' choice of university as well, and this has not been found by any previous study. These findings imply that private universities in Rwanda should be aware of factors influencing students' decision to enrol in a particular private university. After that, they need to strive to conforming with the factors in order to attract more students.

In addition, the study found that students in private higher learning institutions in Rwanda have some challenges which may result in the decline of student enrolments if they are not effectively mitigated. The challenges include:

- Shortage of employment opportunities among Rwandan graduates,
- Declined motivation to study at a university,
- Difficulty in getting tuition fees,
- Lack of flexibility in fee payment,
- Incompetent lecturers,
- Inadequate learning facilities,
- Lack of/poor restaurants, and
- Lack of/poor accommodations.

It was found that very few studies had been conducted on the same topic. The study of Auer (2019) seemed to be the only one that was conducted to identify the challenges of university students. The study reached similar findings, but fewer than those of this study. Auer's study found that one of students' challenges at private universities is the increase in tuition fees and struggle in getting a student loan. On the contrary, this study found eight challenges of students at private universities in Rwanda; seven of them have not been found by any previous study. Eventually, challenges of students in private higher learning institutions might be detrimental to potential enrolments. Thus, these findings imply that there is a need for managers of these institutions to address the challenges in a bid to boost the students' satisfaction, which can improve student enrolments.

Finally, the following institution-based strategies were found to be the most effective to revamp students' enrolments in private higher learning institutions in Rwanda. They include:

- Motivate new applicants by helping the alumni to get jobs,
- Reduce the costs and bring more flexibility in fee payment,
- Offer more flexible and marketable programs,
- Improve quality in teaching and

- Provide adequate instructional facilities.

Furthermore, the findings show that the following are the most effective government-based strategies to revamp student enrolments in private universities in Rwanda. They include:

- Promote graduate employability in Rwanda,
- Provide study loans to private university students,
- Promote more technical programmes than general ones,
- Provide financial support to private universities,
- Sensitise parents to take their children to university,
- Sensitise the youth about the role of university studies in job creation,
- Encourage the youth to study at university with the aim of job creation not job seeking,
- Increase fairness in employee recruitment and
- Give accreditation to private universities proportionally to the available number of students in Rwanda.

A number of researchers have found consistent findings on strategies to revamp students' enrolments in private higher learning institutions in Rwanda. However, they did not classify them as institution-based and government-based. Similarly, this study found new strategies which have not been found by any previous studies. They include Corrine (2007) whose study found that the use of strong marketing strategies can boost student enrolments in tertiary institution. Similarly, Talbert (2012) found that the effective strategies to increase enrolment, retention and graduation rates at university are to be expanded namely advertising techniques and increasing teaching effectiveness. Finally, Hayes (2014) found that the effective strategies to boost student enrolments in private universities are: the provision of scholarships and financial aid to students. The study revealed that most of the strategies are financial. This is due to the fact that money is the first condition to fulfil in order to study at university. That means whenever parents are not capable of paying tuition fees for their children, they can't send them to university.

Conclusion and recommendations

From the findings of this study, it can be concluded that there are a variety of important factors which influence students' choice of private universities in Rwanda. It can be concluded that current university students are facing a number of challenges which can affect future student enrolments in private universities in Rwanda. It can also be concluded that there are various effective strategies to revamp student enrolments in private universities in Rwanda. These findings provide a picture of the most important factors influencing students' choice of private universities in Rwanda and the challenges facing the students in these institutions. This implies that the findings can be a good opportunity for the institutions to develop better policies and improve their practices in relation to student recruitments. Furthermore, the study also suggested effective strategies to revamp student enrolments in private universities in Rwanda, based on which student enrolments of the institutions can be improved. On the basis of the findings, it was recommended that the managers of private universities in Rwanda should be aware of the most important variables influencing the students' decision to enrol in a particular private university and attempt to comply with them. This will help them devise the most appropriate strategies to improve their student enrolments. Moreover, the senates of private universities in Rwanda should be aware of the most important challenges among their students and manage to mitigate them. This will serve as one of the best strategies to increase the students' satisfaction, which will help in boosting student enrolments. Finally, this study explored a number of institution-based and government-based strategies to revamp student enrolments. Therefore, managers of private higher learning institutions in Rwanda should manage to apply all the suggested institution-based strategies in order to increase their student enrolments. The Government of Rwanda

should support the private higher learning institutions by addressing all the suggested Government-based strategies to increase student enrolments of these institutions.

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